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Appendices

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Appendix A. Notice of Preparation, & Comments, & Notice of Availability

A.1 NOP

**Notice Preparation of Environmental Impact Report
Campus Master Plan 2018
Cal State Dominguez Hills**

The California State University, Dominguez Hills will prepare an Environmental Impact Report for the Campus Master Plan 2018. The California State University Dominguez Hills (CSUDH) Campus Master Plan 2018 (Master Plan). The Master Plan retains the current campus enrollment cap of 20,000 full-time-equivalent (FTE) students and provides a framework for implementation of the University's goals and programs by identifying needed facilities and improvements for this enrollment level and addressing the University needs to the year 2035 planning horizon.

The University completed an Initial Study for the Master Plan which indicates that the project may potentially have significant environmental impacts which will be addressed in the EIR being prepared by University. The 30-day public review period for the Initial Study begins on August 17, 2017 and ends on September 15, 2017.

A public meeting to receive comments on the Initial Study are scheduled as follows:
September 6, 2017 at 5 pm at the Loker Student Union – Ballroom C located on the 3rd floor.

The Initial Study is available for public review during the public review period at the University's website at www.csudh.edu/FacilitiesMasterPlan and at the University Library at the Cal State Dominguez Hills campus.

If you wish to comment, please send your written comments so the comments are received no later than 5:00 pm, September 15, 2017 to:

Roshni Thomas, Director
Planning, Design and Construction
Phone: (310) 243-3826
Email: Roshthomas@csudh.edu

A.2 NOP Newspaper Ad

HAWAII

Five missing after Army Blackhawk goes down

By Audrey Mcavoy
The Associated Press

HONOLULU » A multi-agency team scoured the ocean off Hawaii on Wednesday for five people aboard an Army helicopter that went down during a nighttime training exercise.

Officials at Wheeler Army Airfield near Honolulu reported losing communications around 10 p.m. Tuesday with the crew of a UH-60 Black Hawk, the Coast Guard said in a statement.

Honolulu Fire Department search and rescue crews found and collected pieces of helicopter fuselage and a helmet in a debris field about 2 miles off Kaena Point on Oahu.

Photos showed Army soldiers unloading suspected debris from the firefighters' boat at the harbor in the nearby town of Haleiwa.

Officials closed the state park at Kaena Point while the search was underway. Kaena is a remote spot where Oahu's northern and western coasts meet



MARCO GARCIA — THE ASSOCIATED PRESS

Military personnel gather around the Honolulu Fire Department command center at a harbor on Wednesday, in Haleiwa, Hawaii, after an Army helicopter crashed.

to form a small peninsula. The park's sandy coastline is home to a seabird colony and endangered Hawaiian monk seals. A Coast Guard plane, two helicopters and several boats were being used in the search across an area with light winds and 2-foot seas.

Two Black Hawk crews were conducting training between Kaena Point and Oahu's Dillingham Airfield northwest of Honolulu when communications were lost, officials said.

Clouds and a few showers were in the area at the time.

Susan B. Geffen's



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Notice Preparation of Environmental Impact Report Campus Master Plan 2018 Cal State Dominguez Hills

The California State University, Dominguez Hills will prepare an Environmental Impact Report for the Campus Master Plan 2018. The California State University Dominguez Hills (CSUDH) Campus Master Plan 2018 (Master Plan). The Master Plan retains the current campus enrollment cap of 20,000 full-time-equivalent (FTE) students and provides a framework for implementation of the University's goals and programs by identifying needed facilities and improvements for this enrollment level and addressing the University needs to the year 2035 planning horizon.

The University completed an Initial Study for the Master Plan which indicates that the project may potentially have significant environmental impacts which will be addressed in the EIR being prepared by University. The 30-day public review period for the Initial Study begins on August 17, 2017 and ends on September 15, 2017.

A public meeting to receive comments on the Initial Study are scheduled as follows:
September 6, 2017 at 5 pm at the Loker Student Union – Ballroom C located on the 3rd floor.

The Initial Study is available for public review during the public review period at the University's website at www.csudh.edu/FacilitiesMasterPlan and at the University Library at the Cal State Dominguez Hills campus.

If you wish to comment, please send your written comments so the comments are received no later than 5:00 pm, September 15, 2017 to:

Roshni Thomas, Director
Facilities Planning, Design and Construction
Phone: (310) 243-3826
Email: Roshnithomas@csudh.edu

A.3 Initial Study

Initial Study

Campus Master Plan 2018

California State University, Dominguez Hills



July 2017

wsp

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Initial Study

Campus Master Plan 2018

California State University, Dominguez Hills

August 2017

Lead Agency

The Board of Trustees of the California State University;
California State University, Dominguez Hills

Consultant to Lead Agency

WSP USA

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Initial Study

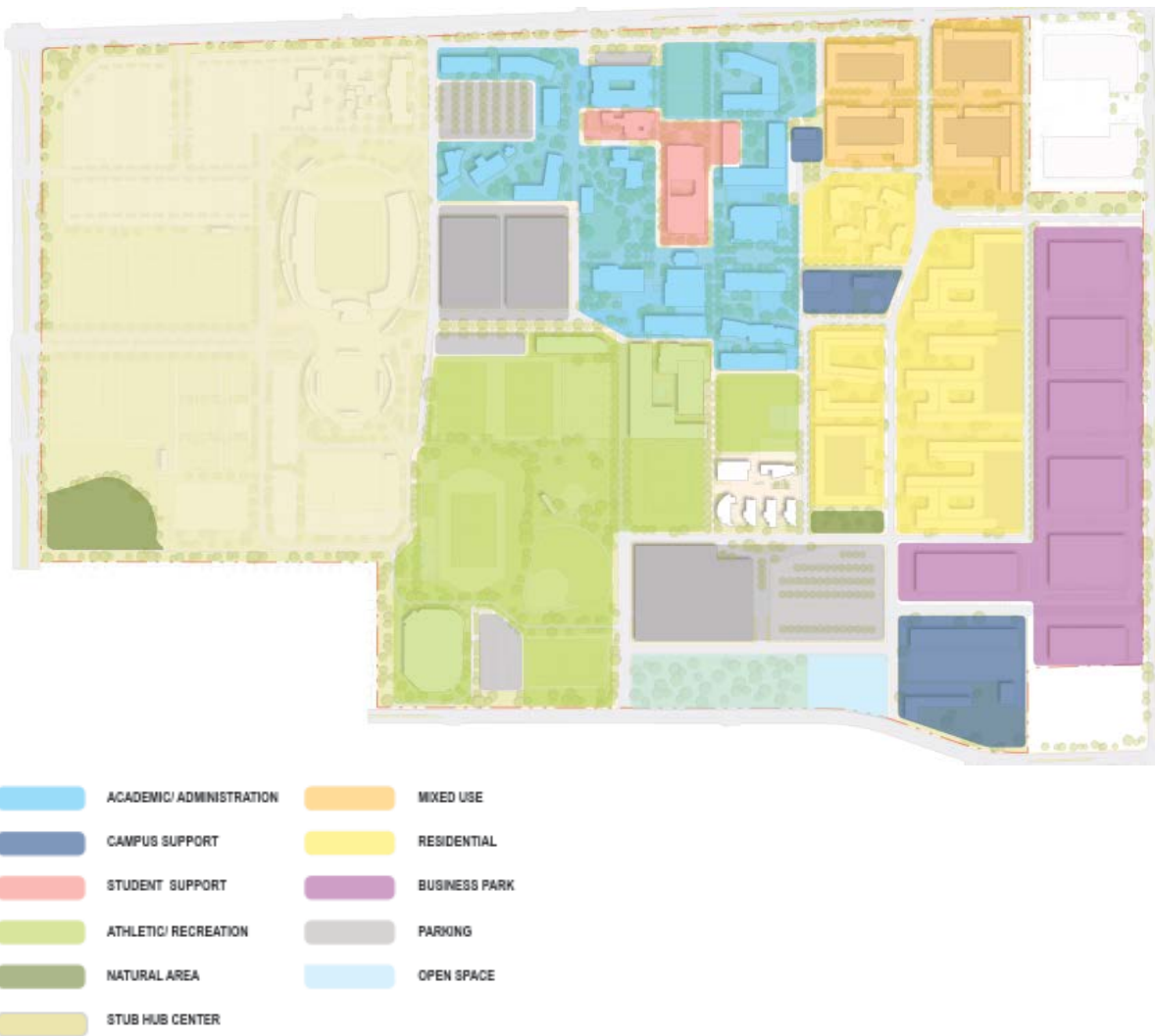
1. **Project Title:** California State University Dominguez Hills Campus Master Plan 2018
2. **Lead Agency Name and Address:** The Board of Trustees of the California State University;
California State University, Dominguez Hills
1000 East Victoria Street
Carson, CA 90747
3. **Contact Person and Phone Number:** Roshni Thomas, Director
Planning, Design and Construction
(310) 243-3826
4. **Project Location:** California State University Dominguez Hills campus, Carson, Los Angeles County (see Figure 1)
5. **Project Sponsor's Name and Address:** Same as Lead Agency
6. **Campus Master Plan Designation:** Various academic, student housing, support, administrative, mixed-use, business park, residential, and other designations
7. **Project Description:** The project is the adoption and implementation of the California State University Dominguez Hills (CSUDH) Campus Master Plan 2018 (Master Plan). The Master Plan retains the current campus enrollment cap of 20,000 full-time-equivalent (FTE) students and provides a framework for implementation of the University's goals and programs by identifying needed facilities and improvements for this enrollment level and addressing the University needs to the year 2035 planning horizon.

University Objectives: The main objective of the Master Plan is to guide the long-term land use development of the campus over the next 20 years. To do so, the Master Plan creates a physical campus environment that facilitates the University's ability to achieve the following objectives:

- Reinforce the University's focus on teaching and learning by providing the appropriate instructional, research, and administrative facilities that support the depth of knowledge the University seeks to instill
- Support opportunities for interaction and collaboration among students, faculty, staff, community members and campus visitors
- Incorporate new technologies and welcoming, socially responsible physical environments
- Make efficient use of developable land and add additional uses to the campus to further engage with the surrounding community and provide further opportunities for its students, faculty, and staff
- Create the appropriate balance between built-up areas and open space

Project Characteristics: The Master Plan Land Use Map (Figure 2) shows the planned land uses. It indicates both areas where uses will change from current activities and areas where future facilities will be developed. Included in the use categories are academic functions, student housing and student support areas, mixed use, residential, and business park areas. Recreation and athletics locations and major natural and open spaces are also indicated. The map illustrates location, adjacency, and scale of future facilities and improvements that are planned to be developed over the next 20 years.

Figure 2
Master Plan Land Use Map



Source: Draft Campus Master Plan 2018

The 346-acre campus is comprised of three major areas: the Core Campus with academic facilities, a planned new University Village, and the existing StubHub Center. The Master Plan provides for new facilities and features within these areas. These facilities and features were formulated and designed in response to the Master Plan objectives and specific needs identified throughout a comprehensive Master Plan development process guided by a Master Plan Steering Committee representing faculty, administration, students and staff, and by input from the campus community and stakeholders through a comprehensive public outreach process of community meetings.

Core Campus: The Core Campus comprises the central portion of the campus, extending from Victoria Street to University Avenue. As illustrated in Figure 3, the Master Plan provides for the best use of the existing facilities and for new, appropriately situated facilities and features, including:

- 12 new academic and administrative facilities, providing classrooms, laboratories, faculty and administrative offices, new performing arts facilities; a new incubator/research facility; and facilities for accommodating CSUDH’s mobile Fabricator Lab vehicles
- Student support facilities, including an expansion of the Loker Student Union, new student residence halls and a new student recreation center
- Athletic facilities including a remodeled Gymnasium and existing and new playfields;
- Campus support facilities, including a new, expanded Child Care Center; new Facilities Services offices and yards; an expansion of the existing Central Plant; and a satellite central plant
- Parking facilities to accommodate 20,000 FTEs, including reconfigured surface lots and new parking structures
- Reconfigured north campus entry at Tamcliff Drive and Victoria Street; a reinforced campus entry at Toro Center Drive and University Avenue; and reconfigured vehicle access to parking facilities
- Open space areas for campus activities, programmed and informal gathering and recreation

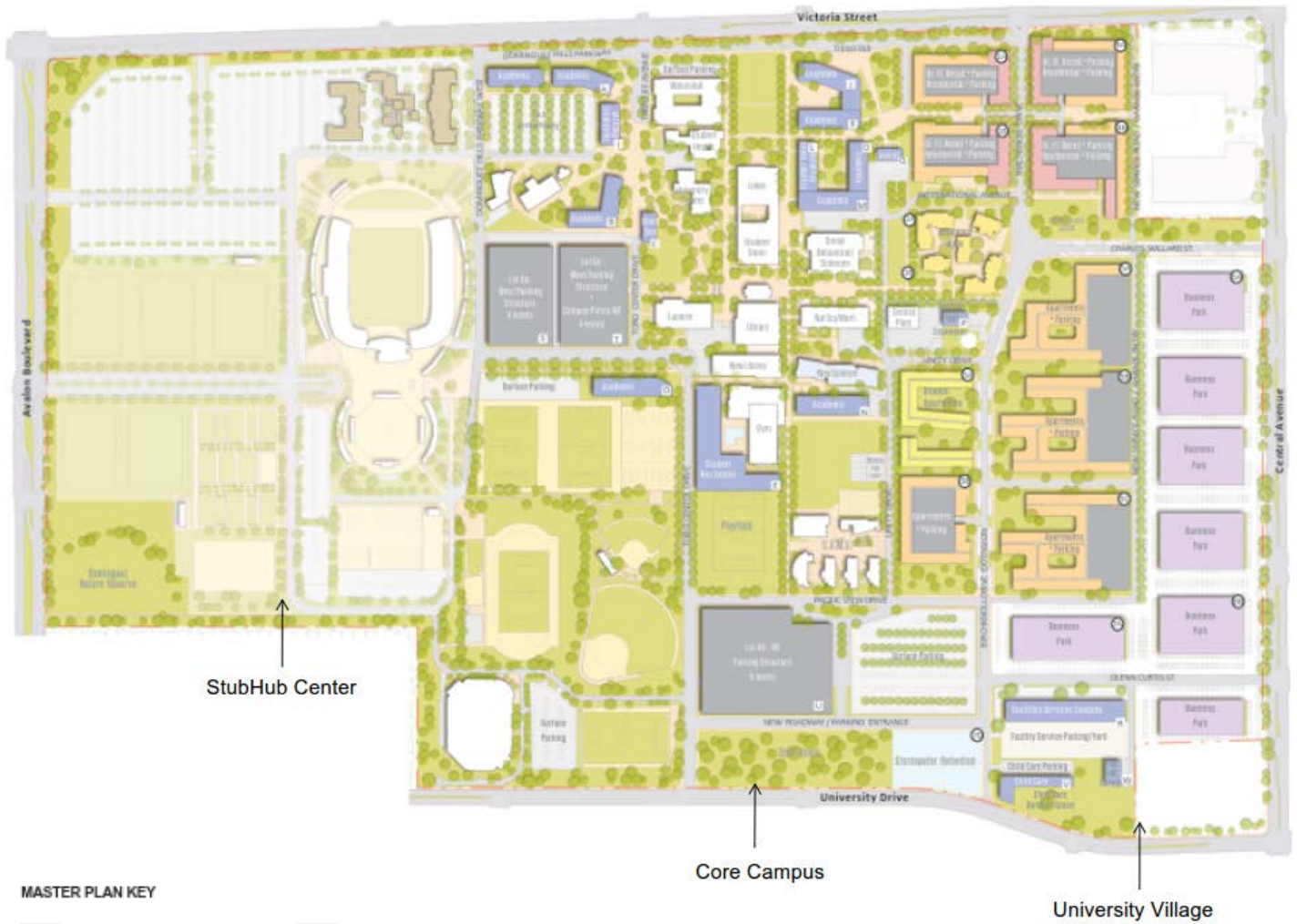
University Village: The University Village comprises the most eastern campus area, extending from Victoria Street to south of Glenn Curtis Drive. As illustrated in Figure 3, the Master Plan provides for a new mixed use development of this area that includes:

- Retail uses to support both the Core Campus and the University Village, including some on-street parking and parking in structures
- Market-rate housing and parking, including housing for faculty and staff and apartment style housing for students
- Business park development targeted to uses compatible with and supportive of the University’s educational mission
- Open space areas for informal activities, leisure, gathering and recreation















- Vehicle circulation improvements including an extension of Birchknoll Drive from Victoria Street to University Avenue, and reconfigured vehicle access from Central Avenue via Charles Willard Drive and Glenn Curtis Drive

StubHub Center: The existing StubHub Center is located the western-most area, east of Avalon Boulevard. The Center's facilities include an existing stadium with seating for 27,000 spectators. The Master Plan provides for additional 3,000 seats for seating for 30,000 spectators at the stadium.

**Figure 3
Master Plan Facilities**



MASTER PLAN KEY

- | | | | |
|---|------------------------------|---|---------------------------------|
|  | EXISTING CAMPUS BUILDING |  | MARKET-RATE APARTMENTS |
|  | PROPOSED NEW CAMPUS BUILDING |  | GROUND FLOOR RETAIL |
|  | BUILDING UNDER CONSTRUCTION |  | BUSINESS PARK |
|  | OTHER BUILDING |  | NEW STUDENT APARTMENTS |
|  | PARKING STRUCTURE |  | NEW RESIDENCE HALLS |
|  | SURFACE PARKING LOT |  | LDP PARCEL DESIGNATION |
|  | PEDESTRIAN PATH |  | NEW CAMPUS FACILITY DESIGNATION |

Housing: Providing appropriate opportunities for students to live on campus is an important component of the Master Plan. The Master Plan provides for replacement of older student housing facilities and for new student residence halls and student apartments within both the Core Campus and the University Village, providing approximately 940 new additional student beds on campus.

The Master Plan also provides for new housing with up to 2,150 apartment units within the University Village that will be made available for faculty, staff, graduate students, and the general public.

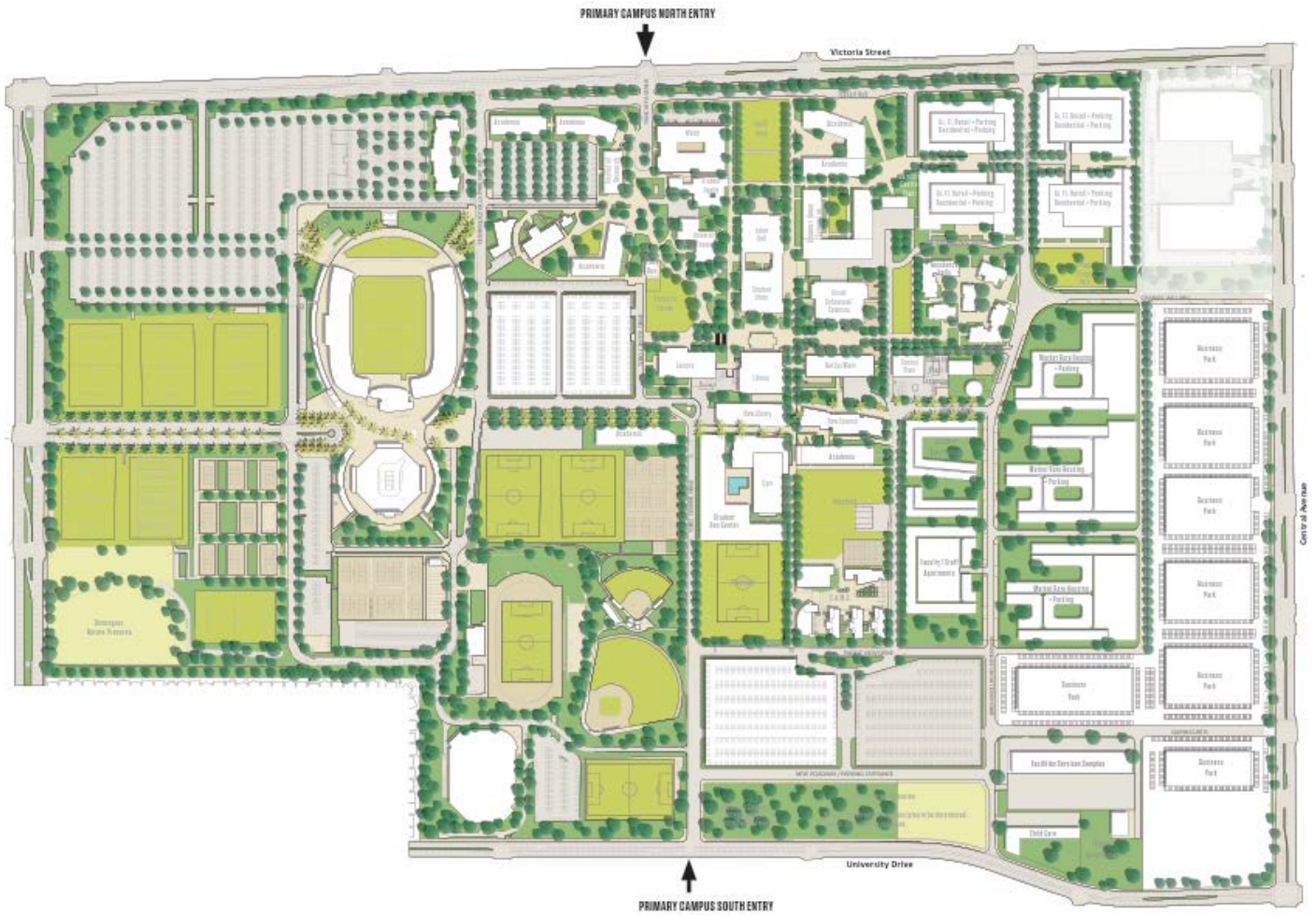
Mixed Use Development: In addition to housing, the University Village will include up to 721,000 square feet of business park facilities and 96,000 square feet of retail uses serving the Village residents and employees.

Landscape: The Master Plan creates a holistic framework for the campus outdoor environment to achieve the following goals:

- Increasing sustainability of the campus landscape
- Increasing plant biodiversity
- Developing visual identity and wayfinding
- Improving connectivity of circulation modes

As illustrated in Figure 4, the landscape plan continues to highlight historic campus open areas, creates strong identity for campus corridors, and provides for enhanced landscape coherence and plant diversity at campus edges, plazas, courtyards, and quadrangles. The landscape plan reduces the overall extent of turf grass within the campus and provides for climate-appropriate plant palettes, enhancing the campus' sustainability.

**Figure 4
Master Plan Landscape Map**

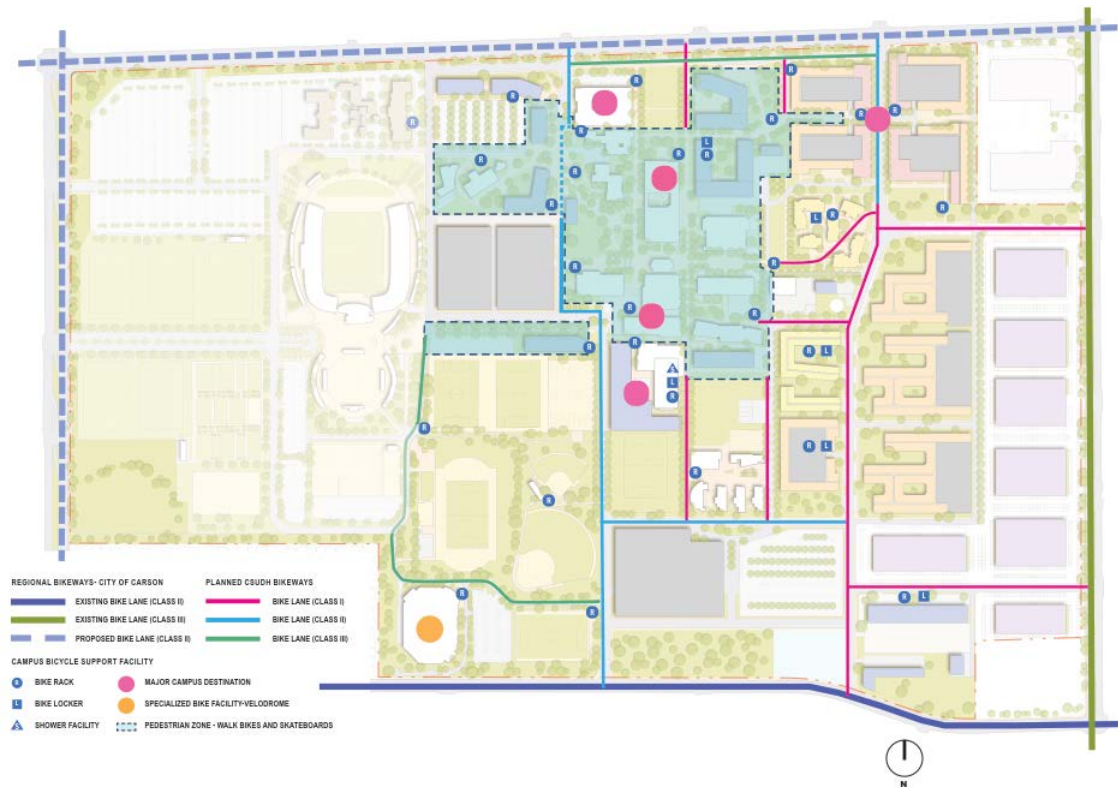


Circulation: The Master Plan emphasizes and provides for an enhanced pedestrian and bicycle circulation throughout the campus, tied together with an enhanced vehicle circulation system that better distributes arriving and departing traffic and addresses pedestrian and bicycle safety and, as illustrated in Figures 5 and 6. This pedestrian and bicycle plans include new and upgraded paths, lanes, and routes, as well as the provision of bicycle racks and other amenities for pedestrians and bicyclists. The existing commuter/transit hub on the Dominguez Hills Parkway frontage road along the northern edge of the campus will continue to support the range of public transit services serving the campus, as well as the Toro Express campus shuttle.

Figure 5
Vehicle and Pedestrian Circulation



**Figure 6
Bicycle Circulation**



Sustainability: The Master Plan incorporates sustainability guidelines for all future campus development. The guidelines address energy efficiency, water efficiency, stormwater management, transportation that reduces vehicular trips and travel, waste management, and the overall enhanced resiliency of the campus’ facilities, operating systems, and infrastructure.

8. Surrounding Land Uses and Setting: The CSU Dominguez Hills 346-acre campus is located in the City of Carson, in Los Angeles County (see Figure 1). The campus is separated from the existing surrounding residential development to the north by Victoria Street, to the south by Avalon Boulevard and on the east by Central Avenue. Central Avenue abuts a series of industrial park buildings and provides access to the campus from State Route (SR) -91 freeway.

9. CSU and Other Public Agencies whose approval will be sought:

- CSU Board of Trustees
 - Approval and adoption of the Campus Master Plan
 - Approval of public-private partnership(s) for development of housing and business park uses
 - Approval of conceptual and schematic plans for future facilities and improvements

Others, as may be necessary

- City of Carson
Approval of any improvements within the City rights-of-way
Approval of new local sewer connections and/or increase in quantity, as needed
Others, as may be necessary
- California Water Service Company
Approval of increase in quantity or new water connections
- Sanitation Districts of Los Angeles County
Approval of increase in quantity and/or new sewer connections
- Regional Water Quality Control Board
Compliance with NPDES permit
- Division of State Architect
Approval of accessibility for future facilities
- State Fire Marshall
Fire safety review and approval of future facilities and improvements
- Others, as may be necessary

Environmental Factors Potentially Affected



The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- | | | |
|--|---|--|
| <input checked="" type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input checked="" type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural and Tribal Resources | <input checked="" type="checkbox"/> Greenhouse Gas Emissions |
| <input type="checkbox"/> Geology /Soils | <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Hydrology / Water Quality |
| <input type="checkbox"/> Land Use / Planning | <input type="checkbox"/> Mineral Resources | <input checked="" type="checkbox"/> Noise |
| <input checked="" type="checkbox"/> Population / Housing | <input checked="" type="checkbox"/> Public Services | <input checked="" type="checkbox"/> Recreation |
| <input checked="" type="checkbox"/> Transportation/Traffic | <input checked="" type="checkbox"/> Utilities / Service Systems | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

Determination

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

 Signature	 Date
--	---

Issues:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS -- Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>a through d. The Cal State Dominguez Hills campus is located in a developed urban area that does not provide scenic vistas, and the campus is not located within a State scenic highway. Campus development with new facilities and improvements pursuant to the Master Plan will result in a more urban visual character, particularly within the campus' eastern area. Therefore, the aesthetic effect of these planned facilities, and any needed mitigation, will be addressed in the EIR.</p>				
<p>II. AGRICULTURE AND FOREST RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement technology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:</p>				

Issues:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined in Public Resources section 4256) or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
a through e. The campus does not contain farmland or forest land. No property under Williamson Act contract or land designated as forest land exists on the campus. Future development pursuant to the Master Plan will not involve any changes to the existing environment that could result in conversion of farmland or forest land to other uses. No impact will result and these issues will not be addressed in the EIR.				
III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Issues:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>a through d. While the Master Plan is anticipated to reduce commute vehicular travel by students, faculty and staff that generate air pollutants through the provision of additional student housing and amenities on campus, the campus development has the potential to generate additional vehicular trips associated with the University Village community housing and business park component, and short-term emissions associated with construction of new facilities and improvements. Therefore, these issues will be evaluated in the EIR.</p>				
<p>e. The campus development and operations are not associated with the generation of objectionable odors that could affect a substantial number of people. No adverse impact will result.</p>				
<p>IV. BIOLOGICAL RESOURCES -- Would the project:</p>				
<p>a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Issues:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
a through f. The Master Plan includes the continuing preservation of the Dominguez Nature Reserve and Monarch Garden natural open space areas. However, since the Master Plan provides for long-term development of new facilities and improvements within the campus areas that are currently partly developed, these issues, and any needed mitigation, will be evaluated in the EIR.				
V. CULTURAL AND TRIBAL RESOURCES -- Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Issues:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>a through d. There is one historic building on campus – the Leo Cain Library, which will not be affected by the future campus development. No other cultural resources and no known tribal resources exist on campus. However, since the campus development pursuant to the Master Plan involves replacement of some older facilities that have become functionally obsolete and development of new facilities and improvements in campus areas that are currently partly developed, the issue of cultural and tribal resources, and any needed mitigation, will be evaluated in the EIR.</p>				
VI. GEOLOGY AND SOILS -- Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				

Issues:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Issues:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>a. through d. There are no known faults within the CSU Dominguez Hills campus. However, the campus is located in the seismically active Southern California region, in proximity to the Newport-Inglewood fault. Therefore, all design and construction of new facilities and improvements will be in strict compliance with the California State University seismic safety standards and requirements. This includes (1) conducting site-specific geotechnical investigations, (2) site-specific seismic design of all new facilities and improvements, (3) using engineering techniques for site-specific soil conditions in construction of all new facilities and improvements developed pursuant to the Master Plan. Each planned facility undergoes an independent peer review process to ensure that all CSU seismic safety requirements are incorporated into design and construction. With mandatory compliance with these requirements and the use of appropriate engineering and design techniques all campus new facilities and improvements will provide the required level of seismic safety. The campus is located on relatively flat terrain; thereby it is not at risk for landslides. Impact will be less than significant and these issues will not be addressed further in the EIR.</p>				
<p>e. The campus is served by sewer systems and no septic tanks or alternative wastewater disposal systems are needed. No impact will result.</p>				
<p>VII. GREENHOUSE GAS EMISSIONS -- Would the project:</p>				
<p>a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>b) Conflict with applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>a and b. The Master Plan is intended to accommodate the continuing growth in student enrollment resulting from regional growth in population, housing, and employment over the next 20 years. In addition, the Master Plan aims to reduce overall emissions, including greenhouse (GHG) emissions, by housing more students on campus and reducing commute vehicular travel, and implementing environmental stewardship and sustainability measures intended to reduce vehicle and energy use that will have a beneficial effect of reducing GHG. In addition, the Master Plan reinforces locations of the nearby transit centers that facilitate transit use and further reduce commute trips. The Master Plan will not conflict nor obstruct the implementation of the South Coast Air Quality Management Plan which aims at reducing overall emissions, including greenhouse gas (GHG) emissions. However, since development of community housing and business park uses pursuant to the Master Plan has the potential to generate additional vehicular trips, and campus development will result in short-term construction emissions, which include GHG, associated with development of new facilities and improvements, these issues will be evaluated in the EIR.</p>				
<p>VIII. HAZARDS AND HAZARDOUS MATERIALS -- Would the project:</p>				
<p>a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Issues:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Issues:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>a through c. For most of the new facilities on-site use and storage of hazardous materials will be limited to small amounts of everyday household cleaners and common chemicals used for landscaping and maintenance. Materials used for laboratory academic research and instructions will be handled and disposed of in accordance with established University safety procedures, ensuring safe and lawful handling, movement, storage, and disposal. Impact will be less than significant and these issues will not be addressed further in the EIR.</p>				
<p>d. The campus is not included on the Department of Toxic Substances Control Hazardous Waste and Substance List (Cortese List) or any other list of hazardous materials sites. No impact will result.</p>				
<p>e and f. The campus is not located within two miles of a public use airport or private airport. No impact will result.</p>				
<p>g. All new facilities developed pursuant to the Master Plan will include the provision of all necessary emergency access in compliance with existing regulations. Therefore, the project will not impair implementation nor physically interfere with any adopted emergency response or evacuation plans. No impact will result.</p>				
<p>h. The campus is located within a highly urbanized area and away from hillside and is not subject wildfire hazards. No impact will result.</p>				
<p>IX. HYDROLOGY AND WATER QUALITY -- Would the project:</p>				
<p>a) Violate any water quality standards or waste discharge requirements?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Issues:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>a, c through f. The Master Plan includes development of new facilities and improvements that will result in additional runoff. While all new development will include all necessary drainage improvements, and the Master includes a new stormwater retention basin and the use of bioswales in new development, the issues of drainage will be evaluated in the EIR.</p>				
<p>b. The implementation of the Master Plan is not expected to result in substantially increased groundwater pumping since there are no groundwater wells on campus and groundwater is not the direct source of water for the campus. No significant impact will result.</p>				
<p>g through i. The National Flood Insurance Rate Maps do not identify 100-year flood hazard areas within the campus. The closest designated flood zone is along the Dominguez Channel to the southeast of the campus. No adverse impact will result.</p>				

Issues:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>j. The campus is located inland and is not subject to tsunamis, nor is it subject to a seiche as it is not located near a large body of water. The campus is not subject to mudflows as it is relatively flat and not located adjacent to hillsides. No impact will result.</p>				
<p>X. LAND USE AND PLANNING -- Would the project:</p>				
<p>a) Physically divide an established community?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>c) Conflict with any applicable habitat conservation plan or natural community conservation plan?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>a through c. The Master Plan provides for new facilities and improvements within the campus and will not physically divide an established community. No other land use plans apply to the campus and no adverse impact will result.</p>				
<p>XI. MINERAL RESOURCES -- Would the project:</p>				
<p>a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>a and b. No mineral resources are known to exist on the CSU Dominguez Hills campus. No impact will result.</p>				
<p>XII. NOISE -- Would the project result in:</p>				

Issues:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>a, c through d. Implementation of the Master Plan will result in noise associated with construction of new facilities and improvements, day-to-day campus activities, and residential and business park uses. These issues will be addressed in the EIR.</p>				
<p>b. The long-term facilities and improvements provided pursuant to the Master Plan will continue the University uses and functions that do not involve generating excessive vibration or groundborne noise. No adverse impact will result and this issue will not be addressed in the EIR.</p>				
<p>e and f. The campus is not located within an airport land use plan, within two miles of an airport or public use airport, or within the vicinity of a private airstrip. No impact will result.</p>				

Issues:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. POPULATION AND HOUSING -- Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>a. The Master Plan provides for additional student and faculty and staff housing, the opportunity for community housing through provision of “market rate” housing on campus, and business park facilities that provide employment opportunities. While the provision of additional housing and employment opportunities has no potential to significantly affect long-term population, housing, and employment within the Los Angeles County region, it could affect such growth within the nearby areas. Therefore, these issues will be evaluated in the EIR.</p>				
<p>b and c. The Master Plan does not involve the removal of housing or displacement of people. No impact will result.</p>				
XIV. PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Schools?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Parks?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Issues:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
Other public facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>a. The Master Plan provides for needed facilities and improvements to accommodate the projected student enrollment over the next 20 years, as well as for new housing and business park uses that will generate additional demand for fire, police protection, and other public services. Potential impact on these services will be evaluated in the EIR.</p>				
<p>XV. RECREATION</p>				
<p>a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>a and b. Implementation of the Master Plan is not anticipated to result in the construction of new parks or recreational facilities that might have an adverse physical effect on the environment. However, as the Master Plans provides for community housing in the eastern campus area that may result in an increased use of existing recreation facilities by their future residents, these issues will be evaluated further in the EIR.</p>				
<p>XVI. TRANSPORTATION/TRAFFIC -- Would the project:</p>				
<p>a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Issues:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Conflict with applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location which results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with adopted policies plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>a and b. The Master Plan provides for additional student and faculty housing on campus and continued use of public transit which will reduce commuter vehicular trips to campus. However, since the Master Plan also provides for development of the eastern area of the campus within the University Village with new housing that will be made available for faculty, staff, graduate students, and the general public, and with business park uses that will result in vehicular trips, a traffic study will be prepared as part of the EIR to address these issues.</p>				
<p>c through f. The provision of University facilities and improvements will not affect air traffic patterns. The new facilities and improvements pursuant to the Master Plan will include the provision of all required emergency access in compliance with existing regulations. No design features or uses that could result in increased hazards are part of the Master Plan. The Master Plan provides for enhanced use of public transit and bicycles, and enhanced pedestrian circulation supporting the University's alternative transportation programs and policies. No adverse impact will result and these issues will not be addressed further in the EIR.</p>				
<p>XVII. UTILITIES AND SERVICE SYSTEMS -- Would the project:</p>				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Issues:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, State, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>a. The new facilities and uses developed pursuant to the Master Plan will generate wastewater of similar quality to that generated by the campus' existing facilities. The quality of the wastewater flows associated with these typical urban uses meet all applicable requirements. No adverse impact will result and this issue will not be addressed in the EIR.</p>				
<p>b through e. The new facilities and improvements developed pursuant to the Master Plan will use water and generate wastewater, and the new facilities in campus' areas that are not fully developed will generate additional stormwater flows. Therefore, these issues will be evaluated in the EIR.</p>				
<p>f and g. The University implements a recycling program to minimize the amount of solid waste disposed at the landfills. The recycling program and other waste-reduction measures will continue to be implemented in additional uses and facilities developed pursuant to the Master Plan. Nonetheless, since the development pursuant to the Master Plan will generate solid waste, these issues will be further addressed in the EIR.</p>				

Issues:	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>a. Implementation of the Master Plan will result in additional facilities and improvements within the campus. No important examples of California history or prehistory are known to be present within areas the campus where new development may occur, and the Master Plan includes the continuing preservation of the Dominguez Nature Reserve and the Monarch Garden natural open space areas. However, since the Master Plan provides for long-term development of new facilities and improvements within the campus areas that are currently not fully developed, these issues, and any needed mitigation, will be evaluated in the EIR.</p>				
<p>b. The future area-wide growth and development over the next 20 years, including the campus development pursuant to the Master Plan, may result in significant cumulative air quality, traffic, noise, and other impacts. Therefore, these issues will be evaluated in the EIR.</p>				
<p>c. The Master Plan will result in the provision of needed facilities and improvements at the CSU Dominguez Hills campus. These facilities and improvements are necessary to continue the University functions and the provision of higher education opportunities to the residents of the surrounding areas and the state, with no potential to result in substantial adverse effects on people.</p>				

Preparers of the Initial Study

Lead Agency

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1000 East Victoria Street
Carson, CA 90747

Contact Person: Roshni Thomas, Director
Planning, Design and Construction
Phone: (310) 243-3826
Email: Roshthomas@csudh.edu

Consultant to the Lead Agency

WSP USA
444 South Flower Street, Suite 800
Los Angeles, CA 90071

Contact Person: Irena Finkelstein, AICP, Project Manager

Phone: (213) 362-9470
Email: Irena.Finkelstein@wsp.com

A.4 Letter DTSC



Matthew Rodriguez
Secretary for
Environmental Protection



Department of Toxic Substances Control

Barbara A. Lee, Director
5796 Corporate Avenue
Cypress, California 90630

SEP 6 '17 PM 1:39



Edmund G. Brown Jr.
Governor

August 28, 2017

Ms. Roshni Thomas, Director
Planning, Design and Construction
California State University, Dominguez Hills
1000 East Victoria Street
Carson, California 9074
Roshthomas@csudh.edu

**NOTICE OF PREPARATION (NOP) FOR A DRAFT ENVIRONMENTAL IMPACT
REPORT (EIR) FOR CAMPUS MASTER PLAN 2018 PROJECT
(CALIFORNIA STATE UNIVERSITY, DOMINGUEZ HILLS) (SCH# 2017081035)**

Dear Ms. Thomas:

The Department of Toxic Substances Control (DTSC) has reviewed the subject NOP. The following project description is stated in the NOP: "The project is the adoption and implementation of the California State University Dominguez Hills (CSUDH) Campus Master Plan 2018 (Master Plan). The Master Plan retains the current campus enrollment cap of 20,000 full-time-equivalent (FTE) students and provides a framework for implementation of the University's goals and programs by identifying needed facilities and improvements for this enrollment level and addressing the University needs to the year 2035 planning horizon."

Based on the review of the submitted document DTSC has the following comments:

1. The EIR should identify and determine whether current or historic uses at the project site may have resulted in any release of hazardous wastes/substances. A Phase I Environmental Site Assessment may be appropriate to identify any recognized environmental conditions.
2. If there are any recognized environmental conditions in the project area, then proper investigation, sampling and remedial actions overseen by the appropriate regulatory agencies should be conducted prior to the new development or any construction.
3. If the proposed project involves the demolition of existing structures, lead-based paints or products, mercury, and asbestos containing materials (ACMs) should

Ms. Roshni Thomas, Director

August 28, 2017

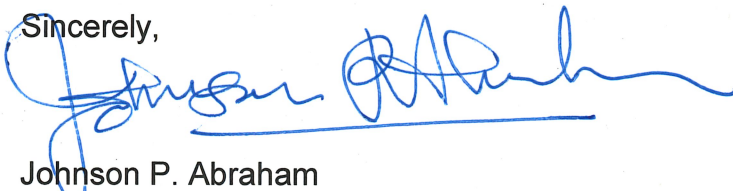
Page 2

be addressed in accordance with all applicable and relevant laws and regulations if buildings are modified/demolished.

4. If the site was used for agricultural or related activities, residual pesticides may be present in onsite soil. DTSC recommends investigation and mitigation, as necessary, to address potential impact to human health and environment from residual pesticides.
5. DTSC recommends evaluation, proper investigation and mitigation, if necessary, on onsite areas with current or historic PCB-containing transformers.
6. If the project plans include discharging wastewater to a storm drain, you may be required to obtain an NPDES permit from the overseeing Regional Water Quality Control Board (RWQCB).
7. If the project development involves soil export/import, proper evaluation is required. If soil contamination is suspected or observed in the project area, then excavated soil should be sampled prior to export/disposal. If the soil is contaminated, it should be disposed of properly in accordance with all applicable and relevant laws and regulations. In addition, if imported soil was used as backfill onsite and/or backfill soil will be imported, DTSC recommends proper evaluation/sampling as necessary to ensure the backfill material is free of contamination.
8. If during construction/demolition of the project, soil and/or groundwater contamination is suspected, construction/demolition in the area should cease and appropriate health and safety procedures should be implemented. If it is determined that contaminated soil and/or groundwater exist, the EIR should identify how any required investigation and/or remediation will be conducted, and the appropriate government agency to provide regulatory oversight.

If you have any questions regarding this letter, please contact me at (714) 484-5380 or email at Johnson.Abraham@dtsc.ca.gov.

Sincerely,



Johnson P. Abraham
Project Manager
Brownfields Restoration and School Evaluation Branch
Brownfields and Environmental Restoration Program - Cypress

kl/sh/ja

cc: See next page.

Ms. Roshni Thomas, Director
August 28, 2017
Page 3

cc: Governor's Office of Planning and Research (via e-mail)
State Clearinghouse
P.O. Box 3044
Sacramento, California 95812-3044
State.clearinghouse@opr.ca.gov

Mr. Dave Kereazis (via e-mail)
Office of Planning & Environmental Analysis
Department of Toxic Substances Control
Dave.Kereazis@dtsc.ca.gov

Mr. Shahir Haddad, Chief (via e-mail)
Schools Evaluation and Brownfields Cleanup
Brownfields and Environmental Restoration Program - Cypress
Shahir.Haddad@dtsc.ca.gov

CEQA# 2017081035

A.5 Letter OPR



Edmund G. Brown Jr.
Governor

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit



Ken Alex
Director

FPD&C

AUG 19 2007

Received

Notice of Preparation

August 17, 2017

To: Reviewing Agencies

Re: Campus Master Plan 2018
SCH# 2017081035

Attached for your review and comment is the Notice of Preparation (NOP) for the Campus Master Plan 2018 draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Roshni Thomas
California State University, Dominguez Hills
1000 E. Victoria Street
Carson, CA 90747-0005

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Attachments
cc: Lead Agency

**Document Details Report
State Clearinghouse Data Base**

SCH# 2017081035
Project Title Campus Master Plan 2018
Lead Agency California State University, Dominguez Hills

Type **NOP** Notice of Preparation
Description The Campus Master Plan 2018 provides a framework for implementation of the University's goals and programs by identifying needed facilities and improvements at the campus for this enrollment level and addressing the University needs to the year 2035 planning horizon.

Lead Agency Contact

Name Roshni Thomas
Agency California State University, Dominguez Hills
Phone (310) 243-3826 **Fax**
email
Address 1000 E. Victoria Street
City Carson **State** CA **Zip** 90747-0005

Project Location

County Los Angeles
City Carson
Region
Cross Streets Within CSU Dominguez Hills
Lat / Long
Parcel No. various
Township **Range** **Section** **Base**

Proximity to:

Highways SR 91, I-110, I-405
Airports
Railways Amtrak
Waterways
Schools various
Land Use Master plan: various academic, student housing, sport and recreation, support, administrative, and others

Project Issues Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Biological Resources; Cumulative Effects; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Geologic/Seismic; Growth Inducing; Landuse; Minerals; Noise; Population/Housing Balance; Public Services; Recreation/Parks; Schools/Universities; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wetland/Riparian; Wildlife

Reviewing Agencies Resources Agency; Department of Parks and Recreation; Department of Water Resources; California Department of Education; Department of Fish and Wildlife, Region 5; California Highway Patrol; Native American Heritage Commission; Public Utilities Commission; Caltrans, District 7; Regional Water Quality Control Board, Region 4; Department of Toxic Substances Control

Date Received 08/17/2017 **Start of Review** 08/17/2017 **End of Review** 09/15/2017

Notice of Completion & Environmental Document Transmittal

2017081035

Mail to: State Clearinghouse, PO Box 3044, Sacramento, CA 95812-3044 916/445-0613

Project Title: Campus Master Plan 2018
The Board of Trustees of the California State University and California State University, Dominguez Hills
Lead Agency: Hills
Contact Person: Roshni Thomas, Director, Planning, Design and Construction
Street Address: 1000 East Victoria Street
Phone: (310) 243-3826
City: Carson **Zip:** 90747 **County:** Los Angeles

Project Location:
County: Los Angeles **City/Nearest Community:** Carson
Zip Code: 90747 **Total Acres:** 346 acres
Cross Streets: Within the CSU Dominguez Hills campus
Assessor's Parcel No.: Various **Section:** _____ **Twp.:** _____ **Range:** _____ **Base:** _____
Within 2 Miles: State Hwy # SR -91, I-110, I-405 **Waterways:** none
Airports: none **Railways:** Amtrak **Schools:** Various

Document Type:
CEQA: NOP Supplement/Subsequent EIR (Prior SCH No.) Other **NEPA:** NOI EA Draft EIS FONSI **Other:** Joint Document Final Document Other _____

AUG 17 2017

Local Action Type:
 General Plan Update Specific Plan Rezone Annexation
 General Plan Amendment Master Plan Prezone Redevelopment
 General Plan Element Planned Unit Development Use Permit Coastal Permit
 Community Plan Site Plan Land Division (Subdivision, etc.) Other _____

Development Type:
 Residential: Units _____ Acres _____ Water Facilities: Type _____ MGD _____
 Office: Sq.ft. _____ Acres _____ Employees _____ Transportation: Type _____
 Commercial: Sq.ft. _____ Acres _____ Employees _____ Mining: Mineral _____
 Industrial: Sq.ft. _____ Acres _____ Employees _____ Power: Type _____ Watts _____
 Educational Waste Treatment: Type _____
 Recreational Hazardous Waste: Type _____
 Other: _____

Funding (approx.): Federal \$ _____ State \$ _____ Total \$ _____

Project Issues Discussed in Document:
 Aesthetic/Visual Flood Plain/Flooding Schools/Universities Water Quality
 Agricultural Land Forest Land/Fire Hazard Septic Systems Water Supply/Groundwater
 Air Quality Geologic/Seismic Sewer Capacity Wetland/Riparian
 Archeological/Historical Minerals Soil Erosion/Compaction/Grading Wildlife
 Coastal Zone Noise Solid Waste Growth Inducing
 Drainage/Absorption Population/Housing Balance Toxic Hazardous Landuse
 Economic/Jobs Public Services/Facilities Traffic/Circulation Cumulative Effects
 Fiscal Recreation/Parks Vegetation Other _____

Present Land Use/Zoning/General Plan Designation: Master Plan: various academic, student housing, sport and recreation, support, administrative, and other designations for Cal State Dominguez Hills campus.

Project Description: The Campus Master Plan 2018 provides a framework provides a framework for implementation of the University's goals and programs by identifying needed facilities and improvements at the campus for this enrollment level and addressing the University needs to the year 2035 planning horizon.

Reviewing Agencies Checklist

Continued

KEY
S = Document sent by lead agency
X = Document sent by SCH
√ = Suggested distribution

Resources Agency

- Boating & Waterways
- Coastal Commission
- Coastal Conservancy
- Colorado River Board
- Conservation
- Fish & Wildlife
- Forestry & Fire Protection
- Office of Historic Preservation
- Parks & Recreation
- Reclamation Board
- S.F. Bay Conservation & Development Commission
- Water Resources (DWR)

Business, Transportation & Housing

- Aeronautics
- California Highway Patrol
- CALTRANS District # 7
- Department of Transportation Planning (headquarters)
- Housing & Community Development

Food & Agriculture

Health & Welfare

Health Services

State & Consumer Services

- General Services
- OLA (Schools)

Environmental Protection Agency

- Air Resources Board
- California Waste Management Board
- SWRCB: Clean Water Grants
- SWRCB: Delta Unit
- SWRCB: Water Quality
- SWRCB: Water Rights
- Regional WQCB # 4 (Los Angeles County)

Youth & Adult Corrections

Corrections

Independent Commission & Offices

- Energy Commission
- Native American Heritage Commission
- Public Utilities Commission
- Santa Monica Mountains Conservancy
- State Lands Commission
- Tahoe Regional Planning Agency
- Other _____

Public Review Period (to be filled in by lead agency)

Starting Date August 17, 2017 Ending Date September 15, 2017
 Signature [Signature] for Roshni Thomas Date August 16, 2017

Lead Agency (Complete if applicable):

Consulting Firm: WSP USA

Address: 444 South Flower Street, Ste.800

City/State/Zip: Los Angeles, CA 90071

Contact: Irena Finkelstein, AICP

Phone: (213) 896-5648

Applicant: Same as Lead Agency

Address: _____

City/State/Zip: _____

Phone: _____

For SCH Use Only:

Date Received at SCH _____

Date Review Starts _____

Date to Agencies _____

Date to SCH _____

Clearance Date _____

Notes: _____

A.6 Letter Native American Heritage Commission

NATIVE AMERICAN HERITAGE COMMISSION

Environmental and Cultural Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
Phone (916) 373-3710



August 25, 2017

Roshni Thomas
California State University, Dominguez Hills
1000 E. Victoria Street
Carson, CA 90747-0005

Sent via e-mail: roshthomas@csudh.edu

RE: SCH# 2017081035; Campus Master Plan 2018 Project, City of Carson; Los Angeles County, California

Dear Mr. Thomas:

The Native American Heritage Commission has received the Notice of Preparation (NOP) for Draft Environmental Impact Report for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code § 21000 et seq.), specifically Public Resources Code section 21084.1, states that a project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit. 14, § 15064.5 (b) (CEQA Guidelines Section 15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an environmental impact report (EIR) shall be prepared. (Pub. Resources Code § 21080 (d); Cal. Code Regs., tit. 14, § 15064 subd. (a)(1) (CEQA Guidelines § 15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources with the area of project effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a **separate category of cultural resources**, "tribal cultural resources" (Pub. Resources Code § 21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment (Pub. Resources Code § 21084.2). Please reference California Natural Resources Agency (2016) "Final Text for tribal cultural resources update to Appendix G: Environmental Checklist Form," <http://resources.ca.gov/ceqa/docs/ab52/Clean-final-AB-52-App-G-text-Submitted.pdf>. Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code § 21084.3 (a)). **AB 52 applies to any project for which a notice of preparation or a notice of negative declaration or mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. § 800 et seq.) may also apply.

The NAHC recommends **lead agencies consult with all California Native American tribes** that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments. **Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.**

SEP 1 '17 AM 8:08

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a **lead agency** shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:
 - a. A brief description of the project.
 - b. The lead agency contact information.
 - c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code § 21080.3.1 (d)).
 - d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code § 21073).
2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A **lead agency** shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code § 21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or environmental impact report. (Pub. Resources Code § 21080.3.1(b)).
 - a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code § 65352.4 (SB 18). (Pub. Resources Code § 21080.3.1 (b)).
3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:
 - a. Alternatives to the project.
 - b. Recommended mitigation measures.
 - c. Significant effects. (Pub. Resources Code § 21080.3.2 (a)).
4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:
 - a. Type of environmental review necessary.
 - b. Significance of the tribal cultural resources.
 - c. Significance of the project's impacts on tribal cultural resources.
 - d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code § 21080.3.2 (a)).
5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code sections 6254 (r) and 6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code § 21082.3 (c)(1)).
6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:
 - a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
 - b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code section 21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code § 21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:
 - a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
 - b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code § 21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code section 21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code section 21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code § 21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code section 21084.3 (b). (Pub. Resources Code § 21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:
 - a. Avoidance and preservation of the resources in place, including, but not limited to:
 - i. Planning and construction to avoid the resources and protect the cultural and natural context.
 - ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
 - b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
 - i. Protecting the cultural character and integrity of the resource.
 - ii. Protecting the traditional use of the resource.
 - iii. Protecting the confidentiality of the resource.
 - c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
 - d. Protecting the resource. (Pub. Resource Code § 21084.3 (b)).
 - e. Please note that a federally recognized California Native American tribe or a nonfederally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code § 815.3 (c)).
 - f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code § 5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An environmental impact report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
 - a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code sections 21080.3.1 and 21080.3.2 and concluded pursuant to Public Resources Code section 21080.3.2.
 - b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
 - c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code section 21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code § 21082.3 (d)).

This process should be documented in the Cultural Resources section of your environmental document.

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires **local governments** to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code § 65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf

Some of SB 18's provisions include:

1. **Tribal Consultation:** If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code § 65352.3 (a)(2)).
2. **No Statutory Time Limit on SB 18 Tribal Consultation.** There is no statutory time limit on SB 18 tribal consultation.
3. **Confidentiality:** Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code section 65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code sections 5097.9 and 5097.993 that are within the city's or county's jurisdiction. (Gov. Code § 65352.3 (b)).
4. **Conclusion of SB 18 Tribal Consultation:** Consultation should be concluded at the point in which:
 - a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
 - b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: <http://nahc.ca.gov/resources/forms/>

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page_id=1068) for an archaeological records search. The records search will determine:
 - a. If part or all of the APE has been previously surveyed for cultural resources.
 - b. If any known cultural resources have been already been recorded on or adjacent to the APE.
 - c. If the probability is low, moderate, or high that cultural resources are located in the APE.
 - d. If a survey is required to determine whether previously unrecorded cultural resources are present.
2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
 - a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.

- b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.
3. Contact the NAHC for:
- a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
 - b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.
4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
- a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, section 15064.5(f) (CEQA Guidelines section 15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
 - b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
 - c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code section 7050.5, Public Resources Code section 5097.98, and Cal. Code Regs., tit. 14, section 15064.5, subdivisions (d) and (e) (CEQA Guidelines section 15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

Please contact me if you need any additional information at gayle.totton@nahc.ca.gov.

Sincerely,

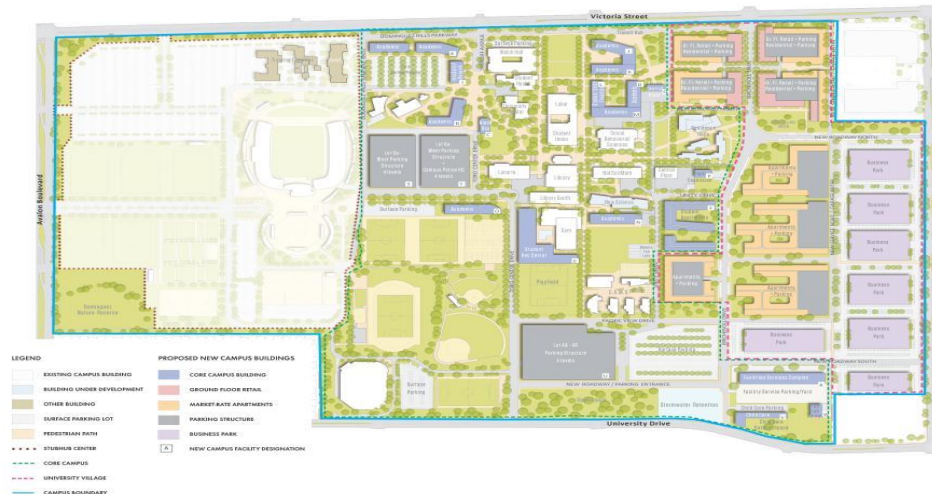


Gayle Totton, M.A., PhD.
Associate Governmental Program Analyst

cc: State Clearinghouse

A.7 Notice of Availability Draft EIR

2018 Campus Master Plan
at the California State University, Dominguez Hills
Announcement of Availability of Draft Environmental Impact Report
for Public Review and Comment



WHAT IS BEING PLANNED?

The project is the adoption and implementation of the California State University, Dominguez Hills (CSUDH or University) 2018 Campus Master Plan (proposed project). The proposed project provides a framework for development of the University’s physical campus and its facilities to accommodate campus enrollment growth from its current enrollment of approximately 11,000 full-time-equivalent students (FTES) to 20,000 FTES over a planning horizon extending to 2035. In conjunction with the proposed project, CSUDH also has prepared its Guidelines for the 2018 Campus Master Plan (Guidelines) to support and advance the University’s vision of developing a vital campus that supports the facilities, buildings, improvements, and services needed for a top-performing model urban university to serve up to 20,000 full-time students.

The proposed project entails the development of new and expanded facilities in three areas of the 344-acre campus: (i) the Core Campus; (ii) the University Village; and (iii) a 3,000-seat expansion of the StubHub Center.

WHY THIS NOTICE?

The Board of Trustees of the California State University and California State University, Dominguez Hills has studied the effects this project may have on the environment and has completed the **Draft Environmental Impact Report (DEIR)**, which evaluates the potential impacts of a the proposed project. This notice is to tell you a **DEIR** has been prepared and is available for you to read and comment on, as well as to notify you about a public meeting in which you may submit comment.

WHAT IS AVAILABLE?

The **Draft Environmental Impact Report** and the related technical studies are available for public review from February 11, 2019 to March 29, 2019. Maps and other information are also available. There are also copies of the documents available at at CSUDH (1000 E. Victoria Street, Carson, CA 90747) at its Leo F. Cain Library and in the Facilities Planning, Design and Construction Office, at the Carson Public Library (151 E Carson St, Carson, CA 90745), and at the Dr. Martin Luther King, Jr. Public Library (17906 S Avalon Blvd, Carson, CA 90746). The report can also be accessed from the CSUDH website: <https://www.csudh.edu/fpcm/campus-master-plan-update/>

WHERE YOU COME IN

Your comments will be a part of the public record. If you wish to make a comment on the documents, you may submit your written comments until March 29, 2019 within the 45-day public review period. Your input is important for us to finalize the environmental document and potential mitigation measures. We encourage you to review and comment on the DEIR. You may send your comments to Jay W. Bond, University Planning Consultant 1000 E. Victoria Street, WH B470, Carson, CA 90747 or to the following e-mail address: masterplan2018@csudh.edu. If you have any questions, you may call (310) 243-3750. A **public meeting** will be held on March 7, 2019 between 6:30 p.m. and 8:00 p.m. at the Juanita Millender-McDonald Community Center, 801 E. Carson Street, Carson, CA to further explain the project and collect comments.

SPECIAL ACCOMMODATIONS

For individuals who require special accommodations (American Sign Language or other lingual interpreter, accessible seating, documentation in alternate formats, etc), contact (310) 243-3750. TDD users may contact the California Relay Service TDD line at 1-800-735-2929.

A.8 Notice of Completion Draft EIR

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P.O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613

For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH #2017081035

Project Title: California State University, Dominguez Hills 2018 Campus Master Plan EIR

Lead Agency: CSU Board of Trustees & CSU Dominguez Hills Contact Person: Jay Bond, Univ. Plng. Consultant

Mailing Address: 1000 East Victoria Street Phone: 310-243-3750

City: Carson Zip: 90747 County: Los Angeles

Project Location: County: Los Angeles City/Nearest Community: Carson

Cross Streets: E. Victoria St./Central Ave/E University Dr./S. Avalon Blvd Zip Code: 90747

Longitude/Latitude (degrees, minutes and seconds): 33 ° 51 ' 31.79" N / 118 ° 15 ' 13.20" W Total Acres: 344

Assessor's Parcel No.: Various within campus Section: _____ Twp.: _____ Range: _____ Base: _____

Within 2 Miles: State Hwy #: SR-91 Waterways: None

Airports: None Railways: Amtrak Schools: Various

Document Type:

- | | | | |
|--------------------------------------|--|------------------------------------|--|
| CEQA: <input type="checkbox"/> NOP | <input checked="" type="checkbox"/> Draft EIR | NEPA: <input type="checkbox"/> NOI | Other: <input type="checkbox"/> Joint Document |
| <input type="checkbox"/> Early Cons | <input type="checkbox"/> Supplement/Subsequent EIR | <input type="checkbox"/> EA | <input type="checkbox"/> Final Document |
| <input type="checkbox"/> Neg Dec | (Prior SCH No.) _____ | <input type="checkbox"/> Draft EIS | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Mit Neg Dec | Other: _____ | <input type="checkbox"/> FONSI | _____ |

Local Action Type:

- | | | | |
|---|---|--|---|
| <input type="checkbox"/> General Plan Update | <input type="checkbox"/> Specific Plan | <input type="checkbox"/> Rezone | <input type="checkbox"/> Annexation |
| <input type="checkbox"/> General Plan Amendment | <input checked="" type="checkbox"/> Master Plan | <input type="checkbox"/> Prezone | <input type="checkbox"/> Redevelopment |
| <input type="checkbox"/> General Plan Element | <input type="checkbox"/> Planned Unit Development | <input type="checkbox"/> Use Permit | <input type="checkbox"/> Coastal Permit |
| <input type="checkbox"/> Community Plan | <input type="checkbox"/> Site Plan | <input type="checkbox"/> Land Division (Subdivision, etc.) | <input type="checkbox"/> Other: _____ |

Development Type:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Residential: Units <u>2643</u> Acres <u>32.9</u> | <input type="checkbox"/> Transportation: Type _____ |
| <input checked="" type="checkbox"/> Office: Sq.ft. <u>720918</u> Acres <u>33</u> Employees _____ | <input type="checkbox"/> Mining: Mineral _____ |
| <input checked="" type="checkbox"/> Commercial: Sq.ft. <u>96085</u> Acres <u>2.2</u> Employees _____ | <input type="checkbox"/> Power: Type _____ MW _____ |
| <input type="checkbox"/> Industrial: Sq.ft. _____ Acres _____ Employees _____ | <input type="checkbox"/> Waste Treatment: Type _____ MGD _____ |
| <input checked="" type="checkbox"/> Educational: <u>1,208,975</u> sq. ft. | <input type="checkbox"/> Hazardous Waste: Type _____ |
| <input checked="" type="checkbox"/> Recreational: <u>3,000</u> seats | <input checked="" type="checkbox"/> Other: <u>Child Care Center (92 students, 18,000 sq.ft.)</u> |
| <input type="checkbox"/> Water Facilities: Type _____ MGD _____ | |

Project Issues Discussed in Document:

- | | | | |
|--|--|--|--|
| <input checked="" type="checkbox"/> Aesthetic/Visual | <input type="checkbox"/> Fiscal | <input checked="" type="checkbox"/> Recreation/Parks | <input checked="" type="checkbox"/> Vegetation |
| <input type="checkbox"/> Agricultural Land | <input type="checkbox"/> Flood Plain/Flooding | <input checked="" type="checkbox"/> Schools/Universities | <input checked="" type="checkbox"/> Water Quality |
| <input checked="" type="checkbox"/> Air Quality | <input type="checkbox"/> Forest Land/Fire Hazard | <input type="checkbox"/> Septic Systems | <input checked="" type="checkbox"/> Water Supply/Groundwater |
| <input checked="" type="checkbox"/> Archeological/Historical | <input type="checkbox"/> Geologic/Seismic | <input checked="" type="checkbox"/> Sewer Capacity | <input checked="" type="checkbox"/> Wetland/Riparian |
| <input checked="" type="checkbox"/> Biological Resources | <input type="checkbox"/> Minerals | <input type="checkbox"/> Soil Erosion/Compaction/Grading | <input checked="" type="checkbox"/> Growth Inducement |
| <input type="checkbox"/> Coastal Zone | <input checked="" type="checkbox"/> Noise | <input checked="" type="checkbox"/> Solid Waste | <input checked="" type="checkbox"/> Land Use |
| <input type="checkbox"/> Drainage/Absorption | <input checked="" type="checkbox"/> Population/Housing Balance | <input checked="" type="checkbox"/> Toxic/Hazardous | <input checked="" type="checkbox"/> Cumulative Effects |
| <input type="checkbox"/> Economic/Jobs | <input checked="" type="checkbox"/> Public Services/Facilities | <input checked="" type="checkbox"/> Traffic/Circulation | <input type="checkbox"/> Other: _____ |

Present Land Use/Zoning/General Plan Designation:

Not applicable.

Project Description: *(please use a separate page if necessary)*

The project is the adoption and implementation of the California State University, Dominguez Hills (CSUDH or University) 2018 Campus Master Plan (proposed project). The proposed project provides a framework for development of the University's physical campus and its facilities to accommodate campus enrollment growth from its current enrollment of approximately 11,000 full-time-equivalent students (FTES) to 20,000 FTES over a planning horizon extending to 2035.

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with and "X". If you have already sent your document to the agency please denote that with an "S".

- | | |
|---|--|
| <input checked="" type="checkbox"/> Air Resources Board | <input checked="" type="checkbox"/> Office of Historic Preservation |
| <input type="checkbox"/> Boating & Waterways, Department of | <input type="checkbox"/> Office of Public School Construction |
| <input type="checkbox"/> California Emergency Management Agency | <input type="checkbox"/> Parks & Recreation, Department of |
| <input checked="" type="checkbox"/> California Highway Patrol | <input type="checkbox"/> Pesticide Regulation, Department of |
| <input checked="" type="checkbox"/> Caltrans District #7 | <input type="checkbox"/> Public Utilities Commission |
| <input type="checkbox"/> Caltrans Division of Aeronautics | <input checked="" type="checkbox"/> Regional WQCB #4 |
| <input type="checkbox"/> Caltrans Planning | <input type="checkbox"/> Resources Agency |
| <input type="checkbox"/> Central Valley Flood Protection Board | <input type="checkbox"/> Resources Recycling and Recovery, Department of |
| <input type="checkbox"/> Coachella Valley Mtns. Conservancy | <input type="checkbox"/> S.F. Bay Conservation & Development Comm. |
| <input type="checkbox"/> Coastal Commission | <input type="checkbox"/> San Gabriel & Lower L.A. Rivers & Mtns. Conservancy |
| <input type="checkbox"/> Colorado River Board | <input type="checkbox"/> San Joaquin River Conservancy |
| <input type="checkbox"/> Conservation, Department of | <input type="checkbox"/> Santa Monica Mtns. Conservancy |
| <input type="checkbox"/> Corrections, Department of | <input checked="" type="checkbox"/> State Lands Commission |
| <input type="checkbox"/> Delta Protection Commission | <input type="checkbox"/> SWRCB: Clean Water Grants |
| <input checked="" type="checkbox"/> Education, Department of | <input type="checkbox"/> SWRCB: Water Quality |
| <input type="checkbox"/> Energy Commission | <input type="checkbox"/> SWRCB: Water Rights |
| <input checked="" type="checkbox"/> Fish & Game Region #5 | <input type="checkbox"/> Tahoe Regional Planning Agency |
| <input type="checkbox"/> Food & Agriculture, Department of | <input checked="" type="checkbox"/> Toxic Substances Control, Department of |
| <input checked="" type="checkbox"/> Forestry and Fire Protection, Department of | <input type="checkbox"/> Water Resources, Department of |
| <input type="checkbox"/> General Services, Department of | <input checked="" type="checkbox"/> Other: <u>Southern California AQMD</u> |
| <input type="checkbox"/> Health Services, Department of | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Housing & Community Development | |
| <input checked="" type="checkbox"/> Native American Heritage Commission | |

Local Public Review Period (to be filled in by lead agency)

Starting Date February 11, 2019 Ending Date March 29, 2019

Lead Agency (Complete if applicable):

Consulting Firm: <u>WSP</u>	Applicant: <u>CSU Board of Trustees & CSU Dominguez Hills</u>
Address: <u>444 S. Flower St. #800</u>	Address: <u>1000 East Victoria Street</u>
City/State/Zip: <u>Los Angeles, CA 90071</u>	City/State/Zip: <u>Carson/CA/90747</u>
Contact: <u>Stephanie Whitmore</u>	Phone: <u>310-243-3750</u>
Phone: <u>+1 619-525-8396</u>	

Signature of Lead Agency Representative: *Naomi Goodwin* Date: 2/6/19

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

A.9 Draft EIR Public Review Period Newspaper Ad

Transportation

Trucks

Chevrolet '11 Silverado LT
BG358413
\$20,476
(888)556-8214
Rydell

Chevrolet '16 Silverado LTZ
GC218829
\$29,454
(888)556-8214
Rydell

Chevrolet '16 Tahoe LT
GR208054
\$37,921
(888)556-8214
Rydell

Nissan '10 Frontier SE
AC435361
\$11,498
(888)556-8214
Rydell

Autos For Sale

Chevrolet '13 Camaro Convert.
D9803199
\$30,421
(888)556-8214
Rydell

Chevrolet '16 Volt
GU117144
\$22,954
(888)556-8214
Rydell

Chevrolet '17 Cruze LT
H7138532
\$14,465
(888)556-8214
Rydell

Chevrolet '18 Camaro ZL1
J0100558
\$54,492
(888)556-8214
Rydell

Dodge '13 Challenger RT
DH629205
\$20,498
(888)556-8214
Rydell

Ford '15 Focus SE
FL319063
\$7,965
(888)556-8214
Rydell

Legal Notice

DB 2-48
CALIFORNIA STORAGEMASTERS
1921 East Maple Avenue
El Segundo, CA 90245
310-414-9294

Notice is hereby given that in accordance with Commercial Code 7201 and AB 750 Chapter 439 and in accordance with California Civil Code 1051 and 1980-1991 the undersigned will @ 10:00 A.M. on Monday, February 25, 2019, at 1921 East Maple Avenue in the City of El Segundo, County of Los Angeles, State of California, sell @ public auction to the highest bidder for cash, household goods, personal property and miscellaneous items which are being held for the following by CALIFORNIA STORAGEMASTERS.

**Paul Saba Unit 838
Unit P31**

Pub Feb 11, 18, 2019

Legal Notice

DB 2-46
STATEMENT OF ABANDONMENT OF USE OF FICTITIOUS BUSINESS NAME
File No. 2019025891

This statement was filed with the County Clerk of LOS ANGELES County on Jan 30, 2019.

The following persons have abandoned the use of the fictitious business name
Current File No: 2014354763
Date Filed: December 17, 2014
VEND4HEALTH
1724 251st St
Lomita, CA 90717
LA COUNTY

REGISTERED OWNER:
Ronnie Louros
1724 251st St
Lomita, CA 90717

Business was conducted by:
AN INDIVIDUAL

I declare that all information in this statement is true and correct.
Signed: **Ronnie Louros, Owner**
(A registrant who declares as true information which he or she knows to be false is guilty of a crime.)

Pub Feb 11, 18, 25; Mar 4, 2019

Legal Notice

DB 2-47
FICTITIOUS BUSINESS NAME STATEMENT
File No. 2019025892

The following person is doing business as:
BLUEBELLSANDDAISIES
1724 251st St
Lomita, CA 90717
LA COUNTY

REGISTERED OWNER:
Ronnie Louros
1724 251st St
Lomita, CA 90717
CA

This Business is conducted by:
AN INDIVIDUAL

The registrant commenced to transact business under the fictitious business name or names listed above on: 1/2019

NOTICE: This Fictitious Name Statement expires five years from the date it was filed in the office of the County Clerk. A new Fictitious Business Name Statement must be filed before that time. The filing of this statement does not of itself authorize the use in this state of a fictitious business name in violation of the rights of another under federal, state, or common law (See Section 14411 et seq., Business and Profession Code).

Pub Feb 11, 18, 25; Mar 4, 2019

Legal Notice

DB 2-43
PUBLIC NOTICE

ANNOUNCEMENT OF AVAILABILITY OF THE CALIFORNIA STATE UNIVERSITY, DOMINGUEZ HILLS 2018 CAMPUS MASTER PLAN DRAFT ENVIRONMENTAL IMPACT REPORT

FOR PUBLIC REVIEW AND COMMENT

Proposed Project: The Board of Trustees of the California State University has completed the Draft Environmental Impact Report (DEIR) for the proposed California State University, Dominguez Hills (CSUDH) 2018 Campus Master Plan (proposed project). The document evaluates the potential impacts the proposed project may have on the environment. The proposed project provides a framework for development of the University's physical campus and its facilities to accommodate campus enrollment growth from its current enrollment of approximately 11,000 full-time-equivalent students (FTES) to 20,000 FTES over a planning horizon extending to 2035. In conjunction with the proposed project, CSUDH also has prepared its Guidelines for the 2018 Campus Master Plan (Guidelines) to support and advance the University's vision of developing a vital campus that supports the facilities, buildings, improvements, and services needed for a top-performing model urban university to serve up to 20,000 full-time students.

Public Review Period: The 45-day public review period for the draft EIR begins on February 11, 2019 and ends on March 29, 2019.

Where to find the draft EIR: The DEIR is available at CSUDH (1000 E. Victoria Street, Carson, CA 90747) in the Leo F. Cain Library and the Facilities Planning, Design and Construction Office, at the Carson Public Library (151 E Carson St, Carson, CA 90745), and at the Dr. Martin Luther King, Jr. Public Library (17906 S Avalon Blvd, Carson, CA 90746). The report can also be accessed from the CSUDH website: <https://www.csudh.edu/fpcm/campus-master-plan-update/>.

If you would like to comment, please send your written comments no later than March 29, 2019 to Jay W. Bond, University Planning Consultant, 1000 E. Victoria Street, Carson, CA 90747 or to the following e-mail address: masterplan2018@csudh.edu. If you have any questions, call (310) 243-3750.

Pub Feb 11, 2019

OFF THE MARK: by Mark Parisi

otmCartoon@gmail.com
©2019 Mark Parisi. Dist by Andrews McMeel Synd. 2-11
offthemark.com

Legal Notice

DB 2-28
FICTITIOUS BUSINESS NAME STATEMENT
File No. 2019027204

The following person is doing business as:
MIKE NOLAN CONSTRUCTION
23102 Huber Ave
Torrance, CA 90501
LA COUNTY

REGISTERED OWNER:
Michael Lee Nolan
23102 Huber Ave
Torrance, CA 90501

This Business is conducted by:
AN INDIVIDUAL

The registrant commenced to transact business under the fictitious business name or names listed above on: 1/2019

I declare that all information in this statement is true and correct.
Signed: **Michael Lee Nolan, Owner**

This statement was filed with the County Clerk of Los Angeles on Jan 31, 2019

NOTICE: This Fictitious Name Statement expires five years from the date it was filed in the office of the County Clerk. A new Fictitious Business Name Statement must be filed before that time. The filing of this statement does not of itself authorize the use in this state of a fictitious business name in violation of the rights of another under federal, state, or common law (See Section 14411 et seq., Business and Profession Code).

Pub Feb 4, 11, 18, 25, 2019

Legal Notice

DB 1-66
FICTITIOUS BUSINESS NAME STATEMENT
File No. 2019 022013

The following person is doing business as:
1. SHIRT HONEY
2. DTLA PRINT
1243 S Boyle Ave
Los Angeles, CA 90023
LA COUNTY

ON# 201829710501
REGISTERED OWNER:
M7 HOLDINGS LLC
1243 S Boyle Ave
Los Angeles, CA 90023
CA

This Business is conducted by:
A LIMITED LIABILITY COMPANY

The registrant commenced to transact business under the fictitious business name or names listed above on: N/A

I declare that all information in this statement is true and correct.
Signed: **M7 Holdings LLC President, Julian Montared**

This statement was filed with the County Clerk of Los Angeles on Jan 25, 2019

NOTICE: This Fictitious Name Statement expires five years from the date it was filed in the office of the County Clerk. A new Fictitious Business Name Statement must be filed before that time. The filing of this statement does not of itself authorize the use in this state of a fictitious business name in violation of the rights of another under federal, state, or common law (See Section 14411 et seq., Business and Profession Code).

Pub Jan 28; Feb 4, 11, 18, 2019

Legal Notice

DB 1-65
FICTITIOUS BUSINESS NAME STATEMENT
File No. 2019 019173

The following person is doing business as:
SACRED LOOM
1711 Via El Prado #202
Redondo Beach, CA 90277
LA COUNTY

REGISTERED OWNER:
Kristin Noelle Fast
26806 Fond Du Lac Road
Rancho Palos Verdes, CA 90275

This Business is conducted by:
AN INDIVIDUAL

The registrant commenced to transact business under the fictitious business name or names listed above on: 12/2018

I declare that all information in this statement is true and correct.
Signed: **Kristin Noelle Fast, Owner**

This statement was filed with the County Clerk of Los Angeles on Jan 23, 2019

NOTICE: This Fictitious Name Statement expires five years from the date it was filed in the office of the County Clerk. A new Fictitious Business Name Statement must be filed before that time. The filing of this statement does not of itself authorize the use in this state of a fictitious business name in violation of the rights of another under federal, state, or common law (See Section 14411 et seq., Business and Profession Code).

Pub Jan 28; Feb 4, 11, 18, 2019

Legal Notice

DB 2-27
FICTITIOUS BUSINESS NAME STATEMENT
File No. 2019 009316

The following person(s) is (are) doing business as:
TMMC SOUTH BAY ORTHO REHAB
23560 Crenshaw Boulevard, Suite 103
Torrance, CA 90505
LA COUNTY

REGISTERED OWNER:
Torrance Memorial Medical Center
3330 Lomita Blvd
Torrance, CA 90505
CA

This Business is conducted by:
A CORPORATION

The registrant commenced to transact business under the fictitious business name or names listed above on: 3/2013

I declare that all information in this statement is true and correct.
Signed: **Torrance Memorial Medical Center, Vice President, Sally Eberhard**

This statement was filed with the County Clerk of Los Angeles on Jan 11, 2019

NOTICE: This Fictitious Name Statement expires five years from the date it was filed in the office of the County Clerk. A new Fictitious Business Name Statement must be filed before that time. The filing of this statement does not of itself authorize the use in this state of a fictitious business name in violation of the rights of another under federal, state, or common law (See Section 14411 et seq., Business and Profession Code).

Pub Feb 4, 11, 18, 25, 2019

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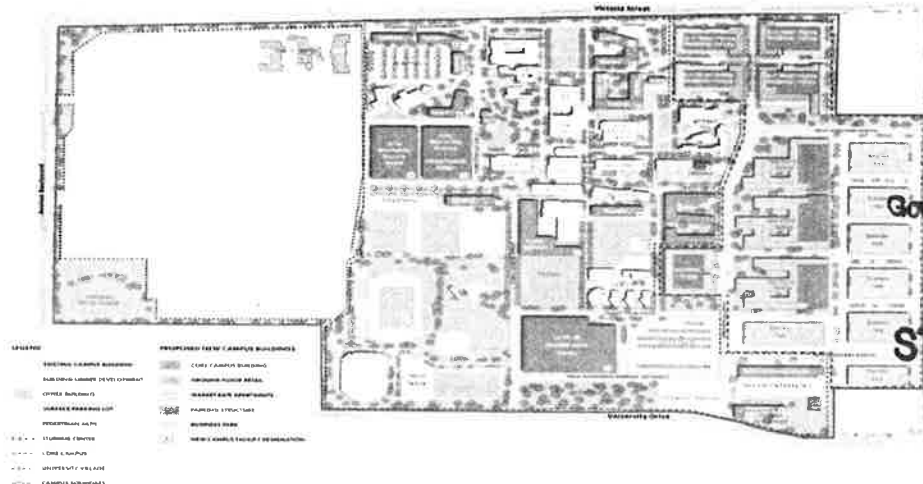
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A.10 Notice of Availability Extended; SCH stamped form

**2018 Campus Master Plan
at the California State University, Dominguez Hills
Announcement of Extended Public Review Period
Draft Environmental Impact Report**



Governor's Office of Planning & Research

FEB 27 2019

STATE CLEARINGHOUSE

On February 11, 2019, the Board of Trustees of the California State University provided public notice of availability of a **Draft Environmental Report (DEIR)** for the proposed **California State University, Dominguez Hills (CSUDH) 2018 Campus Master Plan** (proposed project). The public review period commenced on February 11, 2019 and was scheduled to conclude on March 29, 2019. Due to an unanticipated formatting error in DEIR Appendix F.1 (Transportation Impact Study), which was corrected as of February 26, 2019, the public review period has been extended and now ends on **April 15, 2019**.

WHAT IS BEING PLANNED?

The project is the adoption and implementation of the proposed project, which provides a framework for development of the University's physical campus and its facilities to accommodate campus enrollment growth from its current enrollment of approximately 11,000 full-time-equivalent students (FTES) to 20,000 FTES over a planning horizon extending to 2035. In conjunction with the proposed project, CSUDH also has prepared its Guidelines for the 2018 Campus Master Plan (Guidelines) to support and advance the University's vision of developing a vital campus that supports the facilities, buildings, improvements, and services needed for a top-performing model urban university to serve up to 20,000 full-time students.

The proposed project entails the development of new and expanded facilities in three areas of the 344-acre campus: (i) the Core Campus; (ii) the University Village; and (iii) a 3,000-seat expansion of the StubHub Center.

WHAT IS AVAILABLE?

The **Draft Environmental Impact Report** and the related technical studies are available for public review from February 11, 2019 to April 15, 2019. Maps and other information are also available. There are also copies of the documents available at CSUDH (1000 E. Victoria Street, Carson, CA 90747) at its Leo F. Cain Library and in the Facilities Planning, Design and Construction Office, at the Carson Public Library (151 E Carson St, Carson, CA 90745), and at the Dr. Martin Luther King, Jr. Public Library (17906 S Avalon Blvd, Carson, CA 90746). The report can also be accessed from the CSUDH website: <https://www.csudh.edu/fpcm/campus-master-plan-update/>

WHERE YOU COME IN

Your comments will be a part of the public record. If you wish to make a comment on the documents, you may submit your written comments until April 15, 2019. Your input is important for us to finalize the environmental document and potential mitigation measures. We encourage you to review and comment on the DEIR. You may send your comments to Jay W. Bond, University Planning Consultant 1000 E. Victoria Street, WH B470, Carson, CA 90747 or to the following e-mail address: masterplan2018@csudh.edu. If you have any questions, you may call (310) 243-3750. A **public meeting** will be held on March 7, 2019 between 6:30 p.m. and 8:00 p.m. at the Juanita Millender-McDonald Community Center, 801 E. Carson Street, Carson, CA to further explain the project and collect comments.

SPECIAL ACCOMMODATIONS

For individuals who require special accommodations (American Sign Language or other lingual interpreter, accessible seating, documentation in alternate formats, etc), contact (310) 243-3750. TDD users may contact the California Relay Service TDD line at 1-800-735-2929.

A.11 SCH Memorandum



Gavin Newsom
Governor

STATE OF CALIFORNIA

Governor's Office of Planning and Research
State Clearinghouse and Planning Unit



Kate Gordon
Director

Memorandum

Date: February 27, 2019
To: All Reviewing Agencies
From: Scott Morgan, Director
Re: SCH # 2017081035

**California State University, Dominguez Hills 2018 Campus Master
Plan EIR**

Pursuant to the attached letter, the Lead Agency has corrected some information regarding the above-mentioned project and has also extended the review period for the above referenced project to April 15, 2019 to accommodate the review process. All other project information remains the same.

cc: Jay Bond
California State University, Dominguez Hills
1000 E. Victoria Street, WH B470
Carson, CA 90747

Appendix B. Air Quality

B.1 Air Quality Main Alternative Technical Memo



MEMO

TO: Jay Bond (CSU Dominguez Hills)
FROM: Stephanie Whitmore, Luke Yang (WSP)
SUBJECT: CSUDH Master Plan 2018 EIR – Air Quality and GHG Analysis (Increased Student Housing Alternative)
DATE: October 24, 2018

INTRODUCTION

This memorandum summarizes the methodology and results of the air quality and greenhouse gases (GHG) analyses conducted for one (1) proposed alternative for the California State University, Dominguez Hills (CSUDH or University) Master Plan 2018 EIR Project. Consistent with the analyses conducted for the proposed project, two scenarios were analyzed: 2025 Interim Year, and 2035 Buildout Year scenarios.

Increased Student Housing Alternative

The Increased Student Housing Alternative includes all of the same elements as the Proposed Project; however, the Increased Student Housing Alternative also would include 500 additional student beds, and the conversion of 180 market-rate apartment dwelling units to student housing units, which will accommodate 540 student beds. Under this alternative, the total number of student beds would increase by 1,040 over the Proposed Project, and the total number of market-rate dwelling units would reduce by 180. The location of the student housing, building size, and building footprint would remain identical with the market-rate apartment building proposed under the Project. The addition of more student housing under the Increased Student Housing Alternative would generate a greater amount of construction activity through both the interim and horizon years. The overall construction schedule is assumed to be same as the Proposed Project as the additional construction can be accommodated within the same period.

ANALYSIS METHODOLOGY

The Project's construction and long-term operational emissions were analyzed based on the South Coast Air Quality Management District (SCAQMD) guidelines. The construction emissions for the Increased Student Housing Alternative were calculated using the California Emissions Estimator Model (CalEEMod, Version 2016.2.2). CalEEMod calculates the short-term construction emissions from sources such as off-road equipment, on-road equipment, fugitive dust associated with grading, demolition, truck loading, and roads, and volatile emissions of reactive organic



gases (ROG) from architectural coating and paving. In comparison to the Proposed Project, this alternative would construct 500 additional student beds during the 2025 Interim Year and 540 additional student beds during the 2035 Buildout Year. This alternative would build 180 less market-rate dwelling units compared to the Proposed Project. All other key input assumptions for the construction emissions analysis were assumed to be identical to that of the Proposed Project.

The long-term operational emissions for the Increased Student Housing Alternative were calculated using CalEEMod. Analysis of the proposed alternative's operational impacts considers five emission source types: (1) mobile; (2) area; (3) energy; and (4) waste and (5) water. Mobile source emissions are generated by motor vehicle trips to and from the project site. Area source emissions are generated by, among other things, landscape and maintenance equipment, natural gas fireplaces, and the use of consumer products. Energy source emissions are generated as a result of activities in buildings for which natural gas is used (e.g., natural gas for heat or cooking). Waste and water source emissions are associated with the energy used for disposing waste, supplying and transmitting water, and treatment of wastewater.

Based on comparisons between the scope of this alternative and the Proposed Project, the following key inputs were assumed for the calculation of operational emissions for the 2025 Interim Year and 2035 Buildout Year scenarios:

2025 Interim Year

- Campus support facilities = 256,200 sq.ft.
- Total student beds = 500
- Business Park = 720,918 sq.ft.
- Retail = 96,085 sq.ft.
- Total market-rate dwelling units = 1,063
- No woodstoves and no fireplaces.
- CalEEMod default emission factors for consumer products.
- CalEEMod default emission factors for landscape equipment.

2035 Buildout Year

- Campus support facilities = 1,208,975 sq.ft.
- Total student beds = 2,028
- Business Park = 720,918 sq.ft.
- Retail = 96,085 sq.ft.
- Total market-rate dwelling units = 1,969
- No woodstoves and no fireplaces.
- CalEEMod default emission factors for consumer products.
- CalEEMod default emission factors for landscape equipment.

IMPACT CRITERIA

The Project-related impacts were defined using thresholds established by SCAQMD. The thresholds for both construction- and operation-related emissions are shown in Table 1 and Table 2.



Table 1
SCAQMD Short-Term Construction Thresholds

Criteria Pollutant	Pounds per Day/Metric Tons per Year
Reactive Organic Gases (ROG)	75 pounds/day
Oxides of Nitrogen (NO _x)	100 pounds/day
Carbon Monoxide (CO)	550 pounds/day
Respirable Particulate Matter (PM ₁₀)	150 pounds/day
Ultrafine Particulate Matter (PM _{2.5})	55 pounds/day

Source: South Coast Air Quality Management District

Table 2
SCAQMD Long Term Operational Thresholds

Criteria Pollutant	Pounds per Day/Metric Tons per Year
Reactive Organic Gases (ROG)	55 pounds/day
Oxides of Nitrogen (NO _x)	55 pounds/day
Carbon Monoxide (CO)	550 pounds/day
Sulfur Dioxide (SO ₂)	150 pounds/day
Respirable Particulate Matter (PM ₁₀)	150 pounds/day
Ultrafine Particulate Matter (PM _{2.5})	55 pounds/day

Source: South Coast Air Quality Management District

PROJECT IMPACTS

SHORT-TERM CONSTRUCTION

As noted, the Increased Student Housing Alternative would significantly increase the number of student beds on campus as compared to the Proposed Project, requiring additional construction activities.

The results indicate that the short-term construction impacts of the Increased Student Housing Alternative, based on the total of all emission sources, would have exceedances in both the 2025 Interim and 2035 Buildout Years for Reactive Organic Gases (ROG), while all other emissions would remain under SCAQMD thresholds. Table 3 summarizes short-term construction impacts for the Increased Student Housing Alternative.

Based on the analysis results, the number of significant impacts would remain identical between the Increased Student Housing Alternative and the Proposed Project. The Increased Student Housing Alternative would result in a slight increase of short-term construction emissions during 2025 Interim Year (as compared to the Proposed Project) from the construction of additional student housing. During 2025 Interim Year, the Increased Student Housing Alternative would increase ROG by 1.2 percent, Oxides of Nitrogen (NO_x) by 1.6 percent, Carbon Monoxide (CO) by 2.6 percent, Respirable Particulate Matter (PM₁₀) by two percent, and GHG emissions by 2.8 percent as compared to the Proposed Project. However, as noted, only ROG would exceed SCAQMD emission thresholds. The net differences between the Project and the Alternative are summarized and presented in Table 4.



During the second phase of the construction, between years 2026 and 2035, the construction of additional student housing is offset by the reduction in market-rate apartment units. During the 2035 Buildout Year, under the Increased Student Housing Alternative ROG would decrease by 1.9 percent, and PM₁₀ by 1.1 percent; CO would increase by 0.9 percent, and GHG emissions by 1.2 percent. The net differences between the Project and the Alternative are summarized and presented in Table 4. Similar to the 2025 Interim Year, only ROG would exceed SCAQMD emission thresholds in the horizon year.

The emissions calculation worksheets are included in Appendix A.

**Table 3
Estimated Unmitigated, Peak Day Criteria Air Pollutant Emissions
from Construction by Year (pounds per day)**

Daily Maximum		Reactive Organic Gases (ROGs)	Oxides of Nitrogen (NO _x)	Carbon Monoxide (CO)	Sulfur Dioxide (SO ₂)	Respirable Particulate Matter (PM ₁₀)	Fine Particulate Matter (PM _{2.5})	GHG (CO ₂ e) metric tons/year
2025 Interim Year	2020	8	50	65	0	22	12	21,200
	2021	7	44	61	0	14	5	20,669
	2022	7	41	57	0	14	4	20,203
	2023	150	74	110	0	35	16	41,426
	2024	337	41	61	0	17	5	23,783
2035 Buildout Year	2026	4	25	35	0	19	11	11,067
	2027	95	20	34	0	8	3	10,861
	2031	3	14	23	0	19	10	7,374
	2032	5	31	43	0	15	4	20,631
	2033	5	31	42	0	15	4	20,454
	2034	195	31	41	0	15	4	20,300
SCAQMD Threshold		75	100	550	150	150	55	-
Exceed Threshold?		Yes	No	No	No	No	No	N/A

Note: Because this is a program level project, construction schedule assumptions for emissions calculations were based on best estimation for implementing the project components and phasing. For 2025 Interim Year, construction schedule assumes components of University Village to be constructed between 2020 and 2024, and for the Campus Core, between 2023 and 2024. For 2035 Buildout Year, construction schedule assumes components of University Village to be constructed between 2026 and 2027, and for Campus Core between 2031 and 2034.



**Table 4
Comparison Between Proposed Project and Increased Student
Housing Alternative (Project Construction Emissions - pounds per day)**

Daily Maximum		Reactive Organic Gases (ROGs)	Oxides of Nitrogen (NO _x)	Carbon Monoxide (CO)	Sulfur Dioxide (SO ₂)	Respirable Particulate Matter (PM ₁₀)	Fine Particulate Matter (PM _{2.5})	GHG (CO ₂ e) metric tons/year
2025 Interim Year	2020	-	-	-	-	-	-	+100
	2021	-	-	-	-	-	-	-
	2022	-	-	-	-	-	-	-
	2023	+1	+2	+5	-	-	-	+1,703
	2024	+5	+2	+4	-	+2	-	+1,660
2035 Buildout Year	2026	-	-3	-4	-	-2	-	-1,685
	2027	-19	-2	-3	-	-2	-	-1,644
	2031	-	-	-	-	-	-	-7
	2032	+1	+1	+3	-	+1	-	+1,485
	2033	+1	+2	+3	-	+1	-	+1,467
	2034	+11	+2	+3	-	+1	-	+1,450
SCAQMD Threshold		75	100	550	150	150	55	-
Exceed Threshold?		Yes	No	No	No	No	No	N/A

LONG-TERM OPERATIONAL

The Increased Student Housing Alternative, compared to the Proposed Project, would increase the number of student beds by 500 units during the 2025 Interim Year, and by 1,040 student beds during the 2035 Buildout Year. In addition, this alternative would also reduce the market-rate housing by 180 dwelling units during the 2035 Buildout Year. Because the Increased Student Housing Alternative would increase the number of student beds on campus, reducing student commuting trips, emissions related to commuting trips were considered as reduction as part of the proposed alternative. Based on these assumptions, the long-term operational emission values were calculated, and the results are presented in Table 5.

The results indicate that the long-term operation of the Increased Student Housing Alternative, based on total of all emission sources, would have exceedances in both the 2025 Interim and 2035 Buildout Years. In the 2025 Interim Year, the alternative would exceed SCAQMD thresholds for ROG, NO_x, and PM₁₀. In the 2035 Buildout Year, the alternative would exceed all SCAQMD emission thresholds, with the exception of CO and Sulfur Dioxide (SO₂).

As noted, the Increased Student Housing Alternative would significantly increase the number of student beds on campus as compared to the Proposed Project. The increased student housing would increase on-site emission levels due to higher energy demand, but this increase is offset by the emission reductions from the elimination of the commuting trips. This can be seen by comparing the emission levels between this alternative and the Proposed Project. Table 5 summarizes the comparison results. Based on the analysis results, the number of significant impacts would remain identical between the Increased Student Housing Alternative and the Proposed Project. However, the Increased Student Housing Alternative would result in lower



long-term operational emission levels of four criteria pollutants during 2025 Interim Year, and all the criteria pollutants during 2035 Buildout Year.

During 2025 Interim Year, the Increased Student Housing Alternative would reduce ROG by 24 percent, NO_x by nine percent, CO by 40 percent, and GHG emissions by one percent. This alternative would, however, increase SO₂, PM₁₀, and Ultrafine Particulate Matter (PM_{2.5}) slightly, by approximately one percent.

During 2035 Buildout Year, this alternative would reduce emissions of all criteria pollutants from one percent to as much as 148 percent.

The emissions calculation worksheets are included in Appendix A.

**Table 5
Comparison Between Proposed Project and Increased Student Housing Alternative (Project Long-Term Operational Emissions)**

	ROG (lbs/day)	NO_x lbs/day	CO lbs/day	SO₂ lbs/day	PM₁₀ lbs/day	PM_{2.5} lbs/day	GHG (CO₂e) metric tons/year
SCAQMD Threshold	55	55	550	150	150	55	-
2025 Interim Year							
Proposed Project							
Emissions	81	147	492	2	159	44	30,689
Exceeds Threshold?	Yes	Yes	No	No	Yes	No	-
Increased Student Housing Alternative							
Emissions	62	133	294	2	161	44	30,491
Exceeds Threshold?	Yes	Yes	No	No	Yes	No	-
Difference	-19	-14	-198	<1	2	<1	-198
% Difference	-24%	-9%	-40%	1%	1%	1%	-1%
2035 Buildout Year							
Proposed Project							
Emissions	102	208	299	3	287	79	51,987
Exceeds Threshold?	Yes	Yes	No	No	Yes	Yes	-
Increased Student Housing Alternative							
Emissions	56	172	-145	3	282	78	49,868
Exceeds Threshold?	Yes	Yes	No	No	Yes	Yes	-
Difference	-46	-36	-444	<-1	-4	-1	-2,119
% Difference	-45%	-17%	-148%	-1%	-2%	-2%	-4%



CONCLUSION

Based on the analysis, the Increased Student Housing Alternative would have higher short-term construction criteria pollutant emissions as compared to the Proposed Project. However, the number of significant impacts would remain identical between the Increased Student Housing Alternative and the Proposed Project.

Despite the higher construction emissions, the Increased Student Housing Alternative would have a positive effect on the reduction of long-term operational emissions by the Project. Even though the number of significant impacts would remain identical between the Increased Student Housing Alternative and the Proposed Project, emissions of all criteria pollutants would be reduced from one percent to as much as 148 percent.

B.2 Air Quality CalEEMod Outputs

**CSU Dominguez Hills
CalEEMod Air Quality Output Sheets
(Proposed Project)**

Operational 2025

Campus Operational Annual 2025

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

CSUDH Campus Master Plan EIR
South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Day-Care Center	18.00	Student	0.02	1,017.41	0
University/College (4Yr)	2,169.00	Student	9.15	256,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Master Plan
- Construction Phase - Adjusted.
- Demolition - Master Plan
- Grading - Master Plan.
- Vehicle Trips - Student Housing Trip Gen
- Woodstoves - No woodstoves or fireplaces.

Table Name	Column Name	Default Value	New Value
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tblConstructionPhase	NumDays	20.00	30.00
tblConstructionPhase	NumDays	230.00	300.00
tblConstructionPhase	NumDays	20.00	100.00
tblConstructionPhase	PhaseEndDate	6/28/2018	1/27/2023
tblConstructionPhase	PhaseEndDate	7/12/2018	2/10/2023
tblConstructionPhase	PhaseEndDate	8/9/2018	3/24/2023
tblConstructionPhase	PhaseEndDate	6/27/2019	5/17/2024
tblConstructionPhase	PhaseEndDate	7/25/2019	6/14/2024
tblConstructionPhase	PhaseEndDate	8/22/2019	11/1/2024
tblConstructionPhase	PhaseStartDate	6/1/2018	1/1/2023
tblConstructionPhase	PhaseStartDate	6/29/2018	1/28/2023
tblConstructionPhase	PhaseStartDate	7/13/2018	2/11/2023
tblConstructionPhase	PhaseStartDate	8/10/2018	3/25/2023
tblConstructionPhase	PhaseStartDate	6/28/2019	5/18/2024
tblConstructionPhase	PhaseStartDate	7/26/2019	6/15/2024
tblGrading	AcresOfGrading	15.00	10.00
tblLandUse	LandUseSquareFeet	398,656.71	256,200.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.2693	2.3963	2.5614	5.9100e-003	0.3613	0.0992	0.4604	0.1444	0.0928	0.2372	0.0000	527.2856	527.2856	0.0912	0.0000	529.5656
2024	1.3120	0.9887	1.2719	2.8600e-003	0.0862	0.0391	0.1253	0.0232	0.0368	0.0600	0.0000	254.6229	254.6229	0.0386	0.0000	255.5889

Maximum	1.3120	2.3963	2.5614	5.9100e-003	0.3613	0.0992	0.4604	0.1444	0.0928	0.2372	0.0000	527.2856	527.2856	0.0912	0.0000	529.5656
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Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.2693	2.3963	2.5614	5.9100e-003	0.3613	0.0992	0.4604	0.1444	0.0928	0.2372	0.0000	527.2852	527.2852	0.0912	0.0000	529.5652
2024	1.3120	0.9887	1.2719	2.8600e-003	0.0862	0.0391	0.1253	0.0232	0.0368	0.0600	0.0000	254.6227	254.6227	0.0386	0.0000	255.5887
Maximum	1.3120	2.3963	2.5614	5.9100e-003	0.3613	0.0992	0.4604	0.1444	0.0928	0.2372	0.0000	527.2852	527.2852	0.0912	0.0000	529.5652

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
19	12-1-2022	2-28-2023	0.5252	0.5252
20	3-1-2023	5-31-2023	0.6444	0.6444
21	6-1-2023	8-31-2023	0.6427	0.6427
22	9-1-2023	11-30-2023	0.6369	0.6369
23	12-1-2023	2-29-2024	0.6140	0.6140
24	3-1-2024	5-31-2024	0.5680	0.5680
25	6-1-2024	8-31-2024	0.7596	0.7596
26	9-1-2024	9-30-2024	0.2718	0.2718
		Highest	0.7596	0.7596

2.2 Overall Operational
Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.0512	2.50E-04	0.0278	0		1.00E-04	1.00E-04		1.00E-04	1.00E-04	0	0.0543	0.0543	1.40E-04	0	0.0578
Energy	0.0375	0.3406	0.2861	2.04E-03		0.0259	0.0259		0.0259	0.0259	0	1,190.66	1,190.66	0.041	0.0138	1,195.79
Mobile	0.7041	3.4432	9.1476	0.0381	3.5136	0.0279	3.5414	0.9412	0.0259	0.9671	0	3,525.08	3,525.08	0.1549	0	3,528.95
Waste						0	0		0	0	81.0198	0	81.0198	4.7881	0	200.7231
Water						0	0		0	0	1.4872	45.5582	47.0454	0.1546	4.00E-03	52.1019
Total	1.7928	3.7841	9.4616	0.0401	3.5136	0.0539	3.5674	0.9412	0.0519	0.9931	82.507	4,761.35	4,843.85	5.1387	0.0178	4,977.63

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.0512	2.5000e-004	0.0278	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	0.0543	0.0543	1.4000e-004	0.0000	0.0578
Energy	0.0375	0.3406	0.2861	2.0400e-003		0.0259	0.0259		0.0259	0.0259	0.0000	1,190.6570	1,190.6570	0.0410	0.0138	1,195.7935
Mobile	0.7041	3.4432	9.1476	0.0381	3.5136	0.0279	3.5414	0.9412	0.0259	0.9671	0.0000	3,525.0765	3,525.0765	0.1549	0.0000	3,528.9488
Waste						0.0000	0.0000		0.0000	0.0000	81.0198	0.0000	81.0198	4.7881	0.0000	200.7231
Water						0.0000	0.0000		0.0000	0.0000	1.4872	45.5582	47.0454	0.1546	4.0000e-003	52.1019
Total	1.7928	3.7841	9.4616	0.0401	3.5136	0.0539	3.5674	0.9412	0.0519	0.9931	82.5070	4,761.3460	4,843.8530	5.1387	0.0178	4,977.6251

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2023	1/27/2023	5	20	
2	Site Preparation	Site Preparation	1/28/2023	2/10/2023	5	10	
3	Grading	Grading	2/11/2023	3/24/2023	5	30	
4	Building Construction	Building Construction	3/25/2023	5/17/2024	5	300	
5	Paving	Paving	5/18/2024	6/14/2024	5	20	
6	Architectural Coating	Architectural Coating	6/15/2024	11/1/2024	5	100	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 385,826; Non-Residential Outdoor: 128,609; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40

Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	216.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	108.00	42.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	22.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Fugitive Dust					0.0234	0.0000	0.0234	3.5400e-003	0.0000	3.5400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0227	0.2148	0.1964	3.9000e-004		9.9800e-003	9.9800e-003		9.2800e-003	9.2800e-003	0.0000	33.9921	33.9921	9.5200e-003	0.0000	34.2301
Total	0.0227	0.2148	0.1964	3.9000e-004	0.0234	9.9800e-003	0.0334	3.5400e-003	9.2800e-003	0.0128	0.0000	33.9921	33.9921	9.5200e-003	0.0000	34.2301

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.2000e-004	0.0171	5.7000e-003	8.0000e-005	1.8600e-003	3.0000e-005	1.8900e-003	5.1000e-004	3.0000e-005	5.4000e-004	0.0000	7.6800	7.6800	5.3000e-004	0.0000	7.6933
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5000e-004	3.8000e-004	4.4600e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3320	1.3320	3.0000e-005	0.0000	1.3328
Total	1.0700e-003	0.0175	0.0102	9.0000e-005	3.5100e-003	4.0000e-005	3.5500e-003	9.5000e-004	4.0000e-005	9.9000e-004	0.0000	9.0120	9.0120	5.6000e-004	0.0000	9.0261

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0234	0.0000	0.0234	3.5400e-003	0.0000	3.5400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0227	0.2148	0.1964	3.9000e-004		9.9800e-003	9.9800e-003		9.2800e-003	9.2800e-003	0.0000	33.9920	33.9920	9.5200e-003	0.0000	34.2300
Total	0.0227	0.2148	0.1964	3.9000e-004	0.0234	9.9800e-003	0.0334	3.5400e-003	9.2800e-003	0.0128	0.0000	33.9920	33.9920	9.5200e-003	0.0000	34.2300

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.2000e-004	0.0171	5.7000e-003	8.0000e-005	1.8600e-003	3.0000e-005	1.8900e-003	5.1000e-004	3.0000e-005	5.4000e-004	0.0000	7.6800	7.6800	5.3000e-004	0.0000	7.6933
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5000e-004	3.8000e-004	4.4600e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3320	1.3320	3.0000e-005	0.0000	1.3328
Total	1.0700e-003	0.0175	0.0102	9.0000e-005	3.5100e-003	4.0000e-005	3.5500e-003	9.5000e-004	4.0000e-005	9.9000e-004	0.0000	9.0120	9.0120	5.6000e-004	0.0000	9.0261

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1376	0.0912	1.9000e-004		6.3300e-003	6.3300e-003		5.8200e-003	5.8200e-003	0.0000	16.7254	16.7254	5.4100e-003	0.0000	16.8606
Total	0.0133	0.1376	0.0912	1.9000e-004	0.0903	6.3300e-003	0.0967	0.0497	5.8200e-003	0.0555	0.0000	16.7254	16.7254	5.4100e-003	0.0000	16.8606

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e-004	2.3000e-004	2.6700e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.7992	0.7992	2.0000e-005	0.0000	0.7997
Total	3.3000e-004	2.3000e-004	2.6700e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.7992	0.7992	2.0000e-005	0.0000	0.7997

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1376	0.0912	1.9000e-004		6.3300e-003	6.3300e-003		5.8200e-003	5.8200e-003	0.0000	16.7253	16.7253	5.4100e-003	0.0000	16.8606
Total	0.0133	0.1376	0.0912	1.9000e-004	0.0903	6.3300e-003	0.0967	0.0497	5.8200e-003	0.0555	0.0000	16.7253	16.7253	5.4100e-003	0.0000	16.8606

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e-004	2.3000e-004	2.6700e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.7992	0.7992	2.0000e-005	0.0000	0.7997

Total	3.3000e-004	2.3000e-004	2.6700e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.7992	0.7992	2.0000e-005	0.0000	0.7997
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3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0956	0.0000	0.0956	0.0502	0.0000	0.0502	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0257	0.2690	0.2213	4.4000e-004		0.0116	0.0116		0.0107	0.0107	0.0000	39.0909	39.0909	0.0126	0.0000	39.4070
Total	0.0257	0.2690	0.2213	4.4000e-004	0.0956	0.0116	0.1073	0.0502	0.0107	0.0609	0.0000	39.0909	39.0909	0.0126	0.0000	39.4070

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.3000e-004	5.7000e-004	6.6900e-003	2.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.6000e-004	2.0000e-005	6.7000e-004	0.0000	1.9980	1.9980	5.0000e-005	0.0000	1.9992
Total	8.3000e-004	5.7000e-004	6.6900e-003	2.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.6000e-004	2.0000e-005	6.7000e-004	0.0000	1.9980	1.9980	5.0000e-005	0.0000	1.9992

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0956	0.0000	0.0956	0.0502	0.0000	0.0502	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0257	0.2690	0.2213	4.4000e-004		0.0116	0.0116		0.0107	0.0107	0.0000	39.0909	39.0909	0.0126	0.0000	39.4069
Total	0.0257	0.2690	0.2213	4.4000e-004	0.0956	0.0116	0.1073	0.0502	0.0107	0.0609	0.0000	39.0909	39.0909	0.0126	0.0000	39.4069

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.3000e-004	5.7000e-004	6.6900e-003	2.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.6000e-004	2.0000e-005	6.7000e-004	0.0000	1.9980	1.9980	5.0000e-005	0.0000	1.9992
Total	8.3000e-004	5.7000e-004	6.6900e-003	2.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.6000e-004	2.0000e-005	6.7000e-004	0.0000	1.9980	1.9980	5.0000e-005	0.0000	1.9992

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Off-Road	0.1573	1.4385	1.6244	2.6900e-003		0.0700	0.0700		0.0658	0.0658	0.0000	231.8048	231.8048	0.0551	0.0000	233.1833
Total	0.1573	1.4385	1.6244	2.6900e-003		0.0700	0.0700		0.0658	0.0658	0.0000	231.8048	231.8048	0.0551	0.0000	233.1833

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.4100e-003	0.2908	0.0876	1.0100e-003	0.0265	3.4000e-004	0.0268	7.6400e-003	3.2000e-004	7.9600e-003	0.0000	97.9573	97.9573	5.5900e-003	0.0000	98.0971
Worker	0.0397	0.0272	0.3209	1.0600e-003	0.1185	8.5000e-004	0.1193	0.0315	7.8000e-004	0.0323	0.0000	95.9059	95.9059	2.2600e-003	0.0000	95.9625
Total	0.0481	0.3181	0.4085	2.0700e-003	0.1450	1.1900e-003	0.1461	0.0391	1.1000e-003	0.0402	0.0000	193.8632	193.8632	7.8500e-003	0.0000	194.0596

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1573	1.4385	1.6244	2.6900e-003		0.0700	0.0700		0.0658	0.0658	0.0000	231.8045	231.8045	0.0551	0.0000	233.1830
Total	0.1573	1.4385	1.6244	2.6900e-003		0.0700	0.0700		0.0658	0.0658	0.0000	231.8045	231.8045	0.0551	0.0000	233.1830

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.4100e-003	0.2908	0.0876	1.0100e-003	0.0265	3.4000e-004	0.0268	7.6400e-003	3.2000e-004	7.9600e-003	0.0000	97.9573	97.9573	5.5900e-003	0.0000	98.0971
Worker	0.0397	0.0272	0.3209	1.0600e-003	0.1185	8.5000e-004	0.1193	0.0315	7.8000e-004	0.0323	0.0000	95.9059	95.9059	2.2600e-003	0.0000	95.9625
Total	0.0481	0.3181	0.4085	2.0700e-003	0.1450	1.1900e-003	0.1461	0.0391	1.1000e-003	0.0402	0.0000	193.8632	193.8632	7.8500e-003	0.0000	194.0596

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0736	0.6722	0.8083	1.3500e-003		0.0307	0.0307		0.0288	0.0288	0.0000	115.9246	115.9246	0.0274	0.0000	116.6099
Total	0.0736	0.6722	0.8083	1.3500e-003		0.0307	0.0307		0.0288	0.0288	0.0000	115.9246	115.9246	0.0274	0.0000	116.6099

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.1100e-003	0.1451	0.0425	5.0000e-004	0.0132	1.7000e-004	0.0134	3.8200e-003	1.6000e-004	3.9800e-003	0.0000	48.8030	48.8030	2.7500e-003	0.0000	48.8719
Worker	0.0188	0.0124	0.1496	5.1000e-004	0.0593	4.2000e-004	0.0597	0.0157	3.8000e-004	0.0161	0.0000	46.3690	46.3690	1.0400e-003	0.0000	46.3949
Total	0.0229	0.1575	0.1922	1.0100e-003	0.0725	5.9000e-004	0.0731	0.0196	5.4000e-004	0.0201	0.0000	95.1720	95.1720	3.7900e-003	0.0000	95.2668

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0736	0.6722	0.8083	1.3500e-003		0.0307	0.0307		0.0288	0.0288	0.0000	115.9244	115.9244	0.0274	0.0000	116.6097
Total	0.0736	0.6722	0.8083	1.3500e-003		0.0307	0.0307		0.0288	0.0288	0.0000	115.9244	115.9244	0.0274	0.0000	116.6097

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.1100e-003	0.1451	0.0425	5.0000e-004	0.0132	1.7000e-004	0.0134	3.8200e-003	1.6000e-004	3.9800e-003	0.0000	48.8030	48.8030	2.7500e-003	0.0000	48.8719
Worker	0.0188	0.0124	0.1496	5.1000e-004	0.0593	4.2000e-004	0.0597	0.0157	3.8000e-004	0.0161	0.0000	46.3690	46.3690	1.0400e-003	0.0000	46.3949

Total	0.0229	0.1575	0.1922	1.0100e-003	0.0725	5.9000e-004	0.0731	0.0196	5.4000e-004	0.0201	0.0000	95.1720	95.1720	3.7900e-003	0.0000	95.2668
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3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8800e-003	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1885
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.8800e-003	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1885

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	3.4000e-004	4.1600e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.2880	1.2880	3.0000e-005	0.0000	1.2888
Total	5.2000e-004	3.4000e-004	4.1600e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.2880	1.2880	3.0000e-005	0.0000	1.2888

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8800e-003	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1884
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.8800e-003	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1884

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	3.4000e-004	4.1600e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.2880	1.2880	3.0000e-005	0.0000	1.2888
Total	5.2000e-004	3.4000e-004	4.1600e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.2880	1.2880	3.0000e-005	0.0000	1.2888

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Archit. Coating	1.1922					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	9.0400e-003	0.0609	0.0905	1.5000e-004		3.0500e-003	3.0500e-003		3.0500e-003	3.0500e-003	0.0000	12.7663	12.7663	7.2000e-004	0.0000	12.7842
Total	1.2012	0.0609	0.0905	1.5000e-004		3.0500e-003	3.0500e-003		3.0500e-003	3.0500e-003	0.0000	12.7663	12.7663	7.2000e-004	0.0000	12.7842

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8300e-003	2.5300e-003	0.0305	1.0000e-004	0.0121	8.0000e-005	0.0122	3.2100e-003	8.0000e-005	3.2800e-003	0.0000	9.4455	9.4455	2.1000e-004	0.0000	9.4508
Total	3.8300e-003	2.5300e-003	0.0305	1.0000e-004	0.0121	8.0000e-005	0.0122	3.2100e-003	8.0000e-005	3.2800e-003	0.0000	9.4455	9.4455	2.1000e-004	0.0000	9.4508

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.1922					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0400e-003	0.0609	0.0905	1.5000e-004		3.0500e-003	3.0500e-003		3.0500e-003	3.0500e-003	0.0000	12.7663	12.7663	7.2000e-004	0.0000	12.7842
Total	1.2012	0.0609	0.0905	1.5000e-004		3.0500e-003	3.0500e-003		3.0500e-003	3.0500e-003	0.0000	12.7663	12.7663	7.2000e-004	0.0000	12.7842

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8300e-003	2.5300e-003	0.0305	1.0000e-004	0.0121	8.0000e-005	0.0122	3.2100e-003	8.0000e-005	3.2800e-003	0.0000	9.4455	9.4455	2.1000e-004	0.0000	9.4508
Total	3.8300e-003	2.5300e-003	0.0305	1.0000e-004	0.0121	8.0000e-005	0.0122	3.2100e-003	8.0000e-005	3.2800e-003	0.0000	9.4455	9.4455	2.1000e-004	0.0000	9.4508

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.7041	3.4432	9.1476	0.0381	3.5136	0.0279	3.5414	0.9412	0.0259	0.9671	0.0000	3,525.0765	3,525.0765	0.1549	0.0000	3,528.9488
Unmitigated	0.7041	3.4432	9.1476	0.0381	3.5136	0.0279	3.5414	0.9412	0.0259	0.9671	0.0000	3,525.0765	3,525.0765	0.1549	0.0000	3,528.9488

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Day-Care Center	78.84	7.02	6.66	84,727	84,727
University/College (4Yr)	3,708.99	2,819.70	0.00	9,168,144	9,168,144
Total	3,787.83	2,826.72	6.66	9,252,871	9,252,871

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Day-Care Center	16.60	8.40	6.90	12.70	82.30	5.00	28	58	14
University/College (4Yr)	16.60	8.40	6.90	6.40	88.60	5.00	91	9	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Day-Care Center	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827
University/College (4Yr)	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	819.8598	819.8598	0.0339	7.0000e-003	822.7929
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	819.8598	819.8598	0.0339	7.0000e-003	822.7929
Natural Gas Mitigated	0.0375	0.3406	0.2861	2.0400e-003		0.0259	0.0259		0.0259	0.0259	0.0000	370.7972	370.7972	7.1100e-003	6.8000e-003	373.0007

NaturalGas Unmitigated	0.0375	0.3406	0.2861	2.0400e-003		0.0259	0.0259		0.0259	0.0259	0.0000	370.7972	370.7972	7.1100e-003	6.8000e-003	373.0007
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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Day-Care Center	10581.1	6.0000e-005	5.2000e-004	4.4000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.5647	0.5647	1.0000e-005	1.0000e-005	0.5680
University/College (4Yr)	6.9379e+006	0.0374	0.3401	0.2857	2.0400e-003		0.0259	0.0259		0.0259	0.0259	0.0000	370.2326	370.2326	7.1000e-003	6.7900e-003	372.4327
Total		0.0375	0.3406	0.2861	2.0400e-003		0.0259	0.0259		0.0259	0.0259	0.0000	370.7972	370.7972	7.1100e-003	6.8000e-003	373.0007

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Day-Care Center	10581.1	6.0000e-005	5.2000e-004	4.4000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.5647	0.5647	1.0000e-005	1.0000e-005	0.5680
University/College (4Yr)	6.9379e+006	0.0374	0.3401	0.2857	2.0400e-003		0.0259	0.0259		0.0259	0.0259	0.0000	370.2326	370.2326	7.1000e-003	6.7900e-003	372.4327
Total		0.0375	0.3406	0.2861	2.0400e-003		0.0259	0.0259		0.0259	0.0259	0.0000	370.7972	370.7972	7.1100e-003	6.8000e-003	373.0007

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Day-Care Center	6023.07	1.9191	8.0000e-005	2.0000e-005	1.9259
University/College (4Yr)	2.56712e+006	817.9407	0.0338	6.9900e-003	820.8669
Total		819.8598	0.0339	7.0100e-003	822.7929

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Day-Care Center	6023.07	1.9191	8.0000e-005	2.0000e-005	1.9259
University/College (4Yr)	2.56712e+006	817.9407	0.0338	6.9900e-003	820.8669
Total		819.8598	0.0339	7.0100e-003	822.7929

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Mitigated	1.0512	2.5000e-004	0.0278	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	0.0543	0.0543	1.4000e-004	0.0000	0.0578
Unmitigated	1.0512	2.5000e-004	0.0278	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	0.0543	0.0543	1.4000e-004	0.0000	0.0578

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1192					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9295					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.5600e-003	2.5000e-004	0.0278	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	0.0543	0.0543	1.4000e-004	0.0000	0.0578
Total	1.0512	2.5000e-004	0.0278	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	0.0543	0.0543	1.4000e-004	0.0000	0.0578

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1192					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9295					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.5600e-003	2.5000e-004	0.0278	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	0.0543	0.0543	1.4000e-004	0.0000	0.0578
Total	1.0512	2.5000e-004	0.0278	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004	0.0000	0.0543	0.0543	1.4000e-004	0.0000	0.0578

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	47.0454	0.1546	4.0000e-003	52.1019
Unmitigated	47.0454	0.1546	4.0000e-003	52.1019

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Day-Care Center	0.0436363 / 0.112208	0.5921	1.4500e-003	4.0000e-005	0.6397
University/College (4Yr)	4.64405 / 7.26376	46.4533	0.1532	3.9600e-003	51.4622
Total		47.0454	0.1546	4.0000e-003	52.1019

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Day-Care Center	0.0436363 / 0.112208	0.5921	1.4500e-003	4.0000e-005	0.6397
University/College (4Yr)	4.64405 / 7.26376	46.4533	0.1532	3.9600e-003	51.4622
Total		47.0454	0.1546	4.0000e-003	52.1019

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	81.0198	4.7881	0.0000	200.7231
Unmitigated	81.0198	4.7881	0.0000	200.7231

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			

Day-Care Center	3.29	0.6678	0.0395	0.0000	1.6546
University/College (4Yr)	395.84	80.3519	4.7487	0.0000	199.0685
Total		81.0198	4.7881	0.0000	200.7231

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Day-Care Center	3.29	0.6678	0.0395	0.0000	1.6546
University/College (4Yr)	395.84	80.3519	4.7487	0.0000	199.0685
Total		81.0198	4.7881	0.0000	200.7231

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Campus Operational Summer 2025

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

CSUDH Campus Master Plan EIR
South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Day-Care Center	18.00	Student	0.02	1,017.41	0
University/College (4Yr)	2,169.00	Student	9.15	256,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Master Plan
- Construction Phase - Adjusted.
- Demolition - Master Plan
- Grading - Master Plan.
- Vehicle Trips - Student Housing Trip Gen
- Woodstoves - No woodstoves or fireplaces.

Table Name	Column Name	Default Value	New Value
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tblConstructionPhase	NumDays	20.00	30.00
tblConstructionPhase	NumDays	230.00	300.00
tblConstructionPhase	NumDays	20.00	100.00
tblConstructionPhase	PhaseEndDate	6/28/2018	1/27/2023
tblConstructionPhase	PhaseEndDate	7/12/2018	2/10/2023
tblConstructionPhase	PhaseEndDate	8/9/2018	3/24/2023
tblConstructionPhase	PhaseEndDate	6/27/2019	5/17/2024
tblConstructionPhase	PhaseEndDate	7/25/2019	6/14/2024
tblConstructionPhase	PhaseEndDate	8/22/2019	11/1/2024
tblConstructionPhase	PhaseStartDate	6/1/2018	1/1/2023
tblConstructionPhase	PhaseStartDate	6/29/2018	1/28/2023
tblConstructionPhase	PhaseStartDate	7/13/2018	2/11/2023
tblConstructionPhase	PhaseStartDate	8/10/2018	3/25/2023
tblConstructionPhase	PhaseStartDate	6/28/2019	5/18/2024
tblConstructionPhase	PhaseStartDate	7/26/2019	6/15/2024
tblGrading	AcresOfGrading	15.00	10.00
tblLandUse	LandUseSquareFeet	398,656.71	256,200.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	2.7259	27.5643	20.6827	0.0483	18.2675	1.2674	19.5349	9.9840	1.1660	11.1501	0.0000	4,757.0738	4,757.0738	1.1969	0.0000	4,781.6219
2024	24.1017	16.5359	20.2112	0.0479	1.4759	0.6249	2.1008	0.3975	0.5877	0.9852	0.0000	4,716.9952	4,716.9952	0.7173	0.0000	4,734.1848

Maximum	24.1017	27.5643	20.6827	0.0483	18.2675	1.2674	19.5349	9.9840	1.1660	11.1501	0.0000	4,757.0738	4,757.0738	1.1969	0.0000	4,781.6219
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Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	2.7259	27.5643	20.6827	0.0483	18.2675	1.2674	19.5349	9.9840	1.1660	11.1501	0.0000	4,757.0738	4,757.0738	1.1969	0.0000	4,781.6219
2024	24.1017	16.5359	20.2112	0.0479	1.4759	0.6249	2.1008	0.3975	0.5877	0.9852	0.0000	4,716.9952	4,716.9952	0.7173	0.0000	4,734.1848
Maximum	24.1017	27.5643	20.6827	0.0483	18.2675	1.2674	19.5349	9.9840	1.1660	11.1501	0.0000	4,757.0738	4,757.0738	1.1969	0.0000	4,781.6219

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.7667	2.02E-03	0.2227	2.00E-05		7.90E-04	7.90E-04		7.90E-04	7.90E-04		0.4786	0.4786	1.24E-03		0.5098
Energy	0.2053	1.8664	1.5678	0.0112		0.1418	0.1418		0.1418	0.1418		2,239.64	2,239.64	0.0429	0.0411	2,252.95
Mobile	5.0598	22.2751	64.0363	0.2645	23.9187	0.1862	24.1049	6.3977	0.1729	6.5706		26,983.67	26,983.67	1.1474		27,012.36
Total	11.0318	24.1435	65.8267	0.2757	23.9187	0.3288	24.2475	6.3977	0.3155	6.7133		29,223.79	29,223.79	1.1916	0.0411	29,265.81

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.7667	2.0200e-003	0.2227	2.0000e-005		7.9000e-004	7.9000e-004		7.9000e-004	7.9000e-004		0.4786	0.4786	1.2400e-003		0.5098
Energy	0.2053	1.8664	1.5678	0.0112		0.1418	0.1418		0.1418	0.1418		2,239.6381	2,239.6381	0.0429	0.0411	2,252.9471
Mobile	5.0598	22.2751	64.0363	0.2645	23.9187	0.1862	24.1049	6.3977	0.1729	6.5706		26,983.6728	26,983.6728	1.1474		27,012.3579
Total	11.0318	24.1435	65.8267	0.2757	23.9187	0.3288	24.2475	6.3977	0.3155	6.7133		29,223.7895	29,223.7895	1.1916	0.0411	29,265.8147

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2023	1/27/2023	5	20	
2	Site Preparation	Site Preparation	1/28/2023	2/10/2023	5	10	
3	Grading	Grading	2/11/2023	3/24/2023	5	30	
4	Building Construction	Building Construction	3/25/2023	5/17/2024	5	300	
5	Paving	Paving	5/18/2024	6/14/2024	5	20	
6	Architectural Coating	Architectural Coating	6/15/2024	11/1/2024	5	100	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 385,826; Non-Residential Outdoor: 128,609; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	216.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Building Construction	9	108.00	42.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	22.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3373	0.0000	2.3373	0.3539	0.0000	0.3539			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280		3,746.9840	3,746.9840	1.0494		3,773.2183
Total	2.2691	21.4844	19.6434	0.0388	2.3373	0.9975	3.3348	0.3539	0.9280	1.2819		3,746.9840	3,746.9840	1.0494		3,773.2183

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0512	1.6711	0.5584	7.8200e-003	0.1886	3.1000e-003	0.1917	0.0517	2.9700e-003	0.0547		852.7360	852.7360	0.0580		854.1859
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0554	0.0335	0.4810	1.5500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0456		154.1265	154.1265	3.6500e-003		154.2177
Total	0.1066	1.7046	1.0393	9.3700e-003	0.3563	4.2700e-003	0.3606	0.0962	4.0500e-003	0.1002		1,006.8625	1,006.8625	0.0617		1,008.4036

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3373	0.0000	2.3373	0.3539	0.0000	0.3539			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280	0.0000	3,746.9840	3,746.9840	1.0494		3,773.2183
Total	2.2691	21.4844	19.6434	0.0388	2.3373	0.9975	3.3348	0.3539	0.9280	1.2819	0.0000	3,746.9840	3,746.9840	1.0494		3,773.2183

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0512	1.6711	0.5584	7.8200e-003	0.1886	3.1000e-003	0.1917	0.0517	2.9700e-003	0.0547		852.7360	852.7360	0.0580		854.1859
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0554	0.0335	0.4810	1.5500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0456		154.1265	154.1265	3.6500e-003		154.2177
Total	0.1066	1.7046	1.0393	9.3700e-003	0.3563	4.2700e-003	0.3606	0.0962	4.0500e-003	0.1002		1,006.8625	1,006.8625	0.0617		1,008.4036

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.3081	3,687.3081	1.1926		3,717.1219
Total	2.6595	27.5242	18.2443	0.0381	18.0663	1.2660	19.3323	9.9307	1.1647	11.0954		3,687.3081	3,687.3081	1.1926		3,717.1219

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0665	0.0402	0.5772	1.8600e-003	0.2012	1.4100e-003	0.2026	0.0534	1.3000e-003	0.0547		184.9518	184.9518	4.3800e-003		185.0613
Total	0.0665	0.0402	0.5772	1.8600e-003	0.2012	1.4100e-003	0.2026	0.0534	1.3000e-003	0.0547		184.9518	184.9518	4.3800e-003		185.0613

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000

Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219
Total	2.6595	27.5242	18.2443	0.0381	18.0663	1.2660	19.3323	9.9307	1.1647	11.0954	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0665	0.0402	0.5772	1.8600e-003	0.2012	1.4100e-003	0.2026	0.0534	1.3000e-003	0.0547		184.9518	184.9518	4.3800e-003		185.0613
Total	0.0665	0.0402	0.5772	1.8600e-003	0.2012	1.4100e-003	0.2026	0.0534	1.3000e-003	0.0547		184.9518	184.9518	4.3800e-003		185.0613

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.3756	0.0000	6.3756	3.3484	0.0000	3.3484			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129		2,872.6910	2,872.6910	0.9291		2,895.9182
Total	1.7109	17.9359	14.7507	0.0297	6.3756	0.7749	7.1505	3.3484	0.7129	4.0613		2,872.6910	2,872.6910	0.9291		2,895.9182

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0554	0.0335	0.4810	1.5500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0456		154.1265	154.1265	3.6500e-003		154.2177
Total	0.0554	0.0335	0.4810	1.5500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0456		154.1265	154.1265	3.6500e-003		154.2177

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.3756	0.0000	6.3756	3.3484	0.0000	3.3484			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129	0.0000	2,872.6910	2,872.6910	0.9291		2,895.9182
Total	1.7109	17.9359	14.7507	0.0297	6.3756	0.7749	7.1505	3.3484	0.7129	4.0613	0.0000	2,872.6910	2,872.6910	0.9291		2,895.9182

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0554	0.0335	0.4810	1.5500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0456		154.1265	154.1265	3.6500e-003		154.2177
Total	0.0554	0.0335	0.4810	1.5500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0456		154.1265	154.1265	3.6500e-003		154.2177

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079			2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079			2,570.4061

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0823	2.8801	0.8347	0.0102	0.2688	3.3000e-003	0.2721	0.0774	3.1500e-003	0.0805		1,092.1532	1,092.1532	0.0600		1,093.6538
Worker	0.3987	0.2410	3.4629	0.0111	1.2072	8.4500e-003	1.2156	0.3202	7.7800e-003	0.3279		1,109.7107	1,109.7107	0.0263		1,110.3676
Total	0.4810	3.1211	4.2976	0.0213	1.4759	0.0118	1.4877	0.3975	0.0109	0.4085		2,201.8639	2,201.8639	0.0863		2,204.0214

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0823	2.8801	0.8347	0.0102	0.2688	3.3000e-003	0.2721	0.0774	3.1500e-003	0.0805		1,092.1532	1,092.1532	0.0600		1,093.6538
Worker	0.3987	0.2410	3.4629	0.0111	1.2072	8.4500e-003	1.2156	0.3202	7.7800e-003	0.3279		1,109.7107	1,109.7107	0.0263		1,110.3676
Total	0.4810	3.1211	4.2976	0.0213	1.4759	0.0118	1.4877	0.3975	0.0109	0.4085		2,201.8639	2,201.8639	0.0863		2,204.0214

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0805	2.8725	0.8110	0.0101	0.2688	3.2600e-003	0.2720	0.0774	3.1200e-003	0.0805		1,088.1488	1,088.1488	0.0592		1,089.6276
Worker	0.3774	0.2196	3.2334	0.0108	1.2072	8.3400e-003	1.2155	0.3202	7.6800e-003	0.3278		1,073.1475	1,073.1475	0.0241		1,073.7496
Total	0.4578	3.0922	4.0444	0.0209	1.4759	0.0116	1.4875	0.3975	0.0108	0.4083		2,161.2963	2,161.2963	0.0832		2,163.3771

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077

Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
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Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0805	2.8725	0.8110	0.0101	0.2688	3.2600e-003	0.2720	0.0774	3.1200e-003	0.0805		1,088.1488	1,088.1488	0.0592		1,089.6276
Worker	0.3774	0.2196	3.2334	0.0108	1.2072	8.3400e-003	1.2155	0.3202	7.6800e-003	0.3278		1,073.1475	1,073.1475	0.0241		1,073.7496
Total	0.4578	3.0922	4.0444	0.0209	1.4759	0.0116	1.4875	0.3975	0.0108	0.4083		2,161.2963	2,161.2963	0.0832		2,163.3771

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0524	0.0305	0.4491	1.4900e-003	0.1677	1.1600e-003	0.1688	0.0445	1.0700e-003	0.0455		149.0483	149.0483	3.3400e-003		149.1319
Total	0.0524	0.0305	0.4491	1.4900e-003	0.1677	1.1600e-003	0.1688	0.0445	1.0700e-003	0.0455		149.0483	149.0483	3.3400e-003		149.1319

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0524	0.0305	0.4491	1.4900e-003	0.1677	1.1600e-003	0.1688	0.0445	1.0700e-003	0.0455		149.0483	149.0483	3.3400e-003		149.1319
Total	0.0524	0.0305	0.4491	1.4900e-003	0.1677	1.1600e-003	0.1688	0.0445	1.0700e-003	0.0455		149.0483	149.0483	3.3400e-003		149.1319

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	23.8441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	24.0248	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0769	0.0447	0.6587	2.1900e-003	0.2459	1.7000e-003	0.2476	0.0652	1.5600e-003	0.0668		218.6041	218.6041	4.9100e-003		218.7268
Total	0.0769	0.0447	0.6587	2.1900e-003	0.2459	1.7000e-003	0.2476	0.0652	1.5600e-003	0.0668		218.6041	218.6041	4.9100e-003		218.7268

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	23.8441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	24.0248	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0769	0.0447	0.6587	2.1900e-003	0.2459	1.7000e-003	0.2476	0.0652	1.5600e-003	0.0668		218.6041	218.6041	4.9100e-003		218.7268
Total	0.0769	0.0447	0.6587	2.1900e-003	0.2459	1.7000e-003	0.2476	0.0652	1.5600e-003	0.0668		218.6041	218.6041	4.9100e-003		218.7268

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.0598	22.2751	64.0363	0.2645	23.9187	0.1862	24.1049	6.3977	0.1729	6.5706		26,983.6728	26,983.6728	1.1474		27,012.3579
Unmitigated	5.0598	22.2751	64.0363	0.2645	23.9187	0.1862	24.1049	6.3977	0.1729	6.5706		26,983.6728	26,983.6728	1.1474		27,012.3579

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Day-Care Center	78.84	7.02	6.66	84,727	84,727
University/College (4Yr)	3,708.99	2,819.70	0.00	9,168,144	9,168,144
Total	3,787.83	2,826.72	6.66	9,252,871	9,252,871

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Day-Care Center	16.60	8.40	6.90	12.70	82.30	5.00	28	58	14
University/College (4Yr)	16.60	8.40	6.90	6.40	88.60	5.00	91	9	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Day-Care Center	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827
University/College (4Yr)	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.2053	1.8664	1.5678	0.0112		0.1418	0.1418		0.1418	0.1418		2,239.6381	2,239.6381	0.0429	0.0411	2,252.9471
NaturalGas Unmitigated	0.2053	1.8664	1.5678	0.0112		0.1418	0.1418		0.1418	0.1418		2,239.6381	2,239.6381	0.0429	0.0411	2,252.9471

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Day-Care Center	28.9892	3.1000e-004	2.8400e-003	2.3900e-003	2.0000e-005		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		3.4105	3.4105	7.0000e-005	6.0000e-005	3.4308
University/College (4Yr)	19007.9	0.2050	1.8635	1.5654	0.0112		0.1416	0.1416		0.1416	0.1416		2,236.2276	2,236.2276	0.0429	0.0410	2,249.5163
Total		0.2053	1.8664	1.5678	0.0112		0.1419	0.1419		0.1419	0.1419		2,239.6381	2,239.6381	0.0429	0.0411	2,252.9471

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Day-Care Center	0.0289892	3.1000e-004	2.8400e-003	2.3900e-003	2.0000e-005		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		3.4105	3.4105	7.0000e-005	6.0000e-005	3.4308
University/College (4Yr)	19.0079	0.2050	1.8635	1.5654	0.0112		0.1416	0.1416		0.1416	0.1416		2,236.2276	2,236.2276	0.0429	0.0410	2,249.5163
Total		0.2053	1.8664	1.5678	0.0112		0.1419	0.1419		0.1419	0.1419		2,239.6381	2,239.6381	0.0429	0.0411	2,252.9471

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.7667	2.0200e-003	0.2227	2.0000e-005		7.9000e-004	7.9000e-004		7.9000e-004	7.9000e-004		0.4786	0.4786	1.2400e-003		0.5098
Unmitigated	5.7667	2.0200e-003	0.2227	2.0000e-005		7.9000e-004	7.9000e-004		7.9000e-004	7.9000e-004		0.4786	0.4786	1.2400e-003		0.5098

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					

Architectural Coating	0.6533				0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.0929				0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0205	2.0200e-003	0.2227	2.0000e-005	7.9000e-004	7.9000e-004		7.9000e-004	7.9000e-004		0.4786	0.4786	1.2400e-003		0.5098
Total	5.7667	2.0200e-003	0.2227	2.0000e-005	7.9000e-004	7.9000e-004		7.9000e-004	7.9000e-004		0.4786	0.4786	1.2400e-003		0.5098

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6533					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.0929					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0205	2.0200e-003	0.2227	2.0000e-005	7.9000e-004	7.9000e-004		7.9000e-004	7.9000e-004		0.4786	0.4786	1.2400e-003			0.5098
Total	5.7667	2.0200e-003	0.2227	2.0000e-005	7.9000e-004	7.9000e-004		7.9000e-004	7.9000e-004		0.4786	0.4786	1.2400e-003			0.5098

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Campus Operational Winter 2025

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

CSUDH Campus Master Plan EIR
South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Day-Care Center	18.00	Student	0.02	1,017.41	0
University/College (4Yr)	2,169.00	Student	9.15	256,200.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Master Plan
- Construction Phase - Adjusted.
- Demolition - Master Plan
- Grading - Master Plan.
- Vehicle Trips - Student Housing Trip Gen
- Woodstoves - No woodstoves or fireplaces.

Table Name	Column Name	Default Value	New Value
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tblConstructionPhase	NumDays	20.00	30.00
tblConstructionPhase	NumDays	230.00	300.00
tblConstructionPhase	NumDays	20.00	100.00
tblConstructionPhase	PhaseEndDate	6/28/2018	1/27/2023
tblConstructionPhase	PhaseEndDate	7/12/2018	2/10/2023
tblConstructionPhase	PhaseEndDate	8/9/2018	3/24/2023
tblConstructionPhase	PhaseEndDate	6/27/2019	5/17/2024
tblConstructionPhase	PhaseEndDate	7/25/2019	6/14/2024
tblConstructionPhase	PhaseEndDate	8/22/2019	11/1/2024
tblConstructionPhase	PhaseStartDate	6/1/2018	1/1/2023
tblConstructionPhase	PhaseStartDate	6/29/2018	1/28/2023
tblConstructionPhase	PhaseStartDate	7/13/2018	2/11/2023
tblConstructionPhase	PhaseStartDate	8/10/2018	3/25/2023
tblConstructionPhase	PhaseStartDate	6/28/2019	5/18/2024
tblConstructionPhase	PhaseStartDate	7/26/2019	6/15/2024
tblGrading	AcresOfGrading	15.00	10.00
tblLandUse	LandUseSquareFeet	398,656.71	256,200.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	2.7331	27.5683	20.6613	0.0480	18.2675	1.2674	19.5349	9.9840	1.1660	11.1501	0.0000	4,729.6052	4,729.6052	1.1966	0.0000	4,757.4188
2024	24.1103	16.5427	19.9638	0.0469	1.4759	0.6251	2.1010	0.3975	0.5878	0.9854	0.0000	4,621.1275	4,621.1275	0.7171	0.0000	4,638.3650

Maximum	24.1103	27.5683	20.6613	0.0480	18.2675	1.2674	19.5349	9.9840	1.1660	11.1501	0.0000	4,729.6052	4,729.6052	1.1966	0.0000	4,757.4188
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Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	2.7331	27.5683	20.6613	0.0480	18.2675	1.2674	19.5349	9.9840	1.1660	11.1501	0.0000	4,729.6052	4,729.6052	1.1966	0.0000	4,757.4188
2024	24.1103	16.5427	19.9638	0.0469	1.4759	0.6251	2.1010	0.3975	0.5878	0.9854	0.0000	4,621.1275	4,621.1275	0.7171	0.0000	4,638.3650
Maximum	24.1103	27.5683	20.6613	0.0480	18.2675	1.2674	19.5349	9.9840	1.1660	11.1501	0.0000	4,729.6052	4,729.6052	1.1966	0.0000	4,757.4188

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.7667	2.02E-03	0.2227	2.00E-05		7.90E-04	7.90E-04		7.90E-04	7.90E-04		0.4786	0.4786	1.24E-03		0.5098
Energy	0.2053	1.8664	1.5678	0.0112		0.1418	0.1418		0.1418	0.1418		2,239.64	2,239.64	0.0429	0.0411	2,252.95
Mobile	4.8364	22.6507	60.277	0.2509	23.9187	0.187	24.1057	6.3977	0.1737	6.5714		25,626.28	25,626.28	1.149		25,655.00
Total	10.8083	24.5191	62.0675	0.2622	23.9187	0.3296	24.2483	6.3977	0.3163	6.714		27,866.39	27,866.39	1.1932	0.0411	27,908.46

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.7667	2.0200e-003	0.2227	2.0000e-005		7.9000e-004	7.9000e-004		7.9000e-004	7.9000e-004		0.4786	0.4786	1.2400e-003		0.5098
Energy	0.2053	1.8664	1.5678	0.0112		0.1418	0.1418		0.1418	0.1418		2,239.6381	2,239.6381	0.0429	0.0411	2,252.9471
Mobile	4.8364	22.6507	60.2770	0.2509	23.9187	0.1870	24.1057	6.3977	0.1737	6.5714		25,626.2759	25,626.2759	1.1490		25,655.0015
Total	10.8083	24.5191	62.0675	0.2622	23.9187	0.3296	24.2483	6.3977	0.3163	6.7140		27,866.3925	27,866.3925	1.1932	0.0411	27,908.4583

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2023	1/27/2023	5	20	
2	Site Preparation	Site Preparation	1/28/2023	2/10/2023	5	10	
3	Grading	Grading	2/11/2023	3/24/2023	5	30	
4	Building Construction	Building Construction	3/25/2023	5/17/2024	5	300	
5	Paving	Paving	5/18/2024	6/14/2024	5	20	
6	Architectural Coating	Architectural Coating	6/15/2024	11/1/2024	5	100	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 385,826; Non-Residential Outdoor: 128,609; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	216.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Building Construction	9	108.00	42.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	22.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3373	0.0000	2.3373	0.3539	0.0000	0.3539			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280		3,746.9840	3,746.9840	1.0494		3,773.2183
Total	2.2691	21.4844	19.6434	0.0388	2.3373	0.9975	3.3348	0.3539	0.9280	1.2819		3,746.9840	3,746.9840	1.0494		3,773.2183

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0526	1.6810	0.5842	7.6900e-003	0.1886	3.1900e-003	0.1918	0.0517	3.0500e-003	0.0547		838.0673	838.0673	0.0598		839.5615
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0614	0.0367	0.4338	1.4500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0456		144.5539	144.5539	3.4100e-003		144.6391
Total	0.1140	1.7178	1.0179	9.1400e-003	0.3563	4.3600e-003	0.3607	0.0962	4.1300e-003	0.1003		982.6212	982.6212	0.0632		984.2006

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3373	0.0000	2.3373	0.3539	0.0000	0.3539			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280	0.0000	3,746.9840	3,746.9840	1.0494		3,773.2183
Total	2.2691	21.4844	19.6434	0.0388	2.3373	0.9975	3.3348	0.3539	0.9280	1.2819	0.0000	3,746.9840	3,746.9840	1.0494		3,773.2183

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0526	1.6810	0.5842	7.6900e-003	0.1886	3.1900e-003	0.1918	0.0517	3.0500e-003	0.0547		838.0673	838.0673	0.0598		839.5615
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0614	0.0367	0.4338	1.4500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0456		144.5539	144.5539	3.4100e-003		144.6391
Total	0.1140	1.7178	1.0179	9.1400e-003	0.3563	4.3600e-003	0.3607	0.0962	4.1300e-003	0.1003		982.6212	982.6212	0.0632		984.2006

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.3081	3,687.3081	1.1926		3,717.1219
Total	2.6595	27.5242	18.2443	0.0381	18.0663	1.2660	19.3323	9.9307	1.1647	11.0954		3,687.3081	3,687.3081	1.1926		3,717.1219

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0736	0.0441	0.5205	1.7400e-003	0.2012	1.4100e-003	0.2026	0.0534	1.3000e-003	0.0547		173.4647	173.4647	4.0900e-003		173.5669
Total	0.0736	0.0441	0.5205	1.7400e-003	0.2012	1.4100e-003	0.2026	0.0534	1.3000e-003	0.0547		173.4647	173.4647	4.0900e-003		173.5669

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000

Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219
Total	2.6595	27.5242	18.2443	0.0381	18.0663	1.2660	19.3323	9.9307	1.1647	11.0954	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0736	0.0441	0.5205	1.7400e-003	0.2012	1.4100e-003	0.2026	0.0534	1.3000e-003	0.0547		173.4647	173.4647	4.0900e-003		173.5669
Total	0.0736	0.0441	0.5205	1.7400e-003	0.2012	1.4100e-003	0.2026	0.0534	1.3000e-003	0.0547		173.4647	173.4647	4.0900e-003		173.5669

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.3756	0.0000	6.3756	3.3484	0.0000	3.3484			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129		2,872.6910	2,872.6910	0.9291		2,895.9182
Total	1.7109	17.9359	14.7507	0.0297	6.3756	0.7749	7.1505	3.3484	0.7129	4.0613		2,872.6910	2,872.6910	0.9291		2,895.9182

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0614	0.0367	0.4338	1.4500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0456		144.5539	144.5539	3.4100e-003		144.6391
Total	0.0614	0.0367	0.4338	1.4500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0456		144.5539	144.5539	3.4100e-003		144.6391

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.3756	0.0000	6.3756	3.3484	0.0000	3.3484			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129	0.0000	2,872.6910	2,872.6910	0.9291		2,895.9182
Total	1.7109	17.9359	14.7507	0.0297	6.3756	0.7749	7.1505	3.3484	0.7129	4.0613	0.0000	2,872.6910	2,872.6910	0.9291		2,895.9182

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0614	0.0367	0.4338	1.4500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0456		144.5539	144.5539	3.4100e-003		144.6391
Total	0.0614	0.0367	0.4338	1.4500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0456		144.5539	144.5539	3.4100e-003		144.6391

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0865	2.8646	0.9119	9.9100e-003	0.2688	3.4700e-003	0.2722	0.0774	3.3100e-003	0.0807		1,062.7265	1,062.7265	0.0637		1,064.3182
Worker	0.4418	0.2645	3.1231	0.0104	1.2072	8.4500e-003	1.2156	0.3202	7.7800e-003	0.3279		1,040.7880	1,040.7880	0.0245		1,041.4016
Total	0.5283	3.1291	4.0350	0.0204	1.4759	0.0119	1.4879	0.3975	0.0111	0.4086		2,103.5145	2,103.5145	0.0882		2,105.7198

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0865	2.8646	0.9119	9.9100e-003	0.2688	3.4700e-003	0.2722	0.0774	3.3100e-003	0.0807		1,062.7265	1,062.7265	0.0637		1,064.3182
Worker	0.4418	0.2645	3.1231	0.0104	1.2072	8.4500e-003	1.2156	0.3202	7.7800e-003	0.3279		1,040.7880	1,040.7880	0.0245		1,041.4016
Total	0.5283	3.1291	4.0350	0.0204	1.4759	0.0119	1.4879	0.3975	0.0111	0.4086		2,103.5145	2,103.5145	0.0882		2,105.7198

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0846	2.8579	0.8859	9.8700e-003	0.2688	3.4100e-003	0.2722	0.0774	3.2600e-003	0.0806		1,059.0387	1,059.0387	0.0627		1,060.6058
Worker	0.4194	0.2410	2.9111	0.0101	1.2072	8.3400e-003	1.2155	0.3202	7.6800e-003	0.3278		1,006.3899	1,006.3899	0.0225		1,006.9515
Total	0.5040	3.0989	3.7970	0.0200	1.4759	0.0118	1.4877	0.3975	0.0109	0.4085		2,065.4286	2,065.4286	0.0852		2,067.5573

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077

Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
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Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0846	2.8579	0.8859	9.8700e-003	0.2688	3.4100e-003	0.2722	0.0774	3.2600e-003	0.0806		1,059.0387	1,059.0387	0.0627		1,060.6058
Worker	0.4194	0.2410	2.9111	0.0101	1.2072	8.3400e-003	1.2155	0.3202	7.6800e-003	0.3278		1,006.3899	1,006.3899	0.0225		1,006.9515
Total	0.5040	3.0989	3.7970	0.0200	1.4759	0.0118	1.4877	0.3975	0.0109	0.4085		2,065.4286	2,065.4286	0.0852		2,067.5573

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0583	0.0335	0.4043	1.4000e-003	0.1677	1.1600e-003	0.1688	0.0445	1.0700e-003	0.0455		139.7764	139.7764	3.1200e-003		139.8544
Total	0.0583	0.0335	0.4043	1.4000e-003	0.1677	1.1600e-003	0.1688	0.0445	1.0700e-003	0.0455		139.7764	139.7764	3.1200e-003		139.8544

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0583	0.0335	0.4043	1.4000e-003	0.1677	1.1600e-003	0.1688	0.0445	1.0700e-003	0.0455		139.7764	139.7764	3.1200e-003		139.8544
Total	0.0583	0.0335	0.4043	1.4000e-003	0.1677	1.1600e-003	0.1688	0.0445	1.0700e-003	0.0455		139.7764	139.7764	3.1200e-003		139.8544

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	23.8441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	24.0248	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0854	0.0491	0.5930	2.0600e-003	0.2459	1.7000e-003	0.2476	0.0652	1.5600e-003	0.0668		205.0054	205.0054	4.5800e-003		205.1198
Total	0.0854	0.0491	0.5930	2.0600e-003	0.2459	1.7000e-003	0.2476	0.0652	1.5600e-003	0.0668		205.0054	205.0054	4.5800e-003		205.1198

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	23.8441					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	24.0248	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0854	0.0491	0.5930	2.0600e-003	0.2459	1.7000e-003	0.2476	0.0652	1.5600e-003	0.0668		205.0054	205.0054	4.5800e-003		205.1198
Total	0.0854	0.0491	0.5930	2.0600e-003	0.2459	1.7000e-003	0.2476	0.0652	1.5600e-003	0.0668		205.0054	205.0054	4.5800e-003		205.1198

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.8364	22.6507	60.2770	0.2509	23.9187	0.1870	24.1057	6.3977	0.1737	6.5714		25,626.2759	25,626.2759	1.1490		25,655.0015
Unmitigated	4.8364	22.6507	60.2770	0.2509	23.9187	0.1870	24.1057	6.3977	0.1737	6.5714		25,626.2759	25,626.2759	1.1490		25,655.0015

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Day-Care Center	78.84	7.02	6.66	84,727	84,727
University/College (4Yr)	3,708.99	2,819.70	0.00	9,168,144	9,168,144
Total	3,787.83	2,826.72	6.66	9,252,871	9,252,871

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Day-Care Center	16.60	8.40	6.90	12.70	82.30	5.00	28	58	14
University/College (4Yr)	16.60	8.40	6.90	6.40	88.60	5.00	91	9	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Day-Care Center	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827
University/College (4Yr)	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.2053	1.8664	1.5678	0.0112		0.1418	0.1418		0.1418	0.1418		2,239.6381	2,239.6381	0.0429	0.0411	2,252.9471
NaturalGas Unmitigated	0.2053	1.8664	1.5678	0.0112		0.1418	0.1418		0.1418	0.1418		2,239.6381	2,239.6381	0.0429	0.0411	2,252.9471

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Day-Care Center	28.9892	3.1000e-004	2.8400e-003	2.3900e-003	2.0000e-005		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		3.4105	3.4105	7.0000e-005	6.0000e-005	3.4308
University/College (4Yr)	19007.9	0.2050	1.8635	1.5654	0.0112		0.1416	0.1416		0.1416	0.1416		2,236.2276	2,236.2276	0.0429	0.0410	2,249.5163
Total		0.2053	1.8664	1.5678	0.0112		0.1419	0.1419		0.1419	0.1419		2,239.6381	2,239.6381	0.0429	0.0411	2,252.9471

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Day-Care Center	0.0289892	3.1000e-004	2.8400e-003	2.3900e-003	2.0000e-005		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		3.4105	3.4105	7.0000e-005	6.0000e-005	3.4308
University/College (4Yr)	19.0079	0.2050	1.8635	1.5654	0.0112		0.1416	0.1416		0.1416	0.1416		2,236.2276	2,236.2276	0.0429	0.0410	2,249.5163
Total		0.2053	1.8664	1.5678	0.0112		0.1419	0.1419		0.1419	0.1419		2,239.6381	2,239.6381	0.0429	0.0411	2,252.9471

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.7667	2.0200e-003	0.2227	2.0000e-005		7.9000e-004	7.9000e-004		7.9000e-004	7.9000e-004		0.4786	0.4786	1.2400e-003		0.5098
Unmitigated	5.7667	2.0200e-003	0.2227	2.0000e-005		7.9000e-004	7.9000e-004		7.9000e-004	7.9000e-004		0.4786	0.4786	1.2400e-003		0.5098

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					

Architectural Coating	0.6533				0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.0929				0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0205	2.0200e-003	0.2227	2.0000e-005	7.9000e-004	7.9000e-004		7.9000e-004	7.9000e-004		0.4786	0.4786	1.2400e-003		0.5098
Total	5.7667	2.0200e-003	0.2227	2.0000e-005	7.9000e-004	7.9000e-004		7.9000e-004	7.9000e-004		0.4786	0.4786	1.2400e-003		0.5098

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.6533					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.0929					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0205	2.0200e-003	0.2227	2.0000e-005	7.9000e-004	7.9000e-004		7.9000e-004	7.9000e-004		0.4786	0.4786	1.2400e-003			0.5098
Total	5.7667	2.0200e-003	0.2227	2.0000e-005	7.9000e-004	7.9000e-004		7.9000e-004	7.9000e-004		0.4786	0.4786	1.2400e-003			0.5098

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Uni Village Operational Annual 2025

CSUDH Campus Master Plan EIR (University Village) - South Coast Air Basin, Annual

CSUDH Campus Master Plan EIR (University Village)
South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	720.92	1000sqft	33.00	720,918.00	0
Apartments Mid Rise	1,063.00	Dwelling Unit	13.30	1,063,000.00	3040
Regional Shopping Center	96.09	1000sqft	2.20	96,085.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Master Plan
- Demolition - Master Plan
- Grading - Master Plan
- Architectural Coating - Master Plan
- Woodstoves - No woodstove and fireplace.
- Construction Phase -

Year	tons/yr										MT/yr					
2019	0.7803	6.6190	5.7926	0.0153	1.3869	0.2539	1.6408	0.4857	0.2358	0.7215	0.0000	1,395.8156	1,395.8156	0.1796	0.0000	1,400.3060
2020	0.9865	6.4580	8.1896	0.0264	1.6808	0.1749	1.8556	0.4511	0.1645	0.6155	0.0000	2,428.2918	2,428.2918	0.1654	0.0000	2,432.4259
2021	0.8981	5.8363	7.6360	0.0258	1.6744	0.1426	1.8170	0.4494	0.1340	0.5833	0.0000	2,370.2444	2,370.2444	0.1581	0.0000	2,374.1966
2022	7.5264	2.6574	3.7112	0.0120	0.7785	0.0702	0.8487	0.2087	0.0658	0.2745	0.0000	1,103.5025	1,103.5025	0.0845	0.0000	1,105.6159
Maximum	7.5264	6.6190	8.1896	0.0264	1.6808	0.2539	1.8556	0.4857	0.2358	0.7215	0.0000	2,428.2918	2,428.2918	0.1796	0.0000	2,432.4259

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.7803	6.6190	5.7926	0.0153	1.3869	0.2539	1.6408	0.4857	0.2358	0.7215	0.0000	1,395.8151	1,395.8151	0.1796	0.0000	1,400.3054
2020	0.9865	6.4580	8.1896	0.0264	1.6808	0.1749	1.8556	0.4511	0.1645	0.6155	0.0000	2,428.2914	2,428.2914	0.1654	0.0000	2,432.4255
2021	0.8981	5.8363	7.6360	0.0258	1.6744	0.1426	1.8170	0.4494	0.1340	0.5833	0.0000	2,370.2440	2,370.2440	0.1581	0.0000	2,374.1962
2022	7.5264	2.6574	3.7112	0.0120	0.7785	0.0702	0.8487	0.2087	0.0658	0.2745	0.0000	1,103.5023	1,103.5023	0.0845	0.0000	1,105.6157
Maximum	7.5264	6.6190	8.1896	0.0264	1.6808	0.2539	1.8556	0.4857	0.2358	0.7215	0.0000	2,428.2914	2,428.2914	0.1796	0.0000	2,432.4255

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2019	3-31-2019	1.4704	1.4704
2	4-1-2019	6-30-2019	1.8577	1.8577
3	7-1-2019	9-30-2019	1.9910	1.9910

4	10-1-2019	12-31-2019	2.0457	2.0457
5	1-1-2020	3-31-2020	1.8449	1.8449
6	4-1-2020	6-30-2020	1.8190	1.8190
7	7-1-2020	9-30-2020	1.8390	1.8390
8	10-1-2020	12-31-2020	1.8651	1.8651
9	1-1-2021	3-31-2021	1.6578	1.6578
10	4-1-2021	6-30-2021	1.6537	1.6537
11	7-1-2021	9-30-2021	1.6719	1.6719
12	10-1-2021	12-31-2021	1.6946	1.6946
13	1-1-2022	3-31-2022	1.5343	1.5343
14	4-1-2022	6-30-2022	1.2327	1.2327
15	7-1-2022	9-30-2022	3.8764	3.8764
		Highest	3.8764	3.8764

2.2 Overall Operational Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	7.8344	0.1263	10.9624	5.80E-04		0.0608	0.0608		0.0608	0.0608	0	17.9271	17.9271	0.0172	0	18.3571
Energy	0.0942	0.8271	0.5076	5.14E-03		0.0651	0.0651		0.0651	0.0651	0	5,670.09	5,670.09	0.2135	0.0576	5,692.58
Mobile	3.4845	17.0663	45.736	0.1909	17.6506	0.1396	17.7902	4.7283	0.1297	4.858	0	17,679.19	17,679.19	0.7744	0	17,698.55
Waste						0	0		0	0	255.8336	0	255.8336	15.1193	0	633.8168
Water						0	0		0	0	64.8808	1,296.45	1,361.33	6.7174	0.1684	1,579.46
Total	11.4131	18.0196	57.206	0.1966	17.6506	0.2655	17.916	4.7283	0.2555	4.9838	320.7143	24,663.66	24,984.37	22.8418	0.226	25,622.76

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	7.8344	0.1263	10.9624	5.8000e-004		0.0608	0.0608		0.0608	0.0608	0.0000	17.9271	17.9271	0.0172	0.0000	18.3571
Energy	0.0942	0.8271	0.5076	5.1400e-003		0.0651	0.0651		0.0651	0.0651	0.0000	5,670.0876	5,670.0876	0.2135	0.0576	5,692.5760
Mobile	3.4845	17.0663	45.7360	0.1909	17.6506	0.1396	17.7902	4.7283	0.1297	4.8580	0.0000	17,679.1924	17,679.1924	0.7744	0.0000	17,698.5524
Waste						0.0000	0.0000		0.0000	0.0000	255.8336	0.0000	255.8336	15.1193	0.0000	633.8168
Water						0.0000	0.0000		0.0000	0.0000	64.8808	1,296.4530	1,361.3338	6.7174	0.1684	1,579.4587
Total	11.4131	18.0196	57.2060	0.1966	17.6506	0.2655	17.9160	4.7283	0.2555	4.9838	320.7143	24,663.6600	24,984.3744	22.8418	0.2260	25,622.7611

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2019	3/11/2019	5	50	
2	Site Preparation	Site Preparation	3/12/2019	4/22/2019	5	30	
3	Grading	Grading	4/23/2019	8/5/2019	5	75	
4	Building Construction	Building Construction	8/6/2019	6/6/2022	5	740	
5	Paving	Paving	6/7/2022	8/22/2022	5	55	
6	Architectural Coating	Architectural Coating	8/23/2022	11/7/2022	5	55	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 187.5

Acres of Paving: 0

Residential Indoor: 2,152,575; Residential Outdoor: 717,525; Non-Residential Indoor: 1,225,505; Non-Residential Outdoor: 408,502;

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	817.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Worker	1.8100e-003	1.4400e-003	0.0157	4.0000e-005	4.1100e-003	3.0000e-005	4.1500e-003	1.0900e-003	3.0000e-005	1.1200e-003	0.0000	3.8259	3.8259	1.2000e-004	0.0000	3.8289
Total	5.3700e-003	0.1271	0.0408	3.6000e-004	0.0111	4.9000e-004	0.0116	3.0200e-003	4.7000e-004	3.4900e-003	0.0000	35.1363	35.1363	2.4200e-003	0.0000	35.1969

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0884	0.0000	0.0884	0.0134	0.0000	0.0134	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0878	0.8946	0.5515	9.7000e-004		0.0449	0.0449		0.0417	0.0417	0.0000	86.5657	86.5657	0.0241	0.0000	87.1678
Total	0.0878	0.8946	0.5515	9.7000e-004	0.0884	0.0449	0.1332	0.0134	0.0417	0.0551	0.0000	86.5657	86.5657	0.0241	0.0000	87.1678

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.5600e-003	0.1256	0.0251	3.2000e-004	7.0200e-003	4.6000e-004	7.4800e-003	1.9300e-003	4.4000e-004	2.3700e-003	0.0000	31.3104	31.3104	2.3000e-003	0.0000	31.3679
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8100e-003	1.4400e-003	0.0157	4.0000e-005	4.1100e-003	3.0000e-005	4.1500e-003	1.0900e-003	3.0000e-005	1.1200e-003	0.0000	3.8259	3.8259	1.2000e-004	0.0000	3.8289
Total	5.3700e-003	0.1271	0.0408	3.6000e-004	0.0111	4.9000e-004	0.0116	3.0200e-003	4.7000e-004	3.4900e-003	0.0000	35.1363	35.1363	2.4200e-003	0.0000	35.1969

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2710	0.0000	0.2710	0.1490	0.0000	0.1490	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0650	0.6836	0.3310	5.7000e-004		0.0359	0.0359		0.0330	0.0330	0.0000	51.2530	51.2530	0.0162	0.0000	51.6584
Total	0.0650	0.6836	0.3310	5.7000e-004	0.2710	0.0359	0.3069	0.1490	0.0330	0.1820	0.0000	51.2530	51.2530	0.0162	0.0000	51.6584

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-003	1.0400e-003	0.0113	3.0000e-005	2.9600e-003	2.0000e-005	2.9900e-003	7.9000e-004	2.0000e-005	8.1000e-004	0.0000	2.7547	2.7547	9.0000e-005	0.0000	2.7568
Total	1.3000e-003	1.0400e-003	0.0113	3.0000e-005	2.9600e-003	2.0000e-005	2.9900e-003	7.9000e-004	2.0000e-005	8.1000e-004	0.0000	2.7547	2.7547	9.0000e-005	0.0000	2.7568

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Fugitive Dust					0.2710	0.0000	0.2710	0.1490	0.0000	0.1490	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0650	0.6836	0.3309	5.7000e-004		0.0359	0.0359		0.0330	0.0330	0.0000	51.2530	51.2530	0.0162	0.0000	51.6584	
Total	0.0650	0.6836	0.3309	5.7000e-004		0.2710	0.0359	0.3069	0.1490	0.0330	0.1820	0.0000	51.2530	51.2530	0.0162	0.0000	51.6584

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3000e-003	1.0400e-003	0.0113	3.0000e-005	2.9600e-003	2.0000e-005	2.9900e-003	7.9000e-004	2.0000e-005	8.1000e-004	0.0000	2.7547	2.7547	9.0000e-005	0.0000	2.7568
Total	1.3000e-003	1.0400e-003	0.0113	3.0000e-005	2.9600e-003	2.0000e-005	2.9900e-003	7.9000e-004	2.0000e-005	8.1000e-004	0.0000	2.7547	2.7547	9.0000e-005	0.0000	2.7568

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3253	0.0000	0.3253	0.1349	0.0000	0.1349	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1777	2.0445	1.2516	2.3300e-003		0.0894	0.0894		0.0822	0.0822	0.0000	208.8800	208.8800	0.0661	0.0000	210.5321
Total	0.1777	2.0445	1.2516	2.3300e-003	0.3253	0.0894	0.4146	0.1349	0.0822	0.2171	0.0000	208.8800	208.8800	0.0661	0.0000	210.5321

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6100e-003	2.8800e-003	0.0313	8.0000e-005	8.2300e-003	7.0000e-005	8.2900e-003	2.1900e-003	6.0000e-005	2.2500e-003	0.0000	7.6519	7.6519	2.4000e-004	0.0000	7.6579
Total	3.6100e-003	2.8800e-003	0.0313	8.0000e-005	8.2300e-003	7.0000e-005	8.2900e-003	2.1900e-003	6.0000e-005	2.2500e-003	0.0000	7.6519	7.6519	2.4000e-004	0.0000	7.6579

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3253	0.0000	0.3253	0.1349	0.0000	0.1349	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1777	2.0445	1.2516	2.3300e-003		0.0894	0.0894		0.0822	0.0822	0.0000	208.8797	208.8797	0.0661	0.0000	210.5319
Total	0.1777	2.0445	1.2516	2.3300e-003	0.3253	0.0894	0.4146	0.1349	0.0822	0.2171	0.0000	208.8797	208.8797	0.0661	0.0000	210.5319

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr										MT/yr					
	Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.6100e-003	2.8800e-003	0.0313	8.0000e-005	8.2300e-003	7.0000e-005	8.2900e-003	2.1900e-003	6.0000e-005	2.2500e-003	0.0000	7.6519	7.6519	2.4000e-004	0.0000	7.6579
Total	3.6100e-003	2.8800e-003	0.0313	8.0000e-005	8.2300e-003	7.0000e-005	8.2900e-003	2.1900e-003	6.0000e-005	2.2500e-003	0.0000	7.6519	7.6519	2.4000e-004	0.0000	7.6579

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1251	1.1172	0.9097	1.4300e-003		0.0684	0.0684		0.0643	0.0643	0.0000	124.6052	124.6052	0.0304	0.0000	125.3641
Total	0.1251	1.1172	0.9097	1.4300e-003		0.0684	0.0684		0.0643	0.0643	0.0000	124.6052	124.6052	0.0304	0.0000	125.3641

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0522	1.5391	0.3925	3.3400e-003	0.0828	0.0101	0.0929	0.0239	9.6300e-003	0.0335	0.0000	323.6368	323.6368	0.0227	0.0000	324.2046
Worker	0.2621	0.2090	2.2730	6.1500e-003	0.5972	4.7600e-003	0.6019	0.1586	4.3900e-003	0.1630	0.0000	555.3319	555.3319	0.0174	0.0000	555.7673

Total	0.3143	1.7481	2.6655	9.4900e-003	0.6800	0.0148	0.6948	0.1825	0.0140	0.1965	0.0000	878.9687	878.9687	0.0401	0.0000	879.9719
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Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1251	1.1172	0.9097	1.4300e-003		0.0684	0.0684		0.0643	0.0643	0.0000	124.6051	124.6051	0.0304	0.0000	125.3640
Total	0.1251	1.1172	0.9097	1.4300e-003		0.0684	0.0684		0.0643	0.0643	0.0000	124.6051	124.6051	0.0304	0.0000	125.3640

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0522	1.5391	0.3925	3.3400e-003	0.0828	0.0101	0.0929	0.0239	9.6300e-003	0.0335	0.0000	323.6368	323.6368	0.0227	0.0000	324.2046
Worker	0.2621	0.2090	2.2730	6.1500e-003	0.5972	4.7600e-003	0.6019	0.1586	4.3900e-003	0.1630	0.0000	555.3319	555.3319	0.0174	0.0000	555.7673
Total	0.3143	1.7481	2.6655	9.4900e-003	0.6800	0.0148	0.6948	0.1825	0.0140	0.1965	0.0000	878.9687	878.9687	0.0401	0.0000	879.9719

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2777	2.5134	2.2072	3.5300e-003		0.1463	0.1463		0.1376	0.1376	0.0000	303.4091	303.4091	0.0740	0.0000	305.2596
Total	0.2777	2.5134	2.2072	3.5300e-003		0.1463	0.1463		0.1376	0.1376	0.0000	303.4091	303.4091	0.0740	0.0000	305.2596

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1100	3.4836	0.8784	8.2000e-003	0.2047	0.0171	0.2218	0.0591	0.0163	0.0754	0.0000	794.8103	794.8103	0.0530	0.0000	796.1363
Worker	0.5988	0.4610	5.1040	0.0147	1.4761	0.0115	1.4875	0.3920	0.0106	0.4026	0.0000	1,330.0724	1,330.0724	0.0383	0.0000	1,331.0300
Total	0.7088	3.9446	5.9824	0.0229	1.6808	0.0285	1.7093	0.4511	0.0269	0.4780	0.0000	2,124.8827	2,124.8827	0.0913	0.0000	2,127.1663

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Off-Road	0.2777	2.5134	2.2072	3.5300e-003		0.1463	0.1463		0.1376	0.1376	0.0000	303.4087	303.4087	0.0740	0.0000	305.2592
Total	0.2777	2.5134	2.2072	3.5300e-003		0.1463	0.1463		0.1376	0.1376	0.0000	303.4087	303.4087	0.0740	0.0000	305.2592

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1100	3.4836	0.8784	8.2000e-003	0.2047	0.0171	0.2218	0.0591	0.0163	0.0754	0.0000	794.8103	794.8103	0.0530	0.0000	796.1363
Worker	0.5988	0.4610	5.1040	0.0147	1.4761	0.0115	1.4875	0.3920	0.0106	0.4026	0.0000	1,330.0724	1,330.0724	0.0383	0.0000	1,331.0300
Total	0.7088	3.9446	5.9824	0.0229	1.6808	0.0285	1.7093	0.4511	0.0269	0.4780	0.0000	2,124.8827	2,124.8827	0.0913	0.0000	2,127.1663

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2481	2.2749	2.1631	3.5100e-003		0.1251	0.1251		0.1176	0.1176	0.0000	302.2867	302.2867	0.0729	0.0000	304.1099
Total	0.2481	2.2749	2.1631	3.5100e-003		0.1251	0.1251		0.1176	0.1176	0.0000	302.2867	302.2867	0.0729	0.0000	304.1099

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0931	3.1481	0.7956	8.1000e-003	0.2040	6.4100e-003	0.2104	0.0589	6.1300e-003	0.0650	0.0000	785.8192	785.8192	0.0507	0.0000	787.0856
Worker	0.5570	0.4134	4.6773	0.0142	1.4704	0.0111	1.4815	0.3905	0.0102	0.4007	0.0000	1,282.1385	1,282.1385	0.0345	0.0000	1,283.0011
Total	0.6501	3.5615	5.4729	0.0223	1.6744	0.0175	1.6919	0.4494	0.0163	0.4657	0.0000	2,067.9577	2,067.9577	0.0852	0.0000	2,070.0867

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2481	2.2749	2.1631	3.5100e-003		0.1251	0.1251		0.1176	0.1176	0.0000	302.2863	302.2863	0.0729	0.0000	304.1095
Total	0.2481	2.2749	2.1631	3.5100e-003		0.1251	0.1251		0.1176	0.1176	0.0000	302.2863	302.2863	0.0729	0.0000	304.1095

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr										MT/yr					
	Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0931	3.1481	0.7956	8.1000e-003	0.2040	6.4100e-003	0.2104	0.0589	6.1300e-003	0.0650	0.0000	785.8192	785.8192	0.0507	0.0000	787.0856
Worker	0.5570	0.4134	4.6773	0.0142	1.4704	0.0111	1.4815	0.3905	0.0102	0.4007	0.0000	1,282.1385	1,282.1385	0.0345	0.0000	1,283.0011
Total	0.6501	3.5615	5.4729	0.0223	1.6744	0.0175	1.6919	0.4494	0.0163	0.4657	0.0000	2,067.9577	2,067.9577	0.0852	0.0000	2,070.0867

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0947	0.8667	0.9082	1.4900e-003		0.0449	0.0449		0.0422	0.0422	0.0000	128.6075	128.6075	0.0308	0.0000	129.3778
Total	0.0947	0.8667	0.9082	1.4900e-003		0.0449	0.0449		0.0422	0.0422	0.0000	128.6075	128.6075	0.0308	0.0000	129.3778

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0371	1.2704	0.3204	3.4100e-003	0.0867	2.3700e-003	0.0891	0.0250	2.2700e-003	0.0273	0.0000	331.2467	331.2467	0.0208	0.0000	331.7666
Worker	0.2225	0.1588	1.8369	5.8100e-003	0.6254	4.5800e-003	0.6299	0.1661	4.2200e-003	0.1703	0.0000	525.7466	525.7466	0.0133	0.0000	526.0780

Total	0.2596	1.4292	2.1573	9.2200e-003	0.7121	6.9500e-003	0.7190	0.1911	6.4900e-003	0.1976	0.0000	856.9933	856.9933	0.0341	0.0000	857.8446
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Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0947	0.8667	0.9082	1.4900e-003		0.0449	0.0449		0.0422	0.0422	0.0000	128.6074	128.6074	0.0308	0.0000	129.3776
Total	0.0947	0.8667	0.9082	1.4900e-003		0.0449	0.0449		0.0422	0.0422	0.0000	128.6074	128.6074	0.0308	0.0000	129.3776

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0371	1.2704	0.3204	3.4100e-003	0.0867	2.3700e-003	0.0891	0.0250	2.2700e-003	0.0273	0.0000	331.2467	331.2467	0.0208	0.0000	331.7666
Worker	0.2225	0.1588	1.8369	5.8100e-003	0.6254	4.5800e-003	0.6299	0.1661	4.2200e-003	0.1703	0.0000	525.7466	525.7466	0.0133	0.0000	526.0780
Total	0.2596	1.4292	2.1573	9.2200e-003	0.7121	6.9500e-003	0.7190	0.1911	6.4900e-003	0.1976	0.0000	856.9933	856.9933	0.0341	0.0000	857.8446

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0303	0.3059	0.4010	6.3000e-004		0.0156	0.0156		0.0144	0.0144	0.0000	55.0758	55.0758	0.0178	0.0000	55.5211
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0303	0.3059	0.4010	6.3000e-004		0.0156	0.0156		0.0144	0.0144	0.0000	55.0758	55.0758	0.0178	0.0000	55.5211

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6100e-003	1.1500e-003	0.0133	4.0000e-005	4.5300e-003	3.0000e-005	4.5600e-003	1.2000e-003	3.0000e-005	1.2300e-003	0.0000	3.8049	3.8049	1.0000e-004	0.0000	3.8072
Total	1.6100e-003	1.1500e-003	0.0133	4.0000e-005	4.5300e-003	3.0000e-005	4.5600e-003	1.2000e-003	3.0000e-005	1.2300e-003	0.0000	3.8049	3.8049	1.0000e-004	0.0000	3.8072

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Off-Road	0.0303	0.3059	0.4010	6.3000e-004		0.0156	0.0156		0.0144	0.0144	0.0000	55.0757	55.0757	0.0178	0.0000	55.5210
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0303	0.3059	0.4010	6.3000e-004		0.0156	0.0156		0.0144	0.0144	0.0000	55.0757	55.0757	0.0178	0.0000	55.5210

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6100e-003	1.1500e-003	0.0133	4.0000e-005	4.5300e-003	3.0000e-005	4.5600e-003	1.2000e-003	3.0000e-005	1.2300e-003	0.0000	3.8049	3.8049	1.0000e-004	0.0000	3.8072
Total	1.6100e-003	1.1500e-003	0.0133	4.0000e-005	4.5300e-003	3.0000e-005	4.5600e-003	1.2000e-003	3.0000e-005	1.2300e-003	0.0000	3.8049	3.8049	1.0000e-004	0.0000	3.8072

3.7 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	7.1125					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.6200e-003	0.0387	0.0499	8.0000e-005		2.2500e-003	2.2500e-003		2.2500e-003	2.2500e-003	0.0000	7.0215	7.0215	4.6000e-004	0.0000	7.0329
Total	7.1182	0.0387	0.0499	8.0000e-005		2.2500e-003	2.2500e-003		2.2500e-003	2.2500e-003	0.0000	7.0215	7.0215	4.6000e-004	0.0000	7.0329

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0220	0.0157	0.1817	5.8000e-004	0.0619	4.5000e-004	0.0623	0.0164	4.2000e-004	0.0168	0.0000	51.9996	51.9996	1.3100e-003	0.0000	52.0323
Total	0.0220	0.0157	0.1817	5.8000e-004	0.0619	4.5000e-004	0.0623	0.0164	4.2000e-004	0.0168	0.0000	51.9996	51.9996	1.3100e-003	0.0000	52.0323

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	7.1125					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.6200e-003	0.0387	0.0499	8.0000e-005		2.2500e-003	2.2500e-003		2.2500e-003	2.2500e-003	0.0000	7.0214	7.0214	4.6000e-004	0.0000	7.0329
Total	7.1182	0.0387	0.0499	8.0000e-005		2.2500e-003	2.2500e-003		2.2500e-003	2.2500e-003	0.0000	7.0214	7.0214	4.6000e-004	0.0000	7.0329

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr										MT/yr					
	Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0220	0.0157	0.1817	5.8000e-004	0.0619	4.5000e-004	0.0623	0.0164	4.2000e-004	0.0168	0.0000	51.9996	51.9996	1.3100e-003	0.0000	52.0323
Total	0.0220	0.0157	0.1817	5.8000e-004	0.0619	4.5000e-004	0.0623	0.0164	4.2000e-004	0.0168	0.0000	51.9996	51.9996	1.3100e-003	0.0000	52.0323

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Category	tons/yr										MT/yr					
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated	3.4845	17.0663	45.7360	0.1909	17.6506	0.1396	17.7902	4.7283	0.1297	4.8580	0.0000	17,679.1924	17,679.1924	0.7744	0.0000	17,698.5524
Unmitigated	3.4845	17.0663	45.7360	0.1909	17.6506	0.1396	17.7902	4.7283	0.1297	4.8580	0.0000	17,679.1924	17,679.1924	0.7744	0.0000	17,698.5524

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	6,367.37	6,112.25	5602.01	21,247,245	21,247,245
General Office Building	7,158.72	1,593.23	684.87	17,520,919	17,520,919
Regional Shopping Center	3,692.55	4,320.94	2183.05	7,714,162	7,714,162
Total	17,218.63	12,026.42	8,469.93	46,482,326	46,482,326

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.00	19.00	41.00	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827
General Office Building	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827
Regional Shopping Center	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	4,738.3586	4,738.3586	0.1956	0.0405	4,755.3102
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	4,738.3586	4,738.3586	0.1956	0.0405	4,755.3102
NaturalGas Mitigated	0.0942	0.8271	0.5076	5.1400e-003		0.0651	0.0651		0.0651	0.0651	0.0000	931.7291	931.7291	0.0179	0.0171	937.2659
NaturalGas Unmitigated	0.0942	0.8271	0.5076	5.1400e-003		0.0651	0.0651		0.0651	0.0651	0.0000	931.7291	931.7291	0.0179	0.0171	937.2659

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	9.79761e+006	0.0528	0.4515	0.1921	2.8800e-003		0.0365	0.0365		0.0365	0.0365	0.0000	522.8376	522.8376	0.0100	9.5900e-003	525.9446
General Office Building	7.50476e+006	0.0405	0.3679	0.3090	2.2100e-003		0.0280	0.0280		0.0280	0.0280	0.0000	400.4824	400.4824	7.6800e-003	7.3400e-003	402.8623
Regional Shopping Center	157579	8.5000e-004	7.7200e-003	6.4900e-003	5.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	8.4090	8.4090	1.6000e-004	1.5000e-004	8.4590
Total		0.0942	0.8271	0.5076	5.1400e-003		0.0651	0.0651		0.0651	0.0651	0.0000	931.7291	931.7291	0.0179	0.0171	937.2659

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	9.79761e+006	0.0528	0.4515	0.1921	2.8800e-003		0.0365	0.0365		0.0365	0.0365	0.0000	522.8376	522.8376	0.0100	9.5900e-003	525.9446
General Office Building	7.50476e+006	0.0405	0.3679	0.3090	2.2100e-003		0.0280	0.0280		0.0280	0.0280	0.0000	400.4824	400.4824	7.6800e-003	7.3400e-003	402.8623
Regional Shopping Center	157579	8.5000e-004	7.7200e-003	6.4900e-003	5.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	8.4090	8.4090	1.6000e-004	1.5000e-004	8.4590
Total		0.0942	0.8271	0.5076	5.1400e-003		0.0651	0.0651		0.0651	0.0651	0.0000	931.7291	931.7291	0.0179	0.0171	937.2659

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	4.20957e+006	1,341.2576	0.0554	0.0115	1,346.0560
General Office Building	9.36472e+006	2,983.8020	0.1232	0.0255	2,994.4766
Regional Shopping Center	1.29715e+006	413.2990	0.0171	3.5300e-003	414.7776
Total		4,738.3586	0.1956	0.0405	4,755.3102

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	4.20957e+006	1,341.2576	0.0554	0.0115	1,346.0560
General Office Building	9.36472e+006	2,983.8020	0.1232	0.0255	2,994.4766
Regional Shopping Center	1.29715e+006	413.2990	0.0171	3.5300e-003	414.7776
Total		4,738.3586	0.1956	0.0405	4,755.3102

6.0 Area Detail

6.1 Mitigation Measures Area

Consumer Products	6.7934					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.3298	0.1263	10.9624	5.8000e-004		0.0608	0.0608		0.0608	0.0608	0.0000	17.9271	17.9271	0.0172	0.0000	18.3571
Total	7.8344	0.1263	10.9624	5.8000e-004		0.0608	0.0608		0.0608	0.0608	0.0000	17.9271	17.9271	0.0172	0.0000	18.3571

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1,361.3338	6.7174	0.1684	1,579.4587
Unmitigated	1,361.3338	6.7174	0.1684	1,579.4587

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	69.2587 / 43.6631	463.8735	2.2750	0.0571	537.7541
General Office Building	128.132 / 78.5324	850.2353	4.2086	0.1055	986.8893

Regional	7.11689 /	47.2250	0.2338	5.8600e-	54.8153
Shopping Center	4.36196			003	
Total		1,361.3338	6.7174	0.1684	1,579.4587

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	69.2587 / 43.6631	463.8735	2.2750	0.0571	537.7541
General Office Building	128.132 / 78.5324	850.2353	4.2086	0.1055	986.8893
Regional Shopping Center	7.11689 / 4.36196	47.2250	0.2338	5.8600e-003	54.8153
Total		1,361.3338	6.7174	0.1684	1,579.4587

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	255.8336	15.1193	0.0000	633.8168
Unmitigated	255.8336	15.1193	0.0000	633.8168

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	488.98	99.2585	5.8660	0.0000	245.9088
General Office Building	670.46	136.0973	8.0431	0.0000	337.1754
Regional Shopping Center	100.88	20.4777	1.2102	0.0000	50.7327
Total		255.8336	15.1193	0.0000	633.8168

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	488.98	99.2585	5.8660	0.0000	245.9088
General Office Building	670.46	136.0973	8.0431	0.0000	337.1754
Regional Shopping Center	100.88	20.4777	1.2102	0.0000	50.7327
Total		255.8336	15.1193	0.0000	633.8168

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Uni Village Operational Summer 2025

CSUDH Campus Master Plan EIR (University Village) - South Coast Air Basin, Summer

CSUDH Campus Master Plan EIR (University Village)
South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	720.92	1000sqft	33.00	720,918.00	0
Apartments Mid Rise	1,063.00	Dwelling Unit	13.30	1,063,000.00	3040
Regional Shopping Center	96.09	1000sqft	2.20	96,085.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Master Plan
- Demolition - Master Plan
- Grading - Master Plan
- Architectural Coating - Master Plan
- Woodstoves - No woodstove and fireplace.
- Construction Phase -

Year	lb/day										lb/day					
	2019	8.3138	54.5881	70.1865	0.2124	18.2675	2.3919	20.6594	9.9840	2.2006	12.1846	0.0000	21,521.79 42	21,521.794 2	1.9500	0.0000	21,558.52 74
2020	7.5498	48.4201	65.0605	0.2081	13.0663	1.3339	14.4003	3.5012	1.2547	4.7559	0.0000	21,065.48 66	21,065.486 6	1.3944	0.0000	21,100.34 69
2021	6.8968	43.9858	60.9028	0.2038	13.0663	1.0921	14.1584	3.5012	1.0259	4.5271	0.0000	20,635.65 42	20,635.654 2	1.3376	0.0000	20,669.09 45
2022	259.6472	40.7072	57.4829	0.1990	13.0663	0.9337	14.0001	3.5012	0.8775	4.3787	0.0000	20,170.70 77	20,170.707 7	1.2899	0.0000	20,202.95 45
Maximum	259.6472	54.5881	70.1865	0.2124	18.2675	2.3919	20.6594	9.9840	2.2006	12.1846	0.0000	21,521.79 42	21,521.794 2	1.9500	0.0000	21,558.52 74

Mitigated Construction

Year	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
2019	8.3138	54.5881	70.1865	0.2124	18.2675	2.3919	20.6594	9.9840	2.2006	12.1846	0.0000	21,521.79 42	21,521.794 2	1.9500	0.0000	21,558.52 74
2020	7.5498	48.4201	65.0605	0.2081	13.0663	1.3339	14.4003	3.5012	1.2547	4.7559	0.0000	21,065.48 66	21,065.486 6	1.3944	0.0000	21,100.34 69
2021	6.8968	43.9858	60.9028	0.2038	13.0663	1.0921	14.1584	3.5012	1.0259	4.5271	0.0000	20,635.65 42	20,635.654 2	1.3376	0.0000	20,669.09 45
2022	259.6472	40.7072	57.4829	0.1990	13.0663	0.9337	14.0001	3.5012	0.8775	4.3787	0.0000	20,170.70 77	20,170.707 7	1.2899	0.0000	20,202.95 45
Maximum	259.6472	54.5881	70.1865	0.2124	18.2675	2.3919	20.6594	9.9840	2.2006	12.1846	0.0000	21,521.79 42	21,521.794 2	1.9500	0.0000	21,558.52 74

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	43.7596	1.01	87.699	4.64E-03		0.4865	0.4865		0.4865	0.4865	0	158.0899	158.0899	0.1517	0	161.882
Energy	0.5159	4.5319	2.7815	0.0281		0.3564	0.3564		0.3564	0.3564		5,627.70	5,627.70	0.1079	0.1032	5,661.14
Mobile	24.0387	105.9583	307.091	1.2706	115.0717	0.8936	115.9653	30.7791	0.83	31.6091		#####	129,642.51	5.5002		#####
Total	68.3142	111.5002	397.5714	1.3034	115.0717	1.7365	116.8082	30.7791	1.6728	32.452	0	#####	135,428.30	5.7598	0.1032	#####

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	43.7596	1.0100	87.6990	4.6400e-003		0.4865	0.4865		0.4865	0.4865	0.0000	158.0899	158.0899	0.1517	0.0000	161.8820
Energy	0.5159	4.5319	2.7815	0.0281		0.3564	0.3564		0.3564	0.3564		5,627.7012	5,627.7012	0.1079	0.1032	5,661.1438
Mobile	24.0387	105.9583	307.0910	1.2706	115.0717	0.8936	115.9653	30.7791	0.8300	31.6091		129,642.5112	129,642.5112	5.5002		129,780.0172
Total	68.3142	111.5002	397.5714	1.3034	115.0717	1.7365	116.8082	30.7791	1.6728	32.4520	0.0000	135,428.3023	135,428.3023	5.7598	0.1032	135,603.0430

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2019	3/11/2019	5	50	
2	Site Preparation	Site Preparation	3/12/2019	4/22/2019	5	30	
3	Grading	Grading	4/23/2019	8/5/2019	5	75	
4	Building Construction	Building Construction	8/6/2019	6/6/2022	5	740	
5	Paving	Paving	6/7/2022	8/22/2022	5	55	
6	Architectural Coating	Architectural Coating	8/23/2022	11/7/2022	5	55	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 187.5

Acres of Paving: 0

Residential Indoor: 2,152,575; Residential Outdoor: 717,525; Non-Residential Indoor: 1,225,505; Non-Residential Outdoor: 408,502;

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	817.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1,027.00	248.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	205.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.5343	0.0000	3.5343	0.5351	0.0000	0.5351			0.0000			0.0000
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697		3,816.8994	3,816.8994	1.0618		3,843.4451
Total	3.5134	35.7830	22.0600	0.0388	3.5343	1.7949	5.3292	0.5351	1.6697	2.2048		3,816.8994	3,816.8994	1.0618		3,843.4451

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1407	4.8652	0.9733	0.0128	0.2854	0.0182	0.3036	0.0782	0.0174	0.0956		1,390.3701	1,390.3701	0.0997		1,392.8631
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0728	0.0510	0.6719	1.7800e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		177.0542	177.0542	5.5500e-003		177.1930
Total	0.2135	4.9161	1.6452	0.0146	0.4531	0.0195	0.4726	0.1227	0.0186	0.1413		1,567.4244	1,567.4244	0.1053		1,570.0560

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.5343	0.0000	3.5343	0.5351	0.0000	0.5351			0.0000			0.0000
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451
Total	3.5134	35.7830	22.0600	0.0388	3.5343	1.7949	5.3292	0.5351	1.6697	2.2048	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day			
Hauling	0.1407	4.8652	0.9733	0.0128	0.2854	0.0182	0.3036	0.0782	0.0174	0.0956	1,390.3701	1,390.3701	0.0997	1,392.8631
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0728	0.0510	0.6719	1.7800e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457	177.0542	177.0542	5.5500e-003	177.1930
Total	0.2135	4.9161	1.6452	0.0146	0.4531	0.0195	0.4726	0.1227	0.0186	0.1413	1,567.4244	1,567.4244	0.1053	1,570.0560

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
Total	4.3350	45.5727	22.0630	0.0380	18.0663	2.3904	20.4566	9.9307	2.1991	12.1298		3,766.4529	3,766.4529	1.1917		3,796.2445

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0874	0.0612	0.8063	2.1300e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4500e-003	0.0548		212.4651	212.4651	6.6600e-003		212.6315

Total	0.0874	0.0612	0.8063	2.1300e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4500e-003	0.0548		212.4651	212.4651	6.6600e-003		212.6315
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Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000				0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766.4529	3,766.4529	1.1917			3,796.2445
Total	4.3350	45.5727	22.0630	0.0380	18.0663	2.3904	20.4566	9.9307	2.1991	12.1298	0.0000	3,766.4529	3,766.4529	1.1917			3,796.2445

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0874	0.0612	0.8063	2.1300e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4500e-003	0.0548		212.4651	212.4651	6.6600e-003			212.6315
Total	0.0874	0.0612	0.8063	2.1300e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4500e-003	0.0548		212.4651	212.4651	6.6600e-003			212.6315

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920		6,140.0195	6,140.0195	1.9426		6,188.5854
Total	4.7389	54.5202	33.3768	0.0620	8.6733	2.3827	11.0560	3.5965	2.1920	5.7885		6,140.0195	6,140.0195	1.9426		6,188.5854

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0971	0.0680	0.8959	2.3700e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		236.0723	236.0723	7.4000e-003		236.2573
Total	0.0971	0.0680	0.8959	2.3700e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		236.0723	236.0723	7.4000e-003		236.2573

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854
Total	4.7389	54.5202	33.3768	0.0620	8.6733	2.3827	11.0560	3.5965	2.1920	5.7885	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0971	0.0680	0.8959	2.3700e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		236.0723	236.0723	7.4000e-003		236.2573
Total	0.0971	0.0680	0.8959	2.3700e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		236.0723	236.0723	7.4000e-003		236.2573

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
Total	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.9666	28.4684	7.0201	0.0637	1.5869	0.1887	1.7756	0.4568	0.1805	0.6374		6,807.9017	6,807.9017	0.4581		6,819.3531
Worker	4.9860	3.4895	46.0026	0.1218	11.4794	0.0899	11.5693	3.0444	0.0828	3.1272		12,122.3124	12,122.3124	0.3799		12,131.8108
Total	5.9526	31.9579	53.0227	0.1855	13.0664	0.2786	13.3449	3.5012	0.2633	3.7645		18,930.2141	18,930.2141	0.8380		18,951.1640

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
Total	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day				
	Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.9666	28.4684	7.0201	0.0637	1.5869	0.1887	1.7756	0.4568	0.1805	0.6374	6,807.9017	6,807.9017	0.4581		6,819.3531
Worker	4.9860	3.4895	46.0026	0.1218	11.4794	0.0899	11.5693	3.0444	0.0828	3.1272	12,122.3124	12,122.3124	0.3799		12,131.8108
Total	5.9526	31.9579	53.0227	0.1855	13.0664	0.2786	13.3449	3.5012	0.2633	3.7645	18,930.2141	18,930.2141	0.8380		18,951.1640

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	2,553.0631	2,553.0631	0.6229			2,568.6345
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	2,553.0631	2,553.0631	0.6229			2,568.6345

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.8233	26.1199	6.3536	0.0633	1.5869	0.1293	1.7162	0.4568	0.1237	0.5805	6,765.2245	6,765.2245	0.4330			6,776.0499
Worker	4.6066	3.1141	41.8584	0.1179	11.4794	0.0876	11.5670	3.0444	0.0807	3.1251	11,747.1991	11,747.1991	0.3385			11,755.6625

Total	5.4299	29.2340	48.2120	0.1812	13.0663	0.2169	13.2832	3.5012	0.2044	3.7056		18,512.42	18,512.423	0.7716		18,531.71
												36	6			25

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.8233	26.1199	6.3536	0.0633	1.5869	0.1293	1.7162	0.4568	0.1237	0.5805		6,765.2245	6,765.2245	0.4330		6,776.0499
Worker	4.6066	3.1141	41.8584	0.1179	11.4794	0.0876	11.5670	3.0444	0.0807	3.1251		11,747.1991	11,747.1991	0.3385		11,755.6625
Total	5.4299	29.2340	48.2120	0.1812	13.0663	0.2169	13.2832	3.5012	0.2044	3.7056		18,512.4236	18,512.4236	0.7716		18,531.7125

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6977	23.7503	5.7669	0.0627	1.5869	0.0485	1.6354	0.4568	0.0464	0.5032		6,714.4449	6,714.4449	0.4152		6,724.8251
Worker	4.2981	2.8034	38.5607	0.1141	11.4794	0.0850	11.5644	3.0444	0.0782	3.1227		11,367.8454	11,367.8454	0.3064		11,375.5052
Total	4.9958	26.5537	44.3276	0.1768	13.0663	0.1335	13.1998	3.5012	0.1246	3.6259		18,082.2903	18,082.2903	0.7216		18,100.3303

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6977	23.7503	5.7669	0.0627	1.5869	0.0485	1.6354	0.4568	0.0464	0.5032		6,714.4449	6,714.4449	0.4152		6,724.8251
Worker	4.2981	2.8034	38.5607	0.1141	11.4794	0.0850	11.5644	3.0444	0.0782	3.1227		11,367.8454	11,367.8454	0.3064		11,375.5052
Total	4.9958	26.5537	44.3276	0.1768	13.0663	0.1335	13.1998	3.5012	0.1246	3.6259		18,082.2903	18,082.2903	0.7216		18,100.3303

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6548	22.5590	5.4603	0.0621	1.5869	0.0422	1.6291	0.4568	0.0404	0.4972		6,655.5816	6,655.5816	0.4009		6,665.6052
Worker	4.0322	2.5326	35.6592	0.1100	11.4794	0.0825	11.5620	3.0444	0.0760	3.1204		10,960.7925	10,960.7925	0.2770		10,967.7171
Total	4.6869	25.0916	41.1195	0.1721	13.0663	0.1247	13.1911	3.5012	0.1164	3.6176		17,616.3742	17,616.3742	0.6779		17,633.3223

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000
Vendor	0.6548	22.5590	5.4603	0.0621	1.5869	0.0422	1.6291	0.4568	0.0404	0.4972		6,655.5816	6,655.5816	0.4009	6,665.6052
Worker	4.0322	2.5326	35.6592	0.1100	11.4794	0.0825	11.5620	3.0444	0.0760	3.1204		10,960.7925	10,960.7925	0.2770	10,967.7171
Total	4.6869	25.0916	41.1195	0.1721	13.0663	0.1247	13.1911	3.5012	0.1164	3.6176		17,616.3742	17,616.3742	0.6779	17,633.3223

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0589	0.0370	0.5208	1.6100e-003	0.1677	1.2100e-003	0.1689	0.0445	1.1100e-003	0.0456		160.0895	160.0895	4.0500e-003		160.1906

Total	0.0589	0.0370	0.5208	1.6100e-003	0.1677	1.2100e-003	0.1689	0.0445	1.1100e-003	0.0456		160.0895	160.0895	4.0500e-003		160.1906
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Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0589	0.0370	0.5208	1.6100e-003	0.1677	1.2100e-003	0.1689	0.0445	1.1100e-003	0.0456		160.0895	160.0895	4.0500e-003		160.1906
Total	0.0589	0.0370	0.5208	1.6100e-003	0.1677	1.2100e-003	0.1689	0.0445	1.1100e-003	0.0456		160.0895	160.0895	4.0500e-003		160.1906

3.7 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	258.6378					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	258.8423	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.8049	0.5055	7.1180	0.0220	2.2914	0.0165	2.3079	0.6077	0.0152	0.6229		2,187.8895	2,187.8895	0.0553		2,189.2717
Total	0.8049	0.5055	7.1180	0.0220	2.2914	0.0165	2.3079	0.6077	0.0152	0.6229		2,187.8895	2,187.8895	0.0553		2,189.2717

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Archit. Coating	258.6378					0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183	281.9062
Total	258.8423	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183	281.9062

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.8049	0.5055	7.1180	0.0220	2.2914	0.0165	2.3079	0.6077	0.0152	0.6229		2,187.8895	2,187.8895	0.0553		2,189.2717
Total	0.8049	0.5055	7.1180	0.0220	2.2914	0.0165	2.3079	0.6077	0.0152	0.6229		2,187.8895	2,187.8895	0.0553		2,189.2717

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	24.0387	105.9583	307.0910	1.2706	115.0717	0.8936	115.9653	30.7791	0.8300	31.6091		129,642.5112	129,642.5112	5.5002		129,780.0172

Unmitigated	24.0387	105.9583	307.0910	1.2706	115.0717	0.8936	115.9653	30.7791	0.8300	31.6091		129,642.5	129,642.51	5.5002		129,780.0
												112	12			172

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	6,367.37	6,112.25	5602.01	21,247,245	21,247,245
General Office Building	7,158.72	1,593.23	684.87	17,520,919	17,520,919
Regional Shopping Center	3,692.55	4,320.94	2183.05	7,714,162	7,714,162
Total	17,218.63	12,026.42	8,469.93	46,482,326	46,482,326

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.00	19.00	41.00	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827
General Office Building	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827
Regional Shopping Center	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Natural Gas Mitigated	0.5159	4.5319	2.7815	0.0281		0.3564	0.3564		0.3564	0.3564		5,627.7012	5,627.7012	0.1079	0.1032	5,661.1438
Natural Gas Unmitigated	0.5159	4.5319	2.7815	0.0281		0.3564	0.3564		0.3564	0.3564		5,627.7012	5,627.7012	0.1079	0.1032	5,661.1438

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	26842.8	0.2895	2.4737	1.0527	0.0158		0.2000	0.2000		0.2000	0.2000		3,157.9717	3,157.9717	0.0605	0.0579	3,176.7380
General Office Building	20561	0.2217	2.0158	1.6933	0.0121		0.1532	0.1532		0.1532	0.1532		2,418.9384	2,418.9384	0.0464	0.0444	2,433.3129
Regional Shopping Center	431.724	4.6600e-003	0.0423	0.0356	2.5000e-004		3.2200e-003	3.2200e-003		3.2200e-003	3.2200e-003		50.7911	50.7911	9.7000e-004	9.3000e-004	51.0929
Total		0.5159	4.5319	2.7815	0.0281		0.3564	0.3564		0.3564	0.3564		5,627.7012	5,627.7012	0.1079	0.1032	5,661.1438

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	26.8428	0.2895	2.4737	1.0527	0.0158		0.2000	0.2000		0.2000	0.2000		3,157.9717	3,157.9717	0.0605	0.0579	3,176.7380
General Office Building	20.561	0.2217	2.0158	1.6933	0.0121		0.1532	0.1532		0.1532	0.1532		2,418.9384	2,418.9384	0.0464	0.0444	2,433.3129

Landscaping	2.6383	1.0100	87.6990	4.6400e-003		0.4865	0.4865		0.4865	0.4865		158.0899	158.0899	0.1517		161.8820
Total	43.7596	1.0100	87.6990	4.6400e-003		0.4865	0.4865		0.4865	0.4865	0.0000	158.0899	158.0899	0.1517	0.0000	161.8820

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.8973					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	37.2241					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.6383	1.0100	87.6990	4.6400e-003		0.4865	0.4865		0.4865	0.4865			158.0899	158.0899	0.1517	161.8820
Total	43.7596	1.0100	87.6990	4.6400e-003		0.4865	0.4865		0.4865	0.4865	0.0000	158.0899	158.0899	0.1517	0.0000	161.8820

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Uni Village Operational Winter 2025

CSUDH Campus Master Plan EIR (University Village) - South Coast Air Basin, Winter

CSUDH Campus Master Plan EIR (University Village)
South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	720.92	1000sqft	33.00	720,918.00	0
Apartments Mid Rise	1,063.00	Dwelling Unit	13.30	1,063,000.00	3040
Regional Shopping Center	96.09	1000sqft	2.20	96,085.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Master Plan
- Demolition - Master Plan
- Grading - Master Plan
- Architectural Coating - Master Plan
- Woodstoves - No woodstove and fireplace.
- Construction Phase -

Year	lb/day										lb/day					
	2019	8.8453	54.5949	66.7344	0.2031	18.2675	2.3919	20.6594	9.9840	2.2006	12.1846	0.0000	20,587.23 43	20,587.234 3	1.9496	0.0000
2020	8.0484	48.7168	61.8448	0.1991	13.0663	1.3359	14.4022	3.5012	1.2566	4.7578	0.0000	20,152.60 51	20,152.605 1	1.4028	0.0000	20,187.67 48
2021	7.3702	44.2052	57.8900	0.1950	13.0663	1.0936	14.1599	3.5012	1.0274	4.5286	0.0000	19,746.84 61	19,746.846 1	1.3465	0.0000	19,780.50 86
2022	259.7315	40.8860	54.6559	0.1905	13.0663	0.9351	14.0014	3.5012	0.8788	4.3800	0.0000	19,307.73 46	19,307.734 6	1.2991	0.0000	19,340.21 23
Maximum	259.7315	54.5949	66.7344	0.2031	18.2675	2.3919	20.6594	9.9840	2.2006	12.1846	0.0000	20,587.23 43	20,587.234 3	1.9496	0.0000	20,624.17 78

Mitigated Construction

Year	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
2019	8.8453	54.5949	66.7344	0.2031	18.2675	2.3919	20.6594	9.9840	2.2006	12.1846	0.0000	20,587.23 43	20,587.234 3	1.9496	0.0000	20,624.17 78
2020	8.0484	48.7168	61.8448	0.1991	13.0663	1.3359	14.4022	3.5012	1.2566	4.7578	0.0000	20,152.60 51	20,152.605 1	1.4028	0.0000	20,187.67 48
2021	7.3702	44.2052	57.8900	0.1950	13.0663	1.0936	14.1599	3.5012	1.0274	4.5286	0.0000	19,746.84 61	19,746.846 1	1.3465	0.0000	19,780.50 86
2022	259.7315	40.8860	54.6559	0.1905	13.0663	0.9351	14.0014	3.5012	0.8788	4.3800	0.0000	19,307.73 46	19,307.734 6	1.2991	0.0000	19,340.21 23
Maximum	259.7315	54.5949	66.7344	0.2031	18.2675	2.3919	20.6594	9.9840	2.2006	12.1846	0.0000	20,587.23 43	20,587.234 3	1.9496	0.0000	20,624.17 78

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	43.7596	1.01	87.699	4.64E-03		0.4865	0.4865		0.4865	0.4865	0	158.0899	158.0899	0.1517	0	161.882
Energy	0.5159	4.5319	2.7815	0.0281		0.3564	0.3564		0.3564	0.3564		5,627.70	5,627.70	0.1079	0.1032	5,661.14
Mobile	22.981	107.7882	288.8177	1.2058	115.0717	0.8974	115.9691	30.7791	0.8335	31.6127		#####	123,128.91	5.5055		#####
Total	67.2565	113.33	379.2981	1.2386	115.0717	1.7402	116.812	30.7791	1.6764	32.4556	0	#####	128,914.70	5.765	0.1032	#####

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	43.7596	1.0100	87.6990	4.6400e-003		0.4865	0.4865		0.4865	0.4865	0.0000	158.0899	158.0899	0.1517	0.0000	161.8820
Energy	0.5159	4.5319	2.7815	0.0281		0.3564	0.3564		0.3564	0.3564		5,627.7012	5,627.7012	0.1079	0.1032	5,661.1438
Mobile	22.9810	107.7882	288.8177	1.2058	115.0717	0.8974	115.9691	30.7791	0.8335	31.6127		123,128.9056	123,128.9056	5.5055		123,266.5424
Total	67.2565	113.3300	379.2981	1.2386	115.0717	1.7402	116.8120	30.7791	1.6764	32.4556	0.0000	128,914.6967	128,914.6967	5.7650	0.1032	129,089.5682

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2019	3/11/2019	5	50	
2	Site Preparation	Site Preparation	3/12/2019	4/22/2019	5	30	
3	Grading	Grading	4/23/2019	8/5/2019	5	75	
4	Building Construction	Building Construction	8/6/2019	6/6/2022	5	740	
5	Paving	Paving	6/7/2022	8/22/2022	5	55	
6	Architectural Coating	Architectural Coating	8/23/2022	11/7/2022	5	55	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 187.5

Acres of Paving: 0

Residential Indoor: 2,152,575; Residential Outdoor: 717,525; Non-Residential Indoor: 1,225,505; Non-Residential Outdoor: 408,502;

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	817.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1,027.00	248.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	205.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.5343	0.0000	3.5343	0.5351	0.0000	0.5351			0.0000			0.0000
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697		3,816.8994	3,816.8994	1.0618		3,843.4451
Total	3.5134	35.7830	22.0600	0.0388	3.5343	1.7949	5.3292	0.5351	1.6697	2.2048		3,816.8994	3,816.8994	1.0618		3,843.4451

Category	lb/day										lb/day			
Hauling	0.1445	4.9313	1.0446	0.0126	0.2854	0.0185	0.3039	0.0782	0.0177	0.0959	1,366.9934	1,366.9934	0.1037	1,369.5868
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0800	0.0560	0.6105	1.6700e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457	166.0751	166.0751	5.2100e-003	166.2053
Total	0.2244	4.9873	1.6551	0.0143	0.4531	0.0198	0.4729	0.1227	0.0189	0.1416	1,533.0685	1,533.0685	0.1089	1,535.7921

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
Total	4.3350	45.5727	22.0630	0.0380	18.0663	2.3904	20.4566	9.9307	2.1991	12.1298		3,766.4529	3,766.4529	1.1917		3,796.2445

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0960	0.0672	0.7326	2.0000e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4500e-003	0.0548		199.2901	199.2901	6.2500e-003		199.4463

Total	0.0960	0.0672	0.7326	2.0000e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4500e-003	0.0548		199.2901	199.2901	6.2500e-003		199.4463
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Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
Total	4.3350	45.5727	22.0630	0.0380	18.0663	2.3904	20.4566	9.9307	2.1991	12.1298	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0960	0.0672	0.7326	2.0000e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4500e-003	0.0548		199.2901	199.2901	6.2500e-003		199.4463
Total	0.0960	0.0672	0.7326	2.0000e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4500e-003	0.0548		199.2901	199.2901	6.2500e-003		199.4463

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920		6,140.0195	6,140.0195	1.9426		6,188.5854
Total	4.7389	54.5202	33.3768	0.0620	8.6733	2.3827	11.0560	3.5965	2.1920	5.7885		6,140.0195	6,140.0195	1.9426		6,188.5854

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1066	0.0747	0.8139	2.2200e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		221.4335	221.4335	6.9400e-003		221.6070
Total	0.1066	0.0747	0.8139	2.2200e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		221.4335	221.4335	6.9400e-003		221.6070

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854
Total	4.7389	54.5202	33.3768	0.0620	8.6733	2.3827	11.0560	3.5965	2.1920	5.7885	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1066	0.0747	0.8139	2.2200e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		221.4335	221.4335	6.9400e-003		221.6070
Total	0.1066	0.0747	0.8139	2.2200e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		221.4335	221.4335	6.9400e-003		221.6070

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
Total	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.0083	28.5035	7.7746	0.0621	1.5869	0.1917	1.7786	0.4568	0.1834	0.6402		6,625.0454	6,625.0454	0.4899		6,637.2932
Worker	5.4758	3.8341	41.7960	0.1142	11.4794	0.0899	11.5693	3.0444	0.0828	3.1272		11,370.6087	11,370.6087	0.3565		11,379.5212
Total	6.4841	32.3376	49.5706	0.1762	13.0664	0.2816	13.3479	3.5012	0.2662	3.7674		17,995.6541	17,995.6541	0.8464		18,016.8144

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
Total	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day				
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0083	28.5035	7.7746	0.0621	1.5869	0.1917	1.7786	0.4568	0.1834	0.6402	6,625.0454	6,625.0454	0.4899	6,637.2932	
Worker	5.4758	3.8341	41.7960	0.1142	11.4794	0.0899	11.5693	3.0444	0.0828	3.1272	11,370.6087	11,370.6087	0.3565	11,379.5212	
Total	6.4841	32.3376	49.5706	0.1762	13.0664	0.2816	13.3479	3.5012	0.2662	3.7674	17,995.6541	17,995.6541	0.8464	18,016.8144	

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	2,553.0631	2,553.0631	0.6229			2,568.6345
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	2,553.0631	2,553.0631	0.6229			2,568.6345

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.8609	26.1100	7.0402	0.0616	1.5869	0.1313	1.7182	0.4568	0.1256	0.5824	6,581.3594	6,581.3594	0.4628			6,592.9291
Worker	5.0676	3.4208	37.9561	0.1106	11.4794	0.0876	11.5670	3.0444	0.0807	3.1251	11,018.1827	11,018.1827	0.3171			11,026.1113

Total	5.9285	29.5308	44.9963	0.1722	13.0663	0.2188	13.2852	3.5012	0.2062	3.7075		17,599.54	17,599.542	0.7799		17,619.04
												20	0			03

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.8609	26.1100	7.0402	0.0616	1.5869	0.1313	1.7182	0.4568	0.1256	0.5824		6,581.3594	6,581.3594	0.4628		6,592.9291
Worker	5.0676	3.4208	37.9561	0.1106	11.4794	0.0876	11.5670	3.0444	0.0807	3.1251		11,018.1827	11,018.1827	0.3171		11,026.1113
Total	5.9285	29.5308	44.9963	0.1722	13.0663	0.2188	13.2852	3.5012	0.2062	3.7075		17,599.5420	17,599.5420	0.7799		17,619.0403

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.7330	23.6944	6.4105	0.0611	1.5869	0.0500	1.6369	0.4568	0.0478	0.5047		6,531.6698	6,531.6698	0.4437		6,542.7631
Worker	4.7362	3.0787	34.9043	0.1070	11.4794	0.0850	11.5644	3.0444	0.0782	3.1227		10,661.8124	10,661.8124	0.2868		10,668.9812
Total	5.4693	26.7731	41.3148	0.1680	13.0663	0.1350	13.2013	3.5012	0.1261	3.6273		17,193.4822	17,193.4822	0.7305		17,211.7443

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.7330	23.6944	6.4105	0.0611	1.5869	0.0500	1.6369	0.4568	0.0478	0.5047		6,531.6698	6,531.6698	0.4437		6,542.7631
Worker	4.7362	3.0787	34.9043	0.1070	11.4794	0.0850	11.5644	3.0444	0.0782	3.1227		10,661.8124	10,661.8124	0.2868		10,668.9812
Total	5.4693	26.7731	41.3148	0.1680	13.0663	0.1350	13.2013	3.5012	0.1261	3.6273		17,193.4822	17,193.4822	0.7305		17,211.7443

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6881	22.4897	6.0716	0.0605	1.5869	0.0436	1.6305	0.4568	0.0417	0.4985		6,473.3483	6,473.3483	0.4282		6,484.0524
Worker	4.4546	2.7807	32.2209	0.1031	11.4794	0.0825	11.5620	3.0444	0.0760	3.1204		10,280.0526	10,280.0526	0.2590		10,286.5277
Total	5.1426	25.2703	38.2925	0.1636	13.0663	0.1261	13.1924	3.5012	0.1177	3.6189		16,753.4010	16,753.4010	0.6872		16,770.5801

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Vendor	0.6881	22.4897	6.0716	0.0605	1.5869	0.0436	1.6305	0.4568	0.0417	0.4985	6,473.3483	6,473.3483	0.4282		6,484.0524	
Worker	4.4546	2.7807	32.2209	0.1031	11.4794	0.0825	11.5620	3.0444	0.0760	3.1204	10,280.0526	10,280.0526	0.2590		10,286.5277	
Total	5.1426	25.2703	38.2925	0.1636	13.0663	0.1261	13.1924	3.5012	0.1177	3.6189	16,753.4010	16,753.4010	0.6872		16,770.5801	

3.6 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0651	0.0406	0.4706	1.5100e-003	0.1677	1.2100e-003	0.1689	0.0445	1.1100e-003	0.0456		150.1468	150.1468	3.7800e-003		150.2414

Total	0.0651	0.0406	0.4706	1.5100e-003	0.1677	1.2100e-003	0.1689	0.0445	1.1100e-003	0.0456		150.1468	150.1468	3.7800e-003		150.2414
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Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0651	0.0406	0.4706	1.5100e-003	0.1677	1.2100e-003	0.1689	0.0445	1.1100e-003	0.0456		150.1468	150.1468	3.7800e-003		150.2414
Total	0.0651	0.0406	0.4706	1.5100e-003	0.1677	1.2100e-003	0.1689	0.0445	1.1100e-003	0.0456		150.1468	150.1468	3.7800e-003		150.2414

3.7 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	258.6378					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	258.8423	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.8892	0.5551	6.4316	0.0206	2.2914	0.0165	2.3079	0.6077	0.0152	0.6229		2,052.0066	2,052.0066	0.0517		2,053.2991
Total	0.8892	0.5551	6.4316	0.0206	2.2914	0.0165	2.3079	0.6077	0.0152	0.6229		2,052.0066	2,052.0066	0.0517		2,053.2991

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Archit. Coating	258.6378					0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183	281.9062
Total	258.8423	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183	281.9062

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.8892	0.5551	6.4316	0.0206	2.2914	0.0165	2.3079	0.6077	0.0152	0.6229		2,052.0066	2,052.0066	0.0517		2,053.2991
Total	0.8892	0.5551	6.4316	0.0206	2.2914	0.0165	2.3079	0.6077	0.0152	0.6229		2,052.0066	2,052.0066	0.0517		2,053.2991

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	22.9810	107.7882	288.8177	1.2058	115.0717	0.8974	115.9691	30.7791	0.8335	31.6127		123,128.9056	123,128.9056	5.5055		123,266.5424

Unmitigated	22.9810	107.7882	288.8177	1.2058	115.0717	0.8974	115.9691	30.7791	0.8335	31.6127	123,128.9056	123,128.9056	5.5055	123,266.5424
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4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	6,367.37	6,112.25	5602.01	21,247,245	21,247,245
General Office Building	7,158.72	1,593.23	684.87	17,520,919	17,520,919
Regional Shopping Center	3,692.55	4,320.94	2183.05	7,714,162	7,714,162
Total	17,218.63	12,026.42	8,469.93	46,482,326	46,482,326

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.00	19.00	41.00	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827
General Office Building	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827
Regional Shopping Center	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Natural Gas Mitigated	0.5159	4.5319	2.7815	0.0281		0.3564	0.3564		0.3564	0.3564		5,627.7012	5,627.7012	0.1079	0.1032	5,661.1438
Natural Gas Unmitigated	0.5159	4.5319	2.7815	0.0281		0.3564	0.3564		0.3564	0.3564		5,627.7012	5,627.7012	0.1079	0.1032	5,661.1438

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	26842.8	0.2895	2.4737	1.0527	0.0158		0.2000	0.2000		0.2000	0.2000		3,157.9717	3,157.9717	0.0605	0.0579	3,176.7380
General Office Building	20561	0.2217	2.0158	1.6933	0.0121		0.1532	0.1532		0.1532	0.1532		2,418.9384	2,418.9384	0.0464	0.0444	2,433.3129
Regional Shopping Center	431.724	4.6600e-003	0.0423	0.0356	2.5000e-004		3.2200e-003	3.2200e-003		3.2200e-003	3.2200e-003		50.7911	50.7911	9.7000e-004	9.3000e-004	51.0929
Total		0.5159	4.5319	2.7815	0.0281		0.3564	0.3564		0.3564	0.3564		5,627.7012	5,627.7012	0.1079	0.1032	5,661.1438

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	26.8428	0.2895	2.4737	1.0527	0.0158		0.2000	0.2000		0.2000	0.2000		3,157.9717	3,157.9717	0.0605	0.0579	3,176.7380
General Office Building	20.561	0.2217	2.0158	1.6933	0.0121		0.1532	0.1532		0.1532	0.1532		2,418.9384	2,418.9384	0.0464	0.0444	2,433.3129

Landscaping	2.6383	1.0100	87.6990	4.6400e-003		0.4865	0.4865		0.4865	0.4865		158.0899	158.0899	0.1517		161.8820
Total	43.7596	1.0100	87.6990	4.6400e-003		0.4865	0.4865		0.4865	0.4865	0.0000	158.0899	158.0899	0.1517	0.0000	161.8820

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.8973					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	37.2241					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.6383	1.0100	87.6990	4.6400e-003		0.4865	0.4865		0.4865	0.4865			158.0899	158.0899	0.1517	161.8820
Total	43.7596	1.0100	87.6990	4.6400e-003		0.4865	0.4865		0.4865	0.4865	0.0000	158.0899	158.0899	0.1517	0.0000	161.8820

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Operational 2035

Campus Operational Annual 2035

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

CSUDH Campus Master Plan EIR
South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Day-Care Center	184.00	Student	0.24	17,970.00	0
High School	676.00	Student	3.69	89,678.82	0
University/College (4Yr)	20,000.00	Student	179.50	2,222,967.00	0
Apartments Mid Rise	794.00	Dwelling Unit	20.89	794,000.00	1588

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2035
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -
 Land Use - Master Plan
 Construction Phase - Adjusted.
 Demolition -
 Grading - Master Plan.
 Woodstoves - No woodstoves or fireplaces.

Vehicle Trips - Master Plan

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	674.90	0.00
tblFireplaces	NumberNoFireplace	79.40	0.00
tblFireplaces	NumberWood	39.70	0.00
tblLandUse	LandUseSquareFeet	10,400.20	17,970.00
tblLandUse	LandUseSquareFeet	3,675,949.37	2,222,967.00
tblLandUse	LotAcreage	2.06	3.69
tblLandUse	LotAcreage	84.39	179.50
tblLandUse	Population	2,271.00	1,588.00
tblVehicleTrips	HO_TTP	40.60	41.00
tblVehicleTrips	HS_TTP	19.20	19.00
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	6.39	1.42
tblVehicleTrips	ST_TR	1.30	1.20
tblVehicleTrips	SU_TR	5.86	1.42
tblVehicleTrips	WD_TR	6.65	1.42
tblVehicleTrips	WD_TR	1.71	1.57
tblWoodstoves	NumberCatalytic	39.70	0.00
tblWoodstoves	NumberNoncatalytic	39.70	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

Year	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					

2020	0.4454	4.4540	2.9445	5.5600e-003	0.1018	0.2178	0.3196	0.0187	0.2024	0.2211	0.0000	490.6507	490.6507	0.1282	0.0000	493.8547
2021	0.5103	5.2601	3.0619	5.7800e-003	2.4134	0.2564	2.6698	1.0412	0.2362	1.2774	0.0000	508.7323	508.7323	0.1543	0.0000	512.5890
2022	0.4814	5.0569	3.8592	8.3400e-003	1.4278	0.2127	1.6406	0.5045	0.1957	0.7002	0.0000	732.9318	732.9318	0.2299	0.0000	738.6792
2023	0.6772	5.2808	5.8518	0.0195	2.1000	0.1576	2.2576	0.6025	0.1458	0.7482	0.0000	1,778.2939	1,778.2939	0.2166	0.0000	1,783.7096
2024	1.0201	6.4534	8.9865	0.0374	2.6147	0.1009	2.7156	0.7033	0.0946	0.7979	0.0000	3,470.1316	3,470.1316	0.1911	0.0000	3,474.9079
2025	0.9651	6.2245	8.5101	0.0364	2.6047	0.0889	2.6936	0.7006	0.0834	0.7840	0.0000	3,380.7915	3,380.7915	0.1853	0.0000	3,385.4228
2026	0.9327	6.1509	8.1452	0.0357	2.6047	0.0883	2.6930	0.7006	0.0828	0.7834	0.0000	3,314.1628	3,314.1628	0.1811	0.0000	3,318.6895
2027	0.9012	6.0818	7.8218	0.0350	2.6047	0.0874	2.6921	0.7006	0.0820	0.7826	0.0000	3,255.2614	3,255.2614	0.1772	0.0000	3,259.6913
2028	0.8656	5.9993	7.5114	0.0343	2.5948	0.0860	2.6807	0.6979	0.0807	0.7786	0.0000	3,191.2417	3,191.2417	0.1731	0.0000	3,195.5694
2029	0.8329	5.9640	7.2632	0.0339	2.6047	0.0853	2.6901	0.7006	0.0801	0.7806	0.0000	3,157.5729	3,157.5729	0.1705	0.0000	3,161.8359
2030	0.7889	5.3163	7.0188	0.0340	2.6047	0.0349	2.6396	0.7006	0.0338	0.7344	0.0000	3,157.0955	3,157.0955	0.1101	0.0000	3,159.8490
2031	0.7499	5.2712	6.7841	0.0337	2.6047	0.0341	2.6388	0.7006	0.0331	0.7336	0.0000	3,124.5449	3,124.5449	0.1075	0.0000	3,127.2321
2032	0.7176	5.2429	6.5925	0.0334	2.6147	0.0335	2.6482	0.7033	0.0325	0.7357	0.0000	3,105.2510	3,105.2510	0.1055	0.0000	3,107.8880
2033	0.6824	5.1607	6.3581	0.0329	2.5948	0.0325	2.6273	0.6979	0.0316	0.7295	0.0000	3,054.6428	3,054.6428	0.1026	0.0000	3,057.2081
2034	0.6573	5.1238	6.1801	0.0326	2.5948	0.0319	2.6266	0.6979	0.0310	0.7289	0.0000	3,031.3255	3,031.3255	0.1007	0.0000	3,033.8432
2035	0.6269	5.0138	6.0508	0.0325	2.6047	0.0239	2.6286	0.7006	0.0230	0.7236	0.0000	3,023.1040	3,023.1040	0.0985	0.0000	3,025.5666
2036	0.6293	5.0330	6.0740	0.0326	2.6147	0.0240	2.6387	0.7033	0.0231	0.7264	0.0000	3,034.6867	3,034.6867	0.0989	0.0000	3,037.1588
2037	0.6269	5.0138	6.0508	0.0325	2.6047	0.0239	2.6286	0.7006	0.0230	0.7236	0.0000	3,023.1040	3,023.1040	0.0985	0.0000	3,025.5666
2038	0.6269	5.0138	6.0508	0.0325	2.6047	0.0239	2.6286	0.7006	0.0230	0.7236	0.0000	3,023.1040	3,023.1040	0.0985	0.0000	3,025.5666
2039	0.6245	4.9946	6.0277	0.0324	2.5948	0.0238	2.6185	0.6979	0.0230	0.7208	0.0000	3,011.5212	3,011.5212	0.0981	0.0000	3,013.9744
2040	0.5504	4.8999	5.5900	0.0319	2.6048	0.0198	2.6245	0.7006	0.0191	0.7197	0.0000	2,963.4244	2,963.4244	0.0928	0.0000	2,965.7439
2041	0.3195	2.4437	3.6442	0.0163	1.1696	0.0173	1.1869	0.3145	0.0170	0.3315	0.0000	1,498.5393	1,498.5393	0.0472	0.0000	1,499.7186
2042	3.1769	0.3761	1.6881	3.6100e-003	0.1445	0.0115	0.1559	0.0384	0.0114	0.0498	0.0000	314.2347	314.2347	8.5900e-003	0.0000	314.4496

2043	10.2982	0.1229	0.6967	3.0700e-003	0.4319	2.1400e-003	0.4341	0.1147	2.0500e-003	0.1168	0.0000	276.4407	276.4407	3.4100e-003	0.0000	276.5260
Maximum	10.2982	6.4534	8.9865	0.0374	2.6147	0.2564	2.7156	1.0412	0.2362	1.2774	0.0000	3,470.1316	3,470.1316	0.2299	0.0000	3,474.9079

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.4454	4.4540	2.9445	5.5600e-003	0.1018	0.2178	0.3196	0.0187	0.2024	0.2211	0.0000	490.6502	490.6502	0.1282	0.0000	493.8541
2021	0.5103	5.2601	3.0619	5.7800e-003	2.4134	0.2564	2.6698	1.0412	0.2362	1.2774	0.0000	508.7317	508.7317	0.1543	0.0000	512.5885
2022	0.4814	5.0569	3.8592	8.3400e-003	1.4278	0.2127	1.6406	0.5045	0.1957	0.7002	0.0000	732.9310	732.9310	0.2299	0.0000	738.6783
2023	0.6772	5.2808	5.8518	0.0195	2.1000	0.1576	2.2576	0.6025	0.1458	0.7482	0.0000	1,778.2933	1,778.2933	0.2166	0.0000	1,783.7089
2024	1.0201	6.4534	8.9865	0.0374	2.6147	0.1009	2.7156	0.7033	0.0946	0.7979	0.0000	3,470.1313	3,470.1313	0.1911	0.0000	3,474.9075
2025	0.9651	6.2245	8.5101	0.0364	2.6047	0.0889	2.6936	0.7006	0.0834	0.7840	0.0000	3,380.7911	3,380.7911	0.1853	0.0000	3,385.4225
2026	0.9327	6.1509	8.1452	0.0357	2.6047	0.0883	2.6930	0.7006	0.0828	0.7834	0.0000	3,314.1624	3,314.1624	0.1811	0.0000	3,318.6892
2027	0.9012	6.0818	7.8218	0.0350	2.6047	0.0874	2.6921	0.7006	0.0820	0.7826	0.0000	3,255.2610	3,255.2610	0.1772	0.0000	3,259.6909
2028	0.8656	5.9993	7.5114	0.0343	2.5948	0.0860	2.6807	0.6979	0.0807	0.7786	0.0000	3,191.2414	3,191.2414	0.1731	0.0000	3,195.5690
2029	0.8329	5.9640	7.2632	0.0339	2.6047	0.0853	2.6901	0.7006	0.0801	0.7806	0.0000	3,157.5725	3,157.5725	0.1705	0.0000	3,161.8355
2030	0.7889	5.3163	7.0188	0.0340	2.6047	0.0349	2.6396	0.7006	0.0338	0.7344	0.0000	3,157.0951	3,157.0951	0.1101	0.0000	3,159.8486
2031	0.7499	5.2712	6.7841	0.0337	2.6047	0.0341	2.6388	0.7006	0.0331	0.7336	0.0000	3,124.5445	3,124.5445	0.1075	0.0000	3,127.2317
2032	0.7176	5.2429	6.5925	0.0334	2.6147	0.0335	2.6482	0.7033	0.0325	0.7357	0.0000	3,105.2506	3,105.2506	0.1055	0.0000	3,107.8876
2033	0.6824	5.1607	6.3581	0.0329	2.5948	0.0325	2.6273	0.6979	0.0316	0.7295	0.0000	3,054.6424	3,054.6424	0.1026	0.0000	3,057.2077
2034	0.6573	5.1238	6.1801	0.0326	2.5948	0.0319	2.6266	0.6979	0.0310	0.7289	0.0000	3,031.3251	3,031.3251	0.1007	0.0000	3,033.8427

2035	0.6269	5.0138	6.0508	0.0325	2.6047	0.0239	2.6286	0.7006	0.0230	0.7236	0.0000	3,023.1036	3,023.1036	0.0985	0.0000	3,025.5662
2036	0.6293	5.0330	6.0740	0.0326	2.6147	0.0240	2.6387	0.7033	0.0231	0.7264	0.0000	3,034.6863	3,034.6863	0.0989	0.0000	3,037.1584
2037	0.6269	5.0138	6.0508	0.0325	2.6047	0.0239	2.6286	0.7006	0.0230	0.7236	0.0000	3,023.1036	3,023.1036	0.0985	0.0000	3,025.5662
2038	0.6269	5.0138	6.0508	0.0325	2.6047	0.0239	2.6286	0.7006	0.0230	0.7236	0.0000	3,023.1036	3,023.1036	0.0985	0.0000	3,025.5662
2039	0.6245	4.9946	6.0277	0.0324	2.5948	0.0238	2.6185	0.6979	0.0230	0.7208	0.0000	3,011.5208	3,011.5208	0.0981	0.0000	3,013.9740
2040	0.5504	4.8999	5.5900	0.0319	2.6048	0.0198	2.6245	0.7006	0.0191	0.7197	0.0000	2,963.4239	2,963.4239	0.0928	0.0000	2,965.7435
2041	0.3195	2.4437	3.6442	0.0163	1.1696	0.0173	1.1869	0.3145	0.0170	0.3315	0.0000	1,498.5389	1,498.5389	0.0472	0.0000	1,499.7182
2042	3.1769	0.3761	1.6881	3.6100e-003	0.1445	0.0115	0.1559	0.0384	0.0114	0.0498	0.0000	314.2345	314.2345	8.5900e-003	0.0000	314.4493
2043	10.2982	0.1229	0.6967	3.0700e-003	0.4319	2.1400e-003	0.4341	0.1147	2.0500e-003	0.1168	0.0000	276.4406	276.4406	3.4100e-003	0.0000	276.5260
Maximum	10.2982	6.4534	8.9865	0.0374	2.6147	0.2564	2.7156	1.0412	0.2362	1.2774	0.0000	3,470.1313	3,470.1313	0.2299	0.0000	3,474.9075

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2020	3-31-2020	1.2152	1.2152
2	4-1-2020	6-30-2020	1.2146	1.2146
3	7-1-2020	9-30-2020	1.2279	1.2279
4	10-1-2020	12-31-2020	1.2286	1.2286
5	1-1-2021	3-31-2021	1.2556	1.2556
6	4-1-2021	6-30-2021	1.4466	1.4466
7	7-1-2021	9-30-2021	1.4625	1.4625
8	10-1-2021	12-31-2021	1.5940	1.5940
9	1-1-2022	3-31-2022	1.3696	1.3696
10	4-1-2022	6-30-2022	1.3844	1.3844
11	7-1-2022	9-30-2022	1.3996	1.3996
12	10-1-2022	12-31-2022	1.4000	1.4000

13	1-1-2023	3-31-2023	1.2204	1.2204
14	4-1-2023	6-30-2023	1.2336	1.2336
15	7-1-2023	9-30-2023	1.5778	1.5778
16	10-1-2023	12-31-2023	1.9358	1.9358
17	1-1-2024	3-31-2024	1.8563	1.8563
18	4-1-2024	6-30-2024	1.8305	1.8305
19	7-1-2024	9-30-2024	1.8506	1.8506
20	10-1-2024	12-31-2024	1.8767	1.8767
21	1-1-2025	3-31-2025	1.7729	1.7729
22	4-1-2025	6-30-2025	1.7681	1.7681
23	7-1-2025	9-30-2025	1.7875	1.7875
24	10-1-2025	12-31-2025	1.8123	1.8123
25	1-1-2026	3-31-2026	1.7467	1.7467
26	4-1-2026	6-30-2026	1.7427	1.7427
27	7-1-2026	9-30-2026	1.7619	1.7619
28	10-1-2026	12-31-2026	1.7855	1.7855
29	1-1-2027	3-31-2027	1.7218	1.7218
30	4-1-2027	6-30-2027	1.7187	1.7187
31	7-1-2027	9-30-2027	1.7376	1.7376
32	10-1-2027	12-31-2027	1.7601	1.7601
33	1-1-2028	3-31-2028	1.7178	1.7178
34	4-1-2028	6-30-2028	1.6967	1.6967
35	7-1-2028	9-30-2028	1.7153	1.7153
36	10-1-2028	12-31-2028	1.7367	1.7367
37	1-1-2029	3-31-2029	1.6752	1.6752
38	4-1-2029	6-30-2029	1.6741	1.6741
39	7-1-2029	9-30-2029	1.6925	1.6925
40	10-1-2029	12-31-2029	1.7124	1.7124
41	1-1-2030	3-31-2030	1.5043	1.5043
42	4-1-2030	6-30-2030	1.5027	1.5027

43	7-1-2030	9-30-2030	1.5192	1.5192
44	10-1-2030	12-31-2030	1.5377	1.5377
45	1-1-2031	3-31-2031	1.4828	1.4828
46	4-1-2031	6-30-2031	1.4826	1.4826
47	7-1-2031	9-30-2031	1.4989	1.4989
48	10-1-2031	12-31-2031	1.5157	1.5157
49	1-1-2032	3-31-2032	1.4778	1.4778
50	4-1-2032	6-30-2032	1.4626	1.4626
51	7-1-2032	9-30-2032	1.4787	1.4787
52	10-1-2032	12-31-2032	1.4941	1.4941
53	1-1-2033	3-31-2033	1.4432	1.4432
54	4-1-2033	6-30-2033	1.4453	1.4453
55	7-1-2033	9-30-2033	1.4612	1.4612
56	10-1-2033	12-31-2033	1.4753	1.4753
57	1-1-2034	3-31-2034	1.4274	1.4274
58	4-1-2034	6-30-2034	1.4304	1.4304
59	7-1-2034	9-30-2034	1.4461	1.4461
60	10-1-2034	12-31-2034	1.4591	1.4591
61	1-1-2035	3-31-2035	1.3869	1.3869
62	4-1-2035	6-30-2035	1.3903	1.3903
63	7-1-2035	9-30-2035	1.4055	1.4055
64	10-1-2035	12-31-2035	1.4177	1.4177
65	1-1-2036	3-31-2036	1.4023	1.4023
66	4-1-2036	6-30-2036	1.3903	1.3903
67	7-1-2036	9-30-2036	1.4055	1.4055
68	10-1-2036	12-31-2036	1.4177	1.4177
69	1-1-2037	3-31-2037	1.3869	1.3869
70	4-1-2037	6-30-2037	1.3903	1.3903
71	7-1-2037	9-30-2037	1.4055	1.4055
72	10-1-2037	12-31-2037	1.4177	1.4177

73	1-1-2038	3-31-2038	1.3869	1.3869
74	4-1-2038	6-30-2038	1.3903	1.3903
75	7-1-2038	9-30-2038	1.4055	1.4055
76	10-1-2038	12-31-2038	1.4177	1.4177
77	1-1-2039	3-31-2039	1.3869	1.3869
78	4-1-2039	6-30-2039	1.3903	1.3903
79	7-1-2039	9-30-2039	1.4055	1.4055
80	10-1-2039	12-31-2039	1.4177	1.4177
81	1-1-2040	3-31-2040	1.3532	1.3532
82	4-1-2040	6-30-2040	1.3440	1.3440
83	7-1-2040	9-30-2040	1.3588	1.3588
84	10-1-2040	12-31-2040	1.3680	1.3680
85	1-1-2041	3-31-2041	1.3383	1.3383
86	4-1-2041	6-30-2041	1.0953	1.0953
87	7-1-2041	9-30-2041	0.1544	0.1544
88	10-1-2041	12-31-2041	0.1545	0.1545
89	1-1-2042	3-31-2042	0.1512	0.1512
90	4-1-2042	6-30-2042	0.1527	0.1527
91	7-1-2042	9-30-2042	0.5410	0.5410
92	10-1-2042	12-31-2042	2.6978	2.6978
93	1-1-2043	3-31-2043	2.6391	2.6391
94	4-1-2043	6-30-2043	2.6658	2.6658
95	7-1-2043	9-30-2043	2.6951	2.6951
		Highest	2.6978	2.6978

2.2 Overall Operational
Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr										MT/yr					
	Area	12.8876	0.0965	8.4242	4.50E-04		0.0464	0.0464		0.0464	0.0464	0	13.8931	13.8931	0.0141	0
Energy	0.3701	3.343	2.6683	0.0202		0.2557	0.2557		0.2557	0.2557	0	11,964.57	11,964.57	0.4129	0.1381	12,016.04
Mobile	4.344	27.2107	56.6009	0.3003	32.7582	0.1486	32.9068	8.7735	0.1381	8.9116	0	27,998.14	27,998.14	1.0707	0	28,024.90
Waste						0	0		0	0	846.9169	0	846.9169	50.0514	0	2,098.20
Water						0	0		0	0	31.0839	790.1976	821.2816	3.2252	0.0821	926.3886
Total	17.6017	30.6502	67.6934	0.3209	32.7582	0.4507	33.2089	8.7735	0.4402	9.2136	878.0008	40,766.80	41,644.80	54.7743	0.2202	43,079.77

Mitigated Operational

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Area	12.8876	0.0965	8.4242	4.5000e-004		0.0464	0.0464		0.0464	0.0464	0.0000	13.8931	13.8931	0.0141	0.0000	14.2447
Energy	0.3701	3.3430	2.6683	0.0202		0.2557	0.2557		0.2557	0.2557	0.0000	11,964.5734	11,964.5734	0.4129	0.1381	12,016.0391
Mobile	4.3440	27.2107	56.6009	0.3003	32.7582	0.1486	32.9068	8.7735	0.1381	8.9116	0.0000	27,998.1354	27,998.1354	1.0707	0.0000	28,024.9016
Waste						0.0000	0.0000		0.0000	0.0000	846.9169	0.0000	846.9169	50.0514	0.0000	2,098.2007
Water						0.0000	0.0000		0.0000	0.0000	31.0839	790.1976	821.2816	3.2252	0.0821	926.3886
Total	17.6017	30.6502	67.6934	0.3209	32.7582	0.4507	33.2089	8.7735	0.4402	9.2136	878.0008	40,766.7994	41,644.8002	54.7743	0.2202	43,079.7746

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	2/23/2021	5	300	
2	Site Preparation	Site Preparation	2/24/2021	11/2/2021	5	180	
3	Grading	Grading	11/3/2021	8/15/2023	5	465	
4	Building Construction	Building Construction	8/16/2023	6/11/2041	5	4650	
5	Paving	Paving	6/12/2041	9/16/2042	5	330	
6	Architectural Coating	Architectural Coating	9/17/2042	12/22/2043	5	330	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1162.5

Acres of Paving: 0

Residential Indoor: 1,607,850; Residential Outdoor: 535,950; Non-Residential Indoor: 3,495,924; Non-Residential Outdoor: 1,165,308;

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74

Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	780.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1,551.00	467.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	310.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0737	0.0000	0.0737	0.0112	0.0000	0.0112	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4339	4.3493	2.8497	5.0800e-003		0.2173	0.2173		0.2020	0.2020	0.0000	445.3818	445.3818	0.1257	0.0000	448.5250
Total	0.4339	4.3493	2.8497	5.0800e-003	0.0737	0.2173	0.2910	0.0112	0.2020	0.2132	0.0000	445.3818	445.3818	0.1257	0.0000	448.5250

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.7400e-003	0.0980	0.0203	2.6000e-004	6.4900e-003	3.1000e-004	6.8000e-003	1.7600e-003	3.0000e-004	2.0600e-003	0.0000	25.8424	25.8424	1.8700e-003	0.0000	25.8892
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.7500e-003	6.7300e-003	0.0746	2.1000e-004	0.0216	1.7000e-004	0.0217	5.7300e-003	1.5000e-004	5.8800e-003	0.0000	19.4266	19.4266	5.6000e-004	0.0000	19.4406
Total	0.0115	0.1047	0.0949	4.7000e-004	0.0281	4.8000e-004	0.0285	7.4900e-003	4.5000e-004	7.9400e-003	0.0000	45.2689	45.2689	2.4300e-003	0.0000	45.3297

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0737	0.0000	0.0737	0.0112	0.0000	0.0112	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4339	4.3493	2.8497	5.0800e-003		0.2173	0.2173		0.2020	0.2020	0.0000	445.3812	445.3812	0.1257	0.0000	448.5244
Total	0.4339	4.3493	2.8497	5.0800e-003	0.0737	0.2173	0.2910	0.0112	0.2020	0.2132	0.0000	445.3812	445.3812	0.1257	0.0000	448.5244

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.7400e-003	0.0980	0.0203	2.6000e-004	6.4900e-003	3.1000e-004	6.8000e-003	1.7600e-003	3.0000e-004	2.0600e-003	0.0000	25.8424	25.8424	1.8700e-003	0.0000	25.8892
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.7500e-003	6.7300e-003	0.0746	2.1000e-004	0.0216	1.7000e-004	0.0217	5.7300e-003	1.5000e-004	5.8800e-003	0.0000	19.4266	19.4266	5.6000e-004	0.0000	19.4406
Total	0.0115	0.1047	0.0949	4.7000e-004	0.0281	4.8000e-004	0.0285	7.4900e-003	4.5000e-004	7.9400e-003	0.0000	45.2689	45.2689	2.4300e-003	0.0000	45.3297

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0107	0.0000	0.0107	1.6200e-003	0.0000	1.6200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0601	0.5974	0.4097	7.4000e-004		0.0295	0.0295		0.0274	0.0274	0.0000	64.6015	64.6015	0.0182	0.0000	65.0561
Total	0.0601	0.5974	0.4097	7.4000e-004	0.0107	0.0295	0.0402	1.6200e-003	0.0274	0.0290	0.0000	64.6015	64.6015	0.0182	0.0000	65.0561

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.8000e-004	0.0132	2.9100e-003	4.0000e-005	5.2600e-003	4.0000e-005	5.3000e-003	1.3100e-003	4.0000e-005	1.3500e-003	0.0000	3.7073	3.7073	2.7000e-004	0.0000	3.7140

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1800e-003	8.8000e-004	9.9500e-003	3.0000e-005	3.1300e-003	2.0000e-005	3.1500e-003	8.3000e-004	2.0000e-005	8.5000e-004	0.0000	2.7265	2.7265	7.0000e-005	0.0000	2.7283
Total	1.5600e-003	0.0141	0.0129	7.0000e-005	8.3900e-003	6.0000e-005	8.4500e-003	2.1400e-003	6.0000e-005	2.2000e-003	0.0000	6.4338	6.4338	3.4000e-004	0.0000	6.4423

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0107	0.0000	0.0107	1.6200e-003	0.0000	1.6200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0601	0.5974	0.4097	7.4000e-004		0.0295	0.0295		0.0274	0.0274	0.0000	64.6014	64.6014	0.0182	0.0000	65.0560
Total	0.0601	0.5974	0.4097	7.4000e-004	0.0107	0.0295	0.0402	1.6200e-003	0.0274	0.0290	0.0000	64.6014	64.6014	0.0182	0.0000	65.0560

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.8000e-004	0.0132	2.9100e-003	4.0000e-005	5.2600e-003	4.0000e-005	5.3000e-003	1.3100e-003	4.0000e-005	1.3500e-003	0.0000	3.7073	3.7073	2.7000e-004	0.0000	3.7140
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1800e-003	8.8000e-004	9.9500e-003	3.0000e-005	3.1300e-003	2.0000e-005	3.1500e-003	8.3000e-004	2.0000e-005	8.5000e-004	0.0000	2.7265	2.7265	7.0000e-005	0.0000	2.7283
Total	1.5600e-003	0.0141	0.0129	7.0000e-005	8.3900e-003	6.0000e-005	8.4500e-003	2.1400e-003	6.0000e-005	2.2000e-003	0.0000	6.4338	6.4338	3.4000e-004	0.0000	6.4423

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.6260	0.0000	1.6260	0.8938	0.0000	0.8938	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3499	3.6447	1.9039	3.4200e-003		0.1840	0.1840		0.1693	0.1693	0.0000	300.9215	300.9215	0.0973	0.0000	303.3546
Total	0.3499	3.6447	1.9039	3.4200e-003	1.6260	0.1840	1.8100	0.8938	0.1693	1.0630	0.0000	300.9215	300.9215	0.0973	0.0000	303.3546

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.7300e-003	5.0000e-003	0.0565	1.7000e-004	0.0178	1.3000e-004	0.0179	4.7200e-003	1.2000e-004	4.8400e-003	0.0000	15.4978	15.4978	4.2000e-004	0.0000	15.5082
Total	6.7300e-003	5.0000e-003	0.0565	1.7000e-004	0.0178	1.3000e-004	0.0179	4.7200e-003	1.2000e-004	4.8400e-003	0.0000	15.4978	15.4978	4.2000e-004	0.0000	15.5082

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr										MT/yr					
Fugitive Dust					1.6260	0.0000	1.6260	0.8938	0.0000	0.8938	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3499	3.6447	1.9039	3.4200e-003		0.1840	0.1840		0.1693	0.1693	0.0000	300.9211	300.9211	0.0973	0.0000	303.3542
Total	0.3499	3.6447	1.9039	3.4200e-003	1.6260	0.1840	1.8100	0.8938	0.1693	1.0630	0.0000	300.9211	300.9211	0.0973	0.0000	303.3542

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.7300e-003	5.0000e-003	0.0565	1.7000e-004	0.0178	1.3000e-004	0.0179	4.7200e-003	1.2000e-004	4.8400e-003	0.0000	15.4978	15.4978	4.2000e-004	0.0000	15.5082
Total	6.7300e-003	5.0000e-003	0.0565	1.7000e-004	0.0178	1.3000e-004	0.0179	4.7200e-003	1.2000e-004	4.8400e-003	0.0000	15.4978	15.4978	4.2000e-004	0.0000	15.5082

3.4 Grading - 2021

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.7459	0.0000	0.7459	0.1377	0.0000	0.1377	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0901	0.9976	0.6639	1.3300e-003		0.0427	0.0427		0.0393	0.0393	0.0000	117.1642	117.1642	0.0379	0.0000	118.1115

Total	0.0901	0.9976	0.6639	1.3300e-003	0.7459	0.0427	0.7886	0.1377	0.0393	0.1770	0.0000	117.1642	117.1642	0.0379	0.0000	118.1115
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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7900e-003	1.3300e-003	0.0150	5.0000e-005	4.7200e-003	4.0000e-005	4.7500e-003	1.2500e-003	3.0000e-005	1.2900e-003	0.0000	4.1136	4.1136	1.1000e-004	0.0000	4.1164
Total	1.7900e-003	1.3300e-003	0.0150	5.0000e-005	4.7200e-003	4.0000e-005	4.7500e-003	1.2500e-003	3.0000e-005	1.2900e-003	0.0000	4.1136	4.1136	1.1000e-004	0.0000	4.1164

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.7459	0.0000	0.7459	0.1377	0.0000	0.1377	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0901	0.9976	0.6639	1.3300e-003		0.0427	0.0427		0.0393	0.0393	0.0000	117.1641	117.1641	0.0379	0.0000	118.1114
Total	0.0901	0.9976	0.6639	1.3300e-003	0.7459	0.0427	0.7886	0.1377	0.0393	0.1770	0.0000	117.1641	117.1641	0.0379	0.0000	118.1114

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7900e-003	1.3300e-003	0.0150	5.0000e-005	4.7200e-003	4.0000e-005	4.7500e-003	1.2500e-003	3.0000e-005	1.2900e-003	0.0000	4.1136	4.1136	1.1000e-004	0.0000	4.1164
Total	1.7900e-003	1.3300e-003	0.0150	5.0000e-005	4.7200e-003	4.0000e-005	4.7500e-003	1.2500e-003	3.0000e-005	1.2900e-003	0.0000	4.1136	4.1136	1.1000e-004	0.0000	4.1164

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.3993	0.0000	1.3993	0.4969	0.0000	0.4969	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4712	5.0497	3.7754	8.0700e-003		0.2125	0.2125		0.1955	0.1955	0.0000	708.9498	708.9498	0.2293	0.0000	714.6820
Total	0.4712	5.0497	3.7754	8.0700e-003	1.3993	0.2125	1.6118	0.4969	0.1955	0.6924	0.0000	708.9498	708.9498	0.2293	0.0000	714.6820

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0102	7.2400e-003	0.0838	2.7000e-004	0.0285	2.1000e-004	0.0287	7.5800e-003	1.9000e-004	7.7700e-003	0.0000	23.9821	23.9821	6.0000e-004	0.0000	23.9972
Total	0.0102	7.2400e-003	0.0838	2.7000e-004	0.0285	2.1000e-004	0.0287	7.5800e-003	1.9000e-004	7.7700e-003	0.0000	23.9821	23.9821	6.0000e-004	0.0000	23.9972

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.3993	0.0000	1.3993	0.4969	0.0000	0.4969	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.4712	5.0497	3.7754	8.0700e-003		0.2125	0.2125		0.1955	0.1955	0.0000	708.9490	708.9490	0.2293	0.0000	714.6812
Total	0.4712	5.0497	3.7754	8.0700e-003	1.3993	0.2125	1.6118	0.4969	0.1955	0.6924	0.0000	708.9490	708.9490	0.2293	0.0000	714.6812

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0102	7.2400e-003	0.0838	2.7000e-004	0.0285	2.1000e-004	0.0287	7.5800e-003	1.9000e-004	7.7700e-003	0.0000	23.9821	23.9821	6.0000e-004	0.0000	23.9972
Total	0.0102	7.2400e-003	0.0838	2.7000e-004	0.0285	2.1000e-004	0.0287	7.5800e-003	1.9000e-004	7.7700e-003	0.0000	23.9821	23.9821	6.0000e-004	0.0000	23.9972

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.1042	0.0000	1.1042	0.3347	0.0000	0.3347	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2691	2.7958	2.2721	5.0300e-003		0.1154	0.1154		0.1062	0.1062	0.0000	441.7352	441.7352	0.1429	0.0000	445.3068
Total	0.2691	2.7958	2.2721	5.0300e-003	1.1042	0.1154	1.2196	0.3347	0.1062	0.4408	0.0000	441.7352	441.7352	0.1429	0.0000	445.3068

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9500e-003	4.0800e-003	0.0481	1.6000e-004	0.0178	1.3000e-004	0.0179	4.7200e-003	1.2000e-004	4.8400e-003	0.0000	14.3859	14.3859	3.4000e-004	0.0000	14.3944
Total	5.9500e-003	4.0800e-003	0.0481	1.6000e-004	0.0178	1.3000e-004	0.0179	4.7200e-003	1.2000e-004	4.8400e-003	0.0000	14.3859	14.3859	3.4000e-004	0.0000	14.3944

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.1042	0.0000	1.1042	0.3347	0.0000	0.3347	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2691	2.7958	2.2721	5.0300e-003		0.1154	0.1154		0.1062	0.1062	0.0000	441.7347	441.7347	0.1429	0.0000	445.3063
Total	0.2691	2.7958	2.2721	5.0300e-003	1.1042	0.1154	1.2196	0.3347	0.1062	0.4408	0.0000	441.7347	441.7347	0.1429	0.0000	445.3063

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9500e-003	4.0800e-003	0.0481	1.6000e-004	0.0178	1.3000e-004	0.0179	4.7200e-003	1.2000e-004	4.8400e-003	0.0000	14.3859	14.3859	3.4000e-004	0.0000	14.3944
Total	5.9500e-003	4.0800e-003	0.0481	1.6000e-004	0.0178	1.3000e-004	0.0179	4.7200e-003	1.2000e-004	4.8400e-003	0.0000	14.3859	14.3859	3.4000e-004	0.0000	14.3944

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0771	0.7049	0.7960	1.3200e-003		0.0343	0.0343		0.0323	0.0323	0.0000	113.5843	113.5843	0.0270	0.0000	114.2598

Total	0.0771	0.7049	0.7960	1.3200e-003		0.0343	0.0343		0.0323	0.0323	0.0000	113.5843	113.5843	0.0270	0.0000	114.2598
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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0458	1.5845	0.4773	5.4900e-003	0.1442	1.8400e-003	0.1460	0.0416	1.7500e-003	0.0434	0.0000	533.7040	533.7040	0.0305	0.0000	534.4658
Worker	0.2793	0.1916	2.2583	7.4600e-003	0.8338	5.9500e-003	0.8398	0.2214	5.4800e-003	0.2269	0.0000	674.8846	674.8846	0.0159	0.0000	675.2828
Total	0.3251	1.7761	2.7356	0.0130	0.9780	7.7900e-003	0.9858	0.2631	7.2300e-003	0.2703	0.0000	1,208.5885	1,208.5885	0.0464	0.0000	1,209.7486

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0771	0.7049	0.7960	1.3200e-003		0.0343	0.0343		0.0323	0.0323	0.0000	113.5842	113.5842	0.0270	0.0000	114.2597
Total	0.0771	0.7049	0.7960	1.3200e-003		0.0343	0.0343		0.0323	0.0323	0.0000	113.5842	113.5842	0.0270	0.0000	114.2597

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0458	1.5845	0.4773	5.4900e-003	0.1442	1.8400e-003	0.1460	0.0416	1.7500e-003	0.0434	0.0000	533.7040	533.7040	0.0305	0.0000	534.4658
Worker	0.2793	0.1916	2.2583	7.4600e-003	0.8338	5.9500e-003	0.8398	0.2214	5.4800e-003	0.2269	0.0000	674.8846	674.8846	0.0159	0.0000	675.2828
Total	0.3251	1.7761	2.7356	0.0130	0.9780	7.7900e-003	0.9858	0.2631	7.2300e-003	0.2703	0.0000	1,208.5885	1,208.5885	0.0464	0.0000	1,209.7486

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1928	1.7611	2.1179	3.5300e-003		0.0803	0.0803		0.0756	0.0756	0.0000	303.7223	303.7223	0.0718	0.0000	305.5179
Total	0.1928	1.7611	2.1179	3.5300e-003		0.0803	0.0803		0.0756	0.0756	0.0000	303.7223	303.7223	0.0718	0.0000	305.5179

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1198	4.2256	1.2393	0.0146	0.3855	4.8400e-003	0.3904	0.1112	4.6300e-003	0.1159	0.0000	1,421.7255	1,421.7255	0.0802	0.0000	1,423.7316
Worker	0.7075	0.4667	5.6294	0.0193	2.2292	0.0157	2.2449	0.5920	0.0144	0.6065	0.0000	1,744.6838	1,744.6838	0.0390	0.0000	1,745.6584
Total	0.8273	4.6923	6.8687	0.0339	2.6147	0.0205	2.6352	0.7033	0.0191	0.7223	0.0000	3,166.4093	3,166.4093	0.1192	0.0000	3,169.3900

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1928	1.7611	2.1179	3.5300e-003		0.0803	0.0803		0.0756	0.0756	0.0000	303.7220	303.7220	0.0718	0.0000	305.5175
Total	0.1928	1.7611	2.1179	3.5300e-003		0.0803	0.0803		0.0756	0.0756	0.0000	303.7220	303.7220	0.0718	0.0000	305.5175

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1198	4.2256	1.2393	0.0146	0.3855	4.8400e-003	0.3904	0.1112	4.6300e-003	0.1159	0.0000	1,421.7255	1,421.7255	0.0802	0.0000	1,423.7316
Worker	0.7075	0.4667	5.6294	0.0193	2.2292	0.0157	2.2449	0.5920	0.0144	0.6065	0.0000	1,744.6838	1,744.6838	0.0390	0.0000	1,745.6584
Total	0.8273	4.6923	6.8687	0.0339	2.6147	0.0205	2.6352	0.7033	0.0191	0.7223	0.0000	3,166.4093	3,166.4093	0.1192	0.0000	3,169.3900

3.5 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335
Total	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1163	4.1721	1.2029	0.0145	0.3841	4.7400e-003	0.3888	0.1108	4.5300e-003	0.1154	0.0000	1,408.5215	1,408.5215	0.0787	0.0000	1,410.4896
Worker	0.6703	0.4251	5.2082	0.0185	2.2207	0.0153	2.2360	0.5898	0.0141	0.6039	0.0000	1,669.6151	1,669.6151	0.0354	0.0000	1,670.4997
Total	0.7866	4.5973	6.4110	0.0329	2.6047	0.0201	2.6248	0.7006	0.0186	0.7192	0.0000	3,078.1366	3,078.1366	0.1141	0.0000	3,080.9893

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1784	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
Total	0.1784	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1163	4.1721	1.2029	0.0145	0.3841	4.7400e-003	0.3888	0.1108	4.5300e-003	0.1154	0.0000	1,408.5215	1,408.5215	0.0787	0.0000	1,410.4896
Worker	0.6703	0.4251	5.2082	0.0185	2.2207	0.0153	2.2360	0.5898	0.0141	0.6039	0.0000	1,669.6151	1,669.6151	0.0354	0.0000	1,670.4997
Total	0.7866	4.5973	6.4110	0.0329	2.6047	0.0201	2.6248	0.7006	0.0186	0.7192	0.0000	3,078.1366	3,078.1366	0.1141	0.0000	3,080.9893

3.5 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335

Total	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335
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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1137	4.1321	1.1784	0.0144	0.3841	4.6500e-003	0.3887	0.1108	4.4400e-003	0.1153	0.0000	1,401.0312	1,401.0312	0.0775	0.0000	1,402.9691
Worker	0.6406	0.3914	4.8677	0.0178	2.2207	0.0148	2.2355	0.5898	0.0136	0.6034	0.0000	1,610.4767	1,610.4767	0.0324	0.0000	1,611.2869
Total	0.7542	4.5236	6.0461	0.0322	2.6047	0.0195	2.6242	0.7006	0.0181	0.7187	0.0000	3,011.5079	3,011.5079	0.1099	0.0000	3,014.2560

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1784	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
Total	0.1784	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1137	4.1321	1.1784	0.0144	0.3841	4.6500e-003	0.3887	0.1108	4.4400e-003	0.1153	0.0000	1,401.0312	1,401.0312	0.0775	0.0000	1,402.9691
Worker	0.6406	0.3914	4.8677	0.0178	2.2207	0.0148	2.2355	0.5898	0.0136	0.6034	0.0000	1,610.4767	1,610.4767	0.0324	0.0000	1,611.2869
Total	0.7542	4.5236	6.0461	0.0322	2.6047	0.0195	2.6242	0.7006	0.0181	0.7187	0.0000	3,011.5079	3,011.5079	0.1099	0.0000	3,014.2560

3.5 Building Construction - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335
Total	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1114	4.0935	1.1588	0.0143	0.3841	4.5600e-003	0.3886	0.1108	4.3600e-003	0.1152	0.0000	1,394.2922	1,394.2922	0.0763	0.0000	1,396.2002
Worker	0.6113	0.3611	4.5640	0.0172	2.2207	0.0140	2.2347	0.5898	0.0129	0.6027	0.0000	1,558.3143	1,558.3143	0.0297	0.0000	1,559.0576
Total	0.7227	4.4545	5.7228	0.0315	2.6047	0.0186	2.6233	0.7006	0.0173	0.7178	0.0000	2,952.6065	2,952.6065	0.1061	0.0000	2,955.2578

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1784	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
Total	0.1784	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1114	4.0935	1.1588	0.0143	0.3841	4.5600e-003	0.3886	0.1108	4.3600e-003	0.1152	0.0000	1,394.2922	1,394.2922	0.0763	0.0000	1,396.2002
Worker	0.6113	0.3611	4.5640	0.0172	2.2207	0.0140	2.2347	0.5898	0.0129	0.6027	0.0000	1,558.3143	1,558.3143	0.0297	0.0000	1,559.0576
Total	0.7227	4.4545	5.7228	0.0315	2.6047	0.0186	2.6233	0.7006	0.0173	0.7178	0.0000	2,952.6065	2,952.6065	0.1061	0.0000	2,955.2578

3.5 Building Construction - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1778	1.6211	2.0910	3.5000e-003		0.0686	0.0686		0.0645	0.0645	0.0000	301.4953	301.4953	0.0709	0.0000	303.2671
Total	0.1778	1.6211	2.0910	3.5000e-003		0.0686	0.0686		0.0645	0.0645	0.0000	301.4953	301.4953	0.0709	0.0000	303.2671

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1091	4.0457	1.1390	0.0142	0.3826	4.4700e-003	0.3871	0.1104	4.2700e-003	0.1147	0.0000	1,383.1773	1,383.1773	0.0749	0.0000	1,385.0502
Worker	0.5787	0.3326	4.2814	0.0166	2.2122	0.0129	2.2251	0.5875	0.0119	0.5994	0.0000	1,506.5691	1,506.5691	0.0273	0.0000	1,507.2521
Total	0.6878	4.3782	5.4204	0.0308	2.5948	0.0174	2.6122	0.6979	0.0162	0.7141	0.0000	2,889.7465	2,889.7465	0.1022	0.0000	2,892.3023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1778	1.6211	2.0910	3.5000e-003		0.0686	0.0686		0.0645	0.0645	0.0000	301.4949	301.4949	0.0709	0.0000	303.2667
Total	0.1778	1.6211	2.0910	3.5000e-003		0.0686	0.0686		0.0645	0.0645	0.0000	301.4949	301.4949	0.0709	0.0000	303.2667

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1091	4.0457	1.1390	0.0142	0.3826	4.4700e-003	0.3871	0.1104	4.2700e-003	0.1147	0.0000	1,383.1773	1,383.1773	0.0749	0.0000	1,385.0502
Worker	0.5787	0.3326	4.2814	0.0166	2.2122	0.0129	2.2251	0.5875	0.0119	0.5994	0.0000	1,506.5691	1,506.5691	0.0273	0.0000	1,507.2521
Total	0.6878	4.3782	5.4204	0.0308	2.5948	0.0174	2.6122	0.6979	0.0162	0.7141	0.0000	2,889.7465	2,889.7465	0.1022	0.0000	2,892.3023

3.5 Building Construction - 2029

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335

Total	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335
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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1078	4.0293	1.1290	0.0142	0.3841	4.4000e-003	0.3885	0.1108	4.2100e-003	0.1150	0.0000	1,383.3159	1,383.3159	0.0742	0.0000	1,385.1712
Worker	0.5467	0.3075	4.0351	0.0163	2.2207	0.0121	2.2327	0.5898	0.0111	0.6009	0.0000	1,471.6021	1,471.6021	0.0252	0.0000	1,472.2312
Total	0.6545	4.3367	5.1641	0.0304	2.6047	0.0165	2.6212	0.7006	0.0153	0.7159	0.0000	2,854.9180	2,854.9180	0.0994	0.0000	2,857.4024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1784	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
Total	0.1784	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1078	4.0293	1.1290	0.0142	0.3841	4.4000e-003	0.3885	0.1108	4.2100e-003	0.1150	0.0000	1,383.3159	1,383.3159	0.0742	0.0000	1,385.1712
Worker	0.5467	0.3075	4.0351	0.0163	2.2207	0.0121	2.2327	0.5898	0.0111	0.6009	0.0000	1,471.6021	1,471.6021	0.0252	0.0000	1,472.2312
Total	0.6545	4.3367	5.1641	0.0304	2.6047	0.0165	2.6212	0.7006	0.0153	0.7159	0.0000	2,854.9180	2,854.9180	0.0994	0.0000	2,857.4024

3.5 Building Construction - 2030

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1708	1.0355	2.1085	4.0400e-003		0.0193	0.0193		0.0193	0.0193	0.0000	343.0336	343.0336	0.0138	0.0000	343.3777
Total	0.1708	1.0355	2.1085	4.0400e-003		0.0193	0.0193		0.0193	0.0193	0.0000	343.0336	343.0336	0.0138	0.0000	343.3777

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1062	3.9983	1.1181	0.0141	0.3841	4.3200e-003	0.3884	0.1108	4.1300e-003	0.1150	0.0000	1,378.6305	1,378.6305	0.0733	0.0000	1,380.4629
Worker	0.5118	0.2825	3.7922	0.0159	2.2207	0.0112	2.2319	0.5898	0.0103	0.6001	0.0000	1,435.4314	1,435.4314	0.0231	0.0000	1,436.0084
Total	0.6180	4.2808	4.9103	0.0300	2.6047	0.0156	2.6203	0.7006	0.0145	0.7150	0.0000	2,814.0619	2,814.0619	0.0964	0.0000	2,816.4713

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1708	1.0355	2.1085	4.0400e-003		0.0193	0.0193		0.0193	0.0193	0.0000	343.0332	343.0332	0.0138	0.0000	343.3773
Total	0.1708	1.0355	2.1085	4.0400e-003		0.0193	0.0193		0.0193	0.0193	0.0000	343.0332	343.0332	0.0138	0.0000	343.3773

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1062	3.9983	1.1181	0.0141	0.3841	4.3200e-003	0.3884	0.1108	4.1300e-003	0.1150	0.0000	1,378.6305	1,378.6305	0.0733	0.0000	1,380.4629
Worker	0.5118	0.2825	3.7922	0.0159	2.2207	0.0112	2.2319	0.5898	0.0103	0.6001	0.0000	1,435.4314	1,435.4314	0.0231	0.0000	1,436.0084
Total	0.6180	4.2808	4.9103	0.0300	2.6047	0.0156	2.6203	0.7006	0.0145	0.7150	0.0000	2,814.0619	2,814.0619	0.0964	0.0000	2,816.4713

3.5 Building Construction - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1708	1.0355	2.1085	4.0400e-003		0.0193	0.0193		0.0193	0.0193	0.0000	343.0336	343.0336	0.0138	0.0000	343.3777
Total	0.1708	1.0355	2.1085	4.0400e-003		0.0193	0.0193		0.0193	0.0193	0.0000	343.0336	343.0336	0.0138	0.0000	343.3777

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1055	3.9778	1.1139	0.0141	0.3841	4.2600e-003	0.3884	0.1108	4.0700e-003	0.1149	0.0000	1,376.5534	1,376.5534	0.0726	0.0000	1,378.3683
Worker	0.4736	0.2579	3.5617	0.0155	2.2207	0.0105	2.2312	0.5898	9.6600e-003	0.5994	0.0000	1,404.9579	1,404.9579	0.0211	0.0000	1,405.4861
Total	0.5791	4.2357	4.6756	0.0296	2.6047	0.0148	2.6195	0.7006	0.0137	0.7143	0.0000	2,781.5113	2,781.5113	0.0937	0.0000	2,783.8544

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1708	1.0355	2.1085	4.0400e-003		0.0193	0.0193		0.0193	0.0193	0.0000	343.0332	343.0332	0.0138	0.0000	343.3773
Total	0.1708	1.0355	2.1085	4.0400e-003		0.0193	0.0193		0.0193	0.0193	0.0000	343.0332	343.0332	0.0138	0.0000	343.3773

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1055	3.9778	1.1139	0.0141	0.3841	4.2600e-003	0.3884	0.1108	4.0700e-003	0.1149	0.0000	1,376.5534	1,376.5534	0.0726	0.0000	1,378.3683
Worker	0.4736	0.2579	3.5617	0.0155	2.2207	0.0105	2.2312	0.5898	9.6600e-003	0.5994	0.0000	1,404.9579	1,404.9579	0.0211	0.0000	1,405.4861
Total	0.5791	4.2357	4.6756	0.0296	2.6047	0.0148	2.6195	0.7006	0.0137	0.7143	0.0000	2,781.5113	2,781.5113	0.0937	0.0000	2,783.8544

3.5 Building Construction - 2032

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1715	1.0394	2.1166	4.0600e-003		0.0194	0.0194		0.0194	0.0194	0.0000	344.3479	344.3479	0.0138	0.0000	344.6933

Total	0.1715	1.0394	2.1166	4.0600e-003		0.0194	0.0194		0.0194	0.0194	0.0000	344.3479	344.3479	0.0138	0.0000	344.6933
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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1050	3.9661	1.1132	0.0141	0.3856	4.2200e-003	0.3898	0.1112	4.0300e-003	0.1153	0.0000	1,378.9141	1,378.9141	0.0722	0.0000	1,380.7200
Worker	0.4411	0.2373	3.3627	0.0153	2.2292	9.8300e-003	2.2390	0.5920	9.0400e-003	0.6011	0.0000	1,381.9890	1,381.9890	0.0194	0.0000	1,382.4747
Total	0.5461	4.2035	4.4759	0.0294	2.6147	0.0141	2.6288	0.7033	0.0131	0.7163	0.0000	2,760.9030	2,760.9030	0.0917	0.0000	2,763.1947

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1715	1.0394	2.1166	4.0600e-003		0.0194	0.0194		0.0194	0.0194	0.0000	344.3475	344.3475	0.0138	0.0000	344.6929
Total	0.1715	1.0394	2.1166	4.0600e-003		0.0194	0.0194		0.0194	0.0194	0.0000	344.3475	344.3475	0.0138	0.0000	344.6929

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1050	3.9661	1.1132	0.0141	0.3856	4.2200e-003	0.3898	0.1112	4.0300e-003	0.1153	0.0000	1,378.9141	1,378.9141	0.0722	0.0000	1,380.7200
Worker	0.4411	0.2373	3.3627	0.0153	2.2292	9.8300e-003	2.2390	0.5920	9.0400e-003	0.6011	0.0000	1,381.9890	1,381.9890	0.0194	0.0000	1,382.4747
Total	0.5461	4.2035	4.4759	0.0294	2.6147	0.0141	2.6288	0.7033	0.0131	0.7163	0.0000	2,760.9030	2,760.9030	0.0917	0.0000	2,763.1947

3.5 Building Construction - 2033

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1702	1.0315	2.1004	4.0200e-003		0.0193	0.0193		0.0193	0.0193	0.0000	341.7193	341.7193	0.0137	0.0000	342.0621
Total	0.1702	1.0315	2.1004	4.0200e-003		0.0193	0.0193		0.0193	0.0193	0.0000	341.7193	341.7193	0.0137	0.0000	342.0621

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1035	3.9117	1.1012	0.0140	0.3826	4.1300e-003	0.3868	0.1104	3.9500e-003	0.1144	0.0000	1,366.0507	1,366.0507	0.0711	0.0000	1,367.8289
Worker	0.4087	0.2175	3.1565	0.0149	2.2122	9.1100e-003	2.2213	0.5875	8.3800e-003	0.5959	0.0000	1,346.8728	1,346.8728	0.0178	0.0000	1,347.3172
Total	0.5122	4.1292	4.2577	0.0289	2.5948	0.0132	2.6080	0.6979	0.0123	0.7102	0.0000	2,712.9234	2,712.9234	0.0889	0.0000	2,715.1461

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1702	1.0315	2.1004	4.0200e-003		0.0193	0.0193		0.0193	0.0193	0.0000	341.7189	341.7189	0.0137	0.0000	342.0617
Total	0.1702	1.0315	2.1004	4.0200e-003		0.0193	0.0193		0.0193	0.0193	0.0000	341.7189	341.7189	0.0137	0.0000	342.0617

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1035	3.9117	1.1012	0.0140	0.3826	4.1300e-003	0.3868	0.1104	3.9500e-003	0.1144	0.0000	1,366.0507	1,366.0507	0.0711	0.0000	1,367.8289
Worker	0.4087	0.2175	3.1565	0.0149	2.2122	9.1100e-003	2.2213	0.5875	8.3800e-003	0.5959	0.0000	1,346.8728	1,346.8728	0.0178	0.0000	1,347.3172
Total	0.5122	4.1292	4.2577	0.0289	2.5948	0.0132	2.6080	0.6979	0.0123	0.7102	0.0000	2,712.9234	2,712.9234	0.0889	0.0000	2,715.1461

3.5 Building Construction - 2034

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1702	1.0315	2.1004	4.0200e-003		0.0193	0.0193		0.0193	0.0193	0.0000	341.7193	341.7193	0.0137	0.0000	342.0621
Total	0.1702	1.0315	2.1004	4.0200e-003		0.0193	0.0193		0.0193	0.0193	0.0000	341.7193	341.7193	0.0137	0.0000	342.0621

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1029	3.8899	1.0975	0.0140	0.3826	4.0800e-003	0.3867	0.1104	3.9000e-003	0.1143	0.0000	1,364.2473	1,364.2473	0.0707	0.0000	1,366.0137
Worker	0.3843	0.2023	2.9822	0.0146	2.2122	8.5100e-003	2.2207	0.5875	7.8300e-003	0.5953	0.0000	1,325.3589	1,325.3589	0.0163	0.0000	1,325.7674
Total	0.4871	4.0923	4.0797	0.0286	2.5948	0.0126	2.6074	0.6979	0.0117	0.7096	0.0000	2,689.6062	2,689.6062	0.0870	0.0000	2,691.7811

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1702	1.0315	2.1004	4.0200e-003		0.0193	0.0193		0.0193	0.0193	0.0000	341.7189	341.7189	0.0137	0.0000	342.0617
Total	0.1702	1.0315	2.1004	4.0200e-003		0.0193	0.0193		0.0193	0.0193	0.0000	341.7189	341.7189	0.0137	0.0000	342.0617

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1029	3.8899	1.0975	0.0140	0.3826	4.0800e-003	0.3867	0.1104	3.9000e-003	0.1143	0.0000	1,364.2473	1,364.2473	0.0707	0.0000	1,366.0137
Worker	0.3843	0.2023	2.9822	0.0146	2.2122	8.5100e-003	2.2207	0.5875	7.8300e-003	0.5953	0.0000	1,325.3589	1,325.3589	0.0163	0.0000	1,325.7674
Total	0.4871	4.0923	4.0797	0.0286	2.5948	0.0126	2.6074	0.6979	0.0117	0.7096	0.0000	2,689.6062	2,689.6062	0.0870	0.0000	2,691.7811

3.5 Building Construction - 2035

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1588	0.9346	2.1034	4.0400e-003		0.0118	0.0118		0.0118	0.0118	0.0000	343.0336	343.0336	0.0128	0.0000	343.3530

Total	0.1588	0.9346	2.1034	4.0400e-003		0.0118	0.0118		0.0118	0.0118	0.0000	343.0336	343.0336	0.0128	0.0000	343.3530
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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1027	3.8873	1.0982	0.0140	0.3841	4.0600e-003	0.3882	0.1108	3.8800e-003	0.1147	0.0000	1,368.1101	1,368.1101	0.0705	0.0000	1,369.8727
Worker	0.3654	0.1920	2.8493	0.0145	2.2207	8.0000e-003	2.2287	0.5898	7.3600e-003	0.5971	0.0000	1,311.9602	1,311.9602	0.0152	0.0000	1,312.3408
Total	0.4681	4.0793	3.9475	0.0285	2.6047	0.0121	2.6168	0.7006	0.0112	0.7118	0.0000	2,680.0703	2,680.0703	0.0857	0.0000	2,682.2136

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1588	0.9346	2.1034	4.0400e-003		0.0118	0.0118		0.0118	0.0118	0.0000	343.0332	343.0332	0.0128	0.0000	343.3526
Total	0.1588	0.9346	2.1034	4.0400e-003		0.0118	0.0118		0.0118	0.0118	0.0000	343.0332	343.0332	0.0128	0.0000	343.3526

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1027	3.8873	1.0982	0.0140	0.3841	4.0600e-003	0.3882	0.1108	3.8800e-003	0.1147	0.0000	1,368.1101	1,368.1101	0.0705	0.0000	1,369.8727
Worker	0.3654	0.1920	2.8493	0.0145	2.2207	8.0000e-003	2.2287	0.5898	7.3600e-003	0.5971	0.0000	1,311.9602	1,311.9602	0.0152	0.0000	1,312.3408
Total	0.4681	4.0793	3.9475	0.0285	2.6047	0.0121	2.6168	0.7006	0.0112	0.7118	0.0000	2,680.0703	2,680.0703	0.0857	0.0000	2,682.2136

3.5 Building Construction - 2036

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1594	0.9381	2.1114	4.0600e-003		0.0118	0.0118		0.0118	0.0118	0.0000	344.3479	344.3479	0.0128	0.0000	344.6686
Total	0.1594	0.9381	2.1114	4.0600e-003		0.0118	0.0118		0.0118	0.0118	0.0000	344.3479	344.3479	0.0128	0.0000	344.6686

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1031	3.9022	1.1024	0.0141	0.3856	4.0700e-003	0.3896	0.1113	3.8900e-003	0.1151	0.0000	1,373.3519	1,373.3519	0.0708	0.0000	1,375.1213
Worker	0.3668	0.1927	2.8603	0.0145	2.2292	8.0300e-003	2.2372	0.5920	7.3900e-003	0.5994	0.0000	1,316.9869	1,316.9869	0.0153	0.0000	1,317.3690
Total	0.4699	4.0949	3.9626	0.0286	2.6147	0.0121	2.6268	0.7033	0.0113	0.7145	0.0000	2,690.3388	2,690.3388	0.0861	0.0000	2,692.4902

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1594	0.9381	2.1114	4.0600e-003		0.0118	0.0118		0.0118	0.0118	0.0000	344.3475	344.3475	0.0128	0.0000	344.6682
Total	0.1594	0.9381	2.1114	4.0600e-003		0.0118	0.0118		0.0118	0.0118	0.0000	344.3475	344.3475	0.0128	0.0000	344.6682

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1031	3.9022	1.1024	0.0141	0.3856	4.0700e-003	0.3896	0.1113	3.8900e-003	0.1151	0.0000	1,373.3519	1,373.3519	0.0708	0.0000	1,375.1213
Worker	0.3668	0.1927	2.8603	0.0145	2.2292	8.0300e-003	2.2372	0.5920	7.3900e-003	0.5994	0.0000	1,316.9869	1,316.9869	0.0153	0.0000	1,317.3690
Total	0.4699	4.0949	3.9626	0.0286	2.6147	0.0121	2.6268	0.7033	0.0113	0.7145	0.0000	2,690.3388	2,690.3388	0.0861	0.0000	2,692.4902

3.5 Building Construction - 2037

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1588	0.9346	2.1034	4.0400e-003		0.0118	0.0118		0.0118	0.0118	0.0000	343.0336	343.0336	0.0128	0.0000	343.3530
Total	0.1588	0.9346	2.1034	4.0400e-003		0.0118	0.0118		0.0118	0.0118	0.0000	343.0336	343.0336	0.0128	0.0000	343.3530

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1027	3.8873	1.0982	0.0140	0.3841	4.0600e-003	0.3882	0.1108	3.8800e-003	0.1147	0.0000	1,368.1101	1,368.1101	0.0705	0.0000	1,369.8727
Worker	0.3654	0.1920	2.8493	0.0145	2.2207	8.0000e-003	2.2287	0.5898	7.3600e-003	0.5971	0.0000	1,311.9602	1,311.9602	0.0152	0.0000	1,312.3408
Total	0.4681	4.0793	3.9475	0.0285	2.6047	0.0121	2.6168	0.7006	0.0112	0.7118	0.0000	2,680.0703	2,680.0703	0.0857	0.0000	2,682.2136

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1588	0.9346	2.1034	4.0400e-003		0.0118	0.0118		0.0118	0.0118	0.0000	343.0332	343.0332	0.0128	0.0000	343.3526
Total	0.1588	0.9346	2.1034	4.0400e-003		0.0118	0.0118		0.0118	0.0118	0.0000	343.0332	343.0332	0.0128	0.0000	343.3526

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1027	3.8873	1.0982	0.0140	0.3841	4.0600e-003	0.3882	0.1108	3.8800e-003	0.1147	0.0000	1,368.1101	1,368.1101	0.0705	0.0000	1,369.8727
Worker	0.3654	0.1920	2.8493	0.0145	2.2207	8.0000e-003	2.2287	0.5898	7.3600e-003	0.5971	0.0000	1,311.9602	1,311.9602	0.0152	0.0000	1,312.3408
Total	0.4681	4.0793	3.9475	0.0285	2.6047	0.0121	2.6168	0.7006	0.0112	0.7118	0.0000	2,680.0703	2,680.0703	0.0857	0.0000	2,682.2136

3.5 Building Construction - 2038

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1588	0.9346	2.1034	4.0400e-003		0.0118	0.0118		0.0118	0.0118	0.0000	343.0336	343.0336	0.0128	0.0000	343.3530

Total	0.1588	0.9346	2.1034	4.0400e-003		0.0118	0.0118		0.0118	0.0118	0.0000	343.0336	343.0336	0.0128	0.0000	343.3530
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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1027	3.8873	1.0982	0.0140	0.3841	4.0600e-003	0.3882	0.1108	3.8800e-003	0.1147	0.0000	1,368.1101	1,368.1101	0.0705	0.0000	1,369.8727
Worker	0.3654	0.1920	2.8493	0.0145	2.2207	8.0000e-003	2.2287	0.5898	7.3600e-003	0.5971	0.0000	1,311.9602	1,311.9602	0.0152	0.0000	1,312.3408
Total	0.4681	4.0793	3.9475	0.0285	2.6047	0.0121	2.6168	0.7006	0.0112	0.7118	0.0000	2,680.0703	2,680.0703	0.0857	0.0000	2,682.2136

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1588	0.9346	2.1034	4.0400e-003		0.0118	0.0118		0.0118	0.0118	0.0000	343.0332	343.0332	0.0128	0.0000	343.3526
Total	0.1588	0.9346	2.1034	4.0400e-003		0.0118	0.0118		0.0118	0.0118	0.0000	343.0332	343.0332	0.0128	0.0000	343.3526

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1027	3.8873	1.0982	0.0140	0.3841	4.0600e-003	0.3882	0.1108	3.8800e-003	0.1147	0.0000	1,368.1101	1,368.1101	0.0705	0.0000	1,369.8727
Worker	0.3654	0.1920	2.8493	0.0145	2.2207	8.0000e-003	2.2287	0.5898	7.3600e-003	0.5971	0.0000	1,311.9602	1,311.9602	0.0152	0.0000	1,312.3408
Total	0.4681	4.0793	3.9475	0.0285	2.6047	0.0121	2.6168	0.7006	0.0112	0.7118	0.0000	2,680.0703	2,680.0703	0.0857	0.0000	2,682.2136

3.5 Building Construction - 2039

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1582	0.9310	2.0953	4.0200e-003		0.0118	0.0118		0.0118	0.0118	0.0000	341.7193	341.7193	0.0127	0.0000	342.0375
Total	0.1582	0.9310	2.0953	4.0200e-003		0.0118	0.0118		0.0118	0.0118	0.0000	341.7193	341.7193	0.0127	0.0000	342.0375

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1023	3.8724	1.0939	0.0139	0.3826	4.0400e-003	0.3867	0.1104	3.8600e-003	0.1143	0.0000	1,362.8683	1,362.8683	0.0702	0.0000	1,364.6242
Worker	0.3640	0.1913	2.8384	0.0144	2.2122	7.9700e-003	2.2201	0.5875	7.3300e-003	0.5948	0.0000	1,306.9335	1,306.9335	0.0152	0.0000	1,307.3127
Total	0.4663	4.0636	3.9324	0.0284	2.5948	0.0120	2.6068	0.6979	0.0112	0.7091	0.0000	2,669.8019	2,669.8019	0.0854	0.0000	2,671.9369

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1582	0.9310	2.0953	4.0200e-003		0.0118	0.0118		0.0118	0.0118	0.0000	341.7189	341.7189	0.0127	0.0000	342.0371
Total	0.1582	0.9310	2.0953	4.0200e-003		0.0118	0.0118		0.0118	0.0118	0.0000	341.7189	341.7189	0.0127	0.0000	342.0371

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1023	3.8724	1.0939	0.0139	0.3826	4.0400e-003	0.3867	0.1104	3.8600e-003	0.1143	0.0000	1,362.8683	1,362.8683	0.0702	0.0000	1,364.6242
Worker	0.3640	0.1913	2.8384	0.0144	2.2122	7.9700e-003	2.2201	0.5875	7.3300e-003	0.5948	0.0000	1,306.9335	1,306.9335	0.0152	0.0000	1,307.3127
Total	0.4663	4.0636	3.9324	0.0284	2.5948	0.0120	2.6068	0.6979	0.0112	0.7091	0.0000	2,669.8019	2,669.8019	0.0854	0.0000	2,671.9369

3.5 Building Construction - 2040

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1562	0.8992	2.1035	4.0400e-003		9.6200e-003	9.6200e-003		9.6200e-003	9.6200e-003	0.0000	343.0337	343.0337	0.0123	0.0000	343.3419
Total	0.1562	0.8992	2.1035	4.0400e-003		9.6200e-003	9.6200e-003		9.6200e-003	9.6200e-003	0.0000	343.0337	343.0337	0.0123	0.0000	343.3419

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1013	3.8437	1.0747	0.0140	0.3841	3.9600e-003	0.3881	0.1108	3.7900e-003	0.1146	0.0000	1,365.8861	1,365.8861	0.0688	0.0000	1,367.6055
Worker	0.2929	0.1570	2.4118	0.0138	2.2207	6.1700e-003	2.2268	0.5898	5.6800e-003	0.5954	0.0000	1,254.5046	1,254.5046	0.0117	0.0000	1,254.7966
Total	0.3942	4.0007	3.4865	0.0278	2.6048	0.0101	2.6149	0.7006	9.4700e-003	0.7101	0.0000	2,620.3907	2,620.3907	0.0805	0.0000	2,622.4021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1562	0.8992	2.1035	4.0400e-003		9.6200e-003	9.6200e-003		9.6200e-003	9.6200e-003	0.0000	343.0333	343.0333	0.0123	0.0000	343.3415
Total	0.1562	0.8992	2.1035	4.0400e-003		9.6200e-003	9.6200e-003		9.6200e-003	9.6200e-003	0.0000	343.0333	343.0333	0.0123	0.0000	343.3415

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1013	3.8437	1.0747	0.0140	0.3841	3.9600e-003	0.3881	0.1108	3.7900e-003	0.1146	0.0000	1,365.8861	1,365.8861	0.0688	0.0000	1,367.6055
Worker	0.2929	0.1570	2.4118	0.0138	2.2207	6.1700e-003	2.2268	0.5898	5.6800e-003	0.5954	0.0000	1,254.5046	1,254.5046	0.0117	0.0000	1,254.7966
Total	0.3942	4.0007	3.4865	0.0278	2.6048	0.0101	2.6149	0.7006	9.4700e-003	0.7101	0.0000	2,620.3907	2,620.3907	0.0805	0.0000	2,622.4021

3.5 Building Construction - 2041

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0694	0.3996	0.9349	1.8000e-003		4.2800e-003	4.2800e-003		4.2800e-003	4.2800e-003	0.0000	152.4594	152.4594	5.4800e-003	0.0000	152.5964

Total	0.0694	0.3996	0.9349	1.8000e-003		4.2800e-003	4.2800e-003		4.2800e-003	4.2800e-003	0.0000	152.4594	152.4594	5.4800e-003	0.0000	152.5964
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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0450	1.7083	0.4776	6.2100e-003	0.1707	1.7600e-003	0.1725	0.0493	1.6800e-003	0.0509	0.0000	607.0605	607.0605	0.0306	0.0000	607.8247
Worker	0.1302	0.0698	1.0719	6.1500e-003	0.9870	2.7400e-003	0.9897	0.2621	2.5200e-003	0.2646	0.0000	557.5576	557.5576	5.1900e-003	0.0000	557.6874
Total	0.1752	1.7781	1.5496	0.0124	1.1577	4.5000e-003	1.1622	0.3114	4.2000e-003	0.3156	0.0000	1,164.6181	1,164.6181	0.0358	0.0000	1,165.5120

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0694	0.3996	0.9349	1.8000e-003		4.2800e-003	4.2800e-003		4.2800e-003	4.2800e-003	0.0000	152.4592	152.4592	5.4800e-003	0.0000	152.5962
Total	0.0694	0.3996	0.9349	1.8000e-003		4.2800e-003	4.2800e-003		4.2800e-003	4.2800e-003	0.0000	152.4592	152.4592	5.4800e-003	0.0000	152.5962

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0450	1.7083	0.4776	6.2100e-003	0.1707	1.7600e-003	0.1725	0.0493	1.6800e-003	0.0509	0.0000	607.0605	607.0605	0.0306	0.0000	607.8247
Worker	0.1302	0.0698	1.0719	6.1500e-003	0.9870	2.7400e-003	0.9897	0.2621	2.5200e-003	0.2646	0.0000	557.5576	557.5576	5.1900e-003	0.0000	557.6874
Total	0.1752	1.7781	1.5496	0.0124	1.1577	4.5000e-003	1.1622	0.3114	4.2000e-003	0.3156	0.0000	1,164.6181	1,164.6181	0.0358	0.0000	1,165.5120

3.6 Paving - 2041

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0733	0.2651	1.1468	2.0300e-003		8.4400e-003	8.4400e-003		8.4400e-003	8.4400e-003	0.0000	174.7215	174.7215	5.8700e-003	0.0000	174.8683
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0733	0.2651	1.1468	2.0300e-003		8.4400e-003	8.4400e-003		8.4400e-003	8.4400e-003	0.0000	174.7215	174.7215	5.8700e-003	0.0000	174.8683

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5700e-003	8.4000e-004	0.0130	7.0000e-005	0.0119	3.0000e-005	0.0120	3.1700e-003	3.0000e-005	3.2000e-003	0.0000	6.7403	6.7403	6.0000e-005	0.0000	6.7419
Total	1.5700e-003	8.4000e-004	0.0130	7.0000e-005	0.0119	3.0000e-005	0.0120	3.1700e-003	3.0000e-005	3.2000e-003	0.0000	6.7403	6.7403	6.0000e-005	0.0000	6.7419

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0733	0.2651	1.1468	2.0300e-003		8.4400e-003	8.4400e-003		8.4400e-003	8.4400e-003	0.0000	174.7213	174.7213	5.8700e-003	0.0000	174.8681
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0733	0.2651	1.1468	2.0300e-003		8.4400e-003	8.4400e-003		8.4400e-003	8.4400e-003	0.0000	174.7213	174.7213	5.8700e-003	0.0000	174.8681

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5700e-003	8.4000e-004	0.0130	7.0000e-005	0.0119	3.0000e-005	0.0120	3.1700e-003	3.0000e-005	3.2000e-003	0.0000	6.7403	6.7403	6.0000e-005	0.0000	6.7419
Total	1.5700e-003	8.4000e-004	0.0130	7.0000e-005	0.0119	3.0000e-005	0.0120	3.1700e-003	3.0000e-005	3.2000e-003	0.0000	6.7403	6.7403	6.0000e-005	0.0000	6.7419

3.6 Paving - 2042

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0935	0.3382	1.4631	2.5900e-003		0.0108	0.0108		0.0108	0.0108	0.0000	222.9205	222.9205	7.4900e-003	0.0000	223.1078
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0935	0.3382	1.4631	2.5900e-003		0.0108	0.0108		0.0108	0.0108	0.0000	222.9205	222.9205	7.4900e-003	0.0000	223.1078

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0100e-003	1.0800e-003	0.0165	9.0000e-005	0.0152	4.0000e-005	0.0153	4.0400e-003	4.0000e-005	4.0800e-003	0.0000	8.5997	8.5997	8.0000e-005	0.0000	8.6017
Total	2.0100e-003	1.0800e-003	0.0165	9.0000e-005	0.0152	4.0000e-005	0.0153	4.0400e-003	4.0000e-005	4.0800e-003	0.0000	8.5997	8.5997	8.0000e-005	0.0000	8.6017

Mitigated Construction On-Site

Off-Road	4.3700e-003	0.0276	0.0681	1.1000e-004		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	9.7024	9.7024	3.4000e-004	0.0000	9.7109
Total	3.0643	0.0276	0.0681	1.1000e-004		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	9.7024	9.7024	3.4000e-004	0.0000	9.7109

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0170	9.1400e-003	0.1404	8.1000e-004	0.1292	3.6000e-004	0.1296	0.0343	3.3000e-004	0.0347	0.0000	73.0122	73.0122	6.8000e-004	0.0000	73.0292
Total	0.0170	9.1400e-003	0.1404	8.1000e-004	0.1292	3.6000e-004	0.1296	0.0343	3.3000e-004	0.0347	0.0000	73.0122	73.0122	6.8000e-004	0.0000	73.0292

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.0599					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.3700e-003	0.0276	0.0681	1.1000e-004		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	9.7024	9.7024	3.4000e-004	0.0000	9.7109
Total	3.0643	0.0276	0.0681	1.1000e-004		2.8000e-004	2.8000e-004		2.8000e-004	2.8000e-004	0.0000	9.7024	9.7024	3.4000e-004	0.0000	9.7109

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0170	9.1400e-003	0.1404	8.1000e-004	0.1292	3.6000e-004	0.1296	0.0343	3.3000e-004	0.0347	0.0000	73.0122	73.0122	6.8000e-004	0.0000	73.0292
Total	0.0170	9.1400e-003	0.1404	8.1000e-004	0.1292	3.6000e-004	0.1296	0.0343	3.3000e-004	0.0347	0.0000	73.0122	73.0122	6.8000e-004	0.0000	73.0292

3.7 Architectural Coating - 2043

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	10.2266					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0146	0.0923	0.2276	3.8000e-004		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	32.4263	32.4263	1.1400e-003	0.0000	32.4549
Total	10.2412	0.0923	0.2276	3.8000e-004		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	32.4263	32.4263	1.1400e-003	0.0000	32.4549

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0570	0.0305	0.4691	2.6900e-003	0.4319	1.2000e-003	0.4331	0.1147	1.1000e-003	0.1158	0.0000	244.0143	244.0143	2.2700e-003	0.0000	244.0711
Total	0.0570	0.0305	0.4691	2.6900e-003	0.4319	1.2000e-003	0.4331	0.1147	1.1000e-003	0.1158	0.0000	244.0143	244.0143	2.2700e-003	0.0000	244.0711

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	10.2266					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0146	0.0923	0.2276	3.8000e-004		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	32.4263	32.4263	1.1400e-003	0.0000	32.4548
Total	10.2412	0.0923	0.2276	3.8000e-004		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	32.4263	32.4263	1.1400e-003	0.0000	32.4548

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0570	0.0305	0.4691	2.6900e-003	0.4319	1.2000e-003	0.4331	0.1147	1.1000e-003	0.1158	0.0000	244.0143	244.0143	2.2700e-003	0.0000	244.0711
Total	0.0570	0.0305	0.4691	2.6900e-003	0.4319	1.2000e-003	0.4331	0.1147	1.1000e-003	0.1158	0.0000	244.0143	244.0143	2.2700e-003	0.0000	244.0711

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	4.3440	27.2107	56.6009	0.3003	32.7582	0.1486	32.9068	8.7735	0.1381	8.9116	0.0000	27,998.1354	27,998.1354	1.0707	0.0000	28,024.9016
Unmitigated	4.3440	27.2107	56.6009	0.3003	32.7582	0.1486	32.9068	8.7735	0.1381	8.9116	0.0000	27,998.1354	27,998.1354	1.0707	0.0000	28,024.9016

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,127.48	1,127.48	1127.48	3,850,439	3,850,439
Day-Care Center	805.92	71.76	68.08	866,099	866,099
High School	1,155.96	412.36	169.00	3,881,019	3,881,019
University/College (4Yr)	31,400.00	24,000.00	0.00	77,671,951	77,671,951
Total	34,489.36	25,611.60	1,364.56	86,269,508	86,269,508

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.00	19.00	41.00	86	11	3
Day-Care Center	16.60	8.40	6.90	12.70	82.30	5.00	28	58	14
High School	16.60	8.40	6.90	77.80	17.20	5.00	75	19	6
University/College (4Yr)	16.60	8.40	6.90	6.40	88.60	5.00	91	9	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735
Day-Care Center	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735
High School	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735
University/College (4Yr)	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	8,301.9087	8,301.9087	0.3427	0.0709	8,331.6090
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	8,301.9087	8,301.9087	0.3427	0.0709	8,331.6090
NaturalGas Mitigated	0.3701	3.3430	2.6683	0.0202		0.2557	0.2557		0.2557	0.2557	0.0000	3,662.6647	3,662.6647	0.0702	0.0672	3,684.4301
NaturalGas Unmitigated	0.3701	3.3430	2.6683	0.0202		0.2557	0.2557		0.2557	0.2557	0.0000	3,662.6647	3,662.6647	0.0702	0.0672	3,684.4301

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Land Use	kBTU/yr	tons/yr								MT/yr							
Apartments Mid Rise	7.31825e+006	0.0395	0.3372	0.1435	2.1500e-003		0.0273	0.0273		0.0273	0.0273	0.0000	390.5297	390.5297	7.4900e-003	7.1600e-003	392.8504
Day-Care Center	186888	1.0100e-003	9.1600e-003	7.7000e-003	5.0000e-005		7.0000e-004	7.0000e-004		7.0000e-004	7.0000e-004	0.0000	9.9731	9.9731	1.9000e-004	1.8000e-004	10.0323
High School	932660	5.0300e-003	0.0457	0.0384	2.7000e-004		3.4700e-003	3.4700e-003		3.4700e-003	3.4700e-003	0.0000	49.7703	49.7703	9.5000e-004	9.1000e-004	50.0660
University/College (4Yr)	6.01979e+007	0.3246	2.9509	2.4787	0.0177		0.2243	0.2243		0.2243	0.2243	0.0000	3,212.3917	3,212.3917	0.0616	0.0589	3,231.4813
Total		0.3701	3.3430	2.6683	0.0202		0.2557	0.2557		0.2557	0.2557	0.0000	3,662.6647	3,662.6647	0.0702	0.0671	3,684.4301

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr								MT/yr							
Apartments Mid Rise	7.31825e+006	0.0395	0.3372	0.1435	2.1500e-003		0.0273	0.0273		0.0273	0.0273	0.0000	390.5297	390.5297	7.4900e-003	7.1600e-003	392.8504
Day-Care Center	186888	1.0100e-003	9.1600e-003	7.7000e-003	5.0000e-005		7.0000e-004	7.0000e-004		7.0000e-004	7.0000e-004	0.0000	9.9731	9.9731	1.9000e-004	1.8000e-004	10.0323
High School	932660	5.0300e-003	0.0457	0.0384	2.7000e-004		3.4700e-003	3.4700e-003		3.4700e-003	3.4700e-003	0.0000	49.7703	49.7703	9.5000e-004	9.1000e-004	50.0660
University/College (4Yr)	6.01979e+007	0.3246	2.9509	2.4787	0.0177		0.2243	0.2243		0.2243	0.2243	0.0000	3,212.3917	3,212.3917	0.0616	0.0589	3,231.4813
Total		0.3701	3.3430	2.6683	0.0202		0.2557	0.2557		0.2557	0.2557	0.0000	3,662.6647	3,662.6647	0.0702	0.0671	3,684.4301

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			

Apartments Mid Rise	3.1443e+006	1,001.8425	0.0414	8.5600e-003	1,005.4266
Day-Care Center	106382	33.8957	1.4000e-003	2.9000e-004	34.0170
High School	530899	169.1557	6.9800e-003	1.4400e-003	169.7608
University/College (4Yr)	2.22741e+007	7,097.0148	0.2930	0.0606	7,122.4046
Total		8,301.9087	0.3427	0.0709	8,331.6090

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	3.1443e+006	1,001.8425	0.0414	8.5600e-003	1,005.4266
Day-Care Center	106382	33.8957	1.4000e-003	2.9000e-004	34.0170
High School	530899	169.1557	6.9800e-003	1.4400e-003	169.7608
University/College (4Yr)	2.22741e+007	7,097.0148	0.2930	0.0606	7,122.4046
Total		8,301.9087	0.3427	0.0709	8,331.6090

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2682	0.0965	8.4242	4.5000e-004		0.0464	0.0464		0.0464	0.0464	0.0000	13.8931	13.8931	0.0141	0.0000	14.2447
Total	12.8876	0.0965	8.4242	4.5000e-004		0.0464	0.0464		0.0464	0.0464	0.0000	13.8931	13.8931	0.0141	0.0000	14.2447

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	821.2816	3.2252	0.0821	926.3886
Unmitigated	821.2816	3.2252	0.0821	926.3886

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	51.7323 / 32.6138	346.4869	1.6993	0.0426	401.6714
Day-Care Center	0.44606 / 1.14701	6.0524	0.0148	3.9000e-004	6.5392
High School	2.97775 / 7.65708	40.4039	0.0987	2.6300e-003	43.6536

University/College (4Yr)	42.822 / 66.978	428.3384	1.4125	0.0365	474.5244
Total		821.2816	3.2252	0.0821	926.3886

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	51.7323 / 32.6138	346.4869	1.6993	0.0426	401.6714
Day-Care Center	0.44606 / 1.14701	6.0524	0.0148	3.9000e-004	6.5392
High School	2.97775 / 7.65708	40.4039	0.0987	2.6300e-003	43.6536
University/College (4Yr)	42.822 / 66.978	428.3384	1.4125	0.0365	474.5244
Total		821.2816	3.2252	0.0821	926.3886

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	846.9169	50.0514	0.0000	2,098.2007

Unmitigated	846.9169	50.0514	0.0000	2,098.2007
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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	365.24	74.1404	4.3816	0.0000	183.6798
Day-Care Center	33.58	6.8164	0.4028	0.0000	16.8874
High School	123.37	25.0430	1.4800	0.0000	62.0430
University/College (4Yr)	3650	740.9170	43.7869	0.0000	1,835.5905
Total		846.9169	50.0514	0.0000	2,098.2007

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	365.24	74.1404	4.3816	0.0000	183.6798
Day-Care Center	33.58	6.8164	0.4028	0.0000	16.8874
High School	123.37	25.0430	1.4800	0.0000	62.0430
University/College (4Yr)	3650	740.9170	43.7869	0.0000	1,835.5905

Total		846.9169	50.0514	0.0000	2,098.2007
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9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Campus Operational Summer 2035

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

CSUDH Campus Master Plan EIR
South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Day-Care Center	92.00	Student	0.12	17,846.00	0
University/College (4Yr)	8,882.00	Student	37.48	1,208,975.00	0
Apartments Mid Rise	470.00	Dwelling Unit	12.37	470,000.00	939

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2035
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -
 Land Use - Master Plan
 Construction Phase - Adjusted.
 Demolition -
 Grading - Master Plan.
 Vehicle Trips - Master Plan
 Woodstoves - No woodstoves or fireplaces.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	50.00	90.00
tblConstructionPhase	NumDays	30.00	90.00
tblConstructionPhase	NumDays	75.00	90.00
tblConstructionPhase	NumDays	740.00	600.00
tblConstructionPhase	NumDays	55.00	60.00
tblConstructionPhase	NumDays	55.00	100.00
tblConstructionPhase	PhaseEndDate	3/10/2020	5/23/2031
tblConstructionPhase	PhaseEndDate	4/21/2020	9/26/2031
tblConstructionPhase	PhaseEndDate	8/4/2020	1/30/2032
tblConstructionPhase	PhaseEndDate	6/6/2023	5/19/2034
tblConstructionPhase	PhaseEndDate	8/22/2023	8/11/2034
tblConstructionPhase	PhaseEndDate	11/7/2023	12/29/2034
tblConstructionPhase	PhaseStartDate	1/1/2020	1/20/2031
tblConstructionPhase	PhaseStartDate	3/11/2020	5/26/2031
tblConstructionPhase	PhaseStartDate	4/22/2020	9/29/2031
tblConstructionPhase	PhaseStartDate	8/5/2020	2/2/2032
tblConstructionPhase	PhaseStartDate	6/7/2023	5/22/2034
tblConstructionPhase	PhaseStartDate	8/23/2023	8/14/2034
tblFireplaces	NumberGas	399.50	0.00
tblFireplaces	NumberNoFireplace	47.00	0.00
tblFireplaces	NumberWood	23.50	0.00
tblGrading	AcresOfGrading	225.00	49.97
tblLandUse	LandUseSquareFeet	5,200.10	17,846.00
tblLandUse	LandUseSquareFeet	1,632,489.11	1,208,975.00
tblLandUse	Population	1,344.00	939.00
tblVehicleTrips	HO_TTP	40.60	41.00
tblVehicleTrips	HS_TTP	19.20	19.00
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	6.39	1.42

tblVehicleTrips	SU_TR	5.86	1.42
tblVehicleTrips	WD_TR	6.65	1.42
tblWoodstoves	NumberCatalytic	23.50	0.00
tblWoodstoves	NumberNoncatalytic	23.50	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2031	3.3273	13.8688	23.4069	0.0716	18.2675	0.4890	18.7051	9.9840	0.4889	10.4216	0.0000	7,373.8442	7,373.8442	0.2940	0.0000	7,381.1929
2032	3.5779	24.9512	35.9191	0.1569	11.1519	0.4889	11.3585	3.4331	0.4888	3.9219	0.0000	15,929.0203	15,929.0203	0.5309	0.0000	15,942.2931
2033	3.4515	24.7869	35.0897	0.1556	11.1519	0.2037	11.3556	2.9940	0.1999	3.1938	0.0000	15,798.6185	15,798.6185	0.5211	0.0000	15,811.6465
2034	143.5903	24.6431	34.2867	0.1544	11.1519	0.3313	11.3529	2.9940	0.3312	3.1913	0.0000	15,685.6521	15,685.6521	0.5120	0.0000	15,698.4527
Maximum	143.5903	24.9512	35.9191	0.1569	18.2675	0.4890	18.7051	9.9840	0.4889	10.4216	0.0000	15,929.0203	15,929.0203	0.5309	0.0000	15,942.2931

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2031	3.3273	13.8688	23.4069	0.0716	18.2675	0.4890	18.7051	9.9840	0.4889	10.4216	0.0000	7,373.8442	7,373.8442	0.2940	0.0000	7,381.1929

2032	3.5779	24.9512	35.9191	0.1569	11.1519	0.4889	11.3585	3.4331	0.4888	3.9219	0.0000	15,929.0203	15,929.0203	0.5309	0.0000	15,942.2931
2033	3.4515	24.7869	35.0897	0.1556	11.1519	0.2037	11.3556	2.9940	0.1999	3.1938	0.0000	15,798.6185	15,798.6185	0.5211	0.0000	15,811.6465
2034	143.5903	24.6431	34.2867	0.1544	11.1519	0.3313	11.3529	2.9940	0.3312	3.1913	0.0000	15,685.6521	15,685.6521	0.5120	0.0000	15,698.4527
Maximum	143.5903	24.9512	35.9191	0.1569	11.1519	0.4889	11.3585	3.4331	0.4888	3.9219	0.0000	15,929.0203	15,929.0203	0.5309	0.0000	15,942.2931

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	38.7572	0.454	39.5503	2.12E-03		0.2183	0.2183		0.2183	0.2183	0	71.7836	71.7836	0.0715	0	73.5717
Energy	1.1008	9.9373	7.894	0.06		0.7605	0.7605		0.7605	0.7605		12,008.57	12,008.57	0.2302	0.2202	12,079.94
Mobile	14.492	82.9842	183.501	0.9635	103.0355	0.4598	103.4953	27.5537	0.4272	27.9809		98,957.32	98,957.32	3.6518		99,048.62
Total	54.35	93.3755	230.9453	1.0257	103.0355	1.4386	104.4741	27.5537	1.406	28.9597	0	#####	111,037.68	3.9535	0.2202	#####

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Area	38.7572	0.4540	39.5503	2.1200e-003		0.2183	0.2183		0.2183	0.2183	0.0000	71.7836	71.7836	0.0715	0.0000	73.5717
Energy	1.1008	9.9373	7.8940	0.0600		0.7605	0.7605		0.7605	0.7605		12,008.5748	12,008.5748	0.2302	0.2202	12,079.9357
Mobile	14.4920	82.9842	183.5010	0.9635	103.0355	0.4598	103.4953	27.5537	0.4272	27.9809		98,957.3209	98,957.3209	3.6518		99,048.6153
Total	54.3500	93.3755	230.9453	1.0257	103.0355	1.4386	104.4741	27.5537	1.4060	28.9597	0.0000	111,037.6793	111,037.6793	3.9535	0.2202	111,202.1226

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/20/2031	5/23/2031	5	90	
2	Site Preparation	Site Preparation	5/26/2031	9/26/2031	5	90	
3	Grading	Grading	9/29/2031	1/30/2032	5	90	
4	Building Construction	Building Construction	2/2/2032	5/19/2034	5	600	
5	Paving	Paving	5/22/2034	8/11/2034	5	60	
6	Architectural Coating	Architectural Coating	8/14/2034	12/29/2034	5	100	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 49.97

Acres of Paving: 0

Residential Indoor: 951,750; Residential Outdoor: 317,250; Non-Residential Indoor: 1,840,232; Non-Residential Outdoor: 613,411; Striped

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38

Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	564.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	854.00	251.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	171.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.3570	0.0000	1.3570	0.2055	0.0000	0.2055			0.0000			0.0000
Off-Road	2.0746	9.7770	18.9168	0.0462		0.3511	0.3511		0.3511	0.3511		4,378.5819	4,378.5819	0.1847		4,383.2000
Total	2.0746	9.7770	18.9168	0.0462	1.3570	0.3511	1.7081	0.2055	0.3511	0.5565		4,378.5819	4,378.5819	0.1847		4,383.2000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0287	0.8741	0.3397	4.3600e-003	0.1095	1.6000e-003	0.1111	0.0300	1.5300e-003	0.0315		478.2009	478.2009	0.0326		479.0149
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0350	0.0170	0.2873	1.2100e-003	0.1677	7.8000e-004	0.1684	0.0445	7.2000e-004	0.0452		120.5517	120.5517	1.8300e-003		120.5974
Total	0.0637	0.8910	0.6270	5.5700e-003	0.2771	2.3800e-003	0.2795	0.0745	2.2500e-003	0.0767		598.7526	598.7526	0.0344		599.6123

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day					
Fugitive Dust					1.3570	0.0000	1.3570	0.2055	0.0000	0.2055			0.0000			0.0000
Off-Road	2.0746	9.7770	18.9168	0.0462		0.3511	0.3511		0.3511	0.3511	0.0000	4,378.5819	4,378.5819	0.1847		4,383.2000
Total	2.0746	9.7770	18.9168	0.0462	1.3570	0.3511	1.7081	0.2055	0.3511	0.5565	0.0000	4,378.5819	4,378.5819	0.1847		4,383.2000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0287	0.8741	0.3397	4.3600e-003	0.1095	1.6000e-003	0.1111	0.0300	1.5300e-003	0.0315		478.2009	478.2009	0.0326		479.0149
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0350	0.0170	0.2873	1.2100e-003	0.1677	7.8000e-004	0.1684	0.0445	7.2000e-004	0.0452		120.5517	120.5517	1.8300e-003		120.5974
Total	0.0637	0.8910	0.6270	5.5700e-003	0.2771	2.3800e-003	0.2795	0.0745	2.2500e-003	0.0767		598.7526	598.7526	0.0344		599.6123

3.3 Site Preparation - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.4399	13.6680	16.2918	0.0466		0.4367	0.4367		0.4367	0.4367		4,409.7537	4,409.7537	0.2176		4,415.1936

Total	2.4399	13.6680	16.2918	0.0466	18.0663	0.4367	18.5029	9.9307	0.4367	10.3673		4,409.7537	4,409.7537	0.2176		4,415.1936
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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0420	0.0203	0.3447	1.4500e-003	0.2012	9.3000e-004	0.2021	0.0534	8.6000e-004	0.0542		144.6621	144.6621	2.1900e-003		144.7169
Total	0.0420	0.0203	0.3447	1.4500e-003	0.2012	9.3000e-004	0.2021	0.0534	8.6000e-004	0.0542		144.6621	144.6621	2.1900e-003		144.7169

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.4399	13.6680	16.2918	0.0466		0.4367	0.4367		0.4367	0.4367	0.0000	4,409.7537	4,409.7537	0.2176		4,415.1936
Total	2.4399	13.6680	16.2918	0.0466	18.0663	0.4367	18.5029	9.9307	0.4367	10.3673	0.0000	4,409.7537	4,409.7537	0.2176		4,415.1936

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0420	0.0203	0.3447	1.4500e-003	0.2012	9.3000e-004	0.2021	0.0534	8.6000e-004	0.0542		144.6621	144.6621	2.1900e-003		144.7169
Total	0.0420	0.0203	0.3447	1.4500e-003	0.2012	9.3000e-004	0.2021	0.0534	8.6000e-004	0.0542		144.6621	144.6621	2.1900e-003		144.7169

3.4 Grading - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.6109	0.0000	6.6109	3.3738	0.0000	3.3738			0.0000			0.0000
Off-Road	3.2807	13.8462	23.0239	0.0699		0.4879	0.4879		0.4879	0.4879		7,213.1086	7,213.1086	0.2915		7,220.3963
Total	3.2807	13.8462	23.0239	0.0699	6.6109	0.4879	7.0988	3.3738	0.4879	3.8617		7,213.1086	7,213.1086	0.2915		7,220.3963

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0466	0.0226	0.3830	1.6100e-003	0.2236	1.0400e-003	0.2246	0.0593	9.5000e-004	0.0602		160.7356	160.7356	2.4400e-003		160.7966
Total	0.0466	0.0226	0.3830	1.6100e-003	0.2236	1.0400e-003	0.2246	0.0593	9.5000e-004	0.0602		160.7356	160.7356	2.4400e-003		160.7966

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.6109	0.0000	6.6109	3.3738	0.0000	3.3738			0.0000			0.0000
Off-Road	3.2807	13.8462	23.0239	0.0699		0.4879	0.4879		0.4879	0.4879	0.0000	7,213.1086	7,213.1086	0.2915		7,220.3963
Total	3.2807	13.8462	23.0239	0.0699	6.6109	0.4879	7.0988	3.3738	0.4879	3.8617	0.0000	7,213.1086	7,213.1086	0.2915		7,220.3963

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0466	0.0226	0.3830	1.6100e-003	0.2236	1.0400e-003	0.2246	0.0593	9.5000e-004	0.0602		160.7356	160.7356	2.4400e-003		160.7966
Total	0.0466	0.0226	0.3830	1.6100e-003	0.2236	1.0400e-003	0.2246	0.0593	9.5000e-004	0.0602		160.7356	160.7356	2.4400e-003		160.7966

3.4 Grading - 2032

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					6.6109	0.0000	6.6109	3.3738	0.0000	3.3738			0.0000				0.0000
Off-Road	3.2807	13.8462	23.0239	0.0699		0.4879	0.4879		0.4879	0.4879		7,213.1086	7,213.1086	0.2915			7,220.3963
Total	3.2807	13.8462	23.0239	0.0699	6.6109	0.4879	7.0988	3.3738	0.4879	3.8617		7,213.1086	7,213.1086	0.2915			7,220.3963

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0433	0.0207	0.3607	1.5800e-003	0.2236	9.7000e-004	0.2245	0.0593	8.9000e-004	0.0602		157.5233	157.5233	2.2400e-003			157.5792
Total	0.0433	0.0207	0.3607	1.5800e-003	0.2236	9.7000e-004	0.2245	0.0593	8.9000e-004	0.0602		157.5233	157.5233	2.2400e-003			157.5792

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.6109	0.0000	6.6109	3.3738	0.0000	3.3738			0.0000			0.0000
Off-Road	3.2807	13.8462	23.0239	0.0699		0.4879	0.4879		0.4879	0.4879	0.0000	7,213.1086	7,213.1086	0.2915		7,220.3963
Total	3.2807	13.8462	23.0239	0.0699	6.6109	0.4879	7.0988	3.3738	0.4879	3.8617	0.0000	7,213.1086	7,213.1086	0.2915		7,220.3963

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0433	0.0207	0.3607	1.5800e-003	0.2236	9.7000e-004	0.2245	0.0593	8.9000e-004	0.0602		157.5233	157.5233	2.2400e-003		157.5792
Total	0.0433	0.0207	0.3607	1.5800e-003	0.2236	9.7000e-004	0.2245	0.0593	8.9000e-004	0.0602		157.5233	157.5233	2.2400e-003		157.5792

3.5 Building Construction - 2032

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529

Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529
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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4216	16.1315	4.3583	0.0585	1.6062	0.0172	1.6234	0.4624	0.0164	0.4788		6,305.2300	6,305.2300	0.3192		6,313.2104
Worker	1.8471	0.8851	15.4038	0.0674	9.5457	0.0413	9.5870	2.5316	0.0380	2.5696		6,726.2435	6,726.2435	0.0955		6,728.6298
Total	2.2687	17.0166	19.7621	0.1259	11.1519	0.0585	11.2104	2.9940	0.0544	3.0484		13,031.4735	13,031.4735	0.4147		13,041.8402

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529
Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4216	16.1315	4.3583	0.0585	1.6062	0.0172	1.6234	0.4624	0.0164	0.4788		6,305.2300	6,305.2300	0.3192		6,313.2104
Worker	1.8471	0.8851	15.4038	0.0674	9.5457	0.0413	9.5870	2.5316	0.0380	2.5696		6,726.2435	6,726.2435	0.0955		6,728.6298
Total	2.2687	17.0166	19.7621	0.1259	11.1519	0.0585	11.2104	2.9940	0.0544	3.0484		13,031.4735	13,031.4735	0.4147		13,041.8402

3.5 Building Construction - 2033

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529
Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.4189	16.0347	4.3446	0.0584	1.6062	0.0170	1.6232	0.4624	0.0162	0.4786		6,294.5643	6,294.5643	0.3168		6,302.4848
Worker	1.7235	0.8176	14.5882	0.0662	9.5457	0.0386	9.5843	2.5316	0.0355	2.5671		6,606.5074	6,606.5074	0.0881		6,608.7089
Total	2.1424	16.8523	18.9327	0.1246	11.1519	0.0556	11.2075	2.9940	0.0517	3.0457		12,901.0717	12,901.0717	0.4049		12,911.1937

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529
Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4189	16.0347	4.3446	0.0584	1.6062	0.0170	1.6232	0.4624	0.0162	0.4786		6,294.5643	6,294.5643	0.3168		6,302.4848
Worker	1.7235	0.8176	14.5882	0.0662	9.5457	0.0386	9.5843	2.5316	0.0355	2.5671		6,606.5074	6,606.5074	0.0881		6,608.7089
Total	2.1424	16.8523	18.9327	0.1246	11.1519	0.0556	11.2075	2.9940	0.0517	3.0457		12,901.0717	12,901.0717	0.4049		12,911.1937

3.5 Building Construction - 2034

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529
Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4163	15.9475	4.3297	0.0583	1.6062	0.0168	1.6230	0.4624	0.0160	0.4784		6,286.4092	6,286.4092	0.3148		6,294.2782
Worker	1.6187	0.7610	13.8001	0.0651	9.5457	0.0360	9.5818	2.5316	0.0332	2.5647		6,501.6961	6,501.6961	0.0810		6,503.7216
Total	2.0350	16.7085	18.1298	0.1235	11.1519	0.0528	11.2047	2.9940	0.0492	3.0431		12,788.1054	12,788.1054	0.3958		12,797.9998

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529
Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4163	15.9475	4.3297	0.0583	1.6062	0.0168	1.6230	0.4624	0.0160	0.4784		6,286.4092	6,286.4092	0.3148		6,294.2782
Worker	1.6187	0.7610	13.8001	0.0651	9.5457	0.0360	9.5818	2.5316	0.0332	2.5647		6,501.6961	6,501.6961	0.0810		6,503.7216
Total	2.0350	16.7085	18.1298	0.1235	11.1519	0.0528	11.2047	2.9940	0.0492	3.0431		12,788.1054	12,788.1054	0.3958		12,797.9998

3.6 Paving - 2034

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3845	7.1202	15.8495	0.0281		0.3306	0.3306		0.3306	0.3306		2,656.5168	2,656.5168	0.1245		2,659.6302

Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3845	7.1202	15.8495	0.0281		0.3306	0.3306		0.3306	0.3306		2,656.5168	2,656.5168	0.1245		2,659.6302

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0284	0.0134	0.2424	1.1400e-003	0.1677	6.3000e-004	0.1683	0.0445	5.8000e-004	0.0451		114.1984	114.1984	1.4200e-003		114.2340
Total	0.0284	0.0134	0.2424	1.1400e-003	0.1677	6.3000e-004	0.1683	0.0445	5.8000e-004	0.0451		114.1984	114.1984	1.4200e-003		114.2340

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3845	7.1202	15.8495	0.0281		0.3306	0.3306		0.3306	0.3306	0.0000	2,656.5168	2,656.5168	0.1245		2,659.6302
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3845	7.1202	15.8495	0.0281		0.3306	0.3306		0.3306	0.3306	0.0000	2,656.5168	2,656.5168	0.1245		2,659.6302

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0284	0.0134	0.2424	1.1400e-003	0.1677	6.3000e-004	0.1683	0.0445	5.8000e-004	0.0451		114.1984	114.1984	1.4200e-003		114.2340
Total	0.0284	0.0134	0.2424	1.1400e-003	0.1677	6.3000e-004	0.1683	0.0445	5.8000e-004	0.0451		114.1984	114.1984	1.4200e-003		114.2340

3.7 Architectural Coating - 2034

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	143.1354					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1308	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203		281.4481	281.4481	0.0114		281.7328
Total	143.2662	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203		281.4481	281.4481	0.0114		281.7328

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.3241	0.1524	2.7633	0.0130	1.9114	7.2200e-003	1.9186	0.5069	6.6400e-003	0.5135		1,301.8619	1,301.8619	0.0162		1,302.2674
Total	0.3241	0.1524	2.7633	0.0130	1.9114	7.2200e-003	1.9186	0.5069	6.6400e-003	0.5135		1,301.8619	1,301.8619	0.0162		1,302.2674

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	143.1354					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1308	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203	0.0000	281.4481	281.4481	0.0114		281.7328
Total	143.2662	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203	0.0000	281.4481	281.4481	0.0114		281.7328

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3241	0.1524	2.7633	0.0130	1.9114	7.2200e-003	1.9186	0.5069	6.6400e-003	0.5135		1,301.8619	1,301.8619	0.0162		1,302.2674
Total	0.3241	0.1524	2.7633	0.0130	1.9114	7.2200e-003	1.9186	0.5069	6.6400e-003	0.5135		1,301.8619	1,301.8619	0.0162		1,302.2674

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	14.4920	82.9842	183.5010	0.9635	103.0355	0.4598	103.4953	27.5537	0.4272	27.9809		98,957.3209	98,957.3209	3.6518		99,048.6153
Unmitigated	14.4920	82.9842	183.5010	0.9635	103.0355	0.4598	103.4953	27.5537	0.4272	27.9809		98,957.3209	98,957.3209	3.6518		99,048.6153

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	667.40	667.40	667.40	2,279,227	2,279,227
Day-Care Center	402.96	35.88	34.04	433,049	433,049
University/College (4Yr)	15,188.22	11,546.60	0.00	37,543,317	37,543,317
Total	16,258.58	12,249.88	701.44	40,255,594	40,255,594

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.00	19.00	41.00	86	11	3
Day-Care Center	16.60	8.40	6.90	12.70	82.30	5.00	28	58	14
University/College (4Yr)	16.60	8.40	6.90	6.40	88.60	5.00	91	9	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735
Day-Care Center	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735
University/College (4Yr)	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.1008	9.9373	7.8940	0.0600		0.7605	0.7605		0.7605	0.7605		12,008.5748	12,008.5748	0.2302	0.2202	12,079.9357
NaturalGas Unmitigated	1.1008	9.9373	7.8940	0.0600		0.7605	0.7605		0.7605	0.7605		12,008.5748	12,008.5748	0.2302	0.2202	12,079.9357

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	11868.4	0.1280	1.0938	0.4654	6.9800e-003		0.0884	0.0884		0.0884	0.0884		1,396.2810	1,396.2810	0.0268	0.0256	1,404.5784

Day-Care Center	508.489	5.4800e-003	0.0499	0.0419	3.0000e-004		3.7900e-003	3.7900e-003		3.7900e-003	3.7900e-003		59.8222	59.8222	1.1500e-003	1.1000e-003	60.1777
University/College (4Yr)	89696	0.9673	8.7937	7.3867	0.0528		0.6683	0.6683		0.6683	0.6683		10,552.4716	10,552.4716	0.2023	0.1935	10,615.1796
Total		1.1008	9.9373	7.8940	0.0600		0.7605	0.7605		0.7605	0.7605		12,008.5748	12,008.5748	0.2302	0.2202	12,079.9357

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	11.8684	0.1280	1.0938	0.4654	6.9800e-003		0.0884	0.0884		0.0884	0.0884		1,396.2810	1,396.2810	0.0268	0.0256	1,404.5784
Day-Care Center	0.508489	5.4800e-003	0.0499	0.0419	3.0000e-004		3.7900e-003	3.7900e-003		3.7900e-003	3.7900e-003		59.8222	59.8222	1.1500e-003	1.1000e-003	60.1777
University/College (4Yr)	89.696	0.9673	8.7937	7.3867	0.0528		0.6683	0.6683		0.6683	0.6683		10,552.4716	10,552.4716	0.2023	0.1935	10,615.1796
Total		1.1008	9.9373	7.8940	0.0600		0.7605	0.7605		0.7605	0.7605		12,008.5748	12,008.5748	0.2302	0.2202	12,079.9357

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	38.7572	0.4540	39.5503	2.1200e-003		0.2183	0.2183		0.2183	0.2183	0.0000	71.7836	71.7836	0.0715	0.0000	73.5717

Unmitigated	38.7572	0.4540	39.5503	2.1200e-003		0.2183	0.2183		0.2183	0.2183	0.0000	71.7836	71.7836	0.0715	0.0000	73.5717
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6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.9215					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	33.5971					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2386	0.4540	39.5503	2.1200e-003		0.2183	0.2183		0.2183	0.2183		71.7836	71.7836	0.0715		73.5717
Total	38.7572	0.4540	39.5503	2.1200e-003		0.2183	0.2183		0.2183	0.2183	0.0000	71.7836	71.7836	0.0715	0.0000	73.5717

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.9215					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	33.5971					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2386	0.4540	39.5503	2.1200e-003		0.2183	0.2183		0.2183	0.2183		71.7836	71.7836	0.0715		73.5717

Total	38.7572	0.4540	39.5503	2.1200e-003		0.2183	0.2183		0.2183	0.2183	0.0000	71.7836	71.7836	0.0715	0.0000	73.5717
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7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Campus Operational Winter 2035

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

CSUDH Campus Master Plan EIR
South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Day-Care Center	92.00	Student	0.12	17,846.00	0
University/College (4Yr)	8,882.00	Student	37.48	1,208,975.00	0
Apartments Mid Rise	470.00	Dwelling Unit	12.37	470,000.00	939

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2035
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Master Plan
- Construction Phase - Adjusted.
- Demolition -
- Grading - Master Plan.
- Vehicle Trips - Master Plan
- Woodstoves - No woodstoves or fireplaces.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	50.00	90.00
tblConstructionPhase	NumDays	30.00	90.00
tblConstructionPhase	NumDays	75.00	90.00
tblConstructionPhase	NumDays	740.00	600.00
tblConstructionPhase	NumDays	55.00	60.00
tblConstructionPhase	NumDays	55.00	100.00
tblConstructionPhase	PhaseEndDate	3/10/2020	5/23/2031
tblConstructionPhase	PhaseEndDate	4/21/2020	9/26/2031
tblConstructionPhase	PhaseEndDate	8/4/2020	1/30/2032
tblConstructionPhase	PhaseEndDate	6/6/2023	5/19/2034
tblConstructionPhase	PhaseEndDate	8/22/2023	8/11/2034
tblConstructionPhase	PhaseEndDate	11/7/2023	12/29/2034
tblConstructionPhase	PhaseStartDate	1/1/2020	1/20/2031
tblConstructionPhase	PhaseStartDate	3/11/2020	5/26/2031
tblConstructionPhase	PhaseStartDate	4/22/2020	9/29/2031
tblConstructionPhase	PhaseStartDate	8/5/2020	2/2/2032
tblConstructionPhase	PhaseStartDate	6/7/2023	5/22/2034
tblConstructionPhase	PhaseStartDate	8/23/2023	8/14/2034
tblFireplaces	NumberGas	399.50	0.00
tblFireplaces	NumberNoFireplace	47.00	0.00
tblFireplaces	NumberWood	23.50	0.00
tblGrading	AcresOfGrading	225.00	49.97
tblLandUse	LandUseSquareFeet	5,200.10	17,846.00
tblLandUse	LandUseSquareFeet	1,632,489.11	1,208,975.00
tblLandUse	Population	1,344.00	939.00
tblVehicleTrips	HO_TTP	40.60	41.00
tblVehicleTrips	HS_TTP	19.20	19.00
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	6.39	1.42

tblVehicleTrips	SU_TR	5.86	1.42
tblVehicleTrips	WD_TR	6.65	1.42
tblWoodstoves	NumberCatalytic	23.50	0.00
tblWoodstoves	NumberNoncatalytic	23.50	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2031	3.3333	13.8709	23.3657	0.0715	18.2675	0.4890	18.7051	9.9840	0.4889	10.4216	0.0000	7,363.7545	7,363.7545	0.2938	0.0000	7,371.0988
2032	3.8402	24.9480	34.6361	0.1511	11.1519	0.4889	11.3589	3.4331	0.4888	3.9219	0.0000	15,341.8151	15,341.8151	0.5407	0.0000	15,355.3328
2033	3.7004	24.7758	33.8749	0.1499	11.1519	0.2040	11.3559	2.9940	0.2002	3.1941	0.0000	15,218.1835	15,218.1835	0.5311	0.0000	15,231.4606
2034	143.6338	24.6253	33.1390	0.1488	11.1519	0.3313	11.3531	2.9940	0.3312	3.1915	0.0000	15,110.9240	15,110.9240	0.5222	0.0000	15,123.9786
Maximum	143.6338	24.9480	34.6361	0.1511	18.2675	0.4890	18.7051	9.9840	0.4889	10.4216	0.0000	15,341.8151	15,341.8151	0.5407	0.0000	15,355.3328

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2031	3.3333	13.8709	23.3657	0.0715	18.2675	0.4890	18.7051	9.9840	0.4889	10.4216	0.0000	7,363.7545	7,363.7545	0.2938	0.0000	7,371.0988

2032	3.8402	24.9480	34.6361	0.1511	11.1519	0.4889	11.3589	3.4331	0.4888	3.9219	0.0000	15,341.81 51	15,341.815 1	0.5407	0.0000	15,355.33 28
2033	3.7004	24.7758	33.8749	0.1499	11.1519	0.2040	11.3559	2.9940	0.2002	3.1941	0.0000	15,218.18 35	15,218.183 5	0.5311	0.0000	15,231.46 06
2034	143.6338	24.6253	33.1390	0.1488	11.1519	0.3313	11.3531	2.9940	0.3312	3.1915	0.0000	15,110.92 40	15,110.924 0	0.5222	0.0000	15,123.97 86
Maximum	143.6338	24.9480	34.6361	0.1511	18.2675	0.4890	18.7051	9.9840	0.4889	10.4216	0.0000	15,341.81 51	15,341.815 1	0.5407	0.0000	15,355.33 28

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	38.7572	0.454	39.5503	2.12E-03		0.2183	0.2183		0.2183	0.2183	0	71.7836	71.7836	0.0715	0	73.5717
Energy	1.1008	9.9373	7.894	0.06		0.7605	0.7605		0.7605	0.7605		12,008.57	12,008.57	0.2302	0.2202	12,079.94
Mobile	13.869	83.5485	173.0716	0.9159	103.0355	0.461	103.4965	27.5537	0.4284	27.9821		94,137.82	94,137.82	3.6916		94,230.11
Total	53.727	93.9398	220.516	0.978	103.0355	1.4398	104.4753	27.5537	1.4072	28.9609	0	#####	106,218.18	3.9932	0.2202	#####

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Area	38.7572	0.4540	39.5503	2.1200e-003		0.2183	0.2183		0.2183	0.2183	0.0000	71.7836	71.7836	0.0715	0.0000	73.5717
Energy	1.1008	9.9373	7.8940	0.0600		0.7605	0.7605		0.7605	0.7605		12,008.5748	12,008.5748	0.2302	0.2202	12,079.9357
Mobile	13.8690	83.5485	173.0716	0.9159	103.0355	0.4610	103.4965	27.5537	0.4284	27.9821		94,137.8221	94,137.8221	3.6916		94,230.1108
Total	53.7270	93.9398	220.5160	0.9780	103.0355	1.4398	104.4753	27.5537	1.4072	28.9609	0.0000	106,218.1804	106,218.1804	3.9932	0.2202	106,383.6182

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/20/2031	5/23/2031	5	90	
2	Site Preparation	Site Preparation	5/26/2031	9/26/2031	5	90	
3	Grading	Grading	9/29/2031	1/30/2032	5	90	
4	Building Construction	Building Construction	2/2/2032	5/19/2034	5	600	
5	Paving	Paving	5/22/2034	8/11/2034	5	60	
6	Architectural Coating	Architectural Coating	8/14/2034	12/29/2034	5	100	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 49.97

Acres of Paving: 0

Residential Indoor: 951,750; Residential Outdoor: 317,250; Non-Residential Indoor: 1,840,232; Non-Residential Outdoor: 613,411; Striped

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38

Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	564.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	854.00	251.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	171.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.3570	0.0000	1.3570	0.2055	0.0000	0.2055			0.0000			0.0000
Off-Road	2.0746	9.7770	18.9168	0.0462		0.3511	0.3511		0.3511	0.3511		4,378.5819	4,378.5819	0.1847		4,383.2000
Total	2.0746	9.7770	18.9168	0.0462	1.3570	0.3511	1.7081	0.2055	0.3511	0.5565		4,378.5819	4,378.5819	0.1847		4,383.2000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0295	0.8790	0.3534	4.2900e-003	0.1095	1.6200e-003	0.1111	0.0300	1.5500e-003	0.0315		470.2765	470.2765	0.0334		471.1105
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0395	0.0185	0.2563	1.1300e-003	0.1677	7.8000e-004	0.1684	0.0445	7.2000e-004	0.0452		112.9844	112.9844	1.7000e-003		113.0268
Total	0.0690	0.8976	0.6097	5.4200e-003	0.2771	2.4000e-003	0.2795	0.0745	2.2700e-003	0.0767		583.2610	583.2610	0.0351		584.1374

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day					
Fugitive Dust					1.3570	0.0000	1.3570	0.2055	0.0000	0.2055			0.0000			0.0000
Off-Road	2.0746	9.7770	18.9168	0.0462		0.3511	0.3511		0.3511	0.3511	0.0000	4,378.5819	4,378.5819	0.1847		4,383.2000
Total	2.0746	9.7770	18.9168	0.0462	1.3570	0.3511	1.7081	0.2055	0.3511	0.5565	0.0000	4,378.5819	4,378.5819	0.1847		4,383.2000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0295	0.8790	0.3534	4.2900e-003	0.1095	1.6200e-003	0.1111	0.0300	1.5500e-003	0.0315		470.2765	470.2765	0.0334		471.1105
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0395	0.0185	0.2563	1.1300e-003	0.1677	7.8000e-004	0.1684	0.0445	7.2000e-004	0.0452		112.9844	112.9844	1.7000e-003		113.0268
Total	0.0690	0.8976	0.6097	5.4200e-003	0.2771	2.4000e-003	0.2795	0.0745	2.2700e-003	0.0767		583.2610	583.2610	0.0351		584.1374

3.3 Site Preparation - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.4399	13.6680	16.2918	0.0466		0.4367	0.4367		0.4367	0.4367		4,409.7537	4,409.7537	0.2176		4,415.1936

Total	2.4399	13.6680	16.2918	0.0466	18.0663	0.4367	18.5029	9.9307	0.4367	10.3673		4,409.7537	4,409.7537	0.2176		4,415.1936
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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0474	0.0223	0.3076	1.3600e-003	0.2012	9.3000e-004	0.2021	0.0534	8.6000e-004	0.0542		135.5813	135.5813	2.0400e-003		135.6322
Total	0.0474	0.0223	0.3076	1.3600e-003	0.2012	9.3000e-004	0.2021	0.0534	8.6000e-004	0.0542		135.5813	135.5813	2.0400e-003		135.6322

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.4399	13.6680	16.2918	0.0466		0.4367	0.4367		0.4367	0.4367	0.0000	4,409.7537	4,409.7537	0.2176		4,415.1936
Total	2.4399	13.6680	16.2918	0.0466	18.0663	0.4367	18.5029	9.9307	0.4367	10.3673	0.0000	4,409.7537	4,409.7537	0.2176		4,415.1936

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0474	0.0223	0.3076	1.3600e-003	0.2012	9.3000e-004	0.2021	0.0534	8.6000e-004	0.0542		135.5813	135.5813	2.0400e-003		135.6322
Total	0.0474	0.0223	0.3076	1.3600e-003	0.2012	9.3000e-004	0.2021	0.0534	8.6000e-004	0.0542		135.5813	135.5813	2.0400e-003		135.6322

3.4 Grading - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.6109	0.0000	6.6109	3.3738	0.0000	3.3738			0.0000			0.0000
Off-Road	3.2807	13.8462	23.0239	0.0699		0.4879	0.4879		0.4879	0.4879		7,213.1086	7,213.1086	0.2915		7,220.3963
Total	3.2807	13.8462	23.0239	0.0699	6.6109	0.4879	7.0988	3.3738	0.4879	3.8617		7,213.1086	7,213.1086	0.2915		7,220.3963

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0527	0.0247	0.3418	1.5100e-003	0.2236	1.0400e-003	0.2246	0.0593	9.5000e-004	0.0602		150.6459	150.6459	2.2600e-003		150.7025
Total	0.0527	0.0247	0.3418	1.5100e-003	0.2236	1.0400e-003	0.2246	0.0593	9.5000e-004	0.0602		150.6459	150.6459	2.2600e-003		150.7025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.6109	0.0000	6.6109	3.3738	0.0000	3.3738			0.0000			0.0000
Off-Road	3.2807	13.8462	23.0239	0.0699		0.4879	0.4879		0.4879	0.4879	0.0000	7,213.1086	7,213.1086	0.2915		7,220.3963
Total	3.2807	13.8462	23.0239	0.0699	6.6109	0.4879	7.0988	3.3738	0.4879	3.8617	0.0000	7,213.1086	7,213.1086	0.2915		7,220.3963

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0527	0.0247	0.3418	1.5100e-003	0.2236	1.0400e-003	0.2246	0.0593	9.5000e-004	0.0602		150.6459	150.6459	2.2600e-003		150.7025
Total	0.0527	0.0247	0.3418	1.5100e-003	0.2236	1.0400e-003	0.2246	0.0593	9.5000e-004	0.0602		150.6459	150.6459	2.2600e-003		150.7025

3.4 Grading - 2032

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					6.6109	0.0000	6.6109	3.3738	0.0000	3.3738			0.0000				0.0000
Off-Road	3.2807	13.8462	23.0239	0.0699		0.4879	0.4879		0.4879	0.4879		7,213.1086	7,213.1086	0.2915			7,220.3963
Total	3.2807	13.8462	23.0239	0.0699	6.6109	0.4879	7.0988	3.3738	0.4879	3.8617		7,213.1086	7,213.1086	0.2915			7,220.3963

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0489	0.0227	0.3213	1.4800e-003	0.2236	9.7000e-004	0.2245	0.0593	8.9000e-004	0.0602		147.6150	147.6150	2.0700e-003			147.6668
Total	0.0489	0.0227	0.3213	1.4800e-003	0.2236	9.7000e-004	0.2245	0.0593	8.9000e-004	0.0602		147.6150	147.6150	2.0700e-003			147.6668

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.6109	0.0000	6.6109	3.3738	0.0000	3.3738			0.0000			0.0000
Off-Road	3.2807	13.8462	23.0239	0.0699		0.4879	0.4879		0.4879	0.4879	0.0000	7,213.1086	7,213.1086	0.2915		7,220.3963
Total	3.2807	13.8462	23.0239	0.0699	6.6109	0.4879	7.0988	3.3738	0.4879	3.8617	0.0000	7,213.1086	7,213.1086	0.2915		7,220.3963

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0489	0.0227	0.3213	1.4800e-003	0.2236	9.7000e-004	0.2245	0.0593	8.9000e-004	0.0602		147.6150	147.6150	2.0700e-003		147.6668
Total	0.0489	0.0227	0.3213	1.4800e-003	0.2236	9.7000e-004	0.2245	0.0593	8.9000e-004	0.0602		147.6150	147.6150	2.0700e-003		147.6668

3.5 Building Construction - 2032

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529

Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529
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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4424	16.0458	4.7581	0.0570	1.6062	0.0175	1.6237	0.4624	0.0167	0.4791		6,141.1077	6,141.1077	0.3360		6,149.5081
Worker	2.0887	0.9675	13.7211	0.0631	9.5457	0.0413	9.5870	2.5316	0.0380	2.5696		6,303.1606	6,303.1606	0.0885		6,305.3718
Total	2.5311	17.0134	18.4792	0.1202	11.1519	0.0588	11.2107	2.9940	0.0547	3.0487		12,444.2683	12,444.2683	0.4245		12,454.8799

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529
Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4424	16.0458	4.7581	0.0570	1.6062	0.0175	1.6237	0.4624	0.0167	0.4791		6,141.1077	6,141.1077	0.3360		6,149.5081
Worker	2.0887	0.9675	13.7211	0.0631	9.5457	0.0413	9.5870	2.5316	0.0380	2.5696		6,303.1606	6,303.1606	0.0885		6,305.3718
Total	2.5311	17.0134	18.4792	0.1202	11.1519	0.0588	11.2107	2.9940	0.0547	3.0487		12,444.2683	12,444.2683	0.4245		12,454.8799

3.5 Building Construction - 2033

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529
Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.4394	15.9481	4.7433	0.0569	1.6062	0.0173	1.6235	0.4624	0.0165	0.4789		6,130.4740	6,130.4740	0.3333		6,138.8070
Worker	1.9518	0.8931	12.9746	0.0620	9.5457	0.0386	9.5843	2.5316	0.0355	2.5671		6,190.1627	6,190.1627	0.0815		6,192.2007
Total	2.3912	16.8412	17.7179	0.1189	11.1519	0.0559	11.2078	2.9940	0.0520	3.0460		12,320.6367	12,320.6367	0.4148		12,331.0077

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529
Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4394	15.9481	4.7433	0.0569	1.6062	0.0173	1.6235	0.4624	0.0165	0.4789		6,130.4740	6,130.4740	0.3333		6,138.8070
Worker	1.9518	0.8931	12.9746	0.0620	9.5457	0.0386	9.5843	2.5316	0.0355	2.5671		6,190.1627	6,190.1627	0.0815		6,192.2007
Total	2.3912	16.8412	17.7179	0.1189	11.1519	0.0559	11.2078	2.9940	0.0520	3.0460		12,320.6367	12,320.6367	0.4148		12,331.0077

3.5 Building Construction - 2034

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529
Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4368	15.8599	4.7276	0.0568	1.6062	0.0170	1.6232	0.4624	0.0163	0.4787		6,122.1681	6,122.1681	0.3310		6,130.4435
Worker	1.8361	0.8308	12.2544	0.0610	9.5457	0.0360	9.5818	2.5316	0.0332	2.5647		6,091.2092	6,091.2092	0.0749		6,093.0822
Total	2.2729	16.6906	16.9820	0.1178	11.1519	0.0531	11.2050	2.9940	0.0494	3.0434		12,213.3773	12,213.3773	0.4059		12,223.5258

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529
Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4368	15.8599	4.7276	0.0568	1.6062	0.0170	1.6232	0.4624	0.0163	0.4787		6,122.1681	6,122.1681	0.3310		6,130.4435
Worker	1.8361	0.8308	12.2544	0.0610	9.5457	0.0360	9.5818	2.5316	0.0332	2.5647		6,091.2092	6,091.2092	0.0749		6,093.0822
Total	2.2729	16.6906	16.9820	0.1178	11.1519	0.0531	11.2050	2.9940	0.0494	3.0434		12,213.3773	12,213.3773	0.4059		12,223.5258

3.6 Paving - 2034

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3845	7.1202	15.8495	0.0281		0.3306	0.3306		0.3306	0.3306		2,656.5168	2,656.5168	0.1245		2,659.6302

Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000	
Total	1.3845	7.1202	15.8495	0.0281		0.3306	0.3306		0.3306	0.3306			2,656.5168	2,656.5168	0.1245		2,659.6302

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0323	0.0146	0.2152	1.0700e-003	0.1677	6.3000e-004	0.1683	0.0445	5.8000e-004	0.0451		106.9885	106.9885	1.3200e-003		107.0214
Total	0.0323	0.0146	0.2152	1.0700e-003	0.1677	6.3000e-004	0.1683	0.0445	5.8000e-004	0.0451		106.9885	106.9885	1.3200e-003		107.0214

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3845	7.1202	15.8495	0.0281		0.3306	0.3306		0.3306	0.3306	0.0000	2,656.5168	2,656.5168	0.1245		2,659.6302
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3845	7.1202	15.8495	0.0281		0.3306	0.3306		0.3306	0.3306	0.0000	2,656.5168	2,656.5168	0.1245		2,659.6302

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0323	0.0146	0.2152	1.0700e-003	0.1677	6.3000e-004	0.1683	0.0445	5.8000e-004	0.0451		106.9885	106.9885	1.3200e-003		107.0214
Total	0.0323	0.0146	0.2152	1.0700e-003	0.1677	6.3000e-004	0.1683	0.0445	5.8000e-004	0.0451		106.9885	106.9885	1.3200e-003		107.0214

3.7 Architectural Coating - 2034

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	143.1354					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1308	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203		281.4481	281.4481	0.0114		281.7328
Total	143.2662	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203		281.4481	281.4481	0.0114		281.7328

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.3677	0.1664	2.4538	0.0122	1.9114	7.2200e-003	1.9186	0.5069	6.6400e-003	0.5135		1,219.6684	1,219.6684	0.0150		1,220.0434
Total	0.3677	0.1664	2.4538	0.0122	1.9114	7.2200e-003	1.9186	0.5069	6.6400e-003	0.5135		1,219.6684	1,219.6684	0.0150		1,220.0434

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	143.1354					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1308	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203	0.0000	281.4481	281.4481	0.0114		281.7328
Total	143.2662	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203	0.0000	281.4481	281.4481	0.0114		281.7328

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3677	0.1664	2.4538	0.0122	1.9114	7.2200e-003	1.9186	0.5069	6.6400e-003	0.5135		1,219.6684	1,219.6684	0.0150		1,220.0434
Total	0.3677	0.1664	2.4538	0.0122	1.9114	7.2200e-003	1.9186	0.5069	6.6400e-003	0.5135		1,219.6684	1,219.6684	0.0150		1,220.0434

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	13.8690	83.5485	173.0716	0.9159	103.0355	0.4610	103.4965	27.5537	0.4284	27.9821		94,137.8221	94,137.8221	3.6916		94,230.1108
Unmitigated	13.8690	83.5485	173.0716	0.9159	103.0355	0.4610	103.4965	27.5537	0.4284	27.9821		94,137.8221	94,137.8221	3.6916		94,230.1108

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	667.40	667.40	667.40	2,279,227	2,279,227
Day-Care Center	402.96	35.88	34.04	433,049	433,049
University/College (4Yr)	15,188.22	11,546.60	0.00	37,543,317	37,543,317
Total	16,258.58	12,249.88	701.44	40,255,594	40,255,594

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.00	19.00	41.00	86	11	3
Day-Care Center	16.60	8.40	6.90	12.70	82.30	5.00	28	58	14
University/College (4Yr)	16.60	8.40	6.90	6.40	88.60	5.00	91	9	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735
Day-Care Center	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735
University/College (4Yr)	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.1008	9.9373	7.8940	0.0600		0.7605	0.7605		0.7605	0.7605		12,008.5748	12,008.5748	0.2302	0.2202	12,079.9357
NaturalGas Unmitigated	1.1008	9.9373	7.8940	0.0600		0.7605	0.7605		0.7605	0.7605		12,008.5748	12,008.5748	0.2302	0.2202	12,079.9357

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	11868.4	0.1280	1.0938	0.4654	6.9800e-003		0.0884	0.0884		0.0884	0.0884		1,396.2810	1,396.2810	0.0268	0.0256	1,404.5784

Day-Care Center	508.489	5.4800e-003	0.0499	0.0419	3.0000e-004		3.7900e-003	3.7900e-003		3.7900e-003	3.7900e-003		59.8222	59.8222	1.1500e-003	1.1000e-003	60.1777
University/College (4Yr)	89696	0.9673	8.7937	7.3867	0.0528		0.6683	0.6683		0.6683	0.6683		10,552.476	10,552.4716	0.2023	0.1935	10,615.1796
Total		1.1008	9.9373	7.8940	0.0600		0.7605	0.7605		0.7605	0.7605		12,008.5748	12,008.5748	0.2302	0.2202	12,079.9357

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	11.8684	0.1280	1.0938	0.4654	6.9800e-003		0.0884	0.0884		0.0884	0.0884		1,396.2810	1,396.2810	0.0268	0.0256	1,404.5784
Day-Care Center	0.508489	5.4800e-003	0.0499	0.0419	3.0000e-004		3.7900e-003	3.7900e-003		3.7900e-003	3.7900e-003		59.8222	59.8222	1.1500e-003	1.1000e-003	60.1777
University/College (4Yr)	89.696	0.9673	8.7937	7.3867	0.0528		0.6683	0.6683		0.6683	0.6683		10,552.476	10,552.4716	0.2023	0.1935	10,615.1796
Total		1.1008	9.9373	7.8940	0.0600		0.7605	0.7605		0.7605	0.7605		12,008.5748	12,008.5748	0.2302	0.2202	12,079.9357

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	38.7572	0.4540	39.5503	2.1200e-003		0.2183	0.2183		0.2183	0.2183	0.0000	71.7836	71.7836	0.0715	0.0000	73.5717

Unmitigated	38.7572	0.4540	39.5503	2.1200e-003		0.2183	0.2183		0.2183	0.2183	0.0000	71.7836	71.7836	0.0715	0.0000	73.5717
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6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.9215					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	33.5971					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2386	0.4540	39.5503	2.1200e-003		0.2183	0.2183		0.2183	0.2183		71.7836	71.7836	0.0715		73.5717
Total	38.7572	0.4540	39.5503	2.1200e-003		0.2183	0.2183		0.2183	0.2183	0.0000	71.7836	71.7836	0.0715	0.0000	73.5717

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.9215					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	33.5971					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2386	0.4540	39.5503	2.1200e-003		0.2183	0.2183		0.2183	0.2183		71.7836	71.7836	0.0715		73.5717

Total	38.7572	0.4540	39.5503	2.1200e-003		0.2183	0.2183		0.2183	0.2183	0.0000	71.7836	71.7836	0.0715	0.0000	73.5717
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7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

StubHub Center Operational Annual 2035

CSUDH Campus Master Plan EIR (StubHub Center) - 30,000 - South Coast Air Basin, Annual

CSUDH Campus Master Plan EIR (StubHub Center) - 30,000
South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Arena	18.00	Acre	18.00	784,080.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11	Operational Year		2035	
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Vehicle Trips - StubHub Center operation.

Table Name	Column Name	Default Value	New Value
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TTP	81.00	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00

tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	HO_TL	0.00	20.00
tblVehicleTrips	HO_TTP	0.00	100.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	SU_TR	0.00	634.00
tblVehicleTrips	WD_TR	33.33	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	0.0252	0.2569	0.1429	2.4000e-004	9.9000e-004	0.0132	0.0142	2.6000e-004	0.0123	0.0125	0.0000	22.3358	22.3358	5.8800e-003	0.0000	22.4827
2018	0.6477	5.6372	4.7058	0.0118	0.6964	0.2353	0.9317	0.2320	0.2203	0.4522	0.0000	1,084.8816	1,084.8816	0.1352	0.0000	1,088.2609
2019	3.8492	1.8029	1.7107	4.5600e-003	0.2013	0.0713	0.2725	0.0543	0.0670	0.1212	0.0000	417.7444	417.7444	0.0461	0.0000	418.8979
Maximum	3.8492	5.6372	4.7058	0.0118	0.6964	0.2353	0.9317	0.2320	0.2203	0.4522	0.0000	1,084.8816	1,084.8816	0.1352	0.0000	1,088.2609

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					

2017	0.0252	0.2569	0.1429	2.4000e-004	9.9000e-004	0.0132	0.0142	2.6000e-004	0.0123	0.0125	0.0000	22.3357	22.3357	5.8800e-003	0.0000	22.4827
2018	0.6477	5.6372	4.7058	0.0118	0.6964	0.2353	0.9317	0.2320	0.2203	0.4522	0.0000	1,084.8812	1,084.8812	0.1352	0.0000	1,088.2604
2019	3.8492	1.8029	1.7107	4.5600e-003	0.2013	0.0713	0.2725	0.0543	0.0670	0.1212	0.0000	417.7442	417.7442	0.0461	0.0000	418.8977
Maximum	3.8492	5.6372	4.7058	0.0118	0.6964	0.2353	0.9317	0.2320	0.2203	0.4522	0.0000	1,084.8812	1,084.8812	0.1352	0.0000	1,088.2604

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	12-14-2017	3-13-2018	1.7878	1.7878
2	3-14-2018	6-13-2018	1.4914	1.4914
3	6-14-2018	9-13-2018	1.4891	1.4891
4	9-14-2018	12-13-2018	1.4823	1.4823
5	12-14-2018	3-13-2019	1.3678	1.3678
6	3-14-2019	6-13-2019	2.8569	2.8569
7	6-14-2019	9-13-2019	1.6996	1.6996
		Highest	2.8569	2.8569

2.2 Overall Operational Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.1967	0	2.30E-04	0		0	0		0	0	0	4.50E-04	4.50E-04	0	0	4.80E-04
Energy	0.0765	0.6957	0.5844	4.17E-03		0.0529	0.0529		0.0529	0.0529	0	3,530.39	3,530.39	0.129	0.0376	3,544.81
Mobile	0.4157	2.3958	7.0075	0.0396	4.5067	0.0191	4.5258	1.207	0.0178	1.2248	0	3,687.20	3,687.20	0.1306	0	3,690.47

Waste						0	0		0	0	0.3146	0	0.3146	0.0186	0	0.7795
Water						0	0		0	0	7.6873	106.003	113.6904	0.7939	0.0196	139.3643
Total	3.6889	3.0915	7.5921	0.0438	4.5067	0.072	4.5787	1.207	0.0706	1.2777	8.002	7,323.59	7,331.59	1.0721	0.0571	7,375.42

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.1967	0.0000	2.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.5000e-004	4.5000e-004	0.0000	0.0000	4.8000e-004
Energy	0.0765	0.6957	0.5844	4.1700e-003		0.0529	0.0529		0.0529	0.0529	0.0000	3,530.3851	3,530.3851	0.1290	0.0376	3,544.8062
Mobile	0.4157	2.3958	7.0075	0.0396	4.5067	0.0191	4.5258	1.2070	0.0178	1.2248	0.0000	3,687.2032	3,687.2032	0.1306	0.0000	3,690.4681
Waste						0.0000	0.0000		0.0000	0.0000	0.3146	0.0000	0.3146	0.0186	0.0000	0.7795
Water						0.0000	0.0000		0.0000	0.0000	7.6873	106.0030	113.6904	0.7939	0.0196	139.3643
Total	3.6889	3.0915	7.5921	0.0438	4.5067	0.0720	4.5787	1.2070	0.0706	1.2777	8.0020	7,323.5917	7,331.5937	1.0721	0.0571	7,375.4186

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	12/14/2017	1/10/2018	5	20	
2	Site Preparation	Site Preparation	1/11/2018	1/24/2018	5	10	

3	Grading	Grading	1/25/2018	3/7/2018	5	30
4	Building Construction	Building Construction	3/8/2018	5/1/2019	5	300
5	Paving	Paving	5/2/2019	5/29/2019	5	20
6	Architectural Coating	Architectural Coating	5/30/2019	6/26/2019	5	20

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,176,120; Non-Residential Outdoor: 392,040; Striped Parking

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48

Building Construction	Welders	1	8.00	46	0.45
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Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	329.00	129.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	66.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0246	0.2565	0.1381	2.3000e-004		0.0132	0.0132		0.0123	0.0123	0.0000	21.3603	21.3603	5.8400e-003	0.0000	21.5063
Total	0.0246	0.2565	0.1381	2.3000e-004		0.0132	0.0132		0.0123	0.0123	0.0000	21.3603	21.3603	5.8400e-003	0.0000	21.5063

Unmitigated Construction Off-Site

Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4000e-004	4.5000e-004	4.8000e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9755	0.9755	4.0000e-005	0.0000	0.9764
Total	5.4000e-004	4.5000e-004	4.8000e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9755	0.9755	4.0000e-005	0.0000	0.9764

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0149	0.1533	0.0892	1.6000e-004		7.7500e-003	7.7500e-003		7.2200e-003	7.2200e-003	0.0000	14.0496	14.0496	3.8700e-003	0.0000	14.1464
Total	0.0149	0.1533	0.0892	1.6000e-004		7.7500e-003	7.7500e-003		7.2200e-003	7.2200e-003	0.0000	14.0496	14.0496	3.8700e-003	0.0000	14.1464

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2000e-004	2.6000e-004	2.8100e-003	1.0000e-005	6.6000e-004	1.0000e-005	6.6000e-004	1.7000e-004	0.0000	1.8000e-004	0.0000	0.6321	0.6321	2.0000e-005	0.0000	0.6326
Total	3.2000e-004	2.6000e-004	2.8100e-003	1.0000e-005	6.6000e-004	1.0000e-005	6.6000e-004	1.7000e-004	0.0000	1.8000e-004	0.0000	0.6321	0.6321	2.0000e-005	0.0000	0.6326

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0149	0.1533	0.0892	1.6000e-004		7.7500e-003	7.7500e-003		7.2200e-003	7.2200e-003	0.0000	14.0496	14.0496	3.8700e-003	0.0000	14.1464
Total	0.0149	0.1533	0.0892	1.6000e-004		7.7500e-003	7.7500e-003		7.2200e-003	7.2200e-003	0.0000	14.0496	14.0496	3.8700e-003	0.0000	14.1464

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2000e-004	2.6000e-004	2.8100e-003	1.0000e-005	6.6000e-004	1.0000e-005	6.6000e-004	1.7000e-004	0.0000	1.8000e-004	0.0000	0.6321	0.6321	2.0000e-005	0.0000	0.6326
Total	3.2000e-004	2.6000e-004	2.8100e-003	1.0000e-005	6.6000e-004	1.0000e-005	6.6000e-004	1.7000e-004	0.0000	1.8000e-004	0.0000	0.6321	0.6321	2.0000e-005	0.0000	0.6326

3.3 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0228	0.2410	0.1124	1.9000e-004		0.0129	0.0129		0.0119	0.0119	0.0000	17.3800	17.3800	5.4100e-003	0.0000	17.5152
Total	0.0228	0.2410	0.1124	1.9000e-004	0.0903	0.0129	0.1032	0.0497	0.0119	0.0615	0.0000	17.3800	17.3800	5.4100e-003	0.0000	17.5152

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.8000e-004	3.9000e-004	4.2100e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9481	0.9481	3.0000e-005	0.0000	0.9490
Total	4.8000e-004	3.9000e-004	4.2100e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9481	0.9481	3.0000e-005	0.0000	0.9490

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0228	0.2410	0.1124	1.9000e-004		0.0129	0.0129		0.0119	0.0119	0.0000	17.3799	17.3799	5.4100e-003	0.0000	17.5152

Total	0.0228	0.2410	0.1124	1.9000e-004	0.0903	0.0129	0.1032	0.0497	0.0119	0.0615	0.0000	17.3799	17.3799	5.4100e-003	0.0000	17.5152
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Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.8000e-004	3.9000e-004	4.2100e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9481	0.9481	3.0000e-005	0.0000	0.9490
Total	4.8000e-004	3.9000e-004	4.2100e-003	1.0000e-005	9.9000e-004	1.0000e-005	1.0000e-003	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.9481	0.9481	3.0000e-005	0.0000	0.9490

3.4 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0764	0.8928	0.5263	9.3000e-004		0.0395	0.0395		0.0364	0.0364	0.0000	84.9728	84.9728	0.0265	0.0000	85.6341
Total	0.0764	0.8928	0.5263	9.3000e-004	0.1301	0.0395	0.1696	0.0540	0.0364	0.0903	0.0000	84.9728	84.9728	0.0265	0.0000	85.6341

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5900e-003	1.3100e-003	0.0140	4.0000e-005	3.2900e-003	3.0000e-005	3.3200e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	3.1605	3.1605	1.1000e-004	0.0000	3.1632
Total	1.5900e-003	1.3100e-003	0.0140	4.0000e-005	3.2900e-003	3.0000e-005	3.3200e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	3.1605	3.1605	1.1000e-004	0.0000	3.1632

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0764	0.8928	0.5263	9.3000e-004		0.0395	0.0395		0.0364	0.0364	0.0000	84.9727	84.9727	0.0265	0.0000	85.6340
Total	0.0764	0.8928	0.5263	9.3000e-004	0.1301	0.0395	0.1696	0.0540	0.0364	0.0903	0.0000	84.9727	84.9727	0.0265	0.0000	85.6340

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5900e-003	1.3100e-003	0.0140	4.0000e-005	3.2900e-003	3.0000e-005	3.3200e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	3.1605	3.1605	1.1000e-004	0.0000	3.1632
Total	1.5900e-003	1.3100e-003	0.0140	4.0000e-005	3.2900e-003	3.0000e-005	3.3200e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	3.1605	3.1605	1.1000e-004	0.0000	3.1632

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2854	2.4910	1.8723	2.8700e-003		0.1597	0.1597		0.1502	0.1502	0.0000	253.2221	253.2221	0.0620	0.0000	254.7731
Total	0.2854	2.4910	1.8723	2.8700e-003		0.1597	0.1597		0.1502	0.1502	0.0000	253.2221	253.2221	0.0620	0.0000	254.7731

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0602	1.7046	0.4463	3.5300e-003	0.0866	0.0123	0.0989	0.0250	0.0118	0.0367	0.0000	341.3898	341.3898	0.0246	0.0000	342.0046
Worker	0.1857	0.1525	1.6382	4.0900e-003	0.3844	3.1400e-003	0.3876	0.1021	2.9000e-003	0.1050	0.0000	369.1267	369.1267	0.0126	0.0000	369.4427
Total	0.2459	1.8571	2.0845	7.6200e-003	0.4710	0.0154	0.4864	0.1271	0.0147	0.1417	0.0000	710.5165	710.5165	0.0372	0.0000	711.4473

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2854	2.4910	1.8723	2.8700e-003		0.1597	0.1597		0.1502	0.1502	0.0000	253.2218	253.2218	0.0620	0.0000	254.7728
Total	0.2854	2.4910	1.8723	2.8700e-003		0.1597	0.1597		0.1502	0.1502	0.0000	253.2218	253.2218	0.0620	0.0000	254.7728

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0602	1.7046	0.4463	3.5300e-003	0.0866	0.0123	0.0989	0.0250	0.0118	0.0367	0.0000	341.3898	341.3898	0.0246	0.0000	342.0046
Worker	0.1857	0.1525	1.6382	4.0900e-003	0.3844	3.1400e-003	0.3876	0.1021	2.9000e-003	0.1050	0.0000	369.1267	369.1267	0.0126	0.0000	369.4427
Total	0.2459	1.8571	2.0845	7.6200e-003	0.4710	0.0154	0.4864	0.1271	0.0147	0.1417	0.0000	710.5165	710.5165	0.0372	0.0000	711.4473

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1027	0.9169	0.7466	1.1700e-003		0.0561	0.0561		0.0528	0.0528	0.0000	102.2703	102.2703	0.0249	0.0000	102.8932
Total	0.1027	0.9169	0.7466	1.1700e-003		0.0561	0.0561		0.0528	0.0528	0.0000	102.2703	102.2703	0.0249	0.0000	102.8932

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0223	0.6571	0.1676	1.4300e-003	0.0354	4.3000e-003	0.0397	0.0102	4.1100e-003	0.0143	0.0000	138.1686	138.1686	9.7000e-003	0.0000	138.4110
Worker	0.0689	0.0550	0.5976	1.6200e-003	0.1570	1.2500e-003	0.1583	0.0417	1.1500e-003	0.0429	0.0000	146.0130	146.0130	4.5800e-003	0.0000	146.1275
Total	0.0912	0.7120	0.7652	3.0500e-003	0.1924	5.5500e-003	0.1979	0.0519	5.2600e-003	0.0572	0.0000	284.1816	284.1816	0.0143	0.0000	284.5384

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1027	0.9169	0.7466	1.1700e-003		0.0561	0.0561		0.0528	0.0528	0.0000	102.2702	102.2702	0.0249	0.0000	102.8931

Total	0.1027	0.9169	0.7466	1.1700e-003		0.0561	0.0561		0.0528	0.0528	0.0000	102.2702	102.2702	0.0249	0.0000	102.8931
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Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0223	0.6571	0.1676	1.4300e-003	0.0354	4.3000e-003	0.0397	0.0102	4.1100e-003	0.0143	0.0000	138.1686	138.1686	9.7000e-003	0.0000	138.4110
Worker	0.0689	0.0550	0.5976	1.6200e-003	0.1570	1.2500e-003	0.1583	0.0417	1.1500e-003	0.0429	0.0000	146.0130	146.0130	4.5800e-003	0.0000	146.1275
Total	0.0912	0.7120	0.7652	3.0500e-003	0.1924	5.5500e-003	0.1979	0.0519	5.2600e-003	0.0572	0.0000	284.1816	284.1816	0.0143	0.0000	284.5384

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0145	0.1524	0.1467	2.3000e-004		8.2500e-003	8.2500e-003		7.5900e-003	7.5900e-003	0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0145	0.1524	0.1467	2.3000e-004		8.2500e-003	8.2500e-003		7.5900e-003	7.5900e-003	0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	5.8000e-004	6.2600e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5304	1.5304	5.0000e-005	0.0000	1.5316
Total	7.2000e-004	5.8000e-004	6.2600e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5304	1.5304	5.0000e-005	0.0000	1.5316

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0145	0.1524	0.1467	2.3000e-004		8.2500e-003	8.2500e-003		7.5900e-003	7.5900e-003	0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0145	0.1524	0.1467	2.3000e-004		8.2500e-003	8.2500e-003		7.5900e-003	7.5900e-003	0.0000	20.4752	20.4752	6.4800e-003	0.0000	20.6371

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	5.8000e-004	6.2600e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5304	1.5304	5.0000e-005	0.0000	1.5316
Total	7.2000e-004	5.8000e-004	6.2600e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.5304	1.5304	5.0000e-005	0.0000	1.5316

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.6342					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6600e-003	0.0184	0.0184	3.0000e-005		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5587
Total	3.6369	0.0184	0.0184	3.0000e-005		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5587

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1800e-003	2.5300e-003	0.0276	7.0000e-005	7.2400e-003	6.0000e-005	7.3000e-003	1.9200e-003	5.0000e-005	1.9800e-003	0.0000	6.7337	6.7337	2.1000e-004	0.0000	6.7389
Total	3.1800e-003	2.5300e-003	0.0276	7.0000e-005	7.2400e-003	6.0000e-005	7.3000e-003	1.9200e-003	5.0000e-005	1.9800e-003	0.0000	6.7337	6.7337	2.1000e-004	0.0000	6.7389

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.6342					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6600e-003	0.0184	0.0184	3.0000e-005		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5586
Total	3.6369	0.0184	0.0184	3.0000e-005		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	2.5533	2.5533	2.2000e-004	0.0000	2.5586

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1800e-003	2.5300e-003	0.0276	7.0000e-005	7.2400e-003	6.0000e-005	7.3000e-003	1.9200e-003	5.0000e-005	1.9800e-003	0.0000	6.7337	6.7337	2.1000e-004	0.0000	6.7389
Total	3.1800e-003	2.5300e-003	0.0276	7.0000e-005	7.2400e-003	6.0000e-005	7.3000e-003	1.9200e-003	5.0000e-005	1.9800e-003	0.0000	6.7337	6.7337	2.1000e-004	0.0000	6.7389

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4157	2.3958	7.0075	0.0396	4.5067	0.0191	4.5258	1.2070	0.0178	1.2248	0.0000	3,687.2032	3,687.2032	0.1306	0.0000	3,690.4681
Unmitigated	0.4157	2.3958	7.0075	0.0396	4.5067	0.0191	4.5258	1.2070	0.0178	1.2248	0.0000	3,687.2032	3,687.2032	0.1306	0.0000	3,690.4681

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	0.00	0.00	11412.00	11,868,480	11,868,480
Total	0.00	0.00	11,412.00	11,868,480	11,868,480

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Arena	0.00	0.00	0.00	0.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Arena	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,773.0540	2,773.0540	0.1145	0.0237	2,782.9747
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	2,773.0540	2,773.0540	0.1145	0.0237	2,782.9747
NaturalGas Mitigated	0.0765	0.6957	0.5844	4.1700e-003		0.0529	0.0529		0.0529	0.0529	0.0000	757.3311	757.3311	0.0145	0.0139	761.8315
NaturalGas Unmitigated	0.0765	0.6957	0.5844	4.1700e-003		0.0529	0.0529		0.0529	0.0529	0.0000	757.3311	757.3311	0.0145	0.0139	761.8315

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Arena	1.41918e+007	0.0765	0.6957	0.5844	4.1700e-003		0.0529	0.0529		0.0529	0.0529	0.0000	757.3311	757.3311	0.0145	0.0139	761.8315
Total		0.0765	0.6957	0.5844	4.1700e-003		0.0529	0.0529		0.0529	0.0529	0.0000	757.3311	757.3311	0.0145	0.0139	761.8315

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Land Use	kBTU/yr	tons/yr										MT/yr					
Arena	1.41918e+007	0.0765	0.6957	0.5844	4.1700e-003		0.0529	0.0529		0.0529	0.0529	0.0000	757.3311	757.3311	0.0145	0.0139	761.8315
Total		0.0765	0.6957	0.5844	4.1700e-003		0.0529	0.0529		0.0529	0.0529	0.0000	757.3311	757.3311	0.0145	0.0139	761.8315

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Arena	8.70329e+006	2,773.0540	0.1145	0.0237	2,782.9747
Total		2,773.0540	0.1145	0.0237	2,782.9747

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Arena	8.70329e+006	2,773.0540	0.1145	0.0237	2,782.9747
Total		2,773.0540	0.1145	0.0237	2,782.9747

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.1967	0.0000	2.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.5000e-004	4.5000e-004	0.0000	0.0000	4.8000e-004
Unmitigated	3.1967	0.0000	2.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.5000e-004	4.5000e-004	0.0000	0.0000	4.8000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.3634					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.8333					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	2.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.5000e-004	4.5000e-004	0.0000	0.0000	4.8000e-004
Total	3.1967	0.0000	2.3000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.5000e-004	4.5000e-004	0.0000	0.0000	4.8000e-004

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.3634						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.8333						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	2.3000e-004	0.0000			0.0000	0.0000		0.0000	0.0000	4.5000e-004	4.5000e-004	0.0000	0.0000	4.8000e-004
Total	3.1967	0.0000	2.3000e-004	0.0000			0.0000	0.0000		0.0000	0.0000	4.5000e-004	4.5000e-004	0.0000	0.0000	4.8000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	113.6904	0.7939	0.0196	139.3643
Unmitigated	113.6904	0.7939	0.0196	139.3643

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Arena	24.2308 / 1.54665	113.6904	0.7939	0.0196	139.3643
Total		113.6904	0.7939	0.0196	139.3643

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Arena	24.2308 / 1.54665	113.6904	0.7939	0.0196	139.3643
Total		113.6904	0.7939	0.0196	139.3643

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			

Mitigated	0.3146	0.0186	0.0000	0.7795
Unmitigated	0.3146	0.0186	0.0000	0.7795

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Arena	1.55	0.3146	0.0186	0.0000	0.7795
Total		0.3146	0.0186	0.0000	0.7795

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Arena	1.55	0.3146	0.0186	0.0000	0.7795
Total		0.3146	0.0186	0.0000	0.7795

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

StubHub Center Operational Summer 2035

CSUDH Campus Master Plan EIR (StubHub Center) - 30,000 - South Coast Air Basin, Summer

CSUDH Campus Master Plan EIR (StubHub Center) - 30,000
South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Arena	18.00	Acre	18.00	784,080.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2035
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Vehicle Trips - StubHub Center operation.

Table Name	Column Name	Default Value	New Value
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TTP	81.00	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00

tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	HO_TL	0.00	20.00
tblVehicleTrips	HO_TTP	0.00	100.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	SU_TR	0.00	634.00
tblVehicleTrips	WD_TR	33.33	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	4.1932	42.8138	23.8646	0.0407	0.1677	2.1949	2.3625	0.0445	2.0438	2.0883	0.0000	4,112.3352	4,112.3352	1.0801	0.0000	4,139.3363
2018	5.1970	59.5988	38.0184	0.1007	18.2675	2.6355	20.8460	9.9840	2.4247	12.3563	0.0000	10,203.9429	10,203.9429	1.9523	0.0000	10,229.5923
2019	364.0080	37.0048	35.5523	0.0991	4.5029	1.4168	5.9197	1.2129	1.3331	2.5461	0.0000	10,016.1764	10,016.1764	0.9913	0.0000	10,040.9591
Maximum	364.0080	59.5988	38.0184	0.1007	18.2675	2.6355	20.8460	9.9840	2.4247	12.3563	0.0000	10,203.9429	10,203.9429	1.9523	0.0000	10,229.5923

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					

2017	4.1932	42.8138	23.8646	0.0407	0.1677	2.1949	2.3625	0.0445	2.0438	2.0883	0.0000	4,112.3352	4,112.3352	1.0801	0.0000	4,139.3363
2018	5.1970	59.5988	38.0184	0.1007	18.2675	2.6355	20.8460	9.9840	2.4247	12.3563	0.0000	10,203.9429	10,203.9429	1.9523	0.0000	10,229.5923
2019	364.0080	37.0048	35.5523	0.0991	4.5029	1.4168	5.9197	1.2129	1.3331	2.5461	0.0000	10,016.1764	10,016.1764	0.9913	0.0000	10,040.9591
Maximum	364.0080	59.5988	38.0184	0.1007	18.2675	2.6355	20.8460	9.9840	2.4247	12.3563	0.0000	10,203.9429	10,203.9429	1.9523	0.0000	10,229.5923

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	17.5163	2.00E-05	1.83E-03	0		1.00E-05	1.00E-05		1.00E-05	1.00E-05		3.94E-03	3.94E-03	1.00E-05		4.19E-03
Energy	0.4193	3.8119	3.202	0.0229		0.2897	0.2897		0.2897	0.2897		4,574.33	4,574.33	0.0877	0.0839	4,601.51
Mobile	16.7173	88.5097	287.2158	1.5807	176.5379	0.7356	177.2735	47.2097	0.6839	47.8936		#####	162,050.73	5.5724		#####
Total	34.6529	92.3217	290.4197	1.6036	176.5379	1.0253	177.5633	47.2097	0.9736	48.1833		#####	166,625.07	5.6601	0.0839	#####

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Area	17.5163	2.0000e-005	1.8300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.9400e-003	3.9400e-003	1.0000e-005		4.1900e-003
Energy	0.4193	3.8119	3.2020	0.0229		0.2897	0.2897		0.2897	0.2897		4,574.3265	4,574.3265	0.0877	0.0839	4,601.5095
Mobile	16.7173	88.5097	287.2158	1.5807	176.5379	0.7356	177.2735	47.2097	0.6839	47.8936		162,050.7349	162,050.7349	5.5724		162,190.0441
Total	34.6529	92.3217	290.4197	1.6036	176.5379	1.0253	177.5633	47.2097	0.9736	48.1833		166,625.0653	166,625.0653	5.6601	0.0839	166,791.5577

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	12/14/2017	1/10/2018	5	20	
2	Site Preparation	Site Preparation	1/11/2018	1/24/2018	5	10	
3	Grading	Grading	1/25/2018	3/7/2018	5	30	
4	Building Construction	Building Construction	3/8/2018	5/1/2019	5	300	
5	Paving	Paving	5/2/2019	5/29/2019	5	20	
6	Architectural Coating	Architectural Coating	5/30/2019	6/26/2019	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,176,120; Non-Residential Outdoor: 392,040; Striped Parking

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38

Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	329.00	129.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	66.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.1031	42.7475	23.0122	0.0388		2.1935	2.1935		2.0425	2.0425		3,924.2833	3,924.2833	1.0730		3,951.1070
Total	4.1031	42.7475	23.0122	0.0388		2.1935	2.1935		2.0425	2.0425		3,924.2833	3,924.2833	1.0730		3,951.1070

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0901	0.0663	0.8524	1.8900e-003	0.1677	1.3900e-003	0.1691	0.0445	1.2800e-003	0.0458		188.0518	188.0518	7.1000e-003		188.2294
Total	0.0901	0.0663	0.8524	1.8900e-003	0.1677	1.3900e-003	0.1691	0.0445	1.2800e-003	0.0458		188.0518	188.0518	7.1000e-003		188.2294

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day					
Off-Road	4.1031	42.7475	23.0122	0.0388		2.1935	2.1935		2.0425	2.0425	0.0000	3,924.2833	3,924.2833	1.0730		3,951.1070
Total	4.1031	42.7475	23.0122	0.0388		2.1935	2.1935		2.0425	2.0425	0.0000	3,924.2833	3,924.2833	1.0730		3,951.1070

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0901	0.0663	0.8524	1.8900e-003	0.1677	1.3900e-003	0.1691	0.0445	1.2800e-003	0.0458		188.0518	188.0518	7.1000e-003		188.2294
Total	0.0901	0.0663	0.8524	1.8900e-003	0.1677	1.3900e-003	0.1691	0.0445	1.2800e-003	0.0458		188.0518	188.0518	7.1000e-003		188.2294

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048		3,871.7665	3,871.7665	1.0667		3,898.4344
Total	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048		3,871.7665	3,871.7665	1.0667		3,898.4344

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0801	0.0578	0.7505	1.8400e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2400e-003	0.0457		182.8080	182.8080	6.2500e-003		182.9642
Total	0.0801	0.0578	0.7505	1.8400e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2400e-003	0.0457		182.8080	182.8080	6.2500e-003		182.9642

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048	0.0000	3,871.7665	3,871.7665	1.0667		3,898.4344
Total	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048	0.0000	3,871.7665	3,871.7665	1.0667		3,898.4344

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0801	0.0578	0.7505	1.8400e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2400e-003	0.0457		182.8080	182.8080	6.2500e-003		182.9642
Total	0.0801	0.0578	0.7505	1.8400e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2400e-003	0.0457		182.8080	182.8080	6.2500e-003		182.9642

3.3 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.5627	48.1988	22.4763	0.0380		2.5769	2.5769		2.3708	2.3708		3,831.6239	3,831.6239	1.1928		3,861.4448
Total	4.5627	48.1988	22.4763	0.0380	18.0663	2.5769	20.6432	9.9307	2.3708	12.3014		3,831.6239	3,831.6239	1.1928		3,861.4448

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0962	0.0693	0.9006	2.2000e-003	0.2012	1.6100e-003	0.2028	0.0534	1.4900e-003	0.0549		219.3696	219.3696	7.5000e-003		219.5571
Total	0.0962	0.0693	0.9006	2.2000e-003	0.2012	1.6100e-003	0.2028	0.0534	1.4900e-003	0.0549		219.3696	219.3696	7.5000e-003		219.5571

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.5627	48.1988	22.4763	0.0380		2.5769	2.5769		2.3708	2.3708	0.0000	3,831.6239	3,831.6239	1.1928		3,861.4448
Total	4.5627	48.1988	22.4763	0.0380	18.0663	2.5769	20.6432	9.9307	2.3708	12.3014	0.0000	3,831.6239	3,831.6239	1.1928		3,861.4448

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0962	0.0693	0.9006	2.2000e-003	0.2012	1.6100e-003	0.2028	0.0534	1.4900e-003	0.0549		219.3696	219.3696	7.5000e-003		219.5571
Total	0.0962	0.0693	0.9006	2.2000e-003	0.2012	1.6100e-003	0.2028	0.0534	1.4900e-003	0.0549		219.3696	219.3696	7.5000e-003		219.5571

3.4 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	5.0901	59.5218	35.0894	0.0620		2.6337	2.6337		2.4230	2.4230		6,244.4284	6,244.4284	1.9440		6,293.0278
Total	5.0901	59.5218	35.0894	0.0620	8.6733	2.6337	11.3071	3.5965	2.4230	6.0195		6,244.4284	6,244.4284	1.9440		6,293.0278

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1069	0.0770	1.0006	2.4500e-003	0.2236	1.7900e-003	0.2254	0.0593	1.6500e-003	0.0609		243.7440	243.7440	8.3300e-003		243.9523
Total	0.1069	0.0770	1.0006	2.4500e-003	0.2236	1.7900e-003	0.2254	0.0593	1.6500e-003	0.0609		243.7440	243.7440	8.3300e-003		243.9523

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	5.0901	59.5218	35.0894	0.0620		2.6337	2.6337		2.4230	2.4230	0.0000	6,244.4284	6,244.4284	1.9440		6,293.0278
Total	5.0901	59.5218	35.0894	0.0620	8.6733	2.6337	11.3071	3.5965	2.4230	6.0195	0.0000	6,244.4284	6,244.4284	1.9440		6,293.0278

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1069	0.0770	1.0006	2.4500e-003	0.2236	1.7900e-003	0.2254	0.0593	1.6500e-003	0.0609		243.7440	243.7440	8.3300e-003		243.9523
Total	0.1069	0.0770	1.0006	2.4500e-003	0.2236	1.7900e-003	0.2254	0.0593	1.6500e-003	0.0609		243.7440	243.7440	8.3300e-003		243.9523

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099		2,620.9351	2,620.9351	0.6421		2,636.9883

Total	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099		2,620.9351	2,620.9351	0.6421		2,636.9883
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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5549	15.6726	3.9780	0.0335	0.8255	0.1146	0.9400	0.2376	0.1096	0.3472		3,573.4186	3,573.4186	0.2468		3,579.5890
Worker	1.7576	1.2672	16.4600	0.0403	3.6774	0.0295	3.7069	0.9753	0.0272	1.0025		4,009.5891	4,009.5891	0.1370		4,013.0150
Total	2.3126	16.9398	20.4380	0.0738	4.5029	0.1440	4.6470	1.2129	0.1368	1.3497		7,583.0077	7,583.0077	0.3839		7,592.6041

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099	0.0000	2,620.9351	2,620.9351	0.6421		2,636.9883
Total	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099	0.0000	2,620.9351	2,620.9351	0.6421		2,636.9883

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5549	15.6726	3.9780	0.0335	0.8255	0.1146	0.9400	0.2376	0.1096	0.3472		3,573.4186	3,573.4186	0.2468		3,579.5890
Worker	1.7576	1.2672	16.4600	0.0403	3.6774	0.0295	3.7069	0.9753	0.0272	1.0025		4,009.5891	4,009.5891	0.1370		4,013.0150
Total	2.3126	16.9398	20.4380	0.0738	4.5029	0.1440	4.6470	1.2129	0.1368	1.3497		7,583.0077	7,583.0077	0.3839		7,592.6041

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
Total	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.5028	14.8082	3.6516	0.0332	0.8255	0.0982	0.9236	0.2376	0.0939	0.3315		3,541.2069	3,541.2069	0.2383		3,547.1635
Worker	1.5973	1.1179	14.7370	0.0390	3.6774	0.0288	3.7062	0.9753	0.0265	1.0018		3,883.3893	3,883.3893	0.1217		3,886.4321
Total	2.1001	15.9260	18.3885	0.0722	4.5029	0.1270	4.6298	1.2129	0.1204	1.3333		7,424.5962	7,424.5962	0.3600		7,433.5956

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
Total	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5028	14.8082	3.6516	0.0332	0.8255	0.0982	0.9236	0.2376	0.0939	0.3315		3,541.2069	3,541.2069	0.2383		3,547.1635
Worker	1.5973	1.1179	14.7370	0.0390	3.6774	0.0288	3.7062	0.9753	0.0265	1.0018		3,883.3893	3,883.3893	0.1217		3,886.4321
Total	2.1001	15.9260	18.3885	0.0722	4.5029	0.1270	4.6298	1.2129	0.1204	1.3333		7,424.5962	7,424.5962	0.3600		7,433.5956

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4544	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586		2,257.0025	2,257.0025	0.7141		2,274.8548
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.4544	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586		2,257.0025	2,257.0025	0.7141		2,274.8548

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0728	0.0510	0.6719	1.7800e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		177.0542	177.0542	5.5500e-003		177.1930
Total	0.0728	0.0510	0.6719	1.7800e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		177.0542	177.0542	5.5500e-003		177.1930

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4544	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586	0.0000	2,257.0025	2,257.0025	0.7141		2,274.8548
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.4544	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586	0.0000	2,257.0025	2,257.0025	0.7141		2,274.8548

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0728	0.0510	0.6719	1.7800e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		177.0542	177.0542	5.5500e-003		177.1930
Total	0.0728	0.0510	0.6719	1.7800e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		177.0542	177.0542	5.5500e-003		177.1930

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	363.4211					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423
Total	363.6875	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3204	0.2243	2.9564	7.8200e-003	0.7377	5.7700e-003	0.7435	0.1957	5.3200e-003	0.2010		779.0386	779.0386	0.0244		779.6490
Total	0.3204	0.2243	2.9564	7.8200e-003	0.7377	5.7700e-003	0.7435	0.1957	5.3200e-003	0.2010		779.0386	779.0386	0.0244		779.6490

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	363.4211					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423
Total	363.6875	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3204	0.2243	2.9564	7.8200e-003	0.7377	5.7700e-003	0.7435	0.1957	5.3200e-003	0.2010		779.0386	779.0386	0.0244		779.6490
Total	0.3204	0.2243	2.9564	7.8200e-003	0.7377	5.7700e-003	0.7435	0.1957	5.3200e-003	0.2010		779.0386	779.0386	0.0244		779.6490

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	16.7173	88.5097	287.2158	1.5807	176.5379	0.7356	177.2735	47.2097	0.6839	47.8936		162,050.7349	162,050.7349	5.5724		162,190.0441
Unmitigated	16.7173	88.5097	287.2158	1.5807	176.5379	0.7356	177.2735	47.2097	0.6839	47.8936		162,050.7349	162,050.7349	5.5724		162,190.0441

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT

Arena	0.00	0.00	11412.00	11,868,480	11,868,480
Total	0.00	0.00	11,412.00	11,868,480	11,868,480

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Arena	0.00	0.00	0.00	0.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Arena	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
NaturalGas Mitigated	0.4193	3.8119	3.2020	0.0229		0.2897	0.2897		0.2897	0.2897		4,574.3265	4,574.3265	0.0877	0.0839	4,601.5095
NaturalGas Unmitigated	0.4193	3.8119	3.2020	0.0229		0.2897	0.2897		0.2897	0.2897		4,574.3265	4,574.3265	0.0877	0.0839	4,601.5095

5.2 Energy by Land Use - NaturalGas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	38881.8	0.4193	3.8119	3.2020	0.0229		0.2897	0.2897		0.2897	0.2897		4,574.3265	4,574.3265	0.0877	0.0839	4,601.5095
Total		0.4193	3.8119	3.2020	0.0229		0.2897	0.2897		0.2897	0.2897		4,574.3265	4,574.3265	0.0877	0.0839	4,601.5095

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	38.8818	0.4193	3.8119	3.2020	0.0229		0.2897	0.2897		0.2897	0.2897		4,574.3265	4,574.3265	0.0877	0.0839	4,601.5095
Total		0.4193	3.8119	3.2020	0.0229		0.2897	0.2897		0.2897	0.2897		4,574.3265	4,574.3265	0.0877	0.0839	4,601.5095

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	17.5163	2.0000e-005	1.8300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.9400e-003	3.9400e-003	1.0000e-005		4.1900e-003
Unmitigated	17.5163	2.0000e-005	1.8300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.9400e-003	3.9400e-003	1.0000e-005		4.1900e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.9914					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	15.5248					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.7000e-004	2.0000e-005	1.8300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.9400e-003	3.9400e-003	1.0000e-005		4.1900e-003
Total	17.5163	2.0000e-005	1.8300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.9400e-003	3.9400e-003	1.0000e-005		4.1900e-003

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.9914					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	15.5248					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Landscaping	1.7000e-004	2.0000e-005	1.8300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.9400e-003	3.9400e-003	1.0000e-005		4.1900e-003
Total	17.5163	2.0000e-005	1.8300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.9400e-003	3.9400e-003	1.0000e-005		4.1900e-003

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

StubHub Center Operational Winter 2035

CSUDH Campus Master Plan EIR (StubHub Center) - 30,000 - South Coast Air Basin, Winter

CSUDH Campus Master Plan EIR (StubHub Center) - 30,000
South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Arena	18.00	Acre	18.00	784,080.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2035
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Vehicle Trips - StubHub Center operation.

Table Name	Column Name	Default Value	New Value
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TTP	81.00	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00

tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	HO_TL	0.00	20.00
tblVehicleTrips	HO_TTP	0.00	100.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	100.00
tblVehicleTrips	SU_TR	0.00	634.00
tblVehicleTrips	WD_TR	33.33	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	4.2018	42.8204	23.7927	0.0406	0.1677	2.1949	2.3625	0.0445	2.0438	2.0883	0.0000	4,100.7192	4,100.7192	1.0797	0.0000	4,127.7103
2018	5.2073	59.6064	36.9730	0.0973	18.2675	2.6355	20.8460	9.9840	2.4247	12.3563	0.0000	9,860.6089	9,860.6089	1.9518	0.0000	9,886.4812
2019	364.0394	37.1335	34.5972	0.0958	4.5029	1.4184	5.9213	1.2129	1.3346	2.5476	0.0000	9,680.2529	9,680.2529	1.0004	0.0000	9,705.2622
Maximum	364.0394	59.6064	36.9730	0.0973	18.2675	2.6355	20.8460	9.9840	2.4247	12.3563	0.0000	9,860.6089	9,860.6089	1.9518	0.0000	9,886.4812

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					

2017	4.2018	42.8204	23.7927	0.0406	0.1677	2.1949	2.3625	0.0445	2.0438	2.0883	0.0000	4,100.7192	4,100.7192	1.0797	0.0000	4,127.7103
2018	5.2073	59.6064	36.9730	0.0973	18.2675	2.6355	20.8460	9.9840	2.4247	12.3563	0.0000	9,860.6089	9,860.6089	1.9518	0.0000	9,886.4812
2019	364.0394	37.1335	34.5972	0.0958	4.5029	1.4184	5.9213	1.2129	1.3346	2.5476	0.0000	9,680.2529	9,680.2529	1.0004	0.0000	9,705.2622
Maximum	364.0394	59.6064	36.9730	0.0973	18.2675	2.6355	20.8460	9.9840	2.4247	12.3563	0.0000	9,860.6089	9,860.6089	1.9518	0.0000	9,886.4812

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	17.5163	2.00E-05	1.83E-03	0		1.00E-05	1.00E-05		1.00E-05	1.00E-05		3.94E-03	3.94E-03	1.00E-05		4.19E-03
Energy	0.4193	3.8119	3.202	0.0229		0.2897	0.2897		0.2897	0.2897		4,574.33	4,574.33	0.0877	0.0839	4,601.51
Mobile	16.1985	90.5877	264.4399	1.5061	176.5379	0.7365	177.2744	47.2097	0.6847	47.8944		#####	154,574.35	5.5543		#####
Total	34.1341	94.3997	267.6438	1.529	176.5379	1.0262	177.5641	47.2097	0.9744	48.1841		#####	159,148.68	5.642	0.0839	#####

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Area	17.5163	2.0000e-005	1.8300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.9400e-003	3.9400e-003	1.0000e-005		4.1900e-003
Energy	0.4193	3.8119	3.2020	0.0229		0.2897	0.2897		0.2897	0.2897		4,574.3265	4,574.3265	0.0877	0.0839	4,601.5095
Mobile	16.1985	90.5877	264.4399	1.5061	176.5379	0.7365	177.2744	47.2097	0.6847	47.8944		154,574.3542	154,574.3542	5.5543		154,713.2109
Total	34.1341	94.3997	267.6438	1.5290	176.5379	1.0262	177.5641	47.2097	0.9744	48.1841		159,148.6847	159,148.6847	5.6420	0.0839	159,314.7246

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	12/14/2017	1/10/2018	5	20	
2	Site Preparation	Site Preparation	1/11/2018	1/24/2018	5	10	
3	Grading	Grading	1/25/2018	3/7/2018	5	30	
4	Building Construction	Building Construction	3/8/2018	5/1/2019	5	300	
5	Paving	Paving	5/2/2019	5/29/2019	5	20	
6	Architectural Coating	Architectural Coating	5/30/2019	6/26/2019	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,176,120; Non-Residential Outdoor: 392,040; Striped Parking

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38

Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	329.00	129.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	66.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.1031	42.7475	23.0122	0.0388		2.1935	2.1935		2.0425	2.0425		3,924.2833	3,924.2833	1.0730		3,951.1070
Total	4.1031	42.7475	23.0122	0.0388		2.1935	2.1935		2.0425	2.0425		3,924.2833	3,924.2833	1.0730		3,951.1070

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0987	0.0729	0.7805	1.7700e-003	0.1677	1.3900e-003	0.1691	0.0445	1.2800e-003	0.0458		176.4359	176.4359	6.7000e-003		176.6033
Total	0.0987	0.0729	0.7805	1.7700e-003	0.1677	1.3900e-003	0.1691	0.0445	1.2800e-003	0.0458		176.4359	176.4359	6.7000e-003		176.6033

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day					
Off-Road	4.1031	42.7475	23.0122	0.0388		2.1935	2.1935		2.0425	2.0425	0.0000	3,924.2833	3,924.2833	1.0730		3,951.1070
Total	4.1031	42.7475	23.0122	0.0388		2.1935	2.1935		2.0425	2.0425	0.0000	3,924.2833	3,924.2833	1.0730		3,951.1070

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0987	0.0729	0.7805	1.7700e-003	0.1677	1.3900e-003	0.1691	0.0445	1.2800e-003	0.0458		176.4359	176.4359	6.7000e-003		176.6033
Total	0.0987	0.0729	0.7805	1.7700e-003	0.1677	1.3900e-003	0.1691	0.0445	1.2800e-003	0.0458		176.4359	176.4359	6.7000e-003		176.6033

3.2 Demolition - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048		3,871.7665	3,871.7665	1.0667		3,898.4344
Total	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048		3,871.7665	3,871.7665	1.0667		3,898.4344

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0879	0.0635	0.6839	1.7200e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2400e-003	0.0457		171.4879	171.4879	5.8700e-003		171.6347
Total	0.0879	0.0635	0.6839	1.7200e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2400e-003	0.0457		171.4879	171.4879	5.8700e-003		171.6347

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048	0.0000	3,871.7665	3,871.7665	1.0667		3,898.4344
Total	3.7190	38.3225	22.3040	0.0388		1.9386	1.9386		1.8048	1.8048	0.0000	3,871.7665	3,871.7665	1.0667		3,898.4344

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0879	0.0635	0.6839	1.7200e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2400e-003	0.0457		171.4879	171.4879	5.8700e-003		171.6347
Total	0.0879	0.0635	0.6839	1.7200e-003	0.1677	1.3400e-003	0.1690	0.0445	1.2400e-003	0.0457		171.4879	171.4879	5.8700e-003		171.6347

3.3 Site Preparation - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.5627	48.1988	22.4763	0.0380		2.5769	2.5769		2.3708	2.3708		3,831.6239	3,831.6239	1.1928		3,861.4448
Total	4.5627	48.1988	22.4763	0.0380	18.0663	2.5769	20.6432	9.9307	2.3708	12.3014		3,831.6239	3,831.6239	1.1928		3,861.4448

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1055	0.0762	0.8206	2.0700e-003	0.2012	1.6100e-003	0.2028	0.0534	1.4900e-003	0.0549		205.7855	205.7855	7.0500e-003		205.9616
Total	0.1055	0.0762	0.8206	2.0700e-003	0.2012	1.6100e-003	0.2028	0.0534	1.4900e-003	0.0549		205.7855	205.7855	7.0500e-003		205.9616

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.5627	48.1988	22.4763	0.0380		2.5769	2.5769		2.3708	2.3708	0.0000	3,831.6239	3,831.6239	1.1928		3,861.4448
Total	4.5627	48.1988	22.4763	0.0380	18.0663	2.5769	20.6432	9.9307	2.3708	12.3014	0.0000	3,831.6239	3,831.6239	1.1928		3,861.4448

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1055	0.0762	0.8206	2.0700e-003	0.2012	1.6100e-003	0.2028	0.0534	1.4900e-003	0.0549		205.7855	205.7855	7.0500e-003		205.9616
Total	0.1055	0.0762	0.8206	2.0700e-003	0.2012	1.6100e-003	0.2028	0.0534	1.4900e-003	0.0549		205.7855	205.7855	7.0500e-003		205.9616

3.4 Grading - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000				0.0000
Off-Road	5.0901	59.5218	35.0894	0.0620		2.6337	2.6337		2.4230	2.4230		6,244.4284	6,244.4284	1.9440			6,293.0278
Total	5.0901	59.5218	35.0894	0.0620	8.6733	2.6337	11.3071	3.5965	2.4230	6.0195		6,244.4284	6,244.4284	1.9440			6,293.0278

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.1172	0.0847	0.9118	2.3000e-003	0.2236	1.7900e-003	0.2254	0.0593	1.6500e-003	0.0609		228.6505	228.6505	7.8300e-003			228.8463
Total	0.1172	0.0847	0.9118	2.3000e-003	0.2236	1.7900e-003	0.2254	0.0593	1.6500e-003	0.0609		228.6505	228.6505	7.8300e-003			228.8463

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	5.0901	59.5218	35.0894	0.0620		2.6337	2.6337		2.4230	2.4230	0.0000	6,244.4284	6,244.4284	1.9440		6,293.0278
Total	5.0901	59.5218	35.0894	0.0620	8.6733	2.6337	11.3071	3.5965	2.4230	6.0195	0.0000	6,244.4284	6,244.4284	1.9440		6,293.0278

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1172	0.0847	0.9118	2.3000e-003	0.2236	1.7900e-003	0.2254	0.0593	1.6500e-003	0.0609		228.6505	228.6505	7.8300e-003		228.8463
Total	0.1172	0.0847	0.9118	2.3000e-003	0.2236	1.7900e-003	0.2254	0.0593	1.6500e-003	0.0609		228.6505	228.6505	7.8300e-003		228.8463

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099		2,620.9351	2,620.9351	0.6421		2,636.9883

Total	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099		2,620.9351	2,620.9351	0.6421		2,636.9883
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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5784	15.7058	4.3931	0.0326	0.8255	0.1163	0.9418	0.2376	0.1113	0.3489		3,478.3730	3,478.3730	0.2640		3,484.9718
Worker	1.9275	1.3925	14.9995	0.0378	3.6774	0.0295	3.7069	0.9753	0.0272	1.0025		3,761.3008	3,761.3008	0.1288		3,764.5211
Total	2.5059	17.0983	19.3926	0.0704	4.5029	0.1458	4.6487	1.2129	0.1385	1.3514		7,239.6737	7,239.6737	0.3928		7,249.4929

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099	0.0000	2,620.9351	2,620.9351	0.6421		2,636.9883
Total	2.6795	23.3900	17.5804	0.0269		1.4999	1.4999		1.4099	1.4099	0.0000	2,620.9351	2,620.9351	0.6421		2,636.9883

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5784	15.7058	4.3931	0.0326	0.8255	0.1163	0.9418	0.2376	0.1113	0.3489		3,478.3730	3,478.3730	0.2640		3,484.9718
Worker	1.9275	1.3925	14.9995	0.0378	3.6774	0.0295	3.7069	0.9753	0.0272	1.0025		3,761.3008	3,761.3008	0.1288		3,764.5211
Total	2.5059	17.0983	19.3926	0.0704	4.5029	0.1458	4.6487	1.2129	0.1385	1.3514		7,239.6737	7,239.6737	0.3928		7,249.4929

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
Total	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.5245	14.8264	4.0441	0.0323	0.8255	0.0997	0.9252	0.2376	0.0954	0.3330		3,446.0921	3,446.0921	0.2548		3,452.4630
Worker	1.7542	1.2283	13.3894	0.0366	3.6774	0.0288	3.7062	0.9753	0.0265	1.0018		3,642.5806	3,642.5806	0.1142		3,645.4357
Total	2.2787	16.0547	17.4334	0.0689	4.5029	0.1285	4.6314	1.2129	0.1219	1.3348		7,088.6727	7,088.6727	0.3690		7,097.8987

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
Total	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5245	14.8264	4.0441	0.0323	0.8255	0.0997	0.9252	0.2376	0.0954	0.3330		3,446.0921	3,446.0921	0.2548		3,452.4630
Worker	1.7542	1.2283	13.3894	0.0366	3.6774	0.0288	3.7062	0.9753	0.0265	1.0018		3,642.5806	3,642.5806	0.1142		3,645.4357
Total	2.2787	16.0547	17.4334	0.0689	4.5029	0.1285	4.6314	1.2129	0.1219	1.3348		7,088.6727	7,088.6727	0.3690		7,097.8987

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4544	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586		2,257.0025	2,257.0025	0.7141		2,274.8548
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.4544	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586		2,257.0025	2,257.0025	0.7141		2,274.8548

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0800	0.0560	0.6105	1.6700e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		166.0751	166.0751	5.2100e-003		166.2053
Total	0.0800	0.0560	0.6105	1.6700e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		166.0751	166.0751	5.2100e-003		166.2053

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4544	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586	0.0000	2,257.0025	2,257.0025	0.7141		2,274.8548
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.4544	15.2441	14.6648	0.0228		0.8246	0.8246		0.7586	0.7586	0.0000	2,257.0025	2,257.0025	0.7141		2,274.8548

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0800	0.0560	0.6105	1.6700e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		166.0751	166.0751	5.2100e-003		166.2053
Total	0.0800	0.0560	0.6105	1.6700e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		166.0751	166.0751	5.2100e-003		166.2053

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	363.4211					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423
Total	363.6875	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288		281.4481	281.4481	0.0238		282.0423

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3519	0.2464	2.6860	7.3400e-003	0.7377	5.7700e-003	0.7435	0.1957	5.3200e-003	0.2010		730.7305	730.7305	0.0229		731.3032
Total	0.3519	0.2464	2.6860	7.3400e-003	0.7377	5.7700e-003	0.7435	0.1957	5.3200e-003	0.2010		730.7305	730.7305	0.0229		731.3032

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	363.4211					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2664	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423
Total	363.6875	1.8354	1.8413	2.9700e-003		0.1288	0.1288		0.1288	0.1288	0.0000	281.4481	281.4481	0.0238		282.0423

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3519	0.2464	2.6860	7.3400e-003	0.7377	5.7700e-003	0.7435	0.1957	5.3200e-003	0.2010		730.7305	730.7305	0.0229		731.3032
Total	0.3519	0.2464	2.6860	7.3400e-003	0.7377	5.7700e-003	0.7435	0.1957	5.3200e-003	0.2010		730.7305	730.7305	0.0229		731.3032

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	16.1985	90.5877	264.4399	1.5061	176.5379	0.7365	177.2744	47.2097	0.6847	47.8944		154,574.3542	154,574.3542	5.5543		154,713.2109
Unmitigated	16.1985	90.5877	264.4399	1.5061	176.5379	0.7365	177.2744	47.2097	0.6847	47.8944		154,574.3542	154,574.3542	5.5543		154,713.2109

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT

Arena	0.00	0.00	11412.00	11,868,480	11,868,480
Total	0.00	0.00	11,412.00	11,868,480	11,868,480

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Arena	0.00	0.00	0.00	0.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Arena	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
NaturalGas Mitigated	0.4193	3.8119	3.2020	0.0229		0.2897	0.2897		0.2897	0.2897		4,574.3265	4,574.3265	0.0877	0.0839	4,601.5095
NaturalGas Unmitigated	0.4193	3.8119	3.2020	0.0229		0.2897	0.2897		0.2897	0.2897		4,574.3265	4,574.3265	0.0877	0.0839	4,601.5095

5.2 Energy by Land Use - NaturalGas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	38881.8	0.4193	3.8119	3.2020	0.0229		0.2897	0.2897		0.2897	0.2897		4,574.3265	4,574.3265	0.0877	0.0839	4,601.5095
Total		0.4193	3.8119	3.2020	0.0229		0.2897	0.2897		0.2897	0.2897		4,574.3265	4,574.3265	0.0877	0.0839	4,601.5095

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	38.8818	0.4193	3.8119	3.2020	0.0229		0.2897	0.2897		0.2897	0.2897		4,574.3265	4,574.3265	0.0877	0.0839	4,601.5095
Total		0.4193	3.8119	3.2020	0.0229		0.2897	0.2897		0.2897	0.2897		4,574.3265	4,574.3265	0.0877	0.0839	4,601.5095

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	17.5163	2.0000e-005	1.8300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.9400e-003	3.9400e-003	1.0000e-005		4.1900e-003
Unmitigated	17.5163	2.0000e-005	1.8300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.9400e-003	3.9400e-003	1.0000e-005		4.1900e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.9914					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	15.5248					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.7000e-004	2.0000e-005	1.8300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.9400e-003	3.9400e-003	1.0000e-005		4.1900e-003
Total	17.5163	2.0000e-005	1.8300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.9400e-003	3.9400e-003	1.0000e-005		4.1900e-003

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.9914					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	15.5248					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Landscaping	1.7000e-004	2.0000e-005	1.8300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.9400e-003	3.9400e-003	1.0000e-005		4.1900e-003
Total	17.5163	2.0000e-005	1.8300e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		3.9400e-003	3.9400e-003	1.0000e-005		4.1900e-003

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Uni Village Operational Annual 2035

CSUDH Campus Master Plan EIR (University Village) - South Coast Air Basin, Annual

CSUDH Campus Master Plan EIR (University Village)
South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	720.92	1000sqft	33.00	720,918.00	0
Apartments Mid Rise	2,149.00	Dwelling Unit	35.80	2,149,000.00	6146
Regional Shopping Center	96.09	1000sqft	2.20	96,085.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2035
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Master Plan
- Demolition - Master Plan
- Grading - Master Plan
- Architectural Coating - Master Plan
- Woodstoves - No woodstove and fireplace.
- Construction Phase -

Year	tons/yr										MT/yr					
2019	0.7400	6.7440	5.2804	0.0127	1.4094	0.2777	1.6871	0.5391	0.2569	0.7960	0.0000	1,157.7322	1,157.7322	0.1917	0.0000	1,162.5247
2020	1.4940	8.4384	12.4868	0.0415	2.9005	0.1916	3.0920	0.7772	0.1801	0.9573	0.0000	3,812.8297	3,812.8297	0.2193	0.0000	3,818.3131
2021	1.3658	7.6236	11.5697	0.0404	2.8894	0.1540	3.0434	0.7742	0.1446	0.9188	0.0000	3,714.0779	3,714.0779	0.2081	0.0000	3,719.2793
2022	1.2674	7.0527	10.8075	0.0392	2.8783	0.1322	3.0106	0.7713	0.1242	0.8954	0.0000	3,609.2308	3,609.2308	0.1984	0.0000	3,614.1895
2023	1.1634	5.7396	10.0867	0.0379	2.8783	0.1132	2.9915	0.7713	0.1062	0.8774	0.0000	3,493.3495	3,493.3495	0.1840	0.0000	3,497.9492
2024	10.7136	0.9910	1.9656	6.0200e-003	0.4429	0.0311	0.4741	0.1183	0.0290	0.1473	0.0000	548.1175	548.1175	0.0454	0.0000	549.2521
Maximum	10.7136	8.4384	12.4868	0.0415	2.9005	0.2777	3.0920	0.7772	0.2569	0.9573	0.0000	3,812.8297	3,812.8297	0.2193	0.0000	3,818.3131

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.7400	6.7440	5.2804	0.0127	1.4094	0.2777	1.6871	0.5391	0.2569	0.7960	0.0000	1,157.7315	1,157.7315	0.1917	0.0000	1,162.5240
2020	1.4940	8.4384	12.4868	0.0415	2.9005	0.1916	3.0920	0.7772	0.1801	0.9573	0.0000	3,812.8293	3,812.8293	0.2193	0.0000	3,818.3127
2021	1.3658	7.6236	11.5696	0.0404	2.8894	0.1540	3.0434	0.7742	0.1446	0.9188	0.0000	3,714.0776	3,714.0776	0.2081	0.0000	3,719.2790
2022	1.2674	7.0527	10.8075	0.0392	2.8783	0.1322	3.0106	0.7713	0.1242	0.8954	0.0000	3,609.2304	3,609.2304	0.1984	0.0000	3,614.1892
2023	1.1634	5.7396	10.0867	0.0379	2.8783	0.1132	2.9915	0.7713	0.1062	0.8774	0.0000	3,493.3491	3,493.3491	0.1840	0.0000	3,497.9488
2024	10.7136	0.9910	1.9656	6.0200e-003	0.4429	0.0311	0.4741	0.1183	0.0290	0.1473	0.0000	548.1173	548.1173	0.0454	0.0000	549.2520
Maximum	10.7136	8.4384	12.4868	0.0415	2.9005	0.2777	3.0920	0.7772	0.2569	0.9573	0.0000	3,812.8293	3,812.8293	0.2193	0.0000	3,818.3127

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
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Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2019	3-31-2019	1.3840	1.3840
2	4-1-2019	6-30-2019	1.6970	1.6970
3	7-1-2019	9-30-2019	1.9525	1.9525
4	10-1-2019	12-31-2019	2.4358	2.4358
5	1-1-2020	3-31-2020	2.4649	2.4649
6	4-1-2020	6-30-2020	2.4197	2.4197
7	7-1-2020	9-30-2020	2.4463	2.4463
8	10-1-2020	12-31-2020	2.4920	2.4920
9	1-1-2021	3-31-2021	2.2163	2.2163
10	4-1-2021	6-30-2021	2.2011	2.2011
11	7-1-2021	9-30-2021	2.2253	2.2253
12	10-1-2021	12-31-2021	2.2656	2.2656
13	1-1-2022	3-31-2022	2.0599	2.0599
14	4-1-2022	6-30-2022	2.0461	2.0461
15	7-1-2022	9-30-2022	2.0686	2.0686
16	10-1-2022	12-31-2022	2.1057	2.1057
17	1-1-2023	3-31-2023	1.7153	1.7153
18	4-1-2023	6-30-2023	1.7013	1.7013
19	7-1-2023	9-30-2023	1.7200	1.7200
20	10-1-2023	12-31-2023	1.7534	1.7534
21	1-1-2024	3-31-2024	0.8702	0.8702
22	4-1-2024	6-30-2024	4.3430	4.3430
23	7-1-2024	9-30-2024	6.4840	6.4840
		Highest	6.4840	6.4840

2.2 Overall Operational
Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	12.4299	0.2549	22.0944	1.1700e-003		0.1229	0.1229		0.1229	0.1229	0.0000	36.2214	36.2214	0.0345	0.0000	37.0842
Energy	0.1481	1.2883	0.7039	8.0800e-003		0.1023	0.1023		0.1023	0.1023	0.0000	7,574.5161	7,574.5161	0.2803	0.0791	7,605.0809
Mobile	3.3593	20.9574	44.4202	0.2367	25.8928	0.1169	26.0097	6.9348	0.1087	7.0434	0.0000	22,063.0888	22,063.0888	0.8394	0.0000	22,084.0748
Waste						0.0000	0.0000		0.0000	0.0000	357.2397	0.0000	357.2397	21.1123	0.0000	885.0463
Water						0.0000	0.0000		0.0000	0.0000	87.3288	1,747.9152	1,835.2440	9.0417	0.2267	2,128.8481
Total	15.9373	22.5006	67.2185	0.2459	25.8928	0.3422	26.2350	6.9348	0.3339	7.2687	444.5685	31,421.7414	31,866.3099	31.3082	0.3058	32,740.1343

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	12.4299	0.2549	22.0944	1.1700e-003		0.1229	0.1229		0.1229	0.1229	0.0000	36.2214	36.2214	0.0345	0.0000	37.0842
Energy	0.1481	1.2883	0.7039	8.0800e-003		0.1023	0.1023		0.1023	0.1023	0.0000	7,574.5161	7,574.5161	0.2803	0.0791	7,605.0809
Mobile	3.3593	20.9574	44.4202	0.2367	25.8928	0.1169	26.0097	6.9348	0.1087	7.0434	0.0000	22,063.0888	22,063.0888	0.8394	0.0000	22,084.0748
Waste						0.0000	0.0000		0.0000	0.0000	357.2397	0.0000	357.2397	21.1123	0.0000	885.0463
Water						0.0000	0.0000		0.0000	0.0000	87.3288	1,747.9152	1,835.2440	9.0417	0.2267	2,128.8481
Total	15.9373	22.5006	67.2185	0.2459	25.8928	0.3422	26.2350	6.9348	0.3339	7.2687	444.5685	31,421.7414	31,866.3099	31.3082	0.3058	32,740.1343

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2019	4/8/2019	5	70	
2	Site Preparation	Site Preparation	4/9/2019	6/3/2019	5	40	
3	Grading	Grading	6/4/2019	11/4/2019	5	110	
4	Building Construction	Building Construction	11/5/2019	2/5/2024	5	110	
5	Paving	Paving	2/6/2024	5/20/2024	5	75	
6	Architectural Coating	Architectural Coating	5/21/2024	9/2/2024	5	75	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 275

Acres of Paving: 0

Residential Indoor: 4,351,725; Residential Outdoor: 1,450,575; Non-Residential Indoor: 1,225,505; Non-Residential Outdoor: 408,502;

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40

Category	tons/yr										MT/yr					
Fugitive Dust					0.0884	0.0000	0.0884	0.0134	0.0000	0.0134	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1230	1.2524	0.7721	1.3600e-003		0.0628	0.0628		0.0584	0.0584	0.0000	121.1922	121.1922	0.0337	0.0000	122.0350
Total	0.1230	1.2524	0.7721	1.3600e-003	0.0884	0.0628	0.1512	0.0134	0.0584	0.0718	0.0000	121.1922	121.1922	0.0337	0.0000	122.0350

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.5600e-003	0.1256	0.0251	3.2000e-004	7.0200e-003	4.6000e-004	7.4800e-003	1.9300e-003	4.4000e-004	2.3700e-003	0.0000	31.3104	31.3104	2.3000e-003	0.0000	31.3679
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5300e-003	2.0200e-003	0.0219	6.0000e-005	5.7600e-003	5.0000e-005	5.8100e-003	1.5300e-003	4.0000e-005	1.5700e-003	0.0000	5.3563	5.3563	1.7000e-004	0.0000	5.3605
Total	6.0900e-003	0.1277	0.0470	3.8000e-004	0.0128	5.1000e-004	0.0133	3.4600e-003	4.8000e-004	3.9400e-003	0.0000	36.6667	36.6667	2.4700e-003	0.0000	36.7284

Mitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0884	0.0000	0.0884	0.0134	0.0000	0.0134	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1230	1.2524	0.7721	1.3600e-003		0.0628	0.0628		0.0584	0.0584	0.0000	121.1920	121.1920	0.0337	0.0000	122.0349

Total	0.1230	1.2524	0.7721	1.3600e-003	0.0884	0.0628	0.1512	0.0134	0.0584	0.0718	0.0000	121.1920	121.1920	0.0337	0.0000	122.0349
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Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.5600e-003	0.1256	0.0251	3.2000e-004	7.0200e-003	4.6000e-004	7.4800e-003	1.9300e-003	4.4000e-004	2.3700e-003	0.0000	31.3104	31.3104	2.3000e-003	0.0000	31.3679
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5300e-003	2.0200e-003	0.0219	6.0000e-005	5.7600e-003	5.0000e-005	5.8100e-003	1.5300e-003	4.0000e-005	1.5700e-003	0.0000	5.3563	5.3563	1.7000e-004	0.0000	5.3605
Total	6.0900e-003	0.1277	0.0470	3.8000e-004	0.0128	5.1000e-004	0.0133	3.4600e-003	4.8000e-004	3.9400e-003	0.0000	36.6667	36.6667	2.4700e-003	0.0000	36.7284

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3613	0.0000	0.3613	0.1986	0.0000	0.1986	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0867	0.9115	0.4413	7.6000e-004		0.0478	0.0478		0.0440	0.0440	0.0000	68.3374	68.3374	0.0216	0.0000	68.8779
Total	0.0867	0.9115	0.4413	7.6000e-004	0.3613	0.0478	0.4091	0.1986	0.0440	0.2426	0.0000	68.3374	68.3374	0.0216	0.0000	68.8779

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7300e-003	1.3800e-003	0.0150	4.0000e-005	3.9500e-003	3.0000e-005	3.9800e-003	1.0500e-003	3.0000e-005	1.0800e-003	0.0000	3.6729	3.6729	1.2000e-004	0.0000	3.6758
Total	1.7300e-003	1.3800e-003	0.0150	4.0000e-005	3.9500e-003	3.0000e-005	3.9800e-003	1.0500e-003	3.0000e-005	1.0800e-003	0.0000	3.6729	3.6729	1.2000e-004	0.0000	3.6758

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3613	0.0000	0.3613	0.1986	0.0000	0.1986	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0867	0.9115	0.4413	7.6000e-004		0.0478	0.0478		0.0440	0.0440	0.0000	68.3373	68.3373	0.0216	0.0000	68.8778
Total	0.0867	0.9115	0.4413	7.6000e-004	0.3613	0.0478	0.4091	0.1986	0.0440	0.2426	0.0000	68.3373	68.3373	0.0216	0.0000	68.8778

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7300e-003	1.3800e-003	0.0150	4.0000e-005	3.9500e-003	3.0000e-005	3.9800e-003	1.0500e-003	3.0000e-005	1.0800e-003	0.0000	3.6729	3.6729	1.2000e-004	0.0000	3.6758
Total	1.7300e-003	1.3800e-003	0.0150	4.0000e-005	3.9500e-003	3.0000e-005	3.9800e-003	1.0500e-003	3.0000e-005	1.0800e-003	0.0000	3.6729	3.6729	1.2000e-004	0.0000	3.6758

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.4770	0.0000	0.4770	0.1978	0.0000	0.1978	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2606	2.9986	1.8357	3.4100e-003		0.1311	0.1311		0.1206	0.1206	0.0000	306.3573	306.3573	0.0969	0.0000	308.7805
Total	0.2606	2.9986	1.8357	3.4100e-003	0.4770	0.1311	0.6081	0.1978	0.1206	0.3184	0.0000	306.3573	306.3573	0.0969	0.0000	308.7805

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3000e-003	4.2200e-003	0.0459	1.2000e-004	0.0121	1.0000e-004	0.0122	3.2100e-003	9.0000e-005	3.2900e-003	0.0000	11.2227	11.2227	3.5000e-004	0.0000	11.2315
Total	5.3000e-003	4.2200e-003	0.0459	1.2000e-004	0.0121	1.0000e-004	0.0122	3.2100e-003	9.0000e-005	3.2900e-003	0.0000	11.2227	11.2227	3.5000e-004	0.0000	11.2315

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.4770	0.0000	0.4770	0.1978	0.0000	0.1978	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2606	2.9986	1.8357	3.4100e-003		0.1311	0.1311		0.1206	0.1206	0.0000	306.3569	306.3569	0.0969	0.0000	308.7801
Total	0.2606	2.9986	1.8357	3.4100e-003	0.4770	0.1311	0.6081	0.1978	0.1206	0.3184	0.0000	306.3569	306.3569	0.0969	0.0000	308.7801

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3000e-003	4.2200e-003	0.0459	1.2000e-004	0.0121	1.0000e-004	0.0122	3.2100e-003	9.0000e-005	3.2900e-003	0.0000	11.2227	11.2227	3.5000e-004	0.0000	11.2315
Total	5.3000e-003	4.2200e-003	0.0459	1.2000e-004	0.0121	1.0000e-004	0.0122	3.2100e-003	9.0000e-005	3.2900e-003	0.0000	11.2227	11.2227	3.5000e-004	0.0000	11.2315

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0484	0.4321	0.3519	5.5000e-004		0.0264	0.0264		0.0249	0.0249	0.0000	48.1964	48.1964	0.0117	0.0000	48.4899
Total	0.0484	0.4321	0.3519	5.5000e-004		0.0264	0.0264		0.0249	0.0249	0.0000	48.1964	48.1964	0.0117	0.0000	48.4899

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0296	0.8738	0.2228	1.9000e-003	0.0470	5.7200e-003	0.0527	0.0136	5.4700e-003	0.0190	0.0000	183.7323	183.7323	0.0129	0.0000	184.0547
Worker	0.1786	0.1424	1.5486	4.1900e-003	0.4069	3.2400e-003	0.4101	0.1081	2.9900e-003	0.1110	0.0000	378.3544	378.3544	0.0119	0.0000	378.6510
Total	0.2082	1.0162	1.7714	6.0900e-003	0.4539	8.9600e-003	0.4629	0.1216	8.4600e-003	0.1301	0.0000	562.0867	562.0867	0.0248	0.0000	562.7057

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0484	0.4321	0.3519	5.5000e-004		0.0264	0.0264		0.0249	0.0249	0.0000	48.1963	48.1963	0.0117	0.0000	48.4898

Total	0.0484	0.4321	0.3519	5.5000e-004		0.0264	0.0264		0.0249	0.0249	0.0000	48.1963	48.1963	0.0117	0.0000	48.4898
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Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0296	0.8738	0.2228	1.9000e-003	0.0470	5.7200e-003	0.0527	0.0136	5.4700e-003	0.0190	0.0000	183.7323	183.7323	0.0129	0.0000	184.0547
Worker	0.1786	0.1424	1.5486	4.1900e-003	0.4069	3.2400e-003	0.4101	0.1081	2.9900e-003	0.1110	0.0000	378.3544	378.3544	0.0119	0.0000	378.6510
Total	0.2082	1.0162	1.7714	6.0900e-003	0.4539	8.9600e-003	0.4629	0.1216	8.4600e-003	0.1301	0.0000	562.0867	562.0867	0.0248	0.0000	562.7057

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2777	2.5134	2.2072	3.5300e-003		0.1463	0.1463		0.1376	0.1376	0.0000	303.4091	303.4091	0.0740	0.0000	305.2596
Total	0.2777	2.5134	2.2072	3.5300e-003		0.1463	0.1463		0.1376	0.1376	0.0000	303.4091	303.4091	0.0740	0.0000	305.2596

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1614	5.1130	1.2893	0.0120	0.3005	0.0250	0.3255	0.0867	0.0239	0.1106	0.0000	1,166.5764	1,166.5764	0.0779	0.0000	1,168.5226
Worker	1.0548	0.8121	8.9904	0.0259	2.6000	0.0202	2.6202	0.6905	0.0186	0.7091	0.0000	2,342.8442	2,342.8442	0.0675	0.0000	2,344.5308
Total	1.2163	5.9251	10.2797	0.0380	2.9005	0.0452	2.9457	0.7772	0.0425	0.8197	0.0000	3,509.4206	3,509.4206	0.1453	0.0000	3,513.0535

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2777	2.5134	2.2072	3.5300e-003		0.1463	0.1463		0.1376	0.1376	0.0000	303.4087	303.4087	0.0740	0.0000	305.2592
Total	0.2777	2.5134	2.2072	3.5300e-003		0.1463	0.1463		0.1376	0.1376	0.0000	303.4087	303.4087	0.0740	0.0000	305.2592

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1614	5.1130	1.2893	0.0120	0.3005	0.0250	0.3255	0.0867	0.0239	0.1106	0.0000	1,166.5764	1,166.5764	0.0779	0.0000	1,168.5226
Worker	1.0548	0.8121	8.9904	0.0259	2.6000	0.0202	2.6202	0.6905	0.0186	0.7091	0.0000	2,342.8442	2,342.8442	0.0675	0.0000	2,344.5308
Total	1.2163	5.9251	10.2797	0.0380	2.9005	0.0452	2.9457	0.7772	0.0425	0.8197	0.0000	3,509.4206	3,509.4206	0.1453	0.0000	3,513.0535

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2481	2.2749	2.1631	3.5100e-003		0.1251	0.1251		0.1176	0.1176	0.0000	302.2867	302.2867	0.0729	0.0000	304.1099
Total	0.2481	2.2749	2.1631	3.5100e-003		0.1251	0.1251		0.1176	0.1176	0.0000	302.2867	302.2867	0.0729	0.0000	304.1099

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1366	4.6205	1.1678	0.0119	0.2994	9.4100e-003	0.3088	0.0864	9.0000e-003	0.0954	0.0000	1,153.3798	1,153.3798	0.0744	0.0000	1,155.2386
Worker	0.9811	0.7282	8.2388	0.0250	2.5901	0.0195	2.6096	0.6879	0.0180	0.7058	0.0000	2,258.4115	2,258.4115	0.0608	0.0000	2,259.9309
Total	1.1177	5.3487	9.4066	0.0369	2.8894	0.0289	2.9183	0.7742	0.0270	0.8012	0.0000	3,411.7913	3,411.7913	0.1351	0.0000	3,415.1695

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2481	2.2749	2.1631	3.5100e-003		0.1251	0.1251		0.1176	0.1176	0.0000	302.2863	302.2863	0.0729	0.0000	304.1095
Total	0.2481	2.2749	2.1631	3.5100e-003		0.1251	0.1251		0.1176	0.1176	0.0000	302.2863	302.2863	0.0729	0.0000	304.1095

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1366	4.6205	1.1678	0.0119	0.2994	9.4100e-003	0.3088	0.0864	9.0000e-003	0.0954	0.0000	1,153.3798	1,153.3798	0.0744	0.0000	1,155.2386
Worker	0.9811	0.7282	8.2388	0.0250	2.5901	0.0195	2.6096	0.6879	0.0180	0.7058	0.0000	2,258.4115	2,258.4115	0.0608	0.0000	2,259.9309
Total	1.1177	5.3487	9.4066	0.0369	2.8894	0.0289	2.9183	0.7742	0.0270	0.8012	0.0000	3,411.7913	3,411.7913	0.1351	0.0000	3,415.1695

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2218	2.0300	2.1272	3.5000e-003		0.1052	0.1052		0.0990	0.0990	0.0000	301.2428	301.2428	0.0722	0.0000	303.0471
Total	0.2218	2.0300	2.1272	3.5000e-003		0.1052	0.1052		0.0990	0.0990	0.0000	301.2428	301.2428	0.0722	0.0000	303.0471

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1277	4.3674	1.1014	0.0117	0.2982	8.1600e-003	0.3064	0.0860	7.8000e-003	0.0938	0.0000	1,138.8111	1,138.8111	0.0715	0.0000	1,140.5983
Worker	0.9179	0.6553	7.5789	0.0240	2.5801	0.0189	2.5990	0.6852	0.0174	0.7026	0.0000	2,169.1769	2,169.1769	0.0547	0.0000	2,170.5442
Total	1.0456	5.0227	8.6802	0.0357	2.8783	0.0271	2.9054	0.7713	0.0252	0.7965	0.0000	3,307.9880	3,307.9880	0.1262	0.0000	3,311.1425

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2218	2.0300	2.1272	3.5000e-003		0.1052	0.1052		0.0990	0.0990	0.0000	301.2425	301.2425	0.0722	0.0000	303.0467

Total	0.2218	2.0300	2.1272	3.5000e-003		0.1052	0.1052		0.0990	0.0990	0.0000	301.2425	301.2425	0.0722	0.0000	303.0467
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Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1277	4.3674	1.1014	0.0117	0.2982	8.1600e-003	0.3064	0.0860	7.8000e-003	0.0938	0.0000	1,138.8111	1,138.8111	0.0715	0.0000	1,140.5983
Worker	0.9179	0.6553	7.5789	0.0240	2.5801	0.0189	2.5990	0.6852	0.0174	0.7026	0.0000	2,169.1769	2,169.1769	0.0547	0.0000	2,170.5442
Total	1.0456	5.0227	8.6802	0.0357	2.8783	0.0271	2.9054	0.7713	0.0252	0.7965	0.0000	3,307.9880	3,307.9880	0.1262	0.0000	3,311.1425

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2045	1.8700	2.1117	3.5000e-003		0.0910	0.0910		0.0856	0.0856	0.0000	301.3462	301.3462	0.0717	0.0000	303.1383
Total	0.2045	1.8700	2.1117	3.5000e-003		0.0910	0.0910		0.0856	0.0856	0.0000	301.3462	301.3462	0.0717	0.0000	303.1383

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0948	3.2767	0.9870	0.0113	0.2982	3.8000e-003	0.3020	0.0860	3.6300e-003	0.0897	0.0000	1,103.6521	1,103.6521	0.0630	0.0000	1,105.2275
Worker	0.8642	0.5928	6.9880	0.0231	2.5801	0.0184	2.5985	0.6852	0.0170	0.7022	0.0000	2,088.3512	2,088.3512	0.0493	0.0000	2,089.5833
Total	0.9589	3.8695	7.9749	0.0344	2.8783	0.0222	2.9005	0.7713	0.0206	0.7918	0.0000	3,192.0033	3,192.0033	0.1123	0.0000	3,194.8109

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2045	1.8700	2.1117	3.5000e-003		0.0910	0.0910		0.0856	0.0856	0.0000	301.3458	301.3458	0.0717	0.0000	303.1380
Total	0.2045	1.8700	2.1117	3.5000e-003		0.0910	0.0910		0.0856	0.0856	0.0000	301.3458	301.3458	0.0717	0.0000	303.1380

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0948	3.2767	0.9870	0.0113	0.2982	3.8000e-003	0.3020	0.0860	3.6300e-003	0.0897	0.0000	1,103.6521	1,103.6521	0.0630	0.0000	1,105.2275
Worker	0.8642	0.5928	6.9880	0.0231	2.5801	0.0184	2.5985	0.6852	0.0170	0.7022	0.0000	2,088.3512	2,088.3512	0.0493	0.0000	2,089.5833
Total	0.9589	3.8695	7.9749	0.0344	2.8783	0.0222	2.9005	0.7713	0.0206	0.7918	0.0000	3,192.0033	3,192.0033	0.1123	0.0000	3,194.8109

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0191	0.1748	0.2102	3.5000e-004		7.9700e-003	7.9700e-003		7.5000e-003	7.5000e-003	0.0000	30.1404	30.1404	7.1300e-003	0.0000	30.3186
Total	0.0191	0.1748	0.2102	3.5000e-004		7.9700e-003	7.9700e-003		7.5000e-003	7.5000e-003	0.0000	30.1404	30.1404	7.1300e-003	0.0000	30.3186

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.2700e-003	0.3269	0.0959	1.1300e-003	0.0298	3.7000e-004	0.0302	8.6000e-003	3.6000e-004	8.9600e-003	0.0000	109.9695	109.9695	6.2100e-003	0.0000	110.1247
Worker	0.0819	0.0540	0.6516	2.2300e-003	0.2580	1.8200e-003	0.2598	0.0685	1.6700e-003	0.0702	0.0000	201.9368	201.9368	4.5100e-003	0.0000	202.0496
Total	0.0912	0.3809	0.7474	3.3600e-003	0.2878	2.1900e-003	0.2900	0.0771	2.0300e-003	0.0792	0.0000	311.9064	311.9064	0.0107	0.0000	312.1743

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0191	0.1748	0.2102	3.5000e-004		7.9700e-003	7.9700e-003		7.5000e-003	7.5000e-003	0.0000	30.1404	30.1404	7.1300e-003	0.0000	30.3185
Total	0.0191	0.1748	0.2102	3.5000e-004		7.9700e-003	7.9700e-003		7.5000e-003	7.5000e-003	0.0000	30.1404	30.1404	7.1300e-003	0.0000	30.3185

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.2700e-003	0.3269	0.0959	1.1300e-003	0.0298	3.7000e-004	0.0302	8.6000e-003	3.6000e-004	8.9600e-003	0.0000	109.9695	109.9695	6.2100e-003	0.0000	110.1247
Worker	0.0819	0.0540	0.6516	2.2300e-003	0.2580	1.8200e-003	0.2598	0.0685	1.6700e-003	0.0702	0.0000	201.9368	201.9368	4.5100e-003	0.0000	202.0496
Total	0.0912	0.3809	0.7474	3.3600e-003	0.2878	2.1900e-003	0.2900	0.0771	2.0300e-003	0.0792	0.0000	311.9064	311.9064	0.0107	0.0000	312.1743

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0371	0.3572	0.5485	8.6000e-004		0.0176	0.0176		0.0162	0.0162	0.0000	75.0995	75.0995	0.0243	0.0000	75.7067
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0371	0.3572	0.5485	8.6000e-004		0.0176	0.0176		0.0162	0.0162	0.0000	75.0995	75.0995	0.0243	0.0000	75.7067

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9600e-003	1.2900e-003	0.0156	5.0000e-005	6.1700e-003	4.0000e-005	6.2100e-003	1.6400e-003	4.0000e-005	1.6800e-003	0.0000	4.8301	4.8301	1.1000e-004	0.0000	4.8328
Total	1.9600e-003	1.2900e-003	0.0156	5.0000e-005	6.1700e-003	4.0000e-005	6.2100e-003	1.6400e-003	4.0000e-005	1.6800e-003	0.0000	4.8301	4.8301	1.1000e-004	0.0000	4.8328

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0371	0.3572	0.5485	8.6000e-004		0.0176	0.0176		0.0162	0.0162	0.0000	75.0994	75.0994	0.0243	0.0000	75.7066

Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0371	0.3572	0.5485	8.6000e-004		0.0176	0.0176		0.0162	0.0162	0.0000	75.0994	75.0994	0.0243	0.0000	75.7066

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9600e-003	1.2900e-003	0.0156	5.0000e-005	6.1700e-003	4.0000e-005	6.2100e-003	1.6400e-003	4.0000e-005	1.6800e-003	0.0000	4.8301	4.8301	1.1000e-004	0.0000	4.8328
Total	1.9600e-003	1.2900e-003	0.0156	5.0000e-005	6.1700e-003	4.0000e-005	6.2100e-003	1.6400e-003	4.0000e-005	1.6800e-003	0.0000	4.8301	4.8301	1.1000e-004	0.0000	4.8328

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	10.5102					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.7800e-003	0.0457	0.0679	1.1000e-004		2.2800e-003	2.2800e-003		2.2800e-003	2.2800e-003	0.0000	9.5747	9.5747	5.4000e-004	0.0000	9.5882
Total	10.5170	0.0457	0.0679	1.1000e-004		2.2800e-003	2.2800e-003		2.2800e-003	2.2800e-003	0.0000	9.5747	9.5747	5.4000e-004	0.0000	9.5882

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0473	0.0312	0.3761	1.2900e-003	0.1489	1.0500e-003	0.1500	0.0396	9.6000e-004	0.0405	0.0000	116.5664	116.5664	2.6000e-003	0.0000	116.6315
Total	0.0473	0.0312	0.3761	1.2900e-003	0.1489	1.0500e-003	0.1500	0.0396	9.6000e-004	0.0405	0.0000	116.5664	116.5664	2.6000e-003	0.0000	116.6315

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	10.5102					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.7800e-003	0.0457	0.0679	1.1000e-004		2.2800e-003	2.2800e-003		2.2800e-003	2.2800e-003	0.0000	9.5747	9.5747	5.4000e-004	0.0000	9.5882
Total	10.5170	0.0457	0.0679	1.1000e-004		2.2800e-003	2.2800e-003		2.2800e-003	2.2800e-003	0.0000	9.5747	9.5747	5.4000e-004	0.0000	9.5882

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0473	0.0312	0.3761	1.2900e-003	0.1489	1.0500e-003	0.1500	0.0396	9.6000e-004	0.0405	0.0000	116.5664	116.5664	2.6000e-003	0.0000	116.6315
Total	0.0473	0.0312	0.3761	1.2900e-003	0.1489	1.0500e-003	0.1500	0.0396	9.6000e-004	0.0405	0.0000	116.5664	116.5664	2.6000e-003	0.0000	116.6315

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.3593	20.9574	44.4202	0.2367	25.8928	0.1169	26.0097	6.9348	0.1087	7.0434	0.0000	22,063.088	22,063.088	0.8394	0.0000	22,084.0748
Unmitigated	3.3593	20.9574	44.4202	0.2367	25.8928	0.1169	26.0097	6.9348	0.1087	7.0434	0.0000	22,063.088	22,063.088	0.8394	0.0000	22,084.0748

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	12,872.51	12,356.75	11325.23	42,954,214	42,954,214
General Office Building	7,158.72	1,593.23	684.87	17,520,919	17,520,919
Regional Shopping Center	3,692.55	4,320.94	2183.05	7,714,162	7,714,162
Total	23,723.77	18,270.92	14,193.15	68,189,295	68,189,295

4.3 Trip Type Information

	Miles	Trip %	Trip Purpose %
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Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C- NW	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.00	19.00	41.00	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735
General Office Building	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735
Regional Shopping Center	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	6,108.6368	6,108.6368	0.2522	0.0522	6,130.4906
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	6,108.6368	6,108.6368	0.2522	0.0522	6,130.4906
NaturalGas Mitigated	0.1481	1.2883	0.7039	8.0800e-003		0.1023	0.1023		0.1023	0.1023	0.0000	1,465.8793	1,465.8793	0.0281	0.0269	1,474.5902
NaturalGas Unmitigated	0.1481	1.2883	0.7039	8.0800e-003		0.1023	0.1023		0.1023	0.1023	0.0000	1,465.8793	1,465.8793	0.0281	0.0269	1,474.5902

5.2 Energy by Land Use - NaturalGas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.98072e+007	0.1068	0.9127	0.3884	5.8300e-003		0.0738	0.0738		0.0738	0.0738	0.0000	1,056.9878	1,056.9878	0.0203	0.0194	1,063.2690
General Office Building	7.50476e+006	0.0405	0.3679	0.3090	2.2100e-003		0.0280	0.0280		0.0280	0.0280	0.0000	400.4824	400.4824	7.6800e-003	7.3400e-003	402.8623
Regional Shopping Center	157579	8.5000e-004	7.7200e-003	6.4900e-003	5.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	8.4090	8.4090	1.6000e-004	1.5000e-004	8.4590
Total		0.1481	1.2883	0.7039	8.0900e-003		0.1023	0.1023		0.1023	0.1023	0.0000	1,465.8793	1,465.8793	0.0281	0.0269	1,474.5903

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.98072e+007	0.1068	0.9127	0.3884	5.8300e-003		0.0738	0.0738		0.0738	0.0738	0.0000	1,056.9878	1,056.9878	0.0203	0.0194	1,063.2690
General Office Building	7.50476e+006	0.0405	0.3679	0.3090	2.2100e-003		0.0280	0.0280		0.0280	0.0280	0.0000	400.4824	400.4824	7.6800e-003	7.3400e-003	402.8623
Regional Shopping Center	157579	8.5000e-004	7.7200e-003	6.4900e-003	5.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	8.4090	8.4090	1.6000e-004	1.5000e-004	8.4590
Total		0.1481	1.2883	0.7039	8.0900e-003		0.1023	0.1023		0.1023	0.1023	0.0000	1,465.8793	1,465.8793	0.0281	0.0269	1,474.5903

5.3 Energy by Land Use - Electricity

Unmitigated

Electricity Use	Total CO2	CH4	N2O	CO2e
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Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	8.51021e+006	2,711.5358	0.1119	0.0232	2,721.2364
General Office Building	9.36472e+006	2,983.8020	0.1232	0.0255	2,994.4766
Regional Shopping Center	1.29715e+006	413.2990	0.0171	3.5300e-003	414.7776
Total		6,108.6368	0.2522	0.0522	6,130.4906

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	8.51021e+006	2,711.5358	0.1119	0.0232	2,721.2364
General Office Building	9.36472e+006	2,983.8020	0.1232	0.0255	2,994.4766
Regional Shopping Center	1.29715e+006	413.2990	0.0171	3.5300e-003	414.7776
Total		6,108.6368	0.2522	0.0522	6,130.4906

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.6613	0.2549	22.0944	1.1700e-003		0.1229	0.1229		0.1229	0.1229	0.0000	36.2214	36.2214	0.0345	0.0000	37.0842
Total	12.4299	0.2549	22.0944	1.1700e-003		0.1229	0.1229		0.1229	0.1229	0.0000	36.2214	36.2214	0.0345	0.0000	37.0842

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1,835.2440	9.0417	0.2267	2,128.8481
Unmitigated	1,835.2440	9.0417	0.2267	2,128.8481

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	140.016 / 88.271	937.7837	4.5993	0.1154	1,087.1435
General Office Building	128.132 / 78.5324	850.2353	4.2086	0.1055	986.8893
Regional Shopping Center	7.11689 / 4.36196	47.2250	0.2338	5.8600e-003	54.8153

Total		1,835.2440	9.0417	0.2267	2,128.848
					1

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	140.016 / 88.271	937.7837	4.5993	0.1154	1,087.1435
General Office Building	128.132 / 78.5324	850.2353	4.2086	0.1055	986.8893
Regional Shopping Center	7.11689 / 4.36196	47.2250	0.2338	5.8600e-003	54.8153
Total		1,835.2440	9.0417	0.2267	2,128.848
					1

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	357.2397	21.1123	0.0000	885.0463
Unmitigated	357.2397	21.1123	0.0000	885.0463

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	988.54	200.6647	11.8589	0.0000	497.1383
General Office Building	670.46	136.0973	8.0431	0.0000	337.1754
Regional Shopping Center	100.88	20.4777	1.2102	0.0000	50.7327
Total		357.2397	21.1123	0.0000	885.0463

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	988.54	200.6647	11.8589	0.0000	497.1383
General Office Building	670.46	136.0973	8.0431	0.0000	337.1754
Regional Shopping Center	100.88	20.4777	1.2102	0.0000	50.7327
Total		357.2397	21.1123	0.0000	885.0463

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Uni Village Operational Summer 2035

CSUDH Campus Master Plan EIR (University Village) - South Coast Air Basin, Summer

CSUDH Campus Master Plan EIR (University Village)
South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	720.92	1000sqft	33.00	720,918.00	0
Apartments Mid Rise	2,149.00	Dwelling Unit	35.80	2,149,000.00	6146
Regional Shopping Center	96.09	1000sqft	2.20	96,085.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2035
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Master Plan
- Demolition - Master Plan
- Grading - Master Plan
- Architectural Coating - Master Plan
- Woodstoves - No woodstove and fireplace.
- Construction Phase -

Year	lb/day										lb/day					
	2019	12.5625	69.0095	108.4984	0.3349	22.5495	2.3919	24.2746	9.9840	2.2006	12.1846	0.0000	33,936.56 21	33,936.562 1	1.9729	0.0000	33,985.88 41
2020	11.4426	63.0087	99.9051	0.3275	22.5495	1.4611	24.0106	6.0330	1.3740	7.4070	0.0000	33,174.66 59	33,174.665 9	1.8547	0.0000	33,221.03 41
2021	10.4959	57.2295	92.9618	0.3200	22.5495	1.1794	23.7289	6.0330	1.1072	7.1402	0.0000	32,432.22 62	32,432.226 2	1.7651	0.0000	32,476.35 43
2022	9.7697	53.1875	87.1892	0.3119	22.5495	1.0163	23.5658	6.0330	0.9543	6.9873	0.0000	31,629.80 02	31,629.800 2	1.6883	0.0000	31,672.00 81
2023	8.9640	43.3829	81.4822	0.3016	22.5495	0.8699	23.4194	6.0330	0.8161	6.8492	0.0000	30,608.19 19	30,608.191 9	1.5682	0.0000	30,647.39 61
2024	281.7183	42.0178	77.3546	0.2951	22.5495	0.7812	23.3308	6.0330	0.7325	6.7655	0.0000	29,961.54 29	29,961.542 9	1.5204	0.0000	29,999.55 18
Maximum	281.7183	69.0095	108.4984	0.3349	22.5495	2.3919	24.2746	9.9840	2.2006	12.1846	0.0000	33,936.56 21	33,936.562 1	1.9729	0.0000	33,985.88 41

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	12.5625	69.0095	108.4984	0.3349	22.5495	2.3919	24.2746	9.9840	2.2006	12.1846	0.0000	33,936.56 21	33,936.562 1	1.9729	0.0000	33,985.88 41
2020	11.4426	63.0087	99.9051	0.3275	22.5495	1.4611	24.0106	6.0330	1.3740	7.4070	0.0000	33,174.66 59	33,174.665 9	1.8547	0.0000	33,221.03 41
2021	10.4959	57.2295	92.9618	0.3200	22.5495	1.1794	23.7289	6.0330	1.1072	7.1402	0.0000	32,432.22 62	32,432.226 2	1.7651	0.0000	32,476.35 43
2022	9.7697	53.1875	87.1892	0.3119	22.5495	1.0163	23.5658	6.0330	0.9543	6.9873	0.0000	31,629.80 02	31,629.800 2	1.6883	0.0000	31,672.00 81
2023	8.9640	43.3829	81.4822	0.3016	22.5495	0.8699	23.4194	6.0330	0.8161	6.8492	0.0000	30,608.19 19	30,608.191 9	1.5682	0.0000	30,647.39 61
2024	281.7183	42.0178	77.3546	0.2951	22.5495	0.7812	23.3308	6.0330	0.7325	6.7655	0.0000	29,961.54 29	29,961.542 9	1.5204	0.0000	29,999.55 18
Maximum	281.7183	69.0095	108.4984	0.3349	22.5495	2.3919	24.2746	9.9840	2.2006	12.1846	0.0000	33,936.56 21	33,936.562 1	1.9729	0.0000	33,985.88 41

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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2.2 Overall Operational Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	69.7759	2.039	176.755	9.37E-03		0.9835	0.9835		0.9835	0.9835	0	319.4177	319.4177	0.3044	0	327.0266
Energy	0.8116	7.0591	3.8569	0.0443		0.5608	0.5608		0.5608	0.5608		8,854.00	8,854.00	0.1697	0.1623	8,906.62
Mobile	22.2054	126.6024	286.9318	1.5122	162.2762	0.7202	162.9964	43.3958	0.6692	44.065		#####	155,281.22	5.6992		#####
Total	92.793	135.7005	467.5436	1.5658	162.2762	2.2644	164.5406	43.3958	2.2134	45.6092	0	#####	164,454.64	6.1732	0.1623	#####

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	69.7759	2.0390	176.7550	9.3700e-003		0.9835	0.9835		0.9835	0.9835	0.0000	319.4177	319.4177	0.3044	0.0000	327.0266
Energy	0.8116	7.0591	3.8569	0.0443		0.5608	0.5608		0.5608	0.5608		8,854.0016	8,854.0016	0.1697	0.1623	8,906.6165
Mobile	22.2054	126.6024	286.9318	1.5122	162.2762	0.7202	162.9964	43.3958	0.6692	44.0650		155,281.2161	155,281.2161	5.6992		155,423.6953
Total	92.7930	135.7005	467.5436	1.5658	162.2762	2.2644	164.5406	43.3958	2.2134	45.6092	0.0000	164,454.6353	164,454.6353	6.1732	0.1623	164,657.3384

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2019	4/8/2019	5	70	
2	Site Preparation	Site Preparation	4/9/2019	6/3/2019	5	40	
3	Grading	Grading	6/4/2019	11/4/2019	5	110	
4	Building Construction	Building Construction	11/5/2019	2/5/2024	5	1110	
5	Paving	Paving	2/6/2024	5/20/2024	5	75	
6	Architectural Coating	Architectural Coating	5/21/2024	9/2/2024	5	75	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 275

Acres of Paving: 0

Residential Indoor: 4,351,725; Residential Outdoor: 1,450,575; Non-Residential Indoor: 1,225,505; Non-Residential Outdoor: 408,502;

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37

Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	817.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1,809.00	364.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	362.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5245	0.0000	2.5245	0.3822	0.0000	0.3822			0.0000			0.0000

Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697		3,816.8994	3,816.8994	1.0618		3,843.4451
Total	3.5134	35.7830	22.0600	0.0388	2.5245	1.7949	4.3194	0.3822	1.6697	2.0519		3,816.8994	3,816.8994	1.0618		3,843.4451

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1005	3.4751	0.6952	9.1700e-003	0.2039	0.0130	0.2169	0.0559	0.0124	0.0683		993.1215	993.1215	0.0712		994.9022
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0728	0.0510	0.6719	1.7800e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		177.0542	177.0542	5.5500e-003		177.1930
Total	0.1733	3.5261	1.3671	0.0110	0.3715	0.0143	0.3858	0.1003	0.0136	0.1140		1,170.1757	1,170.1757	0.0768		1,172.0951

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5245	0.0000	2.5245	0.3822	0.0000	0.3822			0.0000			0.0000
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451
Total	3.5134	35.7830	22.0600	0.0388	2.5245	1.7949	4.3194	0.3822	1.6697	2.0519	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1005	3.4751	0.6952	9.1700e-003	0.2039	0.0130	0.2169	0.0559	0.0124	0.0683		993.1215	993.1215	0.0712		994.9022
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0728	0.0510	0.6719	1.7800e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		177.0542	177.0542	5.5500e-003		177.1930
Total	0.1733	3.5261	1.3671	0.0110	0.3715	0.0143	0.3858	0.1003	0.0136	0.1140		1,170.1757	1,170.1757	0.0768		1,172.0951

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
Total	4.3350	45.5727	22.0630	0.0380	18.0663	2.3904	20.4566	9.9307	2.1991	12.1298		3,766.4529	3,766.4529	1.1917		3,796.2445

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0874	0.0612	0.8063	2.1300e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4500e-003	0.0548		212.4651	212.4651	6.6600e-003		212.6315
Total	0.0874	0.0612	0.8063	2.1300e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4500e-003	0.0548		212.4651	212.4651	6.6600e-003		212.6315

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
Total	4.3350	45.5727	22.0630	0.0380	18.0663	2.3904	20.4566	9.9307	2.1991	12.1298	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0874	0.0612	0.8063	2.1300e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4500e-003	0.0548		212.4651	212.4651	6.6600e-003		212.6315
Total	0.0874	0.0612	0.8063	2.1300e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4500e-003	0.0548		212.4651	212.4651	6.6600e-003		212.6315

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000				0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920		6,140.0195	6,140.0195	1.9426			6,188.5854
Total	4.7389	54.5202	33.3768	0.0620	8.6733	2.3827	11.0560	3.5965	2.1920	5.7885		6,140.0195	6,140.0195	1.9426			6,188.5854

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0971	0.0680	0.8959	2.3700e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		236.0723	236.0723	7.4000e-003			236.2573
Total	0.0971	0.0680	0.8959	2.3700e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		236.0723	236.0723	7.4000e-003			236.2573

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854
Total	4.7389	54.5202	33.3768	0.0620	8.6733	2.3827	11.0560	3.5965	2.1920	5.7885	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0971	0.0680	0.8959	2.3700e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		236.0723	236.0723	7.4000e-003		236.2573
Total	0.0971	0.0680	0.8959	2.3700e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		236.0723	236.0723	7.4000e-003		236.2573

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635

Total	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.4187	41.7843	10.3036	0.0936	2.3292	0.2770	2.6061	0.6705	0.2650	0.9355		9,992.2428	9,992.2428	0.6723		10,009.0506
Worker	8.7826	6.1465	81.0310	0.2145	20.2204	0.1583	20.3786	5.3625	0.1458	5.5084		21,352.7391	21,352.7391	0.6692		21,369.4701
Total	10.2013	47.9307	91.3346	0.3080	22.5495	0.4352	22.9848	6.0330	0.4108	6.4438		31,344.9820	31,344.9820	1.3416		31,378.5206

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
Total	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.4187	41.7843	10.3036	0.0936	2.3292	0.2770	2.6061	0.6705	0.2650	0.9355		9,992.2428	9,992.2428	0.6723		10,009.0506
Worker	8.7826	6.1465	81.0310	0.2145	20.2204	0.1583	20.3786	5.3625	0.1458	5.5084		21,352.7391	21,352.7391	0.6692		21,369.4701
Total	10.2013	47.9307	91.3346	0.3080	22.5495	0.4352	22.9848	6.0330	0.4108	6.4438		31,344.9820	31,344.9820	1.3416		31,378.5206

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2084	38.3372	9.3255	0.0929	2.3292	0.1898	2.5190	0.6705	0.1816	0.8521		9,929.6037	9,929.6037	0.6356		9,945.4926
Worker	8.1143	5.4854	73.7311	0.2077	20.2204	0.1542	20.3746	5.3625	0.1421	5.5046		20,691.9992	20,691.9992	0.5963		20,706.9070
Total	9.3227	43.8226	83.0566	0.3006	22.5495	0.3440	22.8936	6.0330	0.3236	6.3567		30,621.6028	30,621.6028	1.2319		30,652.3996

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.2084	38.3372	9.3255	0.0929	2.3292	0.1898	2.5190	0.6705	0.1816	0.8521		9,929.6037	9,929.6037	0.6356		9,945.4926
Worker	8.1143	5.4854	73.7311	0.2077	20.2204	0.1542	20.3746	5.3625	0.1421	5.5046		20,691.9992	20,691.9992	0.5963		20,706.9070
Total	9.3227	43.8226	83.0566	0.3006	22.5495	0.3440	22.8936	6.0330	0.3236	6.3567		30,621.6028	30,621.6028	1.2319		30,652.3996

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.0241	34.8593	8.4643	0.0921	2.3292	0.0712	2.4003	0.6705	0.0681	0.7386		9,855.0724	9,855.0724	0.6094		9,870.3078
Worker	7.5709	4.9381	67.9223	0.2010	20.2204	0.1497	20.3700	5.3625	0.1378	5.5004		20,023.7899	20,023.7899	0.5397		20,037.2822
Total	8.5949	39.7974	76.3866	0.2930	22.5495	0.2208	22.7703	6.0330	0.2059	6.2389		29,878.8623	29,878.8623	1.1491		29,907.5900

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.0241	34.8593	8.4643	0.0921	2.3292	0.0712	2.4003	0.6705	0.0681	0.7386		9,855.0724	9,855.0724	0.6094		9,870.3078
Worker	7.5709	4.9381	67.9223	0.2010	20.2204	0.1497	20.3700	5.3625	0.1378	5.5004		20,023.7899	20,023.7899	0.5397		20,037.2822
Total	8.5949	39.7974	76.3866	0.2930	22.5495	0.2208	22.7703	6.0330	0.2059	6.2389		29,878.8623	29,878.8623	1.1491		29,907.5900

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.9610	33.1107	8.0142	0.0912	2.3292	0.0619	2.3911	0.6705	0.0592	0.7297		9,768.6763	9,768.6763	0.5885		9,783.3882
Worker	7.1024	4.4611	62.8116	0.1937	20.2204	0.1454	20.3657	5.3625	0.1339	5.4964		19,306.7903	19,306.7903	0.4879		19,318.9876
Total	8.0634	37.5718	70.8258	0.2849	22.5495	0.2073	22.7568	6.0330	0.1931	6.2261		29,075.4666	29,075.4666	1.0764		29,102.3759

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.9610	33.1107	8.0142	0.0912	2.3292	0.0619	2.3911	0.6705	0.0592	0.7297		9,768.6763	9,768.6763	0.5885		9,783.3882
Worker	7.1024	4.4611	62.8116	0.1937	20.2204	0.1454	20.3657	5.3625	0.1339	5.4964		19,306.7903	19,306.7903	0.4879		19,318.9876
Total	8.0634	37.5718	70.8258	0.2849	22.5495	0.2073	22.7568	6.0330	0.1931	6.2261		29,075.4666	29,075.4666	1.0764		29,102.3759

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.7128	24.9613	7.2342	0.0882	2.3291	0.0286	2.3577	0.6705	0.0273	0.6978		9,465.3273	9,465.3273	0.5202		9,478.3327
Worker	6.6784	4.0368	58.0040	0.1865	20.2204	0.1416	20.3620	5.3625	0.1304	5.4929		18,587.6546	18,587.6546	0.4401		18,598.6574
Total	7.3913	28.9980	65.2382	0.2747	22.5495	0.1702	22.7197	6.0330	0.1577	6.1907		28,052.9819	28,052.9819	0.9603		28,076.9900

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.7128	24.9613	7.2342	0.0882	2.3291	0.0286	2.3577	0.6705	0.0273	0.6978		9,465.3273	9,465.3273	0.5202		9,478.3327
Worker	6.6784	4.0368	58.0040	0.1865	20.2204	0.1416	20.3620	5.3625	0.1304	5.4929		18,587.6546	18,587.6546	0.4401		18,598.6574
Total	7.3913	28.9980	65.2382	0.2747	22.5495	0.1702	22.7197	6.0330	0.1577	6.1907		28,052.9819	28,052.9819	0.9603		28,076.9900

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6974	24.8953	7.0287	0.0879	2.3292	0.0283	2.3574	0.6705	0.0270	0.6975		9,430.6232	9,430.6232	0.5126		9,443.4392
Worker	6.3208	3.6787	54.1591	0.1803	20.2204	0.1397	20.3600	5.3625	0.1286	5.4911		17,975.2209	17,975.2209	0.4034		17,985.3050
Total	7.0182	28.5740	61.1878	0.2681	22.5495	0.1679	22.7175	6.0330	0.1556	6.1886		27,405.8440	27,405.8440	0.9160		27,428.7442

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6974	24.8953	7.0287	0.0879	2.3292	0.0283	2.3574	0.6705	0.0270	0.6975		9,430.6232	9,430.6232	0.5126		9,443.4392
Worker	6.3208	3.6787	54.1591	0.1803	20.2204	0.1397	20.3600	5.3625	0.1286	5.4911		17,975.2209	17,975.2209	0.4034		17,985.3050
Total	7.0182	28.5740	61.1878	0.2681	22.5495	0.1679	22.7175	6.0330	0.1556	6.1886		27,405.8440	27,405.8440	0.9160		27,428.7442

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963

Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310			2,207.5472	2,207.5472	0.7140	2,225.3963

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0524	0.0305	0.4491	1.4900e-003	0.1677	1.1600e-003	0.1688	0.0445	1.0700e-003	0.0455		149.0483	149.0483	3.3400e-003		149.1319
Total	0.0524	0.0305	0.4491	1.4900e-003	0.1677	1.1600e-003	0.1688	0.0445	1.0700e-003	0.0455		149.0483	149.0483	3.3400e-003		149.1319

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0524	0.0305	0.4491	1.4900e-003	0.1677	1.1600e-003	0.1688	0.0445	1.0700e-003	0.0455		149.0483	149.0483	3.3400e-003		149.1319
Total	0.0524	0.0305	0.4491	1.4900e-003	0.1677	1.1600e-003	0.1688	0.0445	1.0700e-003	0.0455		149.0483	149.0483	3.3400e-003		149.1319

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	280.2727					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	280.4535	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2649	0.7362	10.8378	0.0361	4.0463	0.0280	4.0743	1.0731	0.0257	1.0988		3,597.0315	3,597.0315	0.0807		3,599.0494
Total	1.2649	0.7362	10.8378	0.0361	4.0463	0.0280	4.0743	1.0731	0.0257	1.0988		3,597.0315	3,597.0315	0.0807		3,599.0494

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	280.2727					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	280.4535	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.2649	0.7362	10.8378	0.0361	4.0463	0.0280	4.0743	1.0731	0.0257	1.0988		3,597.0315	3,597.0315	0.0807		3,599.0494
Total	1.2649	0.7362	10.8378	0.0361	4.0463	0.0280	4.0743	1.0731	0.0257	1.0988		3,597.0315	3,597.0315	0.0807		3,599.0494

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	22.2054	126.6024	286.9318	1.5122	162.2762	0.7202	162.9964	43.3958	0.6692	44.0650		155,281.2161	155,281.2161	5.6992		155,423.6953
Unmitigated	22.2054	126.6024	286.9318	1.5122	162.2762	0.7202	162.9964	43.3958	0.6692	44.0650		155,281.2161	155,281.2161	5.6992		155,423.6953

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	12,872.51	12,356.75	11325.23	42,954,214	42,954,214
General Office Building	7,158.72	1,593.23	684.87	17,520,919	17,520,919
Regional Shopping Center	3,692.55	4,320.94	2183.05	7,714,162	7,714,162
Total	23,723.77	18,270.92	14,193.15	68,189,295	68,189,295

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.00	19.00	41.00	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735
General Office Building	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735
Regional Shopping Center	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.8116	7.0591	3.8569	0.0443		0.5608	0.5608		0.5608	0.5608		8,854.0016	8,854.0016	0.1697	0.1623	8,906.6165
NaturalGas Unmitigated	0.8116	7.0591	3.8569	0.0443		0.5608	0.5608		0.5608	0.5608		8,854.0016	8,854.0016	0.1697	0.1623	8,906.6165

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	54266.3	0.5852	5.0010	2.1281	0.0319		0.4043	0.4043		0.4043	0.4043		6,384.2721	6,384.2721	0.1224	0.1170	6,422.2106

General Office Building	20561	0.2217	2.0158	1.6933	0.0121		0.1532	0.1532		0.1532	0.1532		2,418.9384	2,418.9384	0.0464	0.0444	2,433.3129
Regional Shopping Center	431.724	4.6600e-003	0.0423	0.0356	2.5000e-004		3.2200e-003	3.2200e-003		3.2200e-003	3.2200e-003		50.7911	50.7911	9.7000e-004	9.3000e-004	51.0929
Total		0.8116	7.0591	3.8569	0.0443		0.5608	0.5608		0.5608	0.5608		8,854.0016	8,854.0016	0.1697	0.1623	8,906.6165

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	54.2663	0.5852	5.0010	2.1281	0.0319		0.4043	0.4043		0.4043	0.4043		6,384.2721	6,384.2721	0.1224	0.1170	6,422.2106
General Office Building	20.561	0.2217	2.0158	1.6933	0.0121		0.1532	0.1532		0.1532	0.1532		2,418.9384	2,418.9384	0.0464	0.0444	2,433.3129
Regional Shopping Center	0.431724	4.6600e-003	0.0423	0.0356	2.5000e-004		3.2200e-003	3.2200e-003		3.2200e-003	3.2200e-003		50.7911	50.7911	9.7000e-004	9.3000e-004	51.0929
Total		0.8116	7.0591	3.8569	0.0443		0.5608	0.5608		0.5608	0.5608		8,854.0016	8,854.0016	0.1697	0.1623	8,906.6165

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	69.7759	2.0390	176.7550	9.3700e-003		0.9835	0.9835		0.9835	0.9835	0.0000	319.4177	319.4177	0.3044	0.0000	327.0266

Unmitigated	69.7759	2.0390	176.7550	9.3700e-003		0.9835	0.9835		0.9835	0.9835	0.0000	319.4177	319.4177	0.3044	0.0000	327.0266
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6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	5.7590					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	58.7269					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.2900	2.0390	176.7550	9.3700e-003		0.9835	0.9835		0.9835	0.9835		319.4177	319.4177	0.3044		327.0266
Total	69.7759	2.0390	176.7550	9.3700e-003		0.9835	0.9835		0.9835	0.9835	0.0000	319.4177	319.4177	0.3044	0.0000	327.0266

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	5.7590					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	58.7269					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.2900	2.0390	176.7550	9.3700e-003		0.9835	0.9835		0.9835	0.9835		319.4177	319.4177	0.3044		327.0266

Total	69.7759	2.0390	176.7550	9.3700e-003		0.9835	0.9835		0.9835	0.9835	0.0000	319.4177	319.4177	0.3044	0.0000	327.0266
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7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Uni Village Operational Winter 2035

CSUDH Campus Master Plan EIR (University Village) - South Coast Air Basin, Winter

CSUDH Campus Master Plan EIR (University Village)
South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	720.92	1000sqft	33.00	720,918.00	0
Apartments Mid Rise	2,149.00	Dwelling Unit	35.80	2,149,000.00	6146
Regional Shopping Center	96.09	1000sqft	2.20	96,085.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2035
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Master Plan
- Demolition - Master Plan
- Grading - Master Plan
- Architectural Coating - Master Plan
- Woodstoves - No woodstove and fireplace.
- Construction Phase -

Year	lb/day										lb/day					
	2019	13.4864	69.6681	102.1961	0.3191	22.5495	2.3919	24.2791	9.9840	2.2006	12.1846	0.0000	32,344.0945	32,344.0945	1.9784	0.0000	32,393.5532
2020	12.3097	63.5343	94.0392	0.3121	22.5495	1.4639	24.0135	6.0330	1.3767	7.4097	0.0000	31,620.6799	31,620.6799	1.8608	0.0000	31,667.1984
2021	11.3194	57.6323	87.4660	0.3050	22.5495	1.1817	23.7312	6.0330	1.1093	7.1424	0.0000	30,920.3240	30,920.3240	1.7724	0.0000	30,964.6340
2022	10.5626	53.5226	82.0302	0.2973	22.5495	1.0183	23.5678	6.0330	0.9562	6.9892	0.0000	30,163.2455	30,163.2455	1.6966	0.0000	30,205.6603
2023	9.7230	43.6422	76.4586	0.2877	22.5495	0.8714	23.4209	6.0330	0.8175	6.8505	0.0000	29,198.7049	29,198.7049	1.5707	0.0000	29,237.9731
2024	281.8592	42.2486	72.6056	0.2815	22.5495	0.7825	23.3321	6.0330	0.7337	6.7668	0.0000	28,591.0653	28,591.0653	1.5239	0.0000	28,629.1625
Maximum	281.8592	69.6681	102.1961	0.3191	22.5495	2.3919	24.2791	9.9840	2.2006	12.1846	0.0000	32,344.0945	32,344.0945	1.9784	0.0000	32,393.5532

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	13.4864	69.6681	102.1961	0.3191	22.5495	2.3919	24.2791	9.9840	2.2006	12.1846	0.0000	32,344.0945	32,344.0945	1.9784	0.0000	32,393.5532
2020	12.3097	63.5343	94.0392	0.3121	22.5495	1.4639	24.0135	6.0330	1.3767	7.4097	0.0000	31,620.6799	31,620.6799	1.8608	0.0000	31,667.1984
2021	11.3194	57.6323	87.4660	0.3050	22.5495	1.1817	23.7312	6.0330	1.1093	7.1424	0.0000	30,920.3240	30,920.3240	1.7724	0.0000	30,964.6340
2022	10.5626	53.5226	82.0302	0.2973	22.5495	1.0183	23.5678	6.0330	0.9562	6.9892	0.0000	30,163.2455	30,163.2455	1.6966	0.0000	30,205.6603
2023	9.7230	43.6422	76.4586	0.2877	22.5495	0.8714	23.4209	6.0330	0.8175	6.8505	0.0000	29,198.7049	29,198.7049	1.5707	0.0000	29,237.9731
2024	281.8592	42.2486	72.6056	0.2815	22.5495	0.7825	23.3321	6.0330	0.7337	6.7668	0.0000	28,591.0653	28,591.0653	1.5239	0.0000	28,629.1625
Maximum	281.8592	69.6681	102.1961	0.3191	22.5495	2.3919	24.2791	9.9840	2.2006	12.1846	0.0000	32,344.0945	32,344.0945	1.9784	0.0000	32,393.5532

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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2.2 Overall Operational Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	69.7759	2.0390	176.7550	9.3700e-003		0.9835	0.9835		0.9835	0.9835	0.0000	319.4177	319.4177	0.3044	0.0000	327.0266
Energy	0.8116	7.0591	3.8569	0.0443		0.5608	0.5608		0.5608	0.5608		8,854.0016	8,854.0016	0.1697	0.1623	8,906.6165
Mobile	21.2661	127.5759	270.1318	1.4377	162.2762	0.7220	162.9982	43.3958	0.6709	44.0667		147,750.3122	147,750.3122	5.7552		147,894.1931
Total	91.8536	136.6741	450.7436	1.4913	162.2762	2.2662	164.5424	43.3958	2.2152	45.6110	0.0000	156,923.7315	156,923.7315	6.2293	0.1623	157,127.8362

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	69.7759	2.0390	176.7550	9.3700e-003		0.9835	0.9835		0.9835	0.9835	0.0000	319.4177	319.4177	0.3044	0.0000	327.0266
Energy	0.8116	7.0591	3.8569	0.0443		0.5608	0.5608		0.5608	0.5608		8,854.0016	8,854.0016	0.1697	0.1623	8,906.6165
Mobile	21.2661	127.5759	270.1318	1.4377	162.2762	0.7220	162.9982	43.3958	0.6709	44.0667		147,750.3122	147,750.3122	5.7552		147,894.1931
Total	91.8536	136.6741	450.7436	1.4913	162.2762	2.2662	164.5424	43.3958	2.2152	45.6110	0.0000	156,923.7315	156,923.7315	6.2293	0.1623	157,127.8362

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2019	4/8/2019	5	70	
2	Site Preparation	Site Preparation	4/9/2019	6/3/2019	5	40	
3	Grading	Grading	6/4/2019	11/4/2019	5	110	
4	Building Construction	Building Construction	11/5/2019	2/5/2024	5	1110	
5	Paving	Paving	2/6/2024	5/20/2024	5	75	
6	Architectural Coating	Architectural Coating	5/21/2024	9/2/2024	5	75	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 275

Acres of Paving: 0

Residential Indoor: 4,351,725; Residential Outdoor: 1,450,575; Non-Residential Indoor: 1,225,505; Non-Residential Outdoor: 408,502;

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37

Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	817.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1,809.00	364.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	362.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5245	0.0000	2.5245	0.3822	0.0000	0.3822			0.0000			0.0000

Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697		3,816.8994	3,816.8994	1.0618		3,843.4451
Total	3.5134	35.7830	22.0600	0.0388	2.5245	1.7949	4.3194	0.3822	1.6697	2.0519		3,816.8994	3,816.8994	1.0618		3,843.4451

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1032	3.5224	0.7461	9.0100e-003	0.2039	0.0132	0.2171	0.0559	0.0127	0.0685		976.4239	976.4239	0.0741		978.2763
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0800	0.0560	0.6105	1.6700e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		166.0751	166.0751	5.2100e-003		166.2053
Total	0.1832	3.5784	1.3566	0.0107	0.3715	0.0145	0.3861	0.1003	0.0139	0.1142		1,142.4990	1,142.4990	0.0793		1,144.4815

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5245	0.0000	2.5245	0.3822	0.0000	0.3822			0.0000			0.0000
Off-Road	3.5134	35.7830	22.0600	0.0388		1.7949	1.7949		1.6697	1.6697	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451
Total	3.5134	35.7830	22.0600	0.0388	2.5245	1.7949	4.3194	0.3822	1.6697	2.0519	0.0000	3,816.8994	3,816.8994	1.0618		3,843.4451

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1032	3.5224	0.7461	9.0100e-003	0.2039	0.0132	0.2171	0.0559	0.0127	0.0685		976.4239	976.4239	0.0741		978.2763
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0800	0.0560	0.6105	1.6700e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		166.0751	166.0751	5.2100e-003		166.2053
Total	0.1832	3.5784	1.3566	0.0107	0.3715	0.0145	0.3861	0.1003	0.0139	0.1142		1,142.4990	1,142.4990	0.0793		1,144.4815

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991		3,766.4529	3,766.4529	1.1917		3,796.2445
Total	4.3350	45.5727	22.0630	0.0380	18.0663	2.3904	20.4566	9.9307	2.1991	12.1298		3,766.4529	3,766.4529	1.1917		3,796.2445

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0960	0.0672	0.7326	2.0000e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4500e-003	0.0548		199.2901	199.2901	6.2500e-003		199.4463
Total	0.0960	0.0672	0.7326	2.0000e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4500e-003	0.0548		199.2901	199.2901	6.2500e-003		199.4463

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.3350	45.5727	22.0630	0.0380		2.3904	2.3904		2.1991	2.1991	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445
Total	4.3350	45.5727	22.0630	0.0380	18.0663	2.3904	20.4566	9.9307	2.1991	12.1298	0.0000	3,766.4529	3,766.4529	1.1917		3,796.2445

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0960	0.0672	0.7326	2.0000e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4500e-003	0.0548		199.2901	199.2901	6.2500e-003		199.4463
Total	0.0960	0.0672	0.7326	2.0000e-003	0.2012	1.5700e-003	0.2028	0.0534	1.4500e-003	0.0548		199.2901	199.2901	6.2500e-003		199.4463

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920		6,140.0195	6,140.0195	1.9426		6,188.5854
Total	4.7389	54.5202	33.3768	0.0620	8.6733	2.3827	11.0560	3.5965	2.1920	5.7885		6,140.0195	6,140.0195	1.9426		6,188.5854

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1066	0.0747	0.8139	2.2200e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		221.4335	221.4335	6.9400e-003		221.6070
Total	0.1066	0.0747	0.8139	2.2200e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		221.4335	221.4335	6.9400e-003		221.6070

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.7389	54.5202	33.3768	0.0620		2.3827	2.3827		2.1920	2.1920	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854
Total	4.7389	54.5202	33.3768	0.0620	8.6733	2.3827	11.0560	3.5965	2.1920	5.7885	0.0000	6,140.0195	6,140.0195	1.9426		6,188.5854

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1066	0.0747	0.8139	2.2200e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		221.4335	221.4335	6.9400e-003		221.6070
Total	0.1066	0.0747	0.8139	2.2200e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		221.4335	221.4335	6.9400e-003		221.6070

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635

Total	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127		2,591.5802	2,591.5802	0.6313		2,607.3635
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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.4799	41.8357	11.4112	0.0911	2.3292	0.2814	2.6106	0.6705	0.2692	0.9397		9,723.8569	9,723.8569	0.7191		9,741.8336
Worker	9.6453	6.7536	73.6212	0.2011	20.2204	0.1583	20.3786	5.3625	0.1458	5.5084		20,028.6575	20,028.6575	0.6280		20,044.3562
Total	11.1252	48.5893	85.0323	0.2922	22.5495	0.4397	22.9892	6.0330	0.4150	6.4481		29,752.5144	29,752.5144	1.3470		29,786.1897

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635
Total	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	0.0000	2,591.5802	2,591.5802	0.6313		2,607.3635

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.4799	41.8357	11.4112	0.0911	2.3292	0.2814	2.6106	0.6705	0.2692	0.9397		9,723.8569	9,723.8569	0.7191		9,741.8336
Worker	9.6453	6.7536	73.6212	0.2011	20.2204	0.1583	20.3786	5.3625	0.1458	5.5084		20,028.6575	20,028.6575	0.6280		20,044.3562
Total	11.1252	48.5893	85.0323	0.2922	22.5495	0.4397	22.9892	6.0330	0.4150	6.4481		29,752.5144	29,752.5144	1.3470		29,786.1897

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2636	38.3228	10.3332	0.0904	2.3292	0.1927	2.5218	0.6705	0.1843	0.8548		9,659.7371	9,659.7371	0.6793		9,676.7185
Worker	8.9262	6.0255	66.8575	0.1948	20.2204	0.1542	20.3746	5.3625	0.1421	5.5046		19,407.8797	19,407.8797	0.5586		19,421.8454
Total	10.1899	44.3483	77.1907	0.2852	22.5495	0.3469	22.8964	6.0330	0.3264	6.3594		29,067.6168	29,067.6168	1.2379		29,098.5639

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.2636	38.3228	10.3332	0.0904	2.3292	0.1927	2.5218	0.6705	0.1843	0.8548		9,659.7371	9,659.7371	0.6793		9,676.7185
Worker	8.9262	6.0255	66.8575	0.1948	20.2204	0.1542	20.3746	5.3625	0.1421	5.5046		19,407.8797	19,407.8797	0.5586		19,421.8454
Total	10.1899	44.3483	77.1907	0.2852	22.5495	0.3469	22.8964	6.0330	0.3264	6.3594		29,067.6168	29,067.6168	1.2379		29,098.5639

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.0759	34.7772	9.4089	0.0896	2.3292	0.0734	2.4026	0.6705	0.0702	0.7407		9,586.8057	9,586.8057	0.6513		9,603.0878
Worker	8.3426	5.4230	61.4819	0.1885	20.2204	0.1497	20.3700	5.3625	0.1378	5.5004		18,780.1544	18,780.1544	0.5051		18,792.7819
Total	9.4185	40.2002	70.8908	0.2781	22.5495	0.2231	22.7726	6.0330	0.2080	6.2411		28,366.9601	28,366.9601	1.1564		28,395.8697

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.0759	34.7772	9.4089	0.0896	2.3292	0.0734	2.4026	0.6705	0.0702	0.7407		9,586.8057	9,586.8057	0.6513		9,603.0878
Worker	8.3426	5.4230	61.4819	0.1885	20.2204	0.1497	20.3700	5.3625	0.1378	5.5004		18,780.1544	18,780.1544	0.5051		18,792.7819
Total	9.4185	40.2002	70.8908	0.2781	22.5495	0.2231	22.7726	6.0330	0.2080	6.2411		28,366.9601	28,366.9601	1.1564		28,395.8697

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.0099	33.0090	8.9115	0.0887	2.3292	0.0639	2.3931	0.6705	0.0611	0.7316		9,501.2048	9,501.2048	0.6284		9,516.9155
Worker	7.8465	4.8980	56.7553	0.1817	20.2204	0.1454	20.3657	5.3625	0.1339	5.4964		18,107.7071	18,107.7071	0.4562		18,119.1126
Total	8.8564	37.9070	65.6668	0.2704	22.5495	0.2093	22.7588	6.0330	0.1950	6.2281		27,608.9119	27,608.9119	1.0847		27,636.0281

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.0099	33.0090	8.9115	0.0887	2.3292	0.0639	2.3931	0.6705	0.0611	0.7316		9,501.2048	9,501.2048	0.6284		9,516.9155
Worker	7.8465	4.8980	56.7553	0.1817	20.2204	0.1454	20.3657	5.3625	0.1339	5.4964		18,107.7071	18,107.7071	0.4562		18,119.1126
Total	8.8564	37.9070	65.6668	0.2704	22.5495	0.2093	22.7588	6.0330	0.1950	6.2281		27,608.9119	27,608.9119	1.0847		27,636.0281

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.7497	24.8267	7.9029	0.0859	2.3291	0.0300	2.3592	0.6705	0.0287	0.6992		9,210.2962	9,210.2962	0.5518		9,224.0911
Worker	7.4005	4.4305	52.3117	0.1749	20.2204	0.1416	20.3620	5.3625	0.1304	5.4929		17,433.1988	17,433.1988	0.4111		17,443.4759
Total	8.1503	29.2573	60.2146	0.2608	22.5495	0.1716	22.7211	6.0330	0.1591	6.1921		26,643.4950	26,643.4950	0.9629		26,667.5670

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.7497	24.8267	7.9029	0.0859	2.3291	0.0300	2.3592	0.6705	0.0287	0.6992		9,210.2962	9,210.2962	0.5518		9,224.0911
Worker	7.4005	4.4305	52.3117	0.1749	20.2204	0.1416	20.3620	5.3625	0.1304	5.4929		17,433.1988	17,433.1988	0.4111		17,443.4759
Total	8.1503	29.2573	60.2146	0.2608	22.5495	0.1716	22.7211	6.0330	0.1591	6.1921		26,643.4950	26,643.4950	0.9629		26,667.5670

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.7330	24.7686	7.6781	0.0855	2.3292	0.0296	2.3587	0.6705	0.0283	0.6988		9,178.3353	9,178.3353	0.5433		9,191.9165
Worker	7.0249	4.0362	48.7607	0.1690	20.2204	0.1397	20.3600	5.3625	0.1286	5.4911		16,857.0311	16,857.0311	0.3763		16,866.4383
Total	7.7579	28.8048	56.4388	0.2546	22.5495	0.1692	22.7187	6.0330	0.1568	6.1899		26,035.3664	26,035.3664	0.9195		26,058.3549

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.7330	24.7686	7.6781	0.0855	2.3292	0.0296	2.3587	0.6705	0.0283	0.6988		9,178.3353	9,178.3353	0.5433		9,191.9165
Worker	7.0249	4.0362	48.7607	0.1690	20.2204	0.1397	20.3600	5.3625	0.1286	5.4911		16,857.0311	16,857.0311	0.3763		16,866.4383
Total	7.7579	28.8048	56.4388	0.2546	22.5495	0.1692	22.7187	6.0330	0.1568	6.1899		26,035.3664	26,035.3664	0.9195		26,058.3549

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963

Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0583	0.0335	0.4043	1.4000e-003	0.1677	1.1600e-003	0.1688	0.0445	1.0700e-003	0.0455		139.7764	139.7764	3.1200e-003		139.8544
Total	0.0583	0.0335	0.4043	1.4000e-003	0.1677	1.1600e-003	0.1688	0.0445	1.0700e-003	0.0455		139.7764	139.7764	3.1200e-003		139.8544

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0583	0.0335	0.4043	1.4000e-003	0.1677	1.1600e-003	0.1688	0.0445	1.0700e-003	0.0455		139.7764	139.7764	3.1200e-003		139.8544
Total	0.0583	0.0335	0.4043	1.4000e-003	0.1677	1.1600e-003	0.1688	0.0445	1.0700e-003	0.0455		139.7764	139.7764	3.1200e-003		139.8544

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	280.2727					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	280.4535	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4058	0.8077	9.7575	0.0338	4.0463	0.0280	4.0743	1.0731	0.0257	1.0988		3,373.2699	3,373.2699	0.0753		3,375.1524
Total	1.4058	0.8077	9.7575	0.0338	4.0463	0.0280	4.0743	1.0731	0.0257	1.0988		3,373.2699	3,373.2699	0.0753		3,375.1524

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	280.2727					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	280.4535	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.4058	0.8077	9.7575	0.0338	4.0463	0.0280	4.0743	1.0731	0.0257	1.0988		3,373.2699	3,373.2699	0.0753		3,375.1524
Total	1.4058	0.8077	9.7575	0.0338	4.0463	0.0280	4.0743	1.0731	0.0257	1.0988		3,373.2699	3,373.2699	0.0753		3,375.1524

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	21.2661	127.5759	270.1318	1.4377	162.2762	0.7220	162.9982	43.3958	0.6709	44.0667		147,750.3122	147,750.3122	5.7552		147,894.1931
Unmitigated	21.2661	127.5759	270.1318	1.4377	162.2762	0.7220	162.9982	43.3958	0.6709	44.0667		147,750.3122	147,750.3122	5.7552		147,894.1931

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	12,872.51	12,356.75	11325.23	42,954,214	42,954,214
General Office Building	7,158.72	1,593.23	684.87	17,520,919	17,520,919
Regional Shopping Center	3,692.55	4,320.94	2183.05	7,714,162	7,714,162
Total	23,723.77	18,270.92	14,193.15	68,189,295	68,189,295

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.00	19.00	41.00	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735
General Office Building	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735
Regional Shopping Center	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.8116	7.0591	3.8569	0.0443		0.5608	0.5608		0.5608	0.5608		8,854.0016	8,854.0016	0.1697	0.1623	8,906.6165
NaturalGas Unmitigated	0.8116	7.0591	3.8569	0.0443		0.5608	0.5608		0.5608	0.5608		8,854.0016	8,854.0016	0.1697	0.1623	8,906.6165

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	54266.3	0.5852	5.0010	2.1281	0.0319		0.4043	0.4043		0.4043	0.4043		6,384.2721	6,384.2721	0.1224	0.1170	6,422.2106

General Office Building	20561	0.2217	2.0158	1.6933	0.0121		0.1532	0.1532		0.1532	0.1532		2,418.9384	2,418.9384	0.0464	0.0444	2,433.3129
Regional Shopping Center	431.724	4.6600e-003	0.0423	0.0356	2.5000e-004		3.2200e-003	3.2200e-003		3.2200e-003	3.2200e-003		50.7911	50.7911	9.7000e-004	9.3000e-004	51.0929
Total		0.8116	7.0591	3.8569	0.0443		0.5608	0.5608		0.5608	0.5608		8,854.0016	8,854.0016	0.1697	0.1623	8,906.6165

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	54.2663	0.5852	5.0010	2.1281	0.0319		0.4043	0.4043		0.4043	0.4043		6,384.2721	6,384.2721	0.1224	0.1170	6,422.2106
General Office Building	20.561	0.2217	2.0158	1.6933	0.0121		0.1532	0.1532		0.1532	0.1532		2,418.9384	2,418.9384	0.0464	0.0444	2,433.3129
Regional Shopping Center	0.431724	4.6600e-003	0.0423	0.0356	2.5000e-004		3.2200e-003	3.2200e-003		3.2200e-003	3.2200e-003		50.7911	50.7911	9.7000e-004	9.3000e-004	51.0929
Total		0.8116	7.0591	3.8569	0.0443		0.5608	0.5608		0.5608	0.5608		8,854.0016	8,854.0016	0.1697	0.1623	8,906.6165

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	69.7759	2.0390	176.7550	9.3700e-003		0.9835	0.9835		0.9835	0.9835	0.0000	319.4177	319.4177	0.3044	0.0000	327.0266

Unmitigated	69.7759	2.0390	176.7550	9.3700e-003		0.9835	0.9835		0.9835	0.9835	0.0000	319.4177	319.4177	0.3044	0.0000	327.0266
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6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	5.7590					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	58.7269					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.2900	2.0390	176.7550	9.3700e-003		0.9835	0.9835		0.9835	0.9835		319.4177	319.4177	0.3044		327.0266
Total	69.7759	2.0390	176.7550	9.3700e-003		0.9835	0.9835		0.9835	0.9835	0.0000	319.4177	319.4177	0.3044	0.0000	327.0266

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	5.7590					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	58.7269					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.2900	2.0390	176.7550	9.3700e-003		0.9835	0.9835		0.9835	0.9835		319.4177	319.4177	0.3044		327.0266

Total	69.7759	2.0390	176.7550	9.3700e-003		0.9835	0.9835		0.9835	0.9835	0.0000	319.4177	319.4177	0.3044	0.0000	327.0266
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7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Construction 2025

Campus Construction Annual 2025

CSUDH Campus Master Plan EIR (Interim 2025 Campus Construction) - South Coast Air Basin, Annual

CSUDH Campus Master Plan EIR (Interim 2025 Campus Construction)
South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
University/College (4Yr)	2,169.00	Student	11.80	1,862,200.00	0
Apartments Mid Rise	150.00	Dwelling Unit	2.00	242,000.00	300
Day-Care Center	110.00	Student	1.00	5,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Master Plan
- Construction Phase - Adjusted.
- Grading - Master Plan
- Demolition - Master Plan
- Vehicle Trips - Master Plan
- Woodstoves - No woodstove and fireplace.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	100.00
tblConstructionPhase	PhaseEndDate	7/12/2024	11/1/2024
tblFireplaces	NumberGas	127.50	0.00
tblFireplaces	NumberNoFireplace	15.00	0.00
tblFireplaces	NumberWood	7.50	0.00
tblGrading	AcresOfGrading	75.00	14.80
tblGrading	AcresOfGrading	0.00	14.80
tblLandUse	LandUseSquareFeet	398,656.71	1,862,200.00
tblLandUse	LandUseSquareFeet	150,000.00	242,000.00
tblLandUse	LandUseSquareFeet	6,217.51	5,800.00
tblLandUse	LotAcreage	9.15	11.80
tblLandUse	LotAcreage	3.95	2.00
tblLandUse	LotAcreage	0.14	1.00
tblLandUse	Population	429.00	300.00
tblVehicleTrips	HO_TTP	40.60	41.00
tblVehicleTrips	HS_TTP	19.20	19.00
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	6.39	1.42
tblVehicleTrips	ST_TR	1.30	1.24
tblVehicleTrips	SU_TR	5.86	1.42
tblVehicleTrips	WD_TR	6.65	1.42
tblVehicleTrips	WD_TR	1.71	1.63
tblWoodstoves	NumberCatalytic	7.50	0.00
tblWoodstoves	NumberNoncatalytic	7.50	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.6382	4.782	5.6797	0.0208	1.4102	0.1173	1.5275	0.4254	0.1096	0.5349	0	1,920.81	1,920.81	0.1588	0	1,924.78
2024	9.7265	2.0639	2.8605	0.0107	0.6912	0.0438	0.735	0.1859	0.0412	0.2271	0	984.4169	984.4169	0.066	0	986.0679
Maximum	9.7265	4.782	5.6797	0.0208	1.4102	0.1173	1.5275	0.4254	0.1096	0.5349	0	1,920.81	1,920.81	0.1588	0	1,924.78

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.6382	4.7820	5.6797	0.0208	1.4102	0.1173	1.5275	0.4254	0.1096	0.5349	0.0000	1,920.8055	1,920.8055	0.1588	0.0000	1,924.7748
2024	9.7265	2.0639	2.8605	0.0107	0.6912	0.0438	0.7350	0.1859	0.0412	0.2271	0.0000	984.4167	984.4167	0.0660	0.0000	986.0677
Maximum	9.7265	4.7820	5.6797	0.0208	1.4102	0.1173	1.5275	0.4254	0.1096	0.5349	0.0000	1,920.8055	1,920.8055	0.1588	0.0000	1,924.7748

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2023	3-31-2023	1.0788	1.0788
2	4-1-2023	6-30-2023	1.4287	1.4287
3	7-1-2023	9-30-2023	1.4444	1.4444
4	10-1-2023	12-31-2023	1.4596	1.4596

5	1-1-2024	3-31-2024	1.3954	1.3954
6	4-1-2024	6-30-2024	1.9089	1.9089
7	7-1-2024	9-30-2024	6.2657	6.2657
		Highest	6.2657	6.2657

2.2 Overall Operational Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	8.6151	0.0181	1.5744	8.0000e-005		8.6800e-003	8.6800e-003		8.6800e-003	8.6800e-003	0.0000	2.5834	2.5834	2.5700e-003	0.0000	2.6476
Energy	0.2797	2.5386	2.1061	0.0153		0.1933	0.1933		0.1933	0.1933	0.0000	8,913.4868	8,913.4868	0.3068	0.1032	8,951.9214
Mobile	0.7759	3.7865	9.9384	0.0412	3.7916	0.0302	3.8218	1.0157	0.0280	1.0438	0.0000	3,813.0325	3,813.0325	0.1683	0.0000	3,817.2397
Waste						0.0000	0.0000		0.0000	0.0000	98.4324	0.0000	98.4324	5.8172	0.0000	243.8620
Water						0.0000	0.0000		0.0000	0.0000	4.6585	110.8703	115.5288	0.4831	0.0122	131.2540
Total	9.6707	6.3432	13.6189	0.0565	3.7916	0.2321	4.0238	1.0157	0.2300	1.2457	103.0909	12,839.9730	12,943.0638	6.7779	0.1155	13,146.9246

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	8.6151	0.0181	1.5744	8.0000e-005		8.6800e-003	8.6800e-003		8.6800e-003	8.6800e-003	0.0000	2.5834	2.5834	2.5700e-003	0.0000	2.6476
Energy	0.2797	2.5386	2.1061	0.0153		0.1933	0.1933		0.1933	0.1933	0.0000	8,913.4868	8,913.4868	0.3068	0.1032	8,951.9214

Mobile	0.7759	3.7865	9.9384	0.0412	3.7916	0.0302	3.8218	1.0157	0.0280	1.0438	0.0000	3,813.0325	3,813.0325	0.1683	0.0000	3,817.2397
Waste						0.0000	0.0000		0.0000	0.0000	98.4324	0.0000	98.4324	5.8172	0.0000	243.8620
Water						0.0000	0.0000		0.0000	0.0000	4.6585	110.8703	115.5288	0.4831	0.0122	131.2540
Total	9.6707	6.3432	13.6189	0.0565	3.7916	0.2321	4.0238	1.0157	0.2300	1.2457	103.0909	12,839.9730	12,943.0638	6.7779	0.1155	13,146.9246

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2023	1/27/2023	5	20	
2	Site Preparation	Site Preparation	1/28/2023	2/10/2023	5	10	
3	Grading	Grading	2/11/2023	3/24/2023	5	30	
4	Building Construction	Building Construction	3/25/2023	5/17/2024	5	300	
5	Paving	Paving	5/18/2024	6/14/2024	5	20	
6	Architectural Coating	Architectural Coating	6/15/2024	11/1/2024	5	100	

Acres of Grading (Site Preparation Phase): 14.8

Acres of Grading (Grading Phase): 14.8

Acres of Paving: 0

Residential Indoor: 490,050; Residential Outdoor: 163,350; Non-Residential Indoor: 2,802,000; Non-Residential Outdoor: 934,000;

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38

Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	179.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	893.00	322.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	15.00	0.00	216.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0234	0.0000	0.0234	3.5400e-003	0.0000	3.5400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0227	0.2148	0.1964	3.9000e-004	9.9800e-003	9.9800e-003	9.9800e-003	9.2800e-003	9.2800e-003	9.2800e-003	0.0000	33.9921	33.9921	9.5200e-003	0.0000	34.2301
Total	0.0227	0.2148	0.1964	3.9000e-004	0.0234	9.9800e-003	0.0334	3.5400e-003	9.2800e-003	0.0128	0.0000	33.9921	33.9921	9.5200e-003	0.0000	34.2301

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.2000e-004	0.0171	5.7000e-003	8.0000e-005	1.8600e-003	3.0000e-005	1.8900e-003	5.1000e-004	3.0000e-005	5.4000e-004	0.0000	7.6800	7.6800	5.3000e-004	0.0000	7.6933
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5000e-004	3.8000e-004	4.4600e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3320	1.3320	3.0000e-005	0.0000	1.3328
Total	1.0700e-003	0.0175	0.0102	9.0000e-005	3.5100e-003	4.0000e-005	3.5500e-003	9.5000e-004	4.0000e-005	9.9000e-004	0.0000	9.0120	9.0120	5.6000e-004	0.0000	9.0261

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr										MT/yr					
Fugitive Dust					0.0234	0.0000	0.0234	3.5400e-003	0.0000	3.5400e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0227	0.2148	0.1964	3.9000e-004	9.9800e-003	9.9800e-003		9.2800e-003	9.2800e-003		0.0000	33.9920	33.9920	9.5200e-003	0.0000	34.2300
Total	0.0227	0.2148	0.1964	3.9000e-004	0.0234	9.9800e-003	0.0334	3.5400e-003	9.2800e-003	0.0128	0.0000	33.9920	33.9920	9.5200e-003	0.0000	34.2300

Mitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.2000e-004	0.0171	5.7000e-003	8.0000e-005	1.8600e-003	3.0000e-005	1.8900e-003	5.1000e-004	3.0000e-005	5.4000e-004	0.0000	7.6800	7.6800	5.3000e-004	0.0000	7.6933
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5000e-004	3.8000e-004	4.4600e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3320	1.3320	3.0000e-005	0.0000	1.3328
Total	1.0700e-003	0.0175	0.0102	9.0000e-005	3.5100e-003	4.0000e-005	3.5500e-003	9.5000e-004	4.0000e-005	9.9000e-004	0.0000	9.0120	9.0120	5.6000e-004	0.0000	9.0261

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0982	0.0000	0.0982	0.0505	0.0000	0.0505	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1376	0.0912	1.9000e-004		6.3300e-003	6.3300e-003		5.8200e-003	5.8200e-003	0.0000	16.7254	16.7254	5.4100e-003	0.0000	16.8606

Total	0.0133	0.1376	0.0912	1.9000e-004	0.0982	6.3300e-003	0.1045	0.0505	5.8200e-003	0.0563	0.0000	16.7254	16.7254	5.4100e-003	0.0000	16.8606
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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e-004	2.3000e-004	2.6700e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.7992	0.7992	2.0000e-005	0.0000	0.7997
Total	3.3000e-004	2.3000e-004	2.6700e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.7992	0.7992	2.0000e-005	0.0000	0.7997

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0982	0.0000	0.0982	0.0505	0.0000	0.0505	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1376	0.0912	1.9000e-004		6.3300e-003	6.3300e-003		5.8200e-003	5.8200e-003	0.0000	16.7253	16.7253	5.4100e-003	0.0000	16.8606
Total	0.0133	0.1376	0.0912	1.9000e-004	0.0982	6.3300e-003	0.1045	0.0505	5.8200e-003	0.0563	0.0000	16.7253	16.7253	5.4100e-003	0.0000	16.8606

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e-004	2.3000e-004	2.6700e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.7992	0.7992	2.0000e-005	0.0000	0.7997
Total	3.3000e-004	2.3000e-004	2.6700e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.7992	0.7992	2.0000e-005	0.0000	0.7997

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0982	0.0000	0.0982	0.0505	0.0000	0.0505	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0498	0.5177	0.4208	9.3000e-004		0.0214	0.0214		0.0197	0.0197	0.0000	81.8028	81.8028	0.0265	0.0000	82.4642
Total	0.0498	0.5177	0.4208	9.3000e-004	0.0982	0.0214	0.1196	0.0505	0.0197	0.0702	0.0000	81.8028	81.8028	0.0265	0.0000	82.4642

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-003	7.6000e-004	8.9100e-003	3.0000e-005	3.2900e-003	2.0000e-005	3.3100e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	2.6641	2.6641	6.0000e-005	0.0000	2.6656
Total	1.1000e-003	7.6000e-004	8.9100e-003	3.0000e-005	3.2900e-003	2.0000e-005	3.3100e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	2.6641	2.6641	6.0000e-005	0.0000	2.6656

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0982	0.0000	0.0982	0.0505	0.0000	0.0505	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0498	0.5177	0.4208	9.3000e-004		0.0214	0.0214		0.0197	0.0197	0.0000	81.8027	81.8027	0.0265	0.0000	82.4641
Total	0.0498	0.5177	0.4208	9.3000e-004	0.0982	0.0214	0.1196	0.0505	0.0197	0.0702	0.0000	81.8027	81.8027	0.0265	0.0000	82.4641

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-003	7.6000e-004	8.9100e-003	3.0000e-005	3.2900e-003	2.0000e-005	3.3100e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	2.6641	2.6641	6.0000e-005	0.0000	2.6656
Total	1.1000e-003	7.6000e-004	8.9100e-003	3.0000e-005	3.2900e-003	2.0000e-005	3.3100e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	2.6641	2.6641	6.0000e-005	0.0000	2.6656

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1573	1.4385	1.6244	2.6900e-003		0.0700	0.0700		0.0658	0.0658	0.0000	231.8048	231.8048	0.0551	0.0000	233.1833
Total	0.1573	1.4385	1.6244	2.6900e-003		0.0700	0.0700		0.0658	0.0658	0.0000	231.8048	231.8048	0.0551	0.0000	233.1833

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0645	2.2297	0.6716	7.7200e-003	0.2029	2.5800e-003	0.2055	0.0586	2.4700e-003	0.0610	0.0000	751.0059	751.0059	0.0429	0.0000	752.0779
Worker	0.3282	0.2251	2.6535	8.7700e-003	0.9797	6.9900e-003	0.9867	0.2602	6.4400e-003	0.2666	0.0000	792.9998	792.9998	0.0187	0.0000	793.4677
Total	0.3926	2.4548	3.3251	0.0165	1.1827	9.5700e-003	1.1922	0.3188	8.9100e-003	0.3277	0.0000	1,544.0057	1,544.0057	0.0616	0.0000	1,545.5456

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1573	1.4385	1.6244	2.6900e-003		0.0700	0.0700		0.0658	0.0658	0.0000	231.8045	231.8045	0.0551	0.0000	233.1830
Total	0.1573	1.4385	1.6244	2.6900e-003		0.0700	0.0700		0.0658	0.0658	0.0000	231.8045	231.8045	0.0551	0.0000	233.1830

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0645	2.2297	0.6716	7.7200e-003	0.2029	2.5800e-003	0.2055	0.0586	2.4700e-003	0.0610	0.0000	751.0059	751.0059	0.0429	0.0000	752.0779
Worker	0.3282	0.2251	2.6535	8.7700e-003	0.9797	6.9900e-003	0.9867	0.2602	6.4400e-003	0.2666	0.0000	792.9998	792.9998	0.0187	0.0000	793.4677
Total	0.3926	2.4548	3.3251	0.0165	1.1827	9.5700e-003	1.1922	0.3188	8.9100e-003	0.3277	0.0000	1,544.0057	1,544.0057	0.0616	0.0000	1,545.5456

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0736	0.6722	0.8083	1.3500e-003		0.0307	0.0307		0.0288	0.0288	0.0000	115.9246	115.9246	0.0274	0.0000	116.6099

Total	0.0736	0.6722	0.8083	1.3500e-003		0.0307	0.0307		0.0288	0.0288	0.0000	115.9246	115.9246	0.0274	0.0000	116.6099
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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0315	1.1121	0.3262	3.8400e-003	0.1015	1.2700e-003	0.1027	0.0293	1.2200e-003	0.0305	0.0000	374.1566	374.1566	0.0211	0.0000	374.6846
Worker	0.1555	0.1026	1.2371	4.2400e-003	0.4899	3.4500e-003	0.4933	0.1301	3.1700e-003	0.1333	0.0000	383.4026	383.4026	8.5700e-003	0.0000	383.6168
Total	0.1870	1.2146	1.5632	8.0800e-003	0.5913	4.7200e-003	0.5961	0.1594	4.3900e-003	0.1638	0.0000	757.5593	757.5593	0.0297	0.0000	758.3014

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0736	0.6722	0.8083	1.3500e-003		0.0307	0.0307		0.0288	0.0288	0.0000	115.9244	115.9244	0.0274	0.0000	116.6097
Total	0.0736	0.6722	0.8083	1.3500e-003		0.0307	0.0307		0.0288	0.0288	0.0000	115.9244	115.9244	0.0274	0.0000	116.6097

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0315	1.1121	0.3262	3.8400e-003	0.1015	1.2700e-003	0.1027	0.0293	1.2200e-003	0.0305	0.0000	374.1566	374.1566	0.0211	0.0000	374.6846
Worker	0.1555	0.1026	1.2371	4.2400e-003	0.4899	3.4500e-003	0.4933	0.1301	3.1700e-003	0.1333	0.0000	383.4026	383.4026	8.5700e-003	0.0000	383.6168
Total	0.1870	1.2146	1.5632	8.0800e-003	0.5913	4.7200e-003	0.5961	0.1594	4.3900e-003	0.1638	0.0000	757.5593	757.5593	0.0297	0.0000	758.3014

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8800e-003	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1885
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.8800e-003	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1885

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	3.4000e-004	4.1600e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.2880	1.2880	3.0000e-005	0.0000	1.2888
Total	5.2000e-004	3.4000e-004	4.1600e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.2880	1.2880	3.0000e-005	0.0000	1.2888

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8800e-003	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1884
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.8800e-003	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1884

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	3.4000e-004	4.1600e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.2880	1.2880	3.0000e-005	0.0000	1.2888
Total	5.2000e-004	3.4000e-004	4.1600e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.2880	1.2880	3.0000e-005	0.0000	1.2888

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	9.4153					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0400e-003	0.0609	0.0905	1.5000e-004		3.0500e-003	3.0500e-003		3.0500e-003	3.0500e-003	0.0000	12.7663	12.7663	7.2000e-004	0.0000	12.7842
Total	9.4244	0.0609	0.0905	1.5000e-004		3.0500e-003	3.0500e-003		3.0500e-003	3.0500e-003	0.0000	12.7663	12.7663	7.2000e-004	0.0000	12.7842

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0312	0.0206	0.2480	8.5000e-004	0.0982	6.9000e-004	0.0989	0.0261	6.4000e-004	0.0267	0.0000	76.8523	76.8523	1.7200e-003	0.0000	76.8952
Total	0.0312	0.0206	0.2480	8.5000e-004	0.0982	6.9000e-004	0.0989	0.0261	6.4000e-004	0.0267	0.0000	76.8523	76.8523	1.7200e-003	0.0000	76.8952

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	9.4153					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0400e-003	0.0609	0.0905	1.5000e-004		3.0500e-003	3.0500e-003		3.0500e-003	3.0500e-003	0.0000	12.7663	12.7663	7.2000e-004	0.0000	12.7842
Total	9.4244	0.0609	0.0905	1.5000e-004		3.0500e-003	3.0500e-003		3.0500e-003	3.0500e-003	0.0000	12.7663	12.7663	7.2000e-004	0.0000	12.7842

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0312	0.0206	0.2480	8.5000e-004	0.0982	6.9000e-004	0.0989	0.0261	6.4000e-004	0.0267	0.0000	76.8523	76.8523	1.7200e-003	0.0000	76.8952
Total	0.0312	0.0206	0.2480	8.5000e-004	0.0982	6.9000e-004	0.0989	0.0261	6.4000e-004	0.0267	0.0000	76.8523	76.8523	1.7200e-003	0.0000	76.8952

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr										MT/yr					
	Mitigated	0.7759	3.7865	9.9384	0.0412	3.7916	0.0302	3.8218	1.0157	0.0280	1.0438	0.0000	3,813.0325	3,813.0325	0.1683	0.0000
Unmitigated	0.7759	3.7865	9.9384	0.0412	3.7916	0.0302	3.8218	1.0157	0.0280	1.0438	0.0000	3,813.0325	3,813.0325	0.1683	0.0000	3,817.2397

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated Annual VMT	Mitigated Annual VMT
	Weekday	Saturday	Sunday		
Apartments Mid Rise	213.00	213.00	213.00	727,413	727,413
Day-Care Center	481.80	42.90	40.70	517,776	517,776
University/College (4Yr)	3,535.47	2,689.56	0.00	8,739,987	8,739,987
Total	4,230.27	2,945.46	253.70	9,985,176	9,985,176

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.00	19.00	41.00	86	11	3
Day-Care Center	16.60	8.40	6.90	12.70	82.30	5.00	28	58	14
University/College (4Yr)	16.60	8.40	6.90	6.40	88.60	5.00	91	9	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827
Day-Care Center	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827
University/College (4Yr)	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated							0.0000	0.0000		0.0000	0.0000	6,145.4400	6,145.4400	0.2537	0.0525	6,167.4255
Electricity Unmitigated							0.0000	0.0000		0.0000	0.0000	6,145.4400	6,145.4400	0.2537	0.0525	6,167.4255
NaturalGas Mitigated	0.2797	2.5386	2.1061	0.0153			0.1933	0.1933		0.1933	0.0000	2,768.0467	2,768.0467	0.0531	0.0508	2,784.4959
NaturalGas Unmitigated	0.2797	2.5386	2.1061	0.0153			0.1933	0.1933		0.1933	0.0000	2,768.0467	2,768.0467	0.0531	0.0508	2,784.4959

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.38254e+006	7.4500e-003	0.0637	0.0271	4.1000e-004		5.1500e-003	5.1500e-003		5.1500e-003	5.1500e-003	0.0000	73.7777	73.7777	1.4100e-003	1.3500e-003	74.2161
Day-Care Center	60320	3.3000e-004	2.9600e-003	2.4800e-003	2.0000e-005		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004	0.0000	3.2189	3.2189	6.0000e-005	6.0000e-005	3.2380
University/College (4Yr)	5.04284e+007	0.2719	2.4720	2.0765	0.0148		0.1879	0.1879		0.1879	0.1879	0.0000	2,691.0502	2,691.0502	0.0516	0.0493	2,707.0418
Total		0.2797	2.5387	2.1061	0.0153		0.1932	0.1932		0.1932	0.1932	0.0000	2,768.0467	2,768.0467	0.0531	0.0508	2,784.4959

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.38254e+006	7.4500e-003	0.0637	0.0271	4.1000e-004		5.1500e-003	5.1500e-003		5.1500e-003	5.1500e-003	0.0000	73.7777	73.7777	1.4100e-003	1.3500e-003	74.2161
Day-Care Center	60320	3.3000e-004	2.9600e-003	2.4800e-003	2.0000e-005		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004	0.0000	3.2189	3.2189	6.0000e-005	6.0000e-005	3.2380
University/College (4Yr)	5.04284e+007	0.2719	2.4720	2.0765	0.0148		0.1879	0.1879		0.1879	0.1879	0.0000	2,691.0502	2,691.0502	0.0516	0.0493	2,707.0418
Total		0.2797	2.5387	2.1061	0.0153		0.1932	0.1932		0.1932	0.1932	0.0000	2,768.0467	2,768.0467	0.0531	0.0508	2,784.4959

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	594012	189.2650	7.8100e-003	1.6200e-003	189.9421
Day-Care Center	34336	10.9402	4.5000e-004	9.0000e-005	10.9793
University/College (4Yr)	1.86592e+007	5,945.2349	0.2455	0.0508	5,966.5042
Total		6,145.4400	0.2537	0.0525	6,167.4255

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	594012	189.2650	7.8100e-003	1.6200e-003	189.9421

Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0491	0.0181	1.5744	8.0000e-005		8.6800e-003	8.6800e-003		8.6800e-003	8.6800e-003	0.0000	2.5834	2.5834	2.5700e-003	0.0000	2.6476
Total	8.6151	0.0181	1.5744	8.0000e-005		8.6800e-003	8.6800e-003		8.6800e-003	8.6800e-003	0.0000	2.5834	2.5834	2.5700e-003	0.0000	2.6476

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.9415					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.6245					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0491	0.0181	1.5744	8.0000e-005		8.6800e-003	8.6800e-003		8.6800e-003	8.6800e-003	0.0000	2.5834	2.5834	2.5700e-003	0.0000	2.6476
Total	8.6151	0.0181	1.5744	8.0000e-005		8.6800e-003	8.6800e-003		8.6800e-003	8.6800e-003	0.0000	2.5834	2.5834	2.5700e-003	0.0000	2.6476

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	115.5288	0.4831	0.0122	131.2540

Unmitigated	115.5288	0.4831	0.0122	131.2540
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7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	9.7731 / 6.1613	65.4572	0.3210	8.0500e-003	75.8825
Day-Care Center	0.266666 / 0.685714	3.6183	8.8400e-003	2.4000e-004	3.9093
University/College (4Yr)	4.64405 / 7.26376	46.4533	0.1532	3.9600e-003	51.4622
Total		115.5288	0.4831	0.0123	131.2540

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	9.7731 / 6.1613	65.4572	0.3210	8.0500e-003	75.8825
Day-Care Center	0.266666 / 0.685714	3.6183	8.8400e-003	2.4000e-004	3.9093
University/College (4Yr)	4.64405 / 7.26376	46.4533	0.1532	3.9600e-003	51.4622
Total		115.5288	0.4831	0.0123	131.2540

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	98.4324	5.8172	0.0000	243.8620
Unmitigated	98.4324	5.8172	0.0000	243.8620

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	69	14.0064	0.8278	0.0000	34.7002
Day-Care Center	20.07	4.0740	0.2408	0.0000	10.0932
University/College (4Yr)	395.84	80.3519	4.7487	0.0000	199.0685
Total		98.4324	5.8172	0.0000	243.8620

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	69	14.0064	0.8278	0.0000	34.7002
Day-Care Center	20.07	4.0740	0.2408	0.0000	10.0932
University/College (4Yr)	395.84	80.3519	4.7487	0.0000	199.0685
Total		98.4324	5.8172	0.0000	243.8620

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Campus Construction Summer 2025

CSUDH Campus Master Plan EIR (Interim 2025 Campus Construction) - South Coast Air Basin, Summer

CSUDH Campus Master Plan EIR (Interim 2025 Campus Construction)
South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
University/College (4Yr)	2,169.00	Student	11.80	1,862,200.00	0
Apartments Mid Rise	150.00	Dwelling Unit	2.00	242,000.00	300
Day-Care Center	110.00	Student	1.00	5,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Master Plan
- Construction Phase - Adjusted.
- Grading - Master Plan
- Demolition - Master Plan
- Vehicle Trips - Master Plan
- Woodstoves - No woodstove and fireplace.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	100.00
tblConstructionPhase	PhaseEndDate	7/12/2024	11/1/2024
tblFireplaces	NumberGas	127.50	0.00
tblFireplaces	NumberNoFireplace	15.00	0.00
tblFireplaces	NumberWood	7.50	0.00
tblGrading	AcresOfGrading	75.00	14.80
tblGrading	AcresOfGrading	0.00	14.80
tblLandUse	LandUseSquareFeet	398,656.71	1,862,200.00
tblLandUse	LandUseSquareFeet	150,000.00	242,000.00
tblLandUse	LandUseSquareFeet	6,217.51	5,800.00
tblLandUse	LotAcreage	9.15	11.80
tblLandUse	LotAcreage	3.95	2.00
tblLandUse	LotAcreage	0.14	1.00
tblLandUse	Population	429.00	300.00
tblVehicleTrips	HO_TTP	40.60	41.00
tblVehicleTrips	HS_TTP	19.20	19.00
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	6.39	1.42
tblVehicleTrips	ST_TR	1.30	1.24
tblVehicleTrips	SU_TR	5.86	1.42
tblVehicleTrips	WD_TR	6.65	1.42
tblVehicleTrips	WD_TR	1.71	1.63
tblWoodstoves	NumberCatalytic	7.50	0.00
tblWoodstoves	NumberNoncatalytic	7.50	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	5.5001	38.4587	51.2767	0.197	19.837	1.4261	21.1044	10.1535	1.312	11.3196	0	20,104.05	20,104.05	1.9491	0	20,136.18
2024	189.1123	37.2825	49.1198	0.1937	12.0421	0.7073	12.7493	3.2403	0.6643	3.9046	0	19,771.51	19,771.51	1.257	0	19,802.94
Maximum	189.1123	38.4587	51.2767	0.197	19.837	1.4261	21.1044	10.1535	1.312	11.3196	0	20,104.05	20,104.05	1.9491	0	20,136.18

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	5.5001	38.4587	51.2767	0.1970	19.8370	1.4261	21.1044	10.1535	1.3120	11.3196	0.0000	20,104.0478	20,104.0478	1.9491	0.0000	20,136.1800
2024	189.1123	37.2825	49.1198	0.1937	12.0421	0.7073	12.7493	3.2403	0.6643	3.9046	0.0000	19,771.5133	19,771.5133	1.2570	0.0000	19,802.9373
Maximum	189.1123	38.4587	51.2767	0.1970	19.8370	1.4261	21.1044	10.1535	1.3120	11.3196	0.0000	20,104.0478	20,104.0478	1.9491	0.0000	20,136.1800

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

1	Demolition	Demolition	1/1/2023	1/27/2023	5	20
2	Site Preparation	Site Preparation	1/28/2023	2/10/2023	5	10
3	Grading	Grading	2/11/2023	3/24/2023	5	30
4	Building Construction	Building Construction	3/25/2023	5/17/2024	5	300
5	Paving	Paving	5/18/2024	6/14/2024	5	20
6	Architectural Coating	Architectural Coating	6/15/2024	11/1/2024	5	100

Acres of Grading (Site Preparation Phase): 14.8

Acres of Grading (Grading Phase): 14.8

Acres of Paving: 0

Residential Indoor: 490,050; Residential Outdoor: 163,350; Non-Residential Indoor: 2,802,000; Non-Residential Outdoor: 934,000; Striped

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	179.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	893.00	322.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	15.00	0.00	216.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3373	0.0000	2.3373	0.3539	0.0000	0.3539			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280		3,746.9840	3,746.9840	1.0494		3,773.2183
Total	2.2691	21.4844	19.6434	0.0388	2.3373	0.9975	3.3348	0.3539	0.9280	1.2819		3,746.9840	3,746.9840	1.0494		3,773.2183

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0512	1.6711	0.5584	7.8200e-003	0.1886	3.1000e-003	0.1917	0.0517	2.9700e-003	0.0547		852.7360	852.7360	0.0580		854.1859
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0554	0.0335	0.4810	1.5500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0456		154.1265	154.1265	3.6500e-003		154.2177
Total	0.1066	1.7046	1.0393	9.3700e-003	0.3563	4.2700e-003	0.3606	0.0962	4.0500e-003	0.1002		1,006.8625	1,006.8625	0.0617		1,008.4036

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3373	0.0000	2.3373	0.3539	0.0000	0.3539			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280	0.0000	3,746.9840	3,746.9840	1.0494		3,773.2183
Total	2.2691	21.4844	19.6434	0.0388	2.3373	0.9975	3.3348	0.3539	0.9280	1.2819	0.0000	3,746.9840	3,746.9840	1.0494		3,773.2183

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0512	1.6711	0.5584	7.8200e-003	0.1886	3.1000e-003	0.1917	0.0517	2.9700e-003	0.0547		852.7360	852.7360	0.0580		854.1859
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0554	0.0335	0.4810	1.5500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0456		154.1265	154.1265	3.6500e-003		154.2177
Total	0.1066	1.7046	1.0393	9.3700e-003	0.3563	4.2700e-003	0.3606	0.0962	4.0500e-003	0.1002		1,006.8625	1,006.8625	0.0617		1,008.4036

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					19.6358	0.0000	19.6358	10.1002	0.0000	10.1002			0.0000				0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.3081	3,687.3081	1.1926			3,717.1219
Total	2.6595	27.5242	18.2443	0.0381	19.6358	1.2660	20.9018	10.1002	1.1647	11.2649		3,687.3081	3,687.3081	1.1926			3,717.1219

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0665	0.0402	0.5772	1.8600e-003	0.2012	1.4100e-003	0.2026	0.0534	1.3000e-003	0.0547		184.9518	184.9518	4.3800e-003		185.0613
Total	0.0665	0.0402	0.5772	1.8600e-003	0.2012	1.4100e-003	0.2026	0.0534	1.3000e-003	0.0547		184.9518	184.9518	4.3800e-003		185.0613

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6358	0.0000	19.6358	10.1002	0.0000	10.1002			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219
Total	2.6595	27.5242	18.2443	0.0381	19.6358	1.2660	20.9018	10.1002	1.1647	11.2649	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0665	0.0402	0.5772	1.8600e-003	0.2012	1.4100e-003	0.2026	0.0534	1.3000e-003	0.0547		184.9518	184.9518	4.3800e-003		185.0613
Total	0.0665	0.0402	0.5772	1.8600e-003	0.2012	1.4100e-003	0.2026	0.0534	1.3000e-003	0.0547		184.9518	184.9518	4.3800e-003		185.0613

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					6.5453	0.0000	6.5453	3.3667	0.0000	3.3667			0.0000				0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105		6,011.4777	6,011.4777	1.9442			6,060.0836
Total	3.3217	34.5156	28.0512	0.0621	6.5453	1.4245	7.9698	3.3667	1.3105	4.6773		6,011.4777	6,011.4777	1.9442			6,060.0836

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0738	0.0446	0.6413	2.0600e-003	0.2236	1.5700e-003	0.2251	0.0593	1.4400e-003	0.0607		205.5020	205.5020	4.8700e-003			205.6236
Total	0.0738	0.0446	0.6413	2.0600e-003	0.2236	1.5700e-003	0.2251	0.0593	1.4400e-003	0.0607		205.5020	205.5020	4.8700e-003			205.6236

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					6.5453	0.0000	6.5453	3.3667	0.0000	3.3667			0.0000				0.0000

Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836
Total	3.3217	34.5156	28.0512	0.0621	6.5453	1.4245	7.9698	3.3667	1.3105	4.6773	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0738	0.0446	0.6413	2.0600e-003	0.2236	1.5700e-003	0.2251	0.0593	1.4400e-003	0.0607		205.5020	205.5020	4.8700e-003		205.6236
Total	0.0738	0.0446	0.6413	2.0600e-003	0.2236	1.5700e-003	0.2251	0.0593	1.4400e-003	0.0607		205.5020	205.5020	4.8700e-003		205.6236

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.6306	22.0811	6.3995	0.0781	2.0604	0.0253	2.0857	0.5931	0.0242	0.6173		8,373.1742	8,373.1742	0.4602			8,384.6789
Worker	3.2968	1.9927	28.6333	0.0920	9.9816	0.0699	10.0515	2.6472	0.0644	2.7115		9,175.6637	9,175.6637	0.2173			9,181.0951
Total	3.9273	24.0738	35.0327	0.1701	12.0420	0.0952	12.1372	3.2403	0.0885	3.3288		17,548.8378	17,548.8378	0.6775			17,565.7740

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079			2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079			2,570.4061

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.6306	22.0811	6.3995	0.0781	2.0604	0.0253	2.0857	0.5931	0.0242	0.6173		8,373.1742	8,373.1742	0.4602		8,384.6789
Worker	3.2968	1.9927	28.6333	0.0920	9.9816	0.0699	10.0515	2.6472	0.0644	2.7115		9,175.6637	9,175.6637	0.2173		9,181.0951
Total	3.9273	24.0738	35.0327	0.1701	12.0420	0.0952	12.1372	3.2403	0.0885	3.3288		17,548.8378	17,548.8378	0.6775		17,565.7740

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6169	22.0228	6.2177	0.0777	2.0604	0.0250	2.0854	0.5931	0.0239	0.6171		8,342.4743	8,342.4743	0.4535		8,353.8116
Worker	3.1202	1.8160	26.7353	0.0890	9.9816	0.0689	10.0506	2.6472	0.0635	2.7106		8,873.3401	8,873.3401	0.1991		8,878.3181
Total	3.7371	23.8387	32.9530	0.1667	12.0421	0.0940	12.1360	3.2403	0.0874	3.3277		17,215.8144	17,215.8144	0.6526		17,232.1296

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6169	22.0228	6.2177	0.0777	2.0604	0.0250	2.0854	0.5931	0.0239	0.6171		8,342.4743	8,342.4743	0.4535		8,353.8116
Worker	3.1202	1.8160	26.7353	0.0890	9.9816	0.0689	10.0506	2.6472	0.0635	2.7106		8,873.3401	8,873.3401	0.1991		8,878.3181
Total	3.7371	23.8387	32.9530	0.1667	12.0421	0.0940	12.1360	3.2403	0.0874	3.3277		17,215.8144	17,215.8144	0.6526		17,232.1296

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0524	0.0305	0.4491	1.4900e-003	0.1677	1.1600e-003	0.1688	0.0445	1.0700e-003	0.0455		149.0483	149.0483	3.3400e-003		149.1319
Total	0.0524	0.0305	0.4491	1.4900e-003	0.1677	1.1600e-003	0.1688	0.0445	1.0700e-003	0.0455		149.0483	149.0483	3.3400e-003		149.1319

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963

Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0524	0.0305	0.4491	1.4900e-003	0.1677	1.1600e-003	0.1688	0.0445	1.0700e-003	0.0455		149.0483	149.0483	3.3400e-003		149.1319
Total	0.0524	0.0305	0.4491	1.4900e-003	0.1677	1.1600e-003	0.1688	0.0445	1.0700e-003	0.0455		149.0483	149.0483	3.3400e-003		149.1319

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	188.3061					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	188.4869	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6254	0.3640	5.3590	0.0178	2.0008	0.0138	2.0146	0.5306	0.0127	0.5433		1,778.6426	1,778.6426	0.0399		1,779.6405
Total	0.6254	0.3640	5.3590	0.0178	2.0008	0.0138	2.0146	0.5306	0.0127	0.5433		1,778.6426	1,778.6426	0.0399		1,779.6405

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	188.3061					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	188.4869	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.6254	0.3640	5.3590	0.0178	2.0008	0.0138	2.0146	0.5306	0.0127	0.5433		1,778.6426	1,778.6426	0.0399	1,779.6405
Total	0.6254	0.3640	5.3590	0.0178	2.0008	0.0138	2.0146	0.5306	0.0127	0.5433		1,778.6426	1,778.6426	0.0399	1,779.6405

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.5579	24.4066	69.0029	0.2838	25.6020	0.2002	25.8021	6.8480	0.1859	7.0339		28,964.1998	28,964.1998	1.2374		28,995.1358
Unmitigated	5.5579	24.4066	69.0029	0.2838	25.6020	0.2002	25.8021	6.8480	0.1859	7.0339		28,964.1998	28,964.1998	1.2374		28,995.1358

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	213.00	213.00	213.00	727,413	727,413
Day-Care Center	481.80	42.90	40.70	517,776	517,776
University/College (4Yr)	3,535.47	2,689.56	0.00	8,739,987	8,739,987
Total	4,230.27	2,945.46	253.70	9,985,176	9,985,176

4.3 Trip Type Information

Miles	Trip %	Trip Purpose %
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Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.00	19.00	41.00	86	11	3
Day-Care Center	16.60	8.40	6.90	12.70	82.30	5.00	28	58	14
University/College (4Yr)	16.60	8.40	6.90	6.40	88.60	5.00	91	9	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827
Day-Care Center	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827
University/College (4Yr)	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.5326	13.9104	11.5400	0.0836		1.0589	1.0589		1.0589	1.0589		16,719.1739	16,719.1739	0.3205	0.3065	16,818.5276
NaturalGas Unmitigated	1.5326	13.9104	11.5400	0.0836		1.0589	1.0589		1.0589	1.0589		16,719.1739	16,719.1739	0.3205	0.3065	16,818.5276

5.2 Energy by Land Use - NaturalGas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	3787.78	0.0409	0.3491	0.1485	2.2300e-003		0.0282	0.0282		0.0282	0.0282		445.6216	445.6216	8.5400e-003	8.1700e-003	448.2697
Day-Care Center	165.26	1.7800e-003	0.0162	0.0136	1.0000e-004		1.2300e-003	1.2300e-003		1.2300e-003	1.2300e-003		19.4424	19.4424	3.7000e-004	3.6000e-004	19.5579
University/College (4Yr)	138160	1.4900	13.5451	11.3779	0.0813		1.0294	1.0294		1.0294	1.0294		16,254.1099	16,254.1099	0.3115	0.2980	16,350.7000
Total		1.5326	13.9104	11.5400	0.0836		1.0589	1.0589		1.0589	1.0589		16,719.1739	16,719.1739	0.3205	0.3065	16,818.5276

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	3.78778	0.0409	0.3491	0.1485	2.2300e-003		0.0282	0.0282		0.0282	0.0282		445.6216	445.6216	8.5400e-003	8.1700e-003	448.2697
Day-Care Center	0.16526	1.7800e-003	0.0162	0.0136	1.0000e-004		1.2300e-003	1.2300e-003		1.2300e-003	1.2300e-003		19.4424	19.4424	3.7000e-004	3.6000e-004	19.5579
University/College (4Yr)	138.16	1.4900	13.5451	11.3779	0.0813		1.0294	1.0294		1.0294	1.0294		16,254.1099	16,254.1099	0.3115	0.2980	16,350.7000
Total		1.5326	13.9104	11.5400	0.0836		1.0589	1.0589		1.0589	1.0589		16,719.1739	16,719.1739	0.3205	0.3065	16,818.5276

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	47.3297	0.1445	12.5956	6.7000e-004		0.0694	0.0694		0.0694	0.0694	0.0000	22.7816	22.7816	0.0226	0.0000	23.3475
Unmitigated	47.3297	0.1445	12.5956	6.7000e-004		0.0694	0.0694		0.0694	0.0694	0.0000	22.7816	22.7816	0.0226	0.0000	23.3475

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	5.1591					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	41.7780					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.3926	0.1445	12.5956	6.7000e-004		0.0694	0.0694		0.0694	0.0694		22.7816	22.7816	0.0226		23.3475
Total	47.3297	0.1445	12.5956	6.7000e-004		0.0694	0.0694		0.0694	0.0694	0.0000	22.7816	22.7816	0.0226	0.0000	23.3475

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	5.1591					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Consumer Products	41.7780					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.3926	0.1445	12.5956	6.7000e-004		0.0694	0.0694		0.0694	0.0694		22.7816	22.7816	0.0226		23.3475
Total	47.3297	0.1445	12.5956	6.7000e-004		0.0694	0.0694		0.0694	0.0694	0.0000	22.7816	22.7816	0.0226	0.0000	23.3475

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Campus Construction Winter 2025

CSUDH Campus Master Plan EIR (Interim 2025 Campus Construction) - South Coast Air Basin, Winter

CSUDH Campus Master Plan EIR (Interim 2025 Campus Construction)
South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
University/College (4Yr)	2,169.00	Student	11.80	1,862,200.00	0
Apartments Mid Rise	150.00	Dwelling Unit	2.00	242,000.00	300
Day-Care Center	110.00	Student	1.00	5,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -
 Land Use - Master Plan
 Construction Phase - Adjusted.
 Grading - Master Plan
 Demolition - Master Plan
 Vehicle Trips - Master Plan
 Woodstoves - No woodstove and fireplace.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	100.00
tblConstructionPhase	PhaseEndDate	7/12/2024	11/1/2024
tblFireplaces	NumberGas	127.50	0.00
tblFireplaces	NumberNoFireplace	15.00	0.00
tblFireplaces	NumberWood	7.50	0.00
tblGrading	AcresOfGrading	75.00	14.80
tblGrading	AcresOfGrading	0.00	14.80
tblLandUse	LandUseSquareFeet	398,656.71	1,862,200.00
tblLandUse	LandUseSquareFeet	150,000.00	242,000.00
tblLandUse	LandUseSquareFeet	6,217.51	5,800.00
tblLandUse	LotAcreage	9.15	11.80
tblLandUse	LotAcreage	3.95	2.00
tblLandUse	LotAcreage	0.14	1.00
tblLandUse	Population	429.00	300.00
tblVehicleTrips	HO_TTP	40.60	41.00
tblVehicleTrips	HS_TTP	19.20	19.00
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	6.39	1.42
tblVehicleTrips	ST_TR	1.30	1.24
tblVehicleTrips	SU_TR	5.86	1.42
tblVehicleTrips	WD_TR	6.65	1.42
tblVehicleTrips	WD_TR	1.71	1.63
tblWoodstoves	NumberCatalytic	7.50	0.00
tblWoodstoves	NumberNoncatalytic	7.50	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	5.8892	38.5341	49.0583	0.1892	19.837	1.4261	21.1044	10.1535	1.312	11.3196	0	19,308.55	19,308.55	1.9488	0	19,341.03
2024	189.182	37.3469	47.0293	0.1861	12.0421	0.7084	12.7505	3.2403	0.6654	3.9057	0	18,996.35	18,996.35	1.2707	0	19,028.12
Maximum	189.182	38.5341	49.0583	0.1892	19.837	1.4261	21.1044	10.1535	1.312	11.3196	0	19,308.55	19,308.55	1.9488	0	19,341.03

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	5.8892	38.5341	49.0583	0.1892	19.8370	1.4261	21.1044	10.1535	1.3120	11.3196	0.0000	19,308.55 44	19,308.554 4	1.9488	0.0000	19,341.02 70
2024	189.1820	37.3469	47.0293	0.1861	12.0421	0.7084	12.7505	3.2403	0.6654	3.9057	0.0000	18,996.34 92	18,996.349 2	1.2707	0.0000	19,028.11 59
Maximum	189.1820	38.5341	49.0583	0.1892	19.8370	1.4261	21.1044	10.1535	1.3120	11.3196	0.0000	19,308.55 44	19,308.554 4	1.9488	0.0000	19,341.02 70

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**2.2 Overall Operational
Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	47.3297	0.1445	12.5956	6.7000e-004		0.0694	0.0694		0.0694	0.0694	0.0000	22.7816	22.7816	0.0226	0.0000	23.3475
Energy	1.5326	13.9104	11.5400	0.0836		1.0589	1.0589		1.0589	1.0589		16,719.1739	16,719.1739	0.3205	0.3065	16,818.5276
Mobile	5.3107	24.7983	65.0670	0.2693	25.6020	0.2011	25.8030	6.8480	0.1868	7.0347		27,503.4408	27,503.4408	1.2404		27,534.4501
Total	54.1729	38.8531	89.2026	0.3536	25.6020	1.3294	26.9313	6.8480	1.3151	8.1630	0.0000	44,245.3963	44,245.3963	1.5835	0.3065	44,376.3252

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	47.3297	0.1445	12.5956	6.7000e-004		0.0694	0.0694		0.0694	0.0694	0.0000	22.7816	22.7816	0.0226	0.0000	23.3475
Energy	1.5326	13.9104	11.5400	0.0836		1.0589	1.0589		1.0589	1.0589		16,719.1739	16,719.1739	0.3205	0.3065	16,818.5276
Mobile	5.3107	24.7983	65.0670	0.2693	25.6020	0.2011	25.8030	6.8480	0.1868	7.0347		27,503.4408	27,503.4408	1.2404		27,534.4501
Total	54.1729	38.8531	89.2026	0.3536	25.6020	1.3294	26.9313	6.8480	1.3151	8.1630	0.0000	44,245.3963	44,245.3963	1.5835	0.3065	44,376.3252

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
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1	Demolition	Demolition	1/1/2023	1/27/2023	5	20
2	Site Preparation	Site Preparation	1/28/2023	2/10/2023	5	10
3	Grading	Grading	2/11/2023	3/24/2023	5	30
4	Building Construction	Building Construction	3/25/2023	5/17/2024	5	300
5	Paving	Paving	5/18/2024	6/14/2024	5	20
6	Architectural Coating	Architectural Coating	6/15/2024	11/1/2024	5	100

Acres of Grading (Site Preparation Phase): 14.8

Acres of Grading (Grading Phase): 14.8

Acres of Paving: 0

Residential Indoor: 490,050; Residential Outdoor: 163,350; Non-Residential Indoor: 2,802,000; Non-Residential Outdoor: 934,000; Striped

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37

Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	179.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	893.00	322.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	15.00	0.00	216.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3373	0.0000	2.3373	0.3539	0.0000	0.3539			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280		3,746.9840	3,746.9840	1.0494		3,773.2183
Total	2.2691	21.4844	19.6434	0.0388	2.3373	0.9975	3.3348	0.3539	0.9280	1.2819		3,746.9840	3,746.9840	1.0494		3,773.2183

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0526	1.6810	0.5842	7.6900e-003	0.1886	3.1900e-003	0.1918	0.0517	3.0500e-003	0.0547		838.0673	838.0673	0.0598		839.5615
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0614	0.0367	0.4338	1.4500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0456		144.5539	144.5539	3.4100e-003		144.6391
Total	0.1140	1.7178	1.0179	9.1400e-003	0.3563	4.3600e-003	0.3607	0.0962	4.1300e-003	0.1003		982.6212	982.6212	0.0632		984.2006

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3373	0.0000	2.3373	0.3539	0.0000	0.3539			0.0000			0.0000
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280	0.0000	3,746.9840	3,746.9840	1.0494		3,773.2183
Total	2.2691	21.4844	19.6434	0.0388	2.3373	0.9975	3.3348	0.3539	0.9280	1.2819	0.0000	3,746.9840	3,746.9840	1.0494		3,773.2183

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0526	1.6810	0.5842	7.6900e-003	0.1886	3.1900e-003	0.1918	0.0517	3.0500e-003	0.0547		838.0673	838.0673	0.0598		839.5615
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0614	0.0367	0.4338	1.4500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0456		144.5539	144.5539	3.4100e-003		144.6391
Total	0.1140	1.7178	1.0179	9.1400e-003	0.3563	4.3600e-003	0.3607	0.0962	4.1300e-003	0.1003		982.6212	982.6212	0.0632		984.2006

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					19.6358	0.0000	19.6358	10.1002	0.0000	10.1002			0.0000				0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.3081	3,687.3081	1.1926			3,717.1219
Total	2.6595	27.5242	18.2443	0.0381	19.6358	1.2660	20.9018	10.1002	1.1647	11.2649		3,687.3081	3,687.3081	1.1926			3,717.1219

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0736	0.0441	0.5205	1.7400e-003	0.2012	1.4100e-003	0.2026	0.0534	1.3000e-003	0.0547		173.4647	173.4647	4.0900e-003		173.5669
Total	0.0736	0.0441	0.5205	1.7400e-003	0.2012	1.4100e-003	0.2026	0.0534	1.3000e-003	0.0547		173.4647	173.4647	4.0900e-003		173.5669

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6358	0.0000	19.6358	10.1002	0.0000	10.1002			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219
Total	2.6595	27.5242	18.2443	0.0381	19.6358	1.2660	20.9018	10.1002	1.1647	11.2649	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0736	0.0441	0.5205	1.7400e-003	0.2012	1.4100e-003	0.2026	0.0534	1.3000e-003	0.0547		173.4647	173.4647	4.0900e-003		173.5669
Total	0.0736	0.0441	0.5205	1.7400e-003	0.2012	1.4100e-003	0.2026	0.0534	1.3000e-003	0.0547		173.4647	173.4647	4.0900e-003		173.5669

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5453	0.0000	6.5453	3.3667	0.0000	3.3667			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105		6,011.4777	6,011.4777	1.9442		6,060.0836
Total	3.3217	34.5156	28.0512	0.0621	6.5453	1.4245	7.9698	3.3667	1.3105	4.6773		6,011.4777	6,011.4777	1.9442		6,060.0836

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0818	0.0490	0.5784	1.9300e-003	0.2236	1.5700e-003	0.2251	0.0593	1.4400e-003	0.0607		192.7385	192.7385	4.5400e-003		192.8521
Total	0.0818	0.0490	0.5784	1.9300e-003	0.2236	1.5700e-003	0.2251	0.0593	1.4400e-003	0.0607		192.7385	192.7385	4.5400e-003		192.8521

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5453	0.0000	6.5453	3.3667	0.0000	3.3667			0.0000			0.0000

Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836
Total	3.3217	34.5156	28.0512	0.0621	6.5453	1.4245	7.9698	3.3667	1.3105	4.6773	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0818	0.0490	0.5784	1.9300e-003	0.2236	1.5700e-003	0.2251	0.0593	1.4400e-003	0.0607		192.7385	192.7385	4.5400e-003		192.8521
Total	0.0818	0.0490	0.5784	1.9300e-003	0.2236	1.5700e-003	0.2251	0.0593	1.4400e-003	0.0607		192.7385	192.7385	4.5400e-003		192.8521

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6632	21.9621	6.9911	0.0760	2.0604	0.0266	2.0870	0.5931	0.0254	0.6185		8,147.5697	8,147.5697	0.4881		8,159.729
Worker	3.6532	2.1871	25.8233	0.0863	9.9816	0.0699	10.0515	2.6472	0.0644	2.7115		8,605.7748	8,605.7748	0.2029		8,610.8480
Total	4.3165	24.1492	32.8143	0.1623	12.0420	0.0965	12.1385	3.2403	0.0898	3.3301		16,753.3445	16,753.3445	0.6911		16,770.6209

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.6632	21.9621	6.9911	0.0760	2.0604	0.0266	2.0870	0.5931	0.0254	0.6185		8,147.5697	8,147.5697	0.4881		8,159.7729
Worker	3.6532	2.1871	25.8233	0.0863	9.9816	0.0699	10.0515	2.6472	0.0644	2.7115		8,605.7748	8,605.7748	0.2029		8,610.8480
Total	4.3165	24.1492	32.8143	0.1623	12.0420	0.0965	12.1385	3.2403	0.0898	3.3301		16,753.3445	16,753.3445	0.6911		16,770.6209

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6484	21.9107	6.7922	0.0757	2.0604	0.0262	2.0866	0.5931	0.0250	0.6181		8,119.2967	8,119.2967	0.4806		8,131.3108
Worker	3.4678	1.9924	24.0704	0.0834	9.9816	0.0689	10.0506	2.6472	0.0635	2.7106		8,321.3537	8,321.3537	0.1858		8,325.9975
Total	4.1162	23.9032	30.8625	0.1591	12.0421	0.0951	12.1371	3.2403	0.0885	3.3288		16,440.6503	16,440.6503	0.6663		16,457.3083

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6484	21.9107	6.7922	0.0757	2.0604	0.0262	2.0866	0.5931	0.0250	0.6181		8,119.2967	8,119.2967	0.4806		8,131.3108
Worker	3.4678	1.9924	24.0704	0.0834	9.9816	0.0689	10.0506	2.6472	0.0635	2.7106		8,321.3537	8,321.3537	0.1858		8,325.9975
Total	4.1162	23.9032	30.8625	0.1591	12.0421	0.0951	12.1371	3.2403	0.0885	3.3288		16,440.6503	16,440.6503	0.6663		16,457.3083

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0583	0.0335	0.4043	1.4000e-003	0.1677	1.1600e-003	0.1688	0.0445	1.0700e-003	0.0455		139.7764	139.7764	3.1200e-003		139.8544
Total	0.0583	0.0335	0.4043	1.4000e-003	0.1677	1.1600e-003	0.1688	0.0445	1.0700e-003	0.0455		139.7764	139.7764	3.1200e-003		139.8544

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963

Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0583	0.0335	0.4043	1.4000e-003	0.1677	1.1600e-003	0.1688	0.0445	1.0700e-003	0.0455		139.7764	139.7764	3.1200e-003		139.8544
Total	0.0583	0.0335	0.4043	1.4000e-003	0.1677	1.1600e-003	0.1688	0.0445	1.0700e-003	0.0455		139.7764	139.7764	3.1200e-003		139.8544

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	188.3061					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	188.4869	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6951	0.3994	4.8249	0.0167	2.0008	0.0138	2.0146	0.5306	0.0127	0.5433		1,667.9981	1,667.9981	0.0372		1,668.9290
Total	0.6951	0.3994	4.8249	0.0167	2.0008	0.0138	2.0146	0.5306	0.0127	0.5433		1,667.9981	1,667.9981	0.0372		1,668.9290

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	188.3061					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	188.4869	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.6951	0.3994	4.8249	0.0167	2.0008	0.0138	2.0146	0.5306	0.0127	0.5433	1,667.9981	1,667.9981	0.0372	1,668.9290	
Total	0.6951	0.3994	4.8249	0.0167	2.0008	0.0138	2.0146	0.5306	0.0127	0.5433	1,667.9981	1,667.9981	0.0372	1,668.9290	

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.3107	24.7983	65.0670	0.2693	25.6020	0.2011	25.8030	6.8480	0.1868	7.0347		27,503.4408	27,503.4408	1.2404		27,534.4501
Unmitigated	5.3107	24.7983	65.0670	0.2693	25.6020	0.2011	25.8030	6.8480	0.1868	7.0347		27,503.4408	27,503.4408	1.2404		27,534.4501

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	213.00	213.00	213.00	727,413	727,413
Day-Care Center	481.80	42.90	40.70	517,776	517,776
University/College (4Yr)	3,535.47	2,689.56	0.00	8,739,987	8,739,987
Total	4,230.27	2,945.46	253.70	9,985,176	9,985,176

4.3 Trip Type Information

Miles	Trip %	Trip Purpose %
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Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.00	19.00	41.00	86	11	3
Day-Care Center	16.60	8.40	6.90	12.70	82.30	5.00	28	58	14
University/College (4Yr)	16.60	8.40	6.90	6.40	88.60	5.00	91	9	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827
Day-Care Center	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827
University/College (4Yr)	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.5326	13.9104	11.5400	0.0836		1.0589	1.0589		1.0589	1.0589		16,719.1739	16,719.1739	0.3205	0.3065	16,818.5276
NaturalGas Unmitigated	1.5326	13.9104	11.5400	0.0836		1.0589	1.0589		1.0589	1.0589		16,719.1739	16,719.1739	0.3205	0.3065	16,818.5276

5.2 Energy by Land Use - NaturalGas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	3787.78	0.0409	0.3491	0.1485	2.2300e-003		0.0282	0.0282		0.0282	0.0282		445.6216	445.6216	8.5400e-003	8.1700e-003	448.2697
Day-Care Center	165.26	1.7800e-003	0.0162	0.0136	1.0000e-004		1.2300e-003	1.2300e-003		1.2300e-003	1.2300e-003		19.4424	19.4424	3.7000e-004	3.6000e-004	19.5579
University/College (4Yr)	138160	1.4900	13.5451	11.3779	0.0813		1.0294	1.0294		1.0294	1.0294		16,254.1099	16,254.1099	0.3115	0.2980	16,350.7000
Total		1.5326	13.9104	11.5400	0.0836		1.0589	1.0589		1.0589	1.0589		16,719.1739	16,719.1739	0.3205	0.3065	16,818.5276

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	3.78778	0.0409	0.3491	0.1485	2.2300e-003		0.0282	0.0282		0.0282	0.0282		445.6216	445.6216	8.5400e-003	8.1700e-003	448.2697
Day-Care Center	0.16526	1.7800e-003	0.0162	0.0136	1.0000e-004		1.2300e-003	1.2300e-003		1.2300e-003	1.2300e-003		19.4424	19.4424	3.7000e-004	3.6000e-004	19.5579
University/College (4Yr)	138.16	1.4900	13.5451	11.3779	0.0813		1.0294	1.0294		1.0294	1.0294		16,254.1099	16,254.1099	0.3115	0.2980	16,350.7000
Total		1.5326	13.9104	11.5400	0.0836		1.0589	1.0589		1.0589	1.0589		16,719.1739	16,719.1739	0.3205	0.3065	16,818.5276

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	47.3297	0.1445	12.5956	6.7000e-004		0.0694	0.0694		0.0694	0.0694	0.0000	22.7816	22.7816	0.0226	0.0000	23.3475
Unmitigated	47.3297	0.1445	12.5956	6.7000e-004		0.0694	0.0694		0.0694	0.0694	0.0000	22.7816	22.7816	0.0226	0.0000	23.3475

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	5.1591					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	41.7780					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.3926	0.1445	12.5956	6.7000e-004		0.0694	0.0694		0.0694	0.0694		22.7816	22.7816	0.0226		23.3475
Total	47.3297	0.1445	12.5956	6.7000e-004		0.0694	0.0694		0.0694	0.0694	0.0000	22.7816	22.7816	0.0226	0.0000	23.3475

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	5.1591					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Consumer Products	41.7780					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.3926	0.1445	12.5956	6.7000e-004		0.0694	0.0694		0.0694	0.0694		22.7816	22.7816	0.0226		23.3475
Total	47.3297	0.1445	12.5956	6.7000e-004		0.0694	0.0694		0.0694	0.0694	0.0000	22.7816	22.7816	0.0226	0.0000	23.3475

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Uni Village Construction Annual 2025

CSUDH Campus Master Plan EIR (Interim 2025 University Village Construction) - South Coast Air Basin, Annual

CSUDH Campus Master Plan EIR (Interim 2025 University Village Construction)
South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	1,063.00	Dwelling Unit	13.30	1,063,000.00	3040
Regional Shopping Center	96.08	1000sqft	2.21	96,085.00	0
General Office Building	720.92	1000sqft	33.00	720,918.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Master Plan
- Construction Phase - Adjusted.
- Grading - Master Plan
- Demolition -
- Vehicle Trips - Master Plan
- Woodstoves - No woodstove and fireplace.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	55.00	100.00
tblConstructionPhase	PhaseEndDate	11/7/2023	1/9/2024
tblFireplaces	NumberGas	903.55	0.00
tblFireplaces	NumberNoFireplace	106.30	0.00
tblFireplaces	NumberWood	53.15	0.00
tblGrading	AcresOfGrading	187.50	48.50
tblGrading	AcresOfGrading	0.00	48.50
tblLandUse	LandUseSquareFeet	96,080.00	96,085.00
tblLandUse	LandUseSquareFeet	720,920.00	720,918.00
tblLandUse	LotAcreage	27.97	13.30
tblLandUse	LotAcreage	16.55	33.00
tblVehicleTrips	HO_TTP	40.60	41.00
tblVehicleTrips	HS_TTP	19.20	19.00
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	6.39	5.75
tblVehicleTrips	ST_TR	2.46	2.21
tblVehicleTrips	ST_TR	49.97	44.97
tblVehicleTrips	SU_TR	5.86	5.27
tblVehicleTrips	SU_TR	1.05	0.95
tblVehicleTrips	SU_TR	25.24	22.72
tblVehicleTrips	WD_TR	6.65	5.99
tblVehicleTrips	WD_TR	11.03	9.93
tblVehicleTrips	WD_TR	42.70	38.43
tblWoodstoves	NumberCatalytic	53.15	0.00
tblWoodstoves	NumberNoncatalytic	53.15	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.7202	6.0002	5.4644	0.0148	1.2575	0.2275	1.4851	0.4681	0.2112	0.6793	0	1,347.42	1,347.42	0.1744	0	1,351.78
2021	0.8981	5.8363	7.636	0.0258	1.6744	0.1426	1.817	0.4494	0.134	0.5833	0	2,370.24	2,370.24	0.1581	0	2,374.20
2022	0.8299	5.3777	7.1803	0.0251	1.668	0.1215	1.7894	0.4476	0.1142	0.5618	0	2,308.61	2,308.61	0.1519	0	2,312.41
2023	7.0157	2.2781	3.6891	0.0122	0.8276	0.0629	0.8905	0.2218	0.059	0.2808	0	1,119.70	1,119.70	0.082	0	1,121.75
2024	0.501	5.91E-03	0.0262	8.00E-05	7.87E-03	2.70E-04	8.14E-03	2.09E-03	2.60E-04	2.35E-03	0	7.0547	7.0547	1.90E-04	0	7.0594
Maximum	7.0157	6.0002	7.636	0.0258	1.6744	0.2275	1.817	0.4681	0.2112	0.6793	0	2,370.24	2,370.24	0.1744	0	2,374.20

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.7202	6.0002	5.4644	0.0148	1.2575	0.2275	1.4851	0.4681	0.2112	0.6793	0.0000	1,347.4223	1,347.4223	0.1744	0.0000	1,351.7823
2021	0.8981	5.8363	7.6360	0.0258	1.6744	0.1426	1.8170	0.4494	0.1340	0.5833	0.0000	2,370.2440	2,370.2440	0.1581	0.0000	2,374.1962
2022	0.8299	5.3777	7.1803	0.0251	1.6680	0.1215	1.7894	0.4476	0.1142	0.5618	0.0000	2,308.6143	2,308.6143	0.1519	0.0000	2,312.4124
2023	7.0157	2.2781	3.6891	0.0122	0.8276	0.0629	0.8905	0.2218	0.0590	0.2808	0.0000	1,119.6991	1,119.6991	0.0820	0.0000	1,121.7500
2024	0.5010	5.9100e-003	0.0262	8.0000e-005	7.8700e-003	2.7000e-004	8.1400e-003	2.0900e-003	2.6000e-004	2.3500e-003	0.0000	7.0547	7.0547	1.9000e-004	0.0000	7.0594
Maximum	7.0157	6.0002	7.6360	0.0258	1.6744	0.2275	1.8170	0.4681	0.2112	0.6793	0.0000	2,370.2440	2,370.2440	0.1744	0.0000	2,374.1962

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2020	3-31-2020	1.2752	1.2752
2	4-1-2020	6-30-2020	1.7197	1.7197
3	7-1-2020	9-30-2020	1.8244	1.8244
4	10-1-2020	12-31-2020	1.8651	1.8651
5	1-1-2021	3-31-2021	1.6578	1.6578
6	4-1-2021	6-30-2021	1.6537	1.6537
7	7-1-2021	9-30-2021	1.6719	1.6719
8	10-1-2021	12-31-2021	1.6946	1.6946
9	1-1-2022	3-31-2022	1.5343	1.5343
10	4-1-2022	6-30-2022	1.5308	1.5308
11	7-1-2022	9-30-2022	1.5476	1.5476
12	10-1-2022	12-31-2022	1.5684	1.5684
13	1-1-2023	3-31-2023	1.2889	1.2889
14	4-1-2023	6-30-2023	1.0429	1.0429
15	7-1-2023	9-30-2023	2.2332	2.2332
16	10-1-2023	12-31-2023	4.7671	4.7671
17	1-1-2024	3-31-2024	0.4658	0.4658
		Highest	4.7671	4.7671

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Area	7.8344	0.1263	10.9624	5.8000e-004		0.0608	0.0608		0.0608	0.0608	0.0000	17.9271	17.9271	0.0172	0.0000	18.3571
Energy	0.0942	0.8271	0.5076	5.1400e-003		0.0651	0.0651		0.0651	0.0651	0.0000	5,670.0876	5,670.0876	0.2135	0.0576	5,692.5760
Mobile	3.4844	17.0662	45.7356	0.1909	17.6504	0.1396	17.7900	4.7283	0.1297	4.8579	0.0000	17,679.0541	17,679.0541	0.7744	0.0000	17,698.4141
Waste						0.0000	0.0000		0.0000	0.0000	255.8336	0.0000	255.8336	15.1193	0.0000	633.8168
Water						0.0000	0.0000		0.0000	0.0000	64.8808	1,296.4530	1,361.3338	6.7174	0.1684	1,579.4587
Total	11.4130	18.0195	57.2056	0.1966	17.6504	0.2655	17.9159	4.7283	0.2555	4.9838	320.7143	24,663.5218	24,984.2362	22.8418	0.2260	25,622.6227

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	7.8344	0.1263	10.9624	5.8000e-004		0.0608	0.0608		0.0608	0.0608	0.0000	17.9271	17.9271	0.0172	0.0000	18.3571
Energy	0.0942	0.8271	0.5076	5.1400e-003		0.0651	0.0651		0.0651	0.0651	0.0000	5,670.0876	5,670.0876	0.2135	0.0576	5,692.5760
Mobile	3.4844	17.0662	45.7356	0.1909	17.6504	0.1396	17.7900	4.7283	0.1297	4.8579	0.0000	17,679.0541	17,679.0541	0.7744	0.0000	17,698.4141
Waste						0.0000	0.0000		0.0000	0.0000	255.8336	0.0000	255.8336	15.1193	0.0000	633.8168
Water						0.0000	0.0000		0.0000	0.0000	64.8808	1,296.4530	1,361.3338	6.7174	0.1684	1,579.4587
Total	11.4130	18.0195	57.2056	0.1966	17.6504	0.2655	17.9159	4.7283	0.2555	4.9838	320.7143	24,663.5218	24,984.2362	22.8418	0.2260	25,622.6227

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	3/10/2020	5	50	
2	Site Preparation	Site Preparation	3/11/2020	4/21/2020	5	30	
3	Grading	Grading	4/22/2020	8/4/2020	5	75	
4	Building Construction	Building Construction	8/5/2020	6/6/2023	5	740	
5	Paving	Paving	6/7/2023	8/22/2023	5	55	
6	Architectural Coating	Architectural Coating	8/23/2023	1/9/2024	5	100	

Acres of Grading (Site Preparation Phase): 48.5

Acres of Grading (Grading Phase): 48.5

Acres of Paving: 0

Residential Indoor: 2,152,575; Residential Outdoor: 717,525; Non-Residential Indoor: 1,225,505; Non-Residential Outdoor: 408,502;

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36

Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	205.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1,027.00	248.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	15.00	0.00	65.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.0000e-003	0.0000	7.0000e-003	1.0600e-003	0.0000	1.0600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0828	0.8300	0.5438	9.7000e-004		0.0415	0.0415		0.0386	0.0386	0.0000	84.9965	84.9965	0.0240	0.0000	85.5964
Total	0.0828	0.8300	0.5438	9.7000e-004	7.0000e-003	0.0415	0.0485	1.0600e-003	0.0386	0.0396	0.0000	84.9965	84.9965	0.0240	0.0000	85.5964

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.6000e-004	9.3500e-003	1.9400e-003	3.0000e-005	5.6000e-004	3.0000e-005	5.9000e-004	1.5000e-004	3.0000e-005	1.8000e-004	0.0000	2.4659	2.4659	1.8000e-004	0.0000	2.4703
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6700e-003	1.2900e-003	0.0142	4.0000e-005	4.1100e-003	3.0000e-005	4.1500e-003	1.0900e-003	3.0000e-005	1.1200e-003	0.0000	3.7074	3.7074	1.1000e-004	0.0000	3.7100
Total	1.9300e-003	0.0106	0.0162	7.0000e-005	4.6700e-003	6.0000e-005	4.7400e-003	1.2400e-003	6.0000e-005	1.3000e-003	0.0000	6.1732	6.1732	2.9000e-004	0.0000	6.1804

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					7.0000e-003	0.0000	7.0000e-003	1.0600e-003	0.0000	1.0600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0828	0.8300	0.5438	9.7000e-004		0.0415	0.0415		0.0386	0.0386	0.0000	84.9964	84.9964	0.0240	0.0000	85.5963
Total	0.0828	0.8300	0.5438	9.7000e-004	7.0000e-003	0.0415	0.0485	1.0600e-003	0.0386	0.0396	0.0000	84.9964	84.9964	0.0240	0.0000	85.5963

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr										MT/yr					
Hauling	2.6000e-004	9.3500e-003	1.9400e-003	3.0000e-005	5.6000e-004	3.0000e-005	5.9000e-004	1.5000e-004	3.0000e-005	1.8000e-004	0.0000	2.4659	2.4659	1.8000e-004	0.0000	2.4703
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6700e-003	1.2900e-003	0.0142	4.0000e-005	4.1100e-003	3.0000e-005	4.1500e-003	1.0900e-003	3.0000e-005	1.1200e-003	0.0000	3.7074	3.7074	1.1000e-004	0.0000	3.7100
Total	1.9300e-003	0.0106	0.0162	7.0000e-005	4.6700e-003	6.0000e-005	4.7400e-003	1.2400e-003	6.0000e-005	1.3000e-003	0.0000	6.1732	6.1732	2.9000e-004	0.0000	6.1804

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2967	0.0000	0.2967	0.1517	0.0000	0.1517	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0612	0.6363	0.3227	5.7000e-004		0.0330	0.0330		0.0303	0.0303	0.0000	50.1460	50.1460	0.0162	0.0000	50.5515
Total	0.0612	0.6363	0.3227	5.7000e-004	0.2967	0.0330	0.3297	0.1517	0.0303	0.1821	0.0000	50.1460	50.1460	0.0162	0.0000	50.5515

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-003	9.3000e-004	0.0102	3.0000e-005	2.9600e-003	2.0000e-005	2.9900e-003	7.9000e-004	2.0000e-005	8.1000e-004	0.0000	2.6693	2.6693	8.0000e-005	0.0000	2.6712

Total	1.2000e-003	9.3000e-004	0.0102	3.0000e-005	2.9600e-003	2.0000e-005	2.9900e-003	7.9000e-004	2.0000e-005	8.1000e-004	0.0000	2.6693	2.6693	8.0000e-005	0.0000	2.6712
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Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2967	0.0000	0.2967	0.1517	0.0000	0.1517	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0612	0.6363	0.3227	5.7000e-004		0.0330	0.0330		0.0303	0.0303	0.0000	50.1460	50.1460	0.0162	0.0000	50.5514
Total	0.0612	0.6363	0.3227	5.7000e-004	0.2967	0.0330	0.3297	0.1517	0.0303	0.1821	0.0000	50.1460	50.1460	0.0162	0.0000	50.5514

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-003	9.3000e-004	0.0102	3.0000e-005	2.9600e-003	2.0000e-005	2.9900e-003	7.9000e-004	2.0000e-005	8.1000e-004	0.0000	2.6693	2.6693	8.0000e-005	0.0000	2.6712
Total	1.2000e-003	9.3000e-004	0.0102	3.0000e-005	2.9600e-003	2.0000e-005	2.9900e-003	7.9000e-004	2.0000e-005	8.1000e-004	0.0000	2.6693	2.6693	8.0000e-005	0.0000	2.6712

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2516	0.0000	0.2516	0.1269	0.0000	0.1269	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1669	1.8824	1.1984	2.3300e-003		0.0815	0.0815		0.0750	0.0750	0.0000	204.3161	204.3161	0.0661	0.0000	205.9681
Total	0.1669	1.8824	1.1984	2.3300e-003	0.2516	0.0815	0.3331	0.1269	0.0750	0.2019	0.0000	204.3161	204.3161	0.0661	0.0000	205.9681

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3400e-003	2.5700e-003	0.0285	8.0000e-005	8.2300e-003	6.0000e-005	8.2900e-003	2.1900e-003	6.0000e-005	2.2400e-003	0.0000	7.4147	7.4147	2.1000e-004	0.0000	7.4201
Total	3.3400e-003	2.5700e-003	0.0285	8.0000e-005	8.2300e-003	6.0000e-005	8.2900e-003	2.1900e-003	6.0000e-005	2.2400e-003	0.0000	7.4147	7.4147	2.1000e-004	0.0000	7.4201

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Fugitive Dust					0.2516	0.0000	0.2516	0.1269	0.0000	0.1269	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1669	1.8824	1.1984	2.3300e-003		0.0815	0.0815		0.0750	0.0750	0.0000	204.3159	204.3159	0.0661	0.0000	205.9679
Total	0.1669	1.8824	1.1984	2.3300e-003	0.2516	0.0815	0.3331	0.1269	0.0750	0.2019	0.0000	204.3159	204.3159	0.0661	0.0000	205.9679

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3400e-003	2.5700e-003	0.0285	8.0000e-005	8.2300e-003	6.0000e-005	8.2900e-003	2.1900e-003	6.0000e-005	2.2400e-003	0.0000	7.4147	7.4147	2.1000e-004	0.0000	7.4201
Total	3.3400e-003	2.5700e-003	0.0285	8.0000e-005	8.2300e-003	6.0000e-005	8.2900e-003	2.1900e-003	6.0000e-005	2.2400e-003	0.0000	7.4147	7.4147	2.1000e-004	0.0000	7.4201

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1134	1.0265	0.9014	1.4400e-003		0.0598	0.0598		0.0562	0.0562	0.0000	123.9113	123.9113	0.0302	0.0000	124.6671
Total	0.1134	1.0265	0.9014	1.4400e-003		0.0598	0.0598		0.0562	0.0562	0.0000	123.9113	123.9113	0.0302	0.0000	124.6671

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0449	1.4227	0.3587	3.3500e-003	0.0836	6.9600e-003	0.0906	0.0241	6.6600e-003	0.0308	0.0000	324.5981	324.5981	0.0217	0.0000	325.1396
Worker	0.2446	0.1883	2.0845	6.0100e-003	0.6028	4.6800e-003	0.6075	0.1601	4.3200e-003	0.1644	0.0000	543.1975	543.1975	0.0156	0.0000	543.5886
Total	0.2895	1.6110	2.4432	9.3600e-003	0.6864	0.0116	0.6981	0.1842	0.0110	0.1952	0.0000	867.7956	867.7956	0.0373	0.0000	868.7282

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1134	1.0265	0.9014	1.4400e-003		0.0598	0.0598		0.0562	0.0562	0.0000	123.9112	123.9112	0.0302	0.0000	124.6669
Total	0.1134	1.0265	0.9014	1.4400e-003		0.0598	0.0598		0.0562	0.0562	0.0000	123.9112	123.9112	0.0302	0.0000	124.6669

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr										MT/yr					
	Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0449	1.4227	0.3587	3.3500e-003	0.0836	6.9600e-003	0.0906	0.0241	6.6600e-003	0.0308	0.0000	324.5981	324.5981	0.0217	0.0000	325.1396
Worker	0.2446	0.1883	2.0845	6.0100e-003	0.6028	4.6800e-003	0.6075	0.1601	4.3200e-003	0.1644	0.0000	543.1975	543.1975	0.0156	0.0000	543.5886
Total	0.2895	1.6110	2.4432	9.3600e-003	0.6864	0.0116	0.6981	0.1842	0.0110	0.1952	0.0000	867.7956	867.7956	0.0373	0.0000	868.7282

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2481	2.2749	2.1631	3.5100e-003		0.1251	0.1251		0.1176	0.1176	0.0000	302.2867	302.2867	0.0729	0.0000	304.1099
Total	0.2481	2.2749	2.1631	3.5100e-003		0.1251	0.1251		0.1176	0.1176	0.0000	302.2867	302.2867	0.0729	0.0000	304.1099

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0931	3.1481	0.7956	8.1000e-003	0.2040	6.4100e-003	0.2104	0.0589	6.1300e-003	0.0650	0.0000	785.8192	785.8192	0.0507	0.0000	787.0856
Worker	0.5570	0.4134	4.6773	0.0142	1.4704	0.0111	1.4815	0.3905	0.0102	0.4007	0.0000	1,282.1385	1,282.1385	0.0345	0.0000	1,283.0011

Total	0.6501	3.5615	5.4729	0.0223	1.6744	0.0175	1.6919	0.4494	0.0163	0.4657	0.0000	2,067.9577	2,067.9577	0.0852	0.0000	2,070.0867
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Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2481	2.2749	2.1631	3.5100e-003		0.1251	0.1251		0.1176	0.1176	0.0000	302.2863	302.2863	0.0729	0.0000	304.1095
Total	0.2481	2.2749	2.1631	3.5100e-003		0.1251	0.1251		0.1176	0.1176	0.0000	302.2863	302.2863	0.0729	0.0000	304.1095

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0931	3.1481	0.7956	8.1000e-003	0.2040	6.4100e-003	0.2104	0.0589	6.1300e-003	0.0650	0.0000	785.8192	785.8192	0.0507	0.0000	787.0856
Worker	0.5570	0.4134	4.6773	0.0142	1.4704	0.0111	1.4815	0.3905	0.0102	0.4007	0.0000	1,282.1385	1,282.1385	0.0345	0.0000	1,283.0011
Total	0.6501	3.5615	5.4729	0.0223	1.6744	0.0175	1.6919	0.4494	0.0163	0.4657	0.0000	2,067.9577	2,067.9577	0.0852	0.0000	2,070.0867

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2218	2.0300	2.1272	3.5000e-003		0.1052	0.1052		0.0990	0.0990	0.0000	301.2428	301.2428	0.0722	0.0000	303.0471
Total	0.2218	2.0300	2.1272	3.5000e-003		0.1052	0.1052		0.0990	0.0990	0.0000	301.2428	301.2428	0.0722	0.0000	303.0471

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0870	2.9756	0.7504	7.9900e-003	0.2032	5.5600e-003	0.2087	0.0586	5.3200e-003	0.0639	0.0000	775.8932	775.8932	0.0487	0.0000	777.1110
Worker	0.5211	0.3720	4.3027	0.0136	1.4648	0.0107	1.4755	0.3890	9.8800e-003	0.3989	0.0000	1,231.4785	1,231.4785	0.0311	0.0000	1,232.2548
Total	0.6081	3.3476	5.0530	0.0216	1.6680	0.0163	1.6842	0.4476	0.0152	0.4628	0.0000	2,007.3718	2,007.3718	0.0798	0.0000	2,009.3657

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Off-Road	0.2218	2.0300	2.1272	3.5000e-003		0.1052	0.1052		0.0990	0.0990	0.0000	301.2425	301.2425	0.0722	0.0000	303.0467
Total	0.2218	2.0300	2.1272	3.5000e-003		0.1052	0.1052		0.0990	0.0990	0.0000	301.2425	301.2425	0.0722	0.0000	303.0467

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0870	2.9756	0.7504	7.9900e-003	0.2032	5.5600e-003	0.2087	0.0586	5.3200e-003	0.0639	0.0000	775.8932	775.8932	0.0487	0.0000	777.1110
Worker	0.5211	0.3720	4.3027	0.0136	1.4648	0.0107	1.4755	0.3890	9.8800e-003	0.3989	0.0000	1,231.4785	1,231.4785	0.0311	0.0000	1,232.2548
Total	0.6081	3.3476	5.0530	0.0216	1.6680	0.0163	1.6842	0.4476	0.0152	0.4628	0.0000	2,007.3718	2,007.3718	0.0798	0.0000	2,009.3657

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0881	0.8056	0.9097	1.5100e-003		0.0392	0.0392		0.0369	0.0369	0.0000	129.8107	129.8107	0.0309	0.0000	130.5827
Total	0.0881	0.8056	0.9097	1.5100e-003		0.0392	0.0392		0.0369	0.0369	0.0000	129.8107	129.8107	0.0309	0.0000	130.5827

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0278	0.9617	0.2897	3.3300e-003	0.0875	1.1100e-003	0.0886	0.0253	1.0600e-003	0.0263	0.0000	323.9121	323.9121	0.0185	0.0000	324.3745
Worker	0.2113	0.1450	1.7089	5.6500e-003	0.6310	4.5000e-003	0.6355	0.1676	4.1400e-003	0.1717	0.0000	510.7167	510.7167	0.0121	0.0000	511.0181
Total	0.2392	1.1067	1.9986	8.9800e-003	0.7185	5.6100e-003	0.7241	0.1928	5.2000e-003	0.1980	0.0000	834.6288	834.6288	0.0306	0.0000	835.3925

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0881	0.8056	0.9097	1.5100e-003		0.0392	0.0392		0.0369	0.0369	0.0000	129.8105	129.8105	0.0309	0.0000	130.5825
Total	0.0881	0.8056	0.9097	1.5100e-003		0.0392	0.0392		0.0369	0.0369	0.0000	129.8105	129.8105	0.0309	0.0000	130.5825

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0278	0.9617	0.2897	3.3300e-003	0.0875	1.1100e-003	0.0886	0.0253	1.0600e-003	0.0263	0.0000	323.9121	323.9121	0.0185	0.0000	324.3745
Worker	0.2113	0.1450	1.7089	5.6500e-003	0.6310	4.5000e-003	0.6355	0.1676	4.1400e-003	0.1717	0.0000	510.7167	510.7167	0.0121	0.0000	511.0181
Total	0.2392	1.1067	1.9986	8.9800e-003	0.7185	5.6100e-003	0.7241	0.1928	5.2000e-003	0.1980	0.0000	834.6288	834.6288	0.0306	0.0000	835.3925

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0284	0.2803	0.4011	6.3000e-004		0.0140	0.0140		0.0129	0.0129	0.0000	55.0739	55.0739	0.0178	0.0000	55.5192
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0284	0.2803	0.4011	6.3000e-004		0.0140	0.0140		0.0129	0.0129	0.0000	55.0739	55.0739	0.0178	0.0000	55.5192

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5200e-003	1.0400e-003	0.0123	4.0000e-005	4.5300e-003	3.0000e-005	4.5600e-003	1.2000e-003	3.0000e-005	1.2300e-003	0.0000	3.6631	3.6631	9.0000e-005	0.0000	3.6652

Total	1.5200e-003	1.0400e-003	0.0123	4.0000e-005	4.5300e-003	3.0000e-005	4.5600e-003	1.2000e-003	3.0000e-005	1.2300e-003	0.0000	3.6631	3.6631	9.0000e-005	0.0000	3.6652
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Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0284	0.2803	0.4011	6.3000e-004		0.0140	0.0140		0.0129	0.0129	0.0000	55.0738	55.0738	0.0178	0.0000	55.5191
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0284	0.2803	0.4011	6.3000e-004		0.0140	0.0140		0.0129	0.0129	0.0000	55.0738	55.0738	0.0178	0.0000	55.5191

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5200e-003	1.0400e-003	0.0123	4.0000e-005	4.5300e-003	3.0000e-005	4.5600e-003	1.2000e-003	3.0000e-005	1.2300e-003	0.0000	3.6631	3.6631	9.0000e-005	0.0000	3.6652
Total	1.5200e-003	1.0400e-003	0.0123	4.0000e-005	4.5300e-003	3.0000e-005	4.5600e-003	1.2000e-003	3.0000e-005	1.2300e-003	0.0000	3.6631	3.6631	9.0000e-005	0.0000	3.6652

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	6.6147					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.9100e-003	0.0606	0.0842	1.4000e-004		3.2900e-003	3.2900e-003		3.2900e-003	3.2900e-003	0.0000	11.8726	11.8726	7.1000e-004	0.0000	11.8904
Total	6.6236	0.0606	0.0842	1.4000e-004		3.2900e-003	3.2900e-003		3.2900e-003	3.2900e-003	0.0000	11.8726	11.8726	7.1000e-004	0.0000	11.8904

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0350	0.0240	0.2833	9.4000e-004	0.1046	7.5000e-004	0.1053	0.0278	6.9000e-004	0.0285	0.0000	84.6503	84.6503	2.0000e-003	0.0000	84.7002
Total	0.0350	0.0240	0.2833	9.4000e-004	0.1046	7.5000e-004	0.1053	0.0278	6.9000e-004	0.0285	0.0000	84.6503	84.6503	2.0000e-003	0.0000	84.7002

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Archit. Coating	6.6147					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	8.9100e-003	0.0606	0.0842	1.4000e-004		3.2900e-003	3.2900e-003		3.2900e-003	3.2900e-003	0.0000	11.8726	11.8726	7.1000e-004	0.0000	11.8904
Total	6.6236	0.0606	0.0842	1.4000e-004		3.2900e-003	3.2900e-003		3.2900e-003	3.2900e-003	0.0000	11.8726	11.8726	7.1000e-004	0.0000	11.8904

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0350	0.0240	0.2833	9.4000e-004	0.1046	7.5000e-004	0.1053	0.0278	6.9000e-004	0.0285	0.0000	84.6503	84.6503	2.0000e-003	0.0000	84.7002
Total	0.0350	0.0240	0.2833	9.4000e-004	0.1046	7.5000e-004	0.1053	0.0278	6.9000e-004	0.0285	0.0000	84.6503	84.6503	2.0000e-003	0.0000	84.7002

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4979					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.3000e-004	4.2700e-003	6.3400e-003	1.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	0.8936	0.8936	5.0000e-005	0.0000	0.8949
Total	0.4985	4.2700e-003	6.3400e-003	1.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	0.8936	0.8936	5.0000e-005	0.0000	0.8949

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5000e-003	1.6500e-003	0.0199	7.0000e-005	7.8700e-003	6.0000e-005	7.9300e-003	2.0900e-003	5.0000e-005	2.1400e-003	0.0000	6.1611	6.1611	1.4000e-004	0.0000	6.1645
Total	2.5000e-003	1.6500e-003	0.0199	7.0000e-005	7.8700e-003	6.0000e-005	7.9300e-003	2.0900e-003	5.0000e-005	2.1400e-003	0.0000	6.1611	6.1611	1.4000e-004	0.0000	6.1645

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.4979					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.3000e-004	4.2700e-003	6.3400e-003	1.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	0.8936	0.8936	5.0000e-005	0.0000	0.8949
Total	0.4985	4.2700e-003	6.3400e-003	1.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	0.8936	0.8936	5.0000e-005	0.0000	0.8949

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr										MT/yr					
	Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5000e-003	1.6500e-003	0.0199	7.0000e-005	7.8700e-003	6.0000e-005	7.9300e-003	2.0900e-003	5.0000e-005	2.1400e-003	0.0000	6.1611	6.1611	1.4000e-004	0.0000	6.1645
Total	2.5000e-003	1.6500e-003	0.0199	7.0000e-005	7.8700e-003	6.0000e-005	7.9300e-003	2.0900e-003	5.0000e-005	2.1400e-003	0.0000	6.1611	6.1611	1.4000e-004	0.0000	6.1645

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Mitigated	3.4844	17.0662	45.7356	0.1909	17.6504	0.1396	17.7900	4.7283	0.1297	4.8579	0.0000	17,679.0541	17,679.0541	0.7744	0.0000	17,698.4141
Unmitigated	3.4844	17.0662	45.7356	0.1909	17.6504	0.1396	17.7900	4.7283	0.1297	4.8579	0.0000	17,679.0541	17,679.0541	0.7744	0.0000	17,698.4141

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	6,367.37	6,112.25	5602.01	21,247,245	21,247,245
General Office Building	7,158.74	1,593.23	684.87	17,520,967	17,520,967
Regional Shopping Center	3,692.35	4,320.72	2182.94	7,713,760	7,713,760
Total	17,218.46	12,026.20	8,469.82	46,481,973	46,481,973

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.00	19.00	41.00	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827
General Office Building	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827
Regional Shopping Center	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	4,738.3586	4,738.3586	0.1956	0.0405	4,755.3102
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	4,738.3586	4,738.3586	0.1956	0.0405	4,755.3102
NaturalGas Mitigated	0.0942	0.8271	0.5076	5.1400e-003		0.0651	0.0651		0.0651	0.0651	0.0000	931.7291	931.7291	0.0179	0.0171	937.2659
NaturalGas Unmitigated	0.0942	0.8271	0.5076	5.1400e-003		0.0651	0.0651		0.0651	0.0651	0.0000	931.7291	931.7291	0.0179	0.0171	937.2659

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	9.79761e+006	0.0528	0.4515	0.1921	2.8800e-003		0.0365	0.0365		0.0365	0.0365	0.0000	522.8376	522.8376	0.0100	9.5900e-003	525.9446
General Office Building	7.50476e+006	0.0405	0.3679	0.3090	2.2100e-003		0.0280	0.0280		0.0280	0.0280	0.0000	400.4824	400.4824	7.6800e-003	7.3400e-003	402.8623
Regional Shopping Center	157579	8.5000e-004	7.7200e-003	6.4900e-003	5.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	8.4090	8.4090	1.6000e-004	1.5000e-004	8.4590
Total		0.0942	0.8271	0.5076	5.1400e-003		0.0651	0.0651		0.0651	0.0651	0.0000	931.7291	931.7291	0.0179	0.0171	937.2659

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	9.79761e+006	0.0528	0.4515	0.1921	2.8800e-003		0.0365	0.0365		0.0365	0.0365	0.0000	522.8376	522.8376	0.0100	9.5900e-003	525.9446
General Office Building	7.50476e+006	0.0405	0.3679	0.3090	2.2100e-003		0.0280	0.0280		0.0280	0.0280	0.0000	400.4824	400.4824	7.6800e-003	7.3400e-003	402.8623
Regional Shopping Center	157579	8.5000e-004	7.7200e-003	6.4900e-003	5.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	8.4090	8.4090	1.6000e-004	1.5000e-004	8.4590
Total		0.0942	0.8271	0.5076	5.1400e-003		0.0651	0.0651		0.0651	0.0651	0.0000	931.7291	931.7291	0.0179	0.0171	937.2659

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	4.20957e+006	1,341.2576	0.0554	0.0115	1,346.0560
General Office Building	9.36472e+006	2,983.8020	0.1232	0.0255	2,994.4766
Regional Shopping Center	1.29715e+006	413.2990	0.0171	3.5300e-003	414.7776
Total		4,738.3586	0.1956	0.0405	4,755.3102

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	4.20957e+006	1,341.2576	0.0554	0.0115	1,346.0560
General Office Building	9.36472e+006	2,983.8020	0.1232	0.0255	2,994.4766
Regional Shopping Center	1.29715e+006	413.2990	0.0171	3.5300e-003	414.7776
Total		4,738.3586	0.1956	0.0405	4,755.3102

6.0 Area Detail

6.1 Mitigation Measures Area

Consumer Products	6.7934					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.3298	0.1263	10.9624	5.8000e-004		0.0608	0.0608		0.0608	0.0608	0.0000	17.9271	17.9271	0.0172	0.0000	18.3571
Total	7.8344	0.1263	10.9624	5.8000e-004		0.0608	0.0608		0.0608	0.0608	0.0000	17.9271	17.9271	0.0172	0.0000	18.3571

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1,361.3338	6.7174	0.1684	1,579.4587
Unmitigated	1,361.3338	6.7174	0.1684	1,579.4587

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	69.2587 / 43.6631	463.8735	2.2750	0.0571	537.7541
General Office Building	128.132 / 78.5324	850.2353	4.2086	0.1055	986.8893

Regional Shopping Center	7.11689 / 4.36196	47.2250	0.2338	5.8600e-003	54.8153
Total		1,361.3338	6.7174	0.1684	1,579.4587

Mitigated

Land Use	Indoor/Outdoor Use Mgal	Total CO2	CH4	N2O	CO2e
		MT/yr			
Apartments Mid Rise	69.2587 / 43.6631	463.8735	2.2750	0.0571	537.7541
General Office Building	128.132 / 78.5324	850.2353	4.2086	0.1055	986.8893
Regional Shopping Center	7.11689 / 4.36196	47.2250	0.2338	5.8600e-003	54.8153
Total		1,361.3338	6.7174	0.1684	1,579.4587

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
		MT/yr		
Mitigated	255.8336	15.1193	0.0000	633.8168
Unmitigated	255.8336	15.1193	0.0000	633.8168

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	488.98	99.2585	5.8660	0.0000	245.9088
General Office Building	670.46	136.0973	8.0431	0.0000	337.1754
Regional Shopping Center	100.88	20.4777	1.2102	0.0000	50.7327
Total		255.8336	15.1193	0.0000	633.8168

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	488.98	99.2585	5.8660	0.0000	245.9088
General Office Building	670.46	136.0973	8.0431	0.0000	337.1754
Regional Shopping Center	100.88	20.4777	1.2102	0.0000	50.7327
Total		255.8336	15.1193	0.0000	633.8168

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Uni Village Construction Summer 2025

CSUDH Campus Master Plan EIR (Interim 2025 University Village Construction) - South Coast Air Basin, Summer

**CSUDH Campus Master Plan EIR (Interim 2025 University Village Construction)
South Coast Air Basin, Summer**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	1,063.00	Dwelling Unit	13.30	1,063,000.00	3040
Regional Shopping Center	96.08	1000sqft	2.21	96,085.00	0
General Office Building	720.92	1000sqft	33.00	720,918.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -
 Land Use - Master Plan
 Construction Phase - Adjusted.
 Grading - Master Plan
 Demolition -
 Vehicle Trips - Master Plan
 Woodstoves - No woodstove and fireplace.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	55.00	100.00
tblConstructionPhase	PhaseEndDate	11/7/2023	1/9/2024
tblFireplaces	NumberGas	903.55	0.00
tblFireplaces	NumberNoFireplace	106.30	0.00
tblFireplaces	NumberWood	53.15	0.00
tblGrading	AcresOfGrading	187.50	48.50
tblGrading	AcresOfGrading	0.00	48.50
tblLandUse	LandUseSquareFeet	96,080.00	96,085.00
tblLandUse	LandUseSquareFeet	720,920.00	720,918.00
tblLandUse	LotAcreage	27.97	13.30
tblLandUse	LotAcreage	16.55	33.00
tblVehicleTrips	HO_TTP	40.60	41.00
tblVehicleTrips	HS_TTP	19.20	19.00
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	6.39	5.75
tblVehicleTrips	ST_TR	2.46	2.21
tblVehicleTrips	ST_TR	49.97	44.97
tblVehicleTrips	SU_TR	5.86	5.27
tblVehicleTrips	SU_TR	1.05	0.95
tblVehicleTrips	SU_TR	25.24	22.72
tblVehicleTrips	WD_TR	6.65	5.99
tblVehicleTrips	WD_TR	11.03	9.93
tblVehicleTrips	WD_TR	42.70	38.43
tblWoodstoves	NumberCatalytic	53.15	0.00
tblWoodstoves	NumberNoncatalytic	53.15	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	7.5498	50.2582	65.0605	0.2081	19.9819	2.199	22.1809	10.1692	2.023	12.1922	0	21,065.49	21,065.49	1.949	0	21,100.35
2021	6.8968	43.9858	60.9028	0.2038	13.0663	1.0921	14.1584	3.5012	1.0259	4.5271	0	20,635.65	20,635.65	1.3376	0	20,669.09
2022	6.3932	40.7072	57.4829	0.199	13.0663	0.9337	14.0001	3.5012	0.8775	4.3787	0	20,170.71	20,170.71	1.2899	0	20,202.95
2023	143.1993	33.6832	54.1026	0.1929	13.0663	0.7996	13.8659	3.5012	0.7511	4.2523	0	19,556.64	19,556.64	1.2121	0	19,586.94
2024	143.1478	1.6357	7.9476	0.0234	2.2914	0.0767	2.3682	0.6077	0.0755	0.6832	0	2,318.44	2,318.44	0.0616	0	2,319.98
Maximum	143.1993	50.2582	65.0605	0.2081	19.9819	2.199	22.1809	10.1692	2.023	12.1922	0	21,065.49	21,065.49	1.949	0	21,100.35

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	7.5498	50.2582	65.0605	0.2081	19.9819	2.1990	22.1809	10.1692	2.0230	12.1922	0.0000	21,065.48 66	21,065.486 6	1.9490	0.0000	21,100.34 69
2021	6.8968	43.9858	60.9028	0.2038	13.0663	1.0921	14.1584	3.5012	1.0259	4.5271	0.0000	20,635.65 42	20,635.654 2	1.3376	0.0000	20,669.09 45
2022	6.3932	40.7072	57.4829	0.1990	13.0663	0.9337	14.0001	3.5012	0.8775	4.3787	0.0000	20,170.70 77	20,170.707 7	1.2899	0.0000	20,202.95 45
2023	143.1993	33.6832	54.1026	0.1929	13.0663	0.7996	13.8659	3.5012	0.7511	4.2523	0.0000	19,556.64 12	19,556.641 2	1.2121	0.0000	19,586.94 46
2024	143.1478	1.6357	7.9476	0.0234	2.2914	0.0767	2.3682	0.6077	0.0755	0.6832	0.0000	2,318.441 0	2,318.4410	0.0616	0.0000	2,319.980 0
Maximum	143.1993	50.2582	65.0605	0.2081	19.9819	2.1990	22.1809	10.1692	2.0230	12.1922	0.0000	21,065.48 66	21,065.486 6	1.9490	0.0000	21,100.34 69

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	43.7596	1.0100	87.6990	4.6400e-003		0.4865	0.4865		0.4865	0.4865	0.0000	158.0899	158.0899	0.1517	0.0000	161.8820
Energy	0.5159	4.5319	2.7815	0.0281		0.3564	0.3564		0.3564	0.3564		5,627.7012	5,627.7012	0.1079	0.1032	5,661.1438
Mobile	24.0384	105.9573	307.0884	1.2706	115.0708	0.8936	115.9644	30.7789	0.8299	31.6088		129,641.4695	129,641.4695	5.5002		129,778.9744
Total	68.3139	111.4991	397.5689	1.3034	115.0708	1.7365	116.8073	30.7789	1.6728	32.4517	0.0000	135,427.2606	135,427.2606	5.7597	0.1032	135,602.0002

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	43.7596	1.0100	87.6990	4.6400e-003		0.4865	0.4865		0.4865	0.4865	0.0000	158.0899	158.0899	0.1517	0.0000	161.8820
Energy	0.5159	4.5319	2.7815	0.0281		0.3564	0.3564		0.3564	0.3564		5,627.7012	5,627.7012	0.1079	0.1032	5,661.1438
Mobile	24.0384	105.9573	307.0884	1.2706	115.0708	0.8936	115.9644	30.7789	0.8299	31.6088		129,641.4695	129,641.4695	5.5002		129,778.9744
Total	68.3139	111.4991	397.5689	1.3034	115.0708	1.7365	116.8073	30.7789	1.6728	32.4517	0.0000	135,427.2606	135,427.2606	5.7597	0.1032	135,602.0002

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	3/10/2020	5	50	
2	Site Preparation	Site Preparation	3/11/2020	4/21/2020	5	30	
3	Grading	Grading	4/22/2020	8/4/2020	5	75	
4	Building Construction	Building Construction	8/5/2020	6/6/2023	5	740	
5	Paving	Paving	6/7/2023	8/22/2023	5	55	
6	Architectural Coating	Architectural Coating	8/23/2023	1/9/2024	5	100	

Acres of Grading (Site Preparation Phase): 48.5

Acres of Grading (Grading Phase): 48.5

Acres of Paving: 0

Residential Indoor: 2,152,575; Residential Outdoor: 717,525; Non-Residential Indoor: 1,225,505; Non-Residential Outdoor: 408,502;

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42

Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	205.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1,027.00	248.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	15.00	0.00	65.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day					
Fugitive Dust					0.2798	0.0000	0.2798	0.0424	0.0000	0.0424			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419		3,747.7049	3,747.7049	1.0580		3,774.1536
Total	3.3121	33.2010	21.7532	0.0388	0.2798	1.6587	1.9385	0.0424	1.5419	1.5842		3,747.7049	3,747.7049	1.0580		3,774.1536

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0104	0.3622	0.0753	1.0100e-003	0.0227	1.1700e-003	0.0239	6.2200e-003	1.1200e-003	7.3400e-003		109.5120	109.5120	7.7500e-003			109.7056
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0673	0.0455	0.6114	1.7200e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1800e-003	0.0456		171.5755	171.5755	4.9400e-003			171.6991
Total	0.0776	0.4077	0.6867	2.7300e-003	0.1904	2.4500e-003	0.1928	0.0507	2.3000e-003	0.0530		281.0874	281.0874	0.0127			281.4047

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					0.2798	0.0000	0.2798	0.0424	0.0000	0.0424			0.0000				0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419	0.0000	3,747.7049	3,747.7049	1.0580			3,774.1536

Total	3.3121	33.2010	21.7532	0.0388	0.2798	1.6587	1.9385	0.0424	1.5419	1.5842	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536
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Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0104	0.3622	0.0753	1.0100e-003	0.0227	1.1700e-003	0.0239	6.2200e-003	1.1200e-003	7.3400e-003		109.5120	109.5120	7.7500e-003		109.7056
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0673	0.0455	0.6114	1.7200e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1800e-003	0.0456		171.5755	171.5755	4.9400e-003		171.6991
Total	0.0776	0.4077	0.6867	2.7300e-003	0.1904	2.4500e-003	0.1928	0.0507	2.3000e-003	0.0530		281.0874	281.0874	0.0127		281.4047

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.7807	0.0000	19.7807	10.1158	0.0000	10.1158			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
Total	4.0765	42.4173	21.5136	0.0380	19.7807	2.1974	21.9781	10.1158	2.0216	12.1374		3,685.1016	3,685.1016	1.1918		3,714.8975

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0807	0.0546	0.7336	2.0700e-003	0.2012	1.5300e-003	0.2027	0.0534	1.4100e-003	0.0548		205.8905	205.8905	5.9300e-003		206.0389
Total	0.0807	0.0546	0.7336	2.0700e-003	0.2012	1.5300e-003	0.2027	0.0534	1.4100e-003	0.0548		205.8905	205.8905	5.9300e-003		206.0389

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.7807	0.0000	19.7807	10.1158	0.0000	10.1158			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
Total	4.0765	42.4173	21.5136	0.0380	19.7807	2.1974	21.9781	10.1158	2.0216	12.1374	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0807	0.0546	0.7336	2.0700e-003	0.2012	1.5300e-003	0.2027	0.0534	1.4100e-003	0.0548		205.8905	205.8905	5.9300e-003		206.0389
Total	0.0807	0.0546	0.7336	2.0700e-003	0.2012	1.5300e-003	0.2027	0.0534	1.4100e-003	0.0548		205.8905	205.8905	5.9300e-003		206.0389

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.7079	0.0000	6.7079	3.3843	0.0000	3.3843			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000		6,005.8653	6,005.8653	1.9424		6,054.4257
Total	4.4501	50.1975	31.9583	0.0620	6.7079	2.1739	8.8818	3.3843	2.0000	5.3843		6,005.8653	6,005.8653	1.9424		6,054.4257

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0897	0.0607	0.8152	2.3000e-003	0.2236	1.7100e-003	0.2253	0.0593	1.5700e-003	0.0609		228.7673	228.7673	6.5900e-003		228.9321
Total	0.0897	0.0607	0.8152	2.3000e-003	0.2236	1.7100e-003	0.2253	0.0593	1.5700e-003	0.0609		228.7673	228.7673	6.5900e-003		228.9321

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.7079	0.0000	6.7079	3.3843	0.0000	3.3843			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257
Total	4.4501	50.1975	31.9583	0.0620	6.7079	2.1739	8.8818	3.3843	2.0000	5.3843	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0897	0.0607	0.8152	2.3000e-003	0.2236	1.7100e-003	0.2253	0.0593	1.5700e-003	0.0609		228.7673	228.7673	6.5900e-003		228.9321
Total	0.0897	0.0607	0.8152	2.3000e-003	0.2236	1.7100e-003	0.2253	0.0593	1.5700e-003	0.0609		228.7673	228.7673	6.5900e-003		228.9321

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.8233	26.1199	6.3536	0.0633	1.5869	0.1293	1.7162	0.4568	0.1237	0.5805		6,765.2245	6,765.2245	0.4330		6,776.0499
Worker	4.6066	3.1141	41.8584	0.1179	11.4794	0.0876	11.5670	3.0444	0.0807	3.1251		11,747.1991	11,747.1991	0.3385		11,755.6625
Total	5.4299	29.2340	48.2120	0.1812	13.0663	0.2169	13.2832	3.5012	0.2044	3.7056		18,512.4236	18,512.4236	0.7716		18,531.7125

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345

Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
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Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.8233	26.1199	6.3536	0.0633	1.5869	0.1293	1.7162	0.4568	0.1237	0.5805		6,765.2245	6,765.2245	0.4330		6,776.0499
Worker	4.6066	3.1141	41.8584	0.1179	11.4794	0.0876	11.5670	3.0444	0.0807	3.1251		11,747.1991	11,747.1991	0.3385		11,755.6625
Total	5.4299	29.2340	48.2120	0.1812	13.0663	0.2169	13.2832	3.5012	0.2044	3.7056		18,512.4236	18,512.4236	0.7716		18,531.7125

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6977	23.7503	5.7669	0.0627	1.5869	0.0485	1.6354	0.4568	0.0464	0.5032		6,714.4449	6,714.4449	0.4152		6,724.8251
Worker	4.2981	2.8034	38.5607	0.1141	11.4794	0.0850	11.5644	3.0444	0.0782	3.1227		11,367.8454	11,367.8454	0.3064		11,375.5052
Total	4.9958	26.5537	44.3276	0.1768	13.0663	0.1335	13.1998	3.5012	0.1246	3.6259		18,082.2903	18,082.2903	0.7216		18,100.3303

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.6977	23.7503	5.7669	0.0627	1.5869	0.0485	1.6354	0.4568	0.0464	0.5032		6,714.4449	6,714.4449	0.4152		6,724.8251
Worker	4.2981	2.8034	38.5607	0.1141	11.4794	0.0850	11.5644	3.0444	0.0782	3.1227		11,367.8454	11,367.8454	0.3064		11,375.5052
Total	4.9958	26.5537	44.3276	0.1768	13.0663	0.1335	13.1998	3.5012	0.1246	3.6259		18,082.2903	18,082.2903	0.7216		18,100.3303

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6548	22.5590	5.4603	0.0621	1.5869	0.0422	1.6291	0.4568	0.0404	0.4972		6,655.5816	6,655.5816	0.4009		6,665.6052
Worker	4.0322	2.5326	35.6592	0.1100	11.4794	0.0825	11.5620	3.0444	0.0760	3.1204		10,960.7925	10,960.7925	0.2770		10,967.7171
Total	4.6869	25.0916	41.1195	0.1721	13.0663	0.1247	13.1911	3.5012	0.1164	3.6176		17,616.3742	17,616.3742	0.6779		17,633.3223

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6548	22.5590	5.4603	0.0621	1.5869	0.0422	1.6291	0.4568	0.0404	0.4972		6,655.5816	6,655.5816	0.4009		6,665.6052
Worker	4.0322	2.5326	35.6592	0.1100	11.4794	0.0825	11.5620	3.0444	0.0760	3.1204		10,960.7925	10,960.7925	0.2770		10,967.7171
Total	4.6869	25.0916	41.1195	0.1721	13.0663	0.1247	13.1911	3.5012	0.1164	3.6176		17,616.3742	17,616.3742	0.6779		17,633.3223

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4857	17.0066	4.9288	0.0601	1.5869	0.0195	1.6064	0.4568	0.0186	0.4754		6,448.9043	6,448.9043	0.3544		6,457.7651
Worker	3.7915	2.2918	32.9298	0.1059	11.4794	0.0804	11.5598	3.0444	0.0740	3.1184		10,552.5270	10,552.5270	0.2499		10,558.7734
Total	4.2771	19.2983	37.8586	0.1660	13.0663	0.0999	13.1662	3.5012	0.0926	3.5939		17,001.4313	17,001.4313	0.6043		17,016.5385

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
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Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4857	17.0066	4.9288	0.0601	1.5869	0.0195	1.6064	0.4568	0.0186	0.4754		6,448.9043	6,448.9043	0.3544		6,457.7651
Worker	3.7915	2.2918	32.9298	0.1059	11.4794	0.0804	11.5598	3.0444	0.0740	3.1184		10,552.5270	10,552.5270	0.2499		10,558.7734
Total	4.2771	19.2983	37.8586	0.1660	13.0663	0.0999	13.1662	3.5012	0.0926	3.5939		17,001.4313	17,001.4313	0.6043		17,016.5385

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0554	0.0335	0.4810	1.5500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0456		154.1265	154.1265	3.6500e-003		154.2177
Total	0.0554	0.0335	0.4810	1.5500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0456		154.1265	154.1265	3.6500e-003		154.2177

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0554	0.0335	0.4810	1.5500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0456		154.1265	154.1265	3.6500e-003		154.2177
Total	0.0554	0.0335	0.4810	1.5500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0456		154.1265	154.1265	3.6500e-003		154.2177

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	142.2508					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	142.4425	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.7568	0.4575	6.5731	0.0211	2.2914	0.0161	2.3075	0.6077	0.0148	0.6225		2,106.3954	2,106.3954	0.0499		2,107.6422
Total	0.7568	0.4575	6.5731	0.0211	2.2914	0.0161	2.3075	0.6077	0.0148	0.6225		2,106.3954	2,106.3954	0.0499		2,107.6422

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	142.2508					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	142.4425	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.7568	0.4575	6.5731	0.0211	2.2914	0.0161	2.3075	0.6077	0.0148	0.6225		2,106.3954	2,106.3954	0.0499		2,107.6422
Total	0.7568	0.4575	6.5731	0.0211	2.2914	0.0161	2.3075	0.6077	0.0148	0.6225		2,106.3954	2,106.3954	0.0499		2,107.6422

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	142.2508					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	142.4316	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.7163	0.4169	6.1374	0.0204	2.2914	0.0158	2.3072	0.6077	0.0146	0.6223		2,036.9930	2,036.9930	0.0457		2,038.1357
Total	0.7163	0.4169	6.1374	0.0204	2.2914	0.0158	2.3072	0.6077	0.0146	0.6223		2,036.9930	2,036.9930	0.0457		2,038.1357

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	142.2508					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	142.4316	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.7163	0.4169	6.1374	0.0204	2.2914	0.0158	2.3072	0.6077	0.0146	0.6223		2,036.9930	2,036.9930	0.0457		2,038.1357
Total	0.7163	0.4169	6.1374	0.0204	2.2914	0.0158	2.3072	0.6077	0.0146	0.6223		2,036.9930	2,036.9930	0.0457		2,038.1357

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	24.0384	105.9573	307.0884	1.2706	115.0708	0.8936	115.9644	30.7789	0.8299	31.6088		129,641.4695	129,641.4695	5.5002		129,778.9744
Unmitigated	24.0384	105.9573	307.0884	1.2706	115.0708	0.8936	115.9644	30.7789	0.8299	31.6088		129,641.4695	129,641.4695	5.5002		129,778.9744

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	6,367.37	6,112.25	5602.01	21,247,245	21,247,245
General Office Building	7,158.74	1,593.23	684.87	17,520,967	17,520,967
Regional Shopping Center	3,692.35	4,320.72	2182.94	7,713,760	7,713,760
Total	17,218.46	12,026.20	8,469.82	46,481,973	46,481,973

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.00	19.00	41.00	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827
General Office Building	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827
Regional Shopping Center	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Natural Gas Mitigated	0.5159	4.5319	2.7815	0.0281		0.3564	0.3564		0.3564	0.3564		5,627.7012	5,627.7012	0.1079	0.1032	5,661.1438
Natural Gas Unmitigated	0.5159	4.5319	2.7815	0.0281		0.3564	0.3564		0.3564	0.3564		5,627.7012	5,627.7012	0.1079	0.1032	5,661.1438

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	26842.8	0.2895	2.4737	1.0527	0.0158		0.2000	0.2000		0.2000	0.2000		3,157.9717	3,157.9717	0.0605	0.0579	3,176.7380
General Office Building	20561	0.2217	2.0158	1.6933	0.0121		0.1532	0.1532		0.1532	0.1532		2,418.9384	2,418.9384	0.0464	0.0444	2,433.3129
Regional Shopping Center	431.724	4.6600e-003	0.0423	0.0356	2.5000e-004		3.2200e-003	3.2200e-003		3.2200e-003	3.2200e-003		50.7911	50.7911	9.7000e-004	9.3000e-004	51.0929
Total		0.5159	4.5319	2.7815	0.0281		0.3564	0.3564		0.3564	0.3564		5,627.7012	5,627.7012	0.1079	0.1032	5,661.1438

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	26.8428	0.2895	2.4737	1.0527	0.0158		0.2000	0.2000		0.2000	0.2000		3,157.9717	3,157.9717	0.0605	0.0579	3,176.7380
General Office Building	20.561	0.2217	2.0158	1.6933	0.0121		0.1532	0.1532		0.1532	0.1532		2,418.9384	2,418.9384	0.0464	0.0444	2,433.3129

Landscaping	2.6383	1.0100	87.6990	4.6400e-003		0.4865	0.4865		0.4865	0.4865		158.0899	158.0899	0.1517		161.8820
Total	43.7596	1.0100	87.6990	4.6400e-003		0.4865	0.4865		0.4865	0.4865	0.0000	158.0899	158.0899	0.1517	0.0000	161.8820

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.8973					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	37.2241					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.6383	1.0100	87.6990	4.6400e-003		0.4865	0.4865		0.4865	0.4865			158.0899	158.0899	0.1517	161.8820
Total	43.7596	1.0100	87.6990	4.6400e-003		0.4865	0.4865		0.4865	0.4865	0.0000	158.0899	158.0899	0.1517	0.0000	161.8820

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Uni Village Construction Winter 2025

CSUDH Campus Master Plan EIR (Interim 2025 University Village Construction) - South Coast Air Basin, Winter

CSUDH Campus Master Plan EIR (Interim 2025 University Village Construction) South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	1,063.00	Dwelling Unit	13.30	1,063,000.00	3040
Regional Shopping Center	96.08	1000sqft	2.21	96,085.00	0
General Office Building	720.92	1000sqft	33.00	720,918.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -
 Land Use - Master Plan
 Construction Phase - Adjusted.
 Grading - Master Plan
 Demolition -
 Vehicle Trips - Master Plan
 Woodstoves - No woodstove and fireplace.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	55.00	100.00
tblConstructionPhase	PhaseEndDate	11/7/2023	1/9/2024
tblFireplaces	NumberGas	903.55	0.00
tblFireplaces	NumberNoFireplace	106.30	0.00
tblFireplaces	NumberWood	53.15	0.00
tblGrading	AcresOfGrading	187.50	48.50
tblGrading	AcresOfGrading	0.00	48.50
tblLandUse	LandUseSquareFeet	96,080.00	96,085.00
tblLandUse	LandUseSquareFeet	720,920.00	720,918.00
tblLandUse	LotAcreage	27.97	13.30
tblLandUse	LotAcreage	16.55	33.00
tblVehicleTrips	HO_TTP	40.60	41.00
tblVehicleTrips	HS_TTP	19.20	19.00
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	6.39	5.75
tblVehicleTrips	ST_TR	2.46	2.21
tblVehicleTrips	ST_TR	49.97	44.97
tblVehicleTrips	SU_TR	5.86	5.27
tblVehicleTrips	SU_TR	1.05	0.95
tblVehicleTrips	SU_TR	25.24	22.72
tblVehicleTrips	WD_TR	6.65	5.99
tblVehicleTrips	WD_TR	11.03	9.93
tblVehicleTrips	WD_TR	42.70	38.43
tblWoodstoves	NumberCatalytic	53.15	0.00
tblWoodstoves	NumberNoncatalytic	53.15	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	8.0484	50.2641	61.8448	0.1991	19.9819	2.199	22.1809	10.1692	2.023	12.1922	0	20,152.61	20,152.61	1.9486	0	20,187.67
2021	7.3702	44.2052	57.89	0.195	13.0663	1.0936	14.1599	3.5012	1.0274	4.5286	0	19,746.85	19,746.85	1.3465	0	19,780.51
2022	6.8489	40.886	54.6559	0.1905	13.0663	0.9351	14.0014	3.5012	0.8788	4.38	0	19,307.73	19,307.73	1.2991	0	19,340.21
2023	143.2811	33.8151	51.3266	0.1847	13.0663	0.8006	13.8669	3.5012	0.752	4.2532	0	18,727.48	18,727.48	1.2172	0	18,757.91
2024	143.2276	1.6762	7.3358	0.0221	2.2914	0.0767	2.3682	0.6077	0.0755	0.6832	0	2,191.73	2,191.73	0.0585	0	2,193.19
Maximum	143.2811	50.2641	61.8448	0.1991	19.9819	2.199	22.1809	10.1692	2.023	12.1922	0	20,152.61	20,152.61	1.9486	0	20,187.67

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	8.0484	50.2641	61.8448	0.1991	19.9819	2.1990	22.1809	10.1692	2.0230	12.1922	0.0000	20,152.60 51	20,152.605 1	1.9486	0.0000	20,187.67 48
2021	7.3702	44.2052	57.8900	0.1950	13.0663	1.0936	14.1599	3.5012	1.0274	4.5286	0.0000	19,746.84 61	19,746.846 1	1.3465	0.0000	19,780.50 86
2022	6.8489	40.8860	54.6559	0.1905	13.0663	0.9351	14.0014	3.5012	0.8788	4.3800	0.0000	19,307.73 46	19,307.734 6	1.2991	0.0000	19,340.21 23
2023	143.2811	33.8151	51.3266	0.1847	13.0663	0.8006	13.8669	3.5012	0.7520	4.2532	0.0000	18,727.47 96	18,727.479 6	1.2172	0.0000	18,757.90 90
2024	143.2276	1.6762	7.3358	0.0221	2.2914	0.0767	2.3682	0.6077	0.0755	0.6832	0.0000	2,191.725 2	2,191.7252	0.0585	0.0000	2,193.187 5
Maximum	143.2811	50.2641	61.8448	0.1991	19.9819	2.1990	22.1809	10.1692	2.0230	12.1922	0.0000	20,152.60 51	20,152.605 1	1.9486	0.0000	20,187.67 48

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	43.7596	1.0100	87.6990	4.6400e-003		0.4865	0.4865		0.4865	0.4865	0.0000	158.0899	158.0899	0.1517	0.0000	161.8820
Energy	0.5159	4.5319	2.7815	0.0281		0.3564	0.3564		0.3564	0.3564		5,627.7012	5,627.7012	0.1079	0.1032	5,661.1438
Mobile	22.9808	107.7871	288.8152	1.2058	115.0708	0.8974	115.9682	30.7789	0.8335	31.6124		123,127.9177	123,127.9177	5.5054		123,265.5533
Total	67.2563	113.3289	379.2956	1.2385	115.0708	1.7402	116.8111	30.7789	1.6764	32.4553	0.0000	128,913.7088	128,913.7088	5.7650	0.1032	129,088.5791

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	43.7596	1.0100	87.6990	4.6400e-003		0.4865	0.4865		0.4865	0.4865	0.0000	158.0899	158.0899	0.1517	0.0000	161.8820
Energy	0.5159	4.5319	2.7815	0.0281		0.3564	0.3564		0.3564	0.3564		5,627.7012	5,627.7012	0.1079	0.1032	5,661.1438
Mobile	22.9808	107.7871	288.8152	1.2058	115.0708	0.8974	115.9682	30.7789	0.8335	31.6124		123,127.9177	123,127.9177	5.5054		123,265.5533
Total	67.2563	113.3289	379.2956	1.2385	115.0708	1.7402	116.8111	30.7789	1.6764	32.4553	0.0000	128,913.7088	128,913.7088	5.7650	0.1032	129,088.5791

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	3/10/2020	5	50	
2	Site Preparation	Site Preparation	3/11/2020	4/21/2020	5	30	
3	Grading	Grading	4/22/2020	8/4/2020	5	75	
4	Building Construction	Building Construction	8/5/2020	6/6/2023	5	740	
5	Paving	Paving	6/7/2023	8/22/2023	5	55	
6	Architectural Coating	Architectural Coating	8/23/2023	1/9/2024	5	100	

Acres of Grading (Site Preparation Phase): 48.5

Acres of Grading (Grading Phase): 48.5

Acres of Paving: 0

Residential Indoor: 2,152,575; Residential Outdoor: 717,525; Non-Residential Indoor: 1,225,505; Non-Residential Outdoor: 408,502;

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42

Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	205.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1,027.00	248.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	15.00	0.00	65.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day					
Fugitive Dust					0.2798	0.0000	0.2798	0.0424	0.0000	0.0424			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419		3,747.7049	3,747.7049	1.0580		3,774.1536
Total	3.3121	33.2010	21.7532	0.0388	0.2798	1.6587	1.9385	0.0424	1.5419	1.5842		3,747.7049	3,747.7049	1.0580		3,774.1536

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0106	0.3669	0.0804	9.9000e-004	0.0227	1.1900e-003	0.0239	6.2200e-003	1.1400e-003	7.3600e-003			107.6416	107.6416	8.0400e-003		107.8428
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000		0.0000
Worker	0.0740	0.0500	0.5544	1.6200e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1800e-003	0.0456			160.9277	160.9277	4.6300e-003		161.0435
Total	0.0846	0.4169	0.6348	2.6100e-003	0.1904	2.4700e-003	0.1928	0.0507	2.3200e-003	0.0530			268.5693	268.5693	0.0127		268.8863

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					0.2798	0.0000	0.2798	0.0424	0.0000	0.0424			0.0000			0.0000	
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419	0.0000		3,747.7049	3,747.7049	1.0580		3,774.1536

Total	3.3121	33.2010	21.7532	0.0388	0.2798	1.6587	1.9385	0.0424	1.5419	1.5842	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536
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Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0106	0.3669	0.0804	9.9000e-004	0.0227	1.1900e-003	0.0239	6.2200e-003	1.1400e-003	7.3600e-003		107.6416	107.6416	8.0400e-003		107.8428
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0740	0.0500	0.5544	1.6200e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1800e-003	0.0456		160.9277	160.9277	4.6300e-003		161.0435
Total	0.0846	0.4169	0.6348	2.6100e-003	0.1904	2.4700e-003	0.1928	0.0507	2.3200e-003	0.0530		268.5693	268.5693	0.0127		268.8863

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.7807	0.0000	19.7807	10.1158	0.0000	10.1158			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
Total	4.0765	42.4173	21.5136	0.0380	19.7807	2.1974	21.9781	10.1158	2.0216	12.1374		3,685.1016	3,685.1016	1.1918		3,714.8975

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0888	0.0600	0.6653	1.9400e-003	0.2012	1.5300e-003	0.2027	0.0534	1.4100e-003	0.0548		193.1132	193.1132	5.5600e-003		193.2522
Total	0.0888	0.0600	0.6653	1.9400e-003	0.2012	1.5300e-003	0.2027	0.0534	1.4100e-003	0.0548		193.1132	193.1132	5.5600e-003		193.2522

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.7807	0.0000	19.7807	10.1158	0.0000	10.1158			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
Total	4.0765	42.4173	21.5136	0.0380	19.7807	2.1974	21.9781	10.1158	2.0216	12.1374	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0888	0.0600	0.6653	1.9400e-003	0.2012	1.5300e-003	0.2027	0.0534	1.4100e-003	0.0548		193.1132	193.1132	5.5600e-003		193.2522
Total	0.0888	0.0600	0.6653	1.9400e-003	0.2012	1.5300e-003	0.2027	0.0534	1.4100e-003	0.0548		193.1132	193.1132	5.5600e-003		193.2522

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.7079	0.0000	6.7079	3.3843	0.0000	3.3843			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000		6,005.8653	6,005.8653	1.9424		6,054.4257
Total	4.4501	50.1975	31.9583	0.0620	6.7079	2.1739	8.8818	3.3843	2.0000	5.3843		6,005.8653	6,005.8653	1.9424		6,054.4257

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0987	0.0666	0.7392	2.1500e-003	0.2236	1.7100e-003	0.2253	0.0593	1.5700e-003	0.0609		214.5703	214.5703	6.1800e-003		214.7247
Total	0.0987	0.0666	0.7392	2.1500e-003	0.2236	1.7100e-003	0.2253	0.0593	1.5700e-003	0.0609		214.5703	214.5703	6.1800e-003		214.7247

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.7079	0.0000	6.7079	3.3843	0.0000	3.3843			0.0000			0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257
Total	4.4501	50.1975	31.9583	0.0620	6.7079	2.1739	8.8818	3.3843	2.0000	5.3843	0.0000	6,005.8653	6,005.8653	1.9424		6,054.4257

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0987	0.0666	0.7392	2.1500e-003	0.2236	1.7100e-003	0.2253	0.0593	1.5700e-003	0.0609		214.5703	214.5703	6.1800e-003		214.7247
Total	0.0987	0.0666	0.7392	2.1500e-003	0.2236	1.7100e-003	0.2253	0.0593	1.5700e-003	0.0609		214.5703	214.5703	6.1800e-003		214.7247

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.8609	26.1100	7.0402	0.0616	1.5869	0.1313	1.7182	0.4568	0.1256	0.5824		6,581.3594	6,581.3594	0.4628		6,592.9291
Worker	5.0676	3.4208	37.9561	0.1106	11.4794	0.0876	11.5670	3.0444	0.0807	3.1251		11,018.1827	11,018.1827	0.3171		11,026.1113
Total	5.9285	29.5308	44.9963	0.1722	13.0663	0.2188	13.2852	3.5012	0.2062	3.7075		17,599.5420	17,599.5420	0.7799		17,619.0403

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345

Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
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Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.8609	26.1100	7.0402	0.0616	1.5869	0.1313	1.7182	0.4568	0.1256	0.5824		6,581.3594	6,581.3594	0.4628		6,592.9291
Worker	5.0676	3.4208	37.9561	0.1106	11.4794	0.0876	11.5670	3.0444	0.0807	3.1251		11,018.1827	11,018.1827	0.3171		11,026.1113
Total	5.9285	29.5308	44.9963	0.1722	13.0663	0.2188	13.2852	3.5012	0.2062	3.7075		17,599.5420	17,599.5420	0.7799		17,619.0403

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.7330	23.6944	6.4105	0.0611	1.5869	0.0500	1.6369	0.4568	0.0478	0.5047		6,531.6698	6,531.6698	0.4437		6,542.7631
Worker	4.7362	3.0787	34.9043	0.1070	11.4794	0.0850	11.5644	3.0444	0.0782	3.1227		10,661.8124	10,661.8124	0.2868		10,668.9812
Total	5.4693	26.7731	41.3148	0.1680	13.0663	0.1350	13.2013	3.5012	0.1261	3.6273		17,193.4822	17,193.4822	0.7305		17,211.7443

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.7330	23.6944	6.4105	0.0611	1.5869	0.0500	1.6369	0.4568	0.0478	0.5047		6,531.6698	6,531.6698	0.4437		6,542.7631
Worker	4.7362	3.0787	34.9043	0.1070	11.4794	0.0850	11.5644	3.0444	0.0782	3.1227		10,661.8124	10,661.8124	0.2868		10,668.9812
Total	5.4693	26.7731	41.3148	0.1680	13.0663	0.1350	13.2013	3.5012	0.1261	3.6273		17,193.4822	17,193.4822	0.7305		17,211.7443

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6881	22.4897	6.0716	0.0605	1.5869	0.0436	1.6305	0.4568	0.0417	0.4985		6,473.3483	6,473.3483	0.4282		6,484.0524
Worker	4.4546	2.7807	32.2209	0.1031	11.4794	0.0825	11.5620	3.0444	0.0760	3.1204		10,280.0526	10,280.0526	0.2590		10,286.5277
Total	5.1426	25.2703	38.2925	0.1636	13.0663	0.1261	13.1924	3.5012	0.1177	3.6189		16,753.4010	16,753.4010	0.6872		16,770.5801

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6881	22.4897	6.0716	0.0605	1.5869	0.0436	1.6305	0.4568	0.0417	0.4985		6,473.3483	6,473.3483	0.4282		6,484.0524
Worker	4.4546	2.7807	32.2209	0.1031	11.4794	0.0825	11.5620	3.0444	0.0760	3.1204		10,280.0526	10,280.0526	0.2590		10,286.5277
Total	5.1426	25.2703	38.2925	0.1636	13.0663	0.1261	13.1924	3.5012	0.1177	3.6189		16,753.4010	16,753.4010	0.6872		16,770.5801

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5108	16.9149	5.3844	0.0585	1.5869	0.0205	1.6074	0.4568	0.0196	0.4764		6,275.1469	6,275.1469	0.3760		6,284.5456
Worker	4.2014	2.5153	29.6982	0.0993	11.4794	0.0804	11.5598	3.0444	0.0740	3.1184		9,897.1228	9,897.1228	0.2334		9,902.9573
Total	4.7122	19.4302	35.0826	0.1578	13.0663	0.1009	13.1672	3.5012	0.0936	3.5948		16,172.2697	16,172.2697	0.6093		16,187.5029

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
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Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5108	16.9149	5.3844	0.0585	1.5869	0.0205	1.6074	0.4568	0.0196	0.4764		6,275.1469	6,275.1469	0.3760		6,284.5456
Worker	4.2014	2.5153	29.6982	0.0993	11.4794	0.0804	11.5598	3.0444	0.0740	3.1184		9,897.1228	9,897.1228	0.2334		9,902.9573
Total	4.7122	19.4302	35.0826	0.1578	13.0663	0.1009	13.1672	3.5012	0.0936	3.5948		16,172.2697	16,172.2697	0.6093		16,187.5029

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0614	0.0367	0.4338	1.4500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0456		144.5539	144.5539	3.4100e-003		144.6391
Total	0.0614	0.0367	0.4338	1.4500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0456		144.5539	144.5539	3.4100e-003		144.6391

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0614	0.0367	0.4338	1.4500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0456		144.5539	144.5539	3.4100e-003		144.6391
Total	0.0614	0.0367	0.4338	1.4500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0456		144.5539	144.5539	3.4100e-003		144.6391

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	142.2508					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	142.4425	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.8387	0.5021	5.9281	0.0198	2.2914	0.0161	2.3075	0.6077	0.0148	0.6225		1,975.5698	1,975.5698	0.0466		1,976.7344
Total	0.8387	0.5021	5.9281	0.0198	2.2914	0.0161	2.3075	0.6077	0.0148	0.6225		1,975.5698	1,975.5698	0.0466		1,976.7344

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	142.2508					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	142.4425	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.8387	0.5021	5.9281	0.0198	2.2914	0.0161	2.3075	0.6077	0.0148	0.6225		1,975.5698	1,975.5698	0.0466		1,976.7344
Total	0.8387	0.5021	5.9281	0.0198	2.2914	0.0161	2.3075	0.6077	0.0148	0.6225		1,975.5698	1,975.5698	0.0466		1,976.7344

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	142.2508					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	142.4316	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.7961	0.4574	5.5257	0.0192	2.2914	0.0158	2.3072	0.6077	0.0146	0.6223		1,910.2772	1,910.2772	0.0426		1,911.3432
Total	0.7961	0.4574	5.5257	0.0192	2.2914	0.0158	2.3072	0.6077	0.0146	0.6223		1,910.2772	1,910.2772	0.0426		1,911.3432

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	142.2508					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	142.4316	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.7961	0.4574	5.5257	0.0192	2.2914	0.0158	2.3072	0.6077	0.0146	0.6223		1,910.2772	1,910.2772	0.0426		1,911.3432
Total	0.7961	0.4574	5.5257	0.0192	2.2914	0.0158	2.3072	0.6077	0.0146	0.6223		1,910.2772	1,910.2772	0.0426		1,911.3432

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	22.9808	107.7871	288.8152	1.2058	115.0708	0.8974	115.9682	30.7789	0.8335	31.6124		123,127.9177	123,127.9177	5.5054		123,265.553
Unmitigated	22.9808	107.7871	288.8152	1.2058	115.0708	0.8974	115.9682	30.7789	0.8335	31.6124		123,127.9177	123,127.9177	5.5054		123,265.553

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	6,367.37	6,112.25	5602.01	21,247,245	21,247,245
General Office Building	7,158.74	1,593.23	684.87	17,520,967	17,520,967
Regional Shopping Center	3,692.35	4,320.72	2182.94	7,713,760	7,713,760
Total	17,218.46	12,026.20	8,469.82	46,481,973	46,481,973

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.00	19.00	41.00	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827
General Office Building	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827
Regional Shopping Center	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Natural Gas Mitigated	0.5159	4.5319	2.7815	0.0281		0.3564	0.3564		0.3564	0.3564		5,627.7012	5,627.7012	0.1079	0.1032	5,661.1438
Natural Gas Unmitigated	0.5159	4.5319	2.7815	0.0281		0.3564	0.3564		0.3564	0.3564		5,627.7012	5,627.7012	0.1079	0.1032	5,661.1438

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	26842.8	0.2895	2.4737	1.0527	0.0158		0.2000	0.2000		0.2000	0.2000		3,157.9717	3,157.9717	0.0605	0.0579	3,176.7380
General Office Building	20561	0.2217	2.0158	1.6933	0.0121		0.1532	0.1532		0.1532	0.1532		2,418.9384	2,418.9384	0.0464	0.0444	2,433.3129
Regional Shopping Center	431.724	4.6600e-003	0.0423	0.0356	2.5000e-004		3.2200e-003	3.2200e-003		3.2200e-003	3.2200e-003		50.7911	50.7911	9.7000e-004	9.3000e-004	51.0929
Total		0.5159	4.5319	2.7815	0.0281		0.3564	0.3564		0.3564	0.3564		5,627.7012	5,627.7012	0.1079	0.1032	5,661.1438

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	26.8428	0.2895	2.4737	1.0527	0.0158		0.2000	0.2000		0.2000	0.2000		3,157.9717	3,157.9717	0.0605	0.0579	3,176.7380
General Office Building	20.561	0.2217	2.0158	1.6933	0.0121		0.1532	0.1532		0.1532	0.1532		2,418.9384	2,418.9384	0.0464	0.0444	2,433.3129

Landscaping	2.6383	1.0100	87.6990	4.6400e-003		0.4865	0.4865		0.4865	0.4865		158.0899	158.0899	0.1517		161.8820
Total	43.7596	1.0100	87.6990	4.6400e-003		0.4865	0.4865		0.4865	0.4865	0.0000	158.0899	158.0899	0.1517	0.0000	161.8820

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	3.8973					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	37.2241					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.6383	1.0100	87.6990	4.6400e-003		0.4865	0.4865		0.4865	0.4865			158.0899	158.0899	0.1517	161.8820
Total	43.7596	1.0100	87.6990	4.6400e-003		0.4865	0.4865		0.4865	0.4865	0.0000	158.0899	158.0899	0.1517	0.0000	161.8820

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Campus Construction Annual 2035

CSUDH Campus Master Plan EIR (Buildout 2035 Campus Construction) - South Coast Air Basin, Annual

CSUDH Campus Master Plan EIR (Buildout 2035 Campus Construction)
South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
University/College (4Yr)	6,713.00	Student	11.80	1,639,960.00	0
Apartments Mid Rise	469.00	Dwelling Unit	6.30	469,000.00	1288
Day-Care Center	74.00	Student	1.00	17,970.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2035
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -
 Land Use - Master Plan
 Construction Phase - Adjusted.
 Grading - Master Plan
 Demolition - Master Plan
 Vehicle Trips - Master Plan
 Woodstoves - No woodstove and fireplace.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	100.00
tblConstructionPhase	NumDays	300.00	600.00
tblConstructionPhase	NumDays	20.00	90.00
tblConstructionPhase	NumDays	30.00	90.00
tblConstructionPhase	NumDays	20.00	60.00
tblConstructionPhase	NumDays	10.00	90.00
tblConstructionPhase	PhaseEndDate	7/14/2026	12/29/2034
tblConstructionPhase	PhaseEndDate	5/19/2026	5/19/2034
tblConstructionPhase	PhaseEndDate	1/28/2025	5/23/2031
tblConstructionPhase	PhaseEndDate	3/25/2025	1/30/2032
tblConstructionPhase	PhaseEndDate	6/16/2026	8/11/2034
tblConstructionPhase	PhaseEndDate	2/11/2025	9/26/2031
tblConstructionPhase	PhaseStartDate	6/17/2026	8/14/2034
tblConstructionPhase	PhaseStartDate	3/26/2025	2/2/2032
tblConstructionPhase	PhaseStartDate	1/1/2025	1/20/2031
tblConstructionPhase	PhaseStartDate	2/12/2025	9/29/2031
tblConstructionPhase	PhaseStartDate	5/20/2026	5/22/2034
tblConstructionPhase	PhaseStartDate	1/29/2025	5/26/2031
tblFireplaces	NumberGas	398.65	0.00
tblFireplaces	NumberNoFireplace	46.90	0.00
tblFireplaces	NumberWood	23.45	0.00
tblGrading	AcresOfGrading	225.00	19.10
tblGrading	AcresOfGrading	0.00	19.10
tblLandUse	LandUseSquareFeet	1,233,832.41	1,639,960.00
tblLandUse	LandUseSquareFeet	4,182.69	17,970.00
tblLandUse	LotAcreage	28.32	11.80
tblLandUse	LotAcreage	12.34	6.30
tblLandUse	LotAcreage	0.10	1.00
tblLandUse	Population	1,341.00	1,288.00

tblVehicleTrips	HO_TTP	40.60	41.00
tblVehicleTrips	HS_TTP	19.20	19.00
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	6.39	1.42
tblVehicleTrips	ST_TR	1.30	1.20
tblVehicleTrips	SU_TR	5.86	1.42
tblVehicleTrips	WD_TR	6.65	1.42
tblVehicleTrips	WD_TR	1.71	1.57
tblWoodstoves	NumberCatalytic	23.45	0.00
tblWoodstoves	NumberNoncatalytic	23.45	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2031	0.3211	1.5688	2.4209	6.91E-03	1.1277	0.0522	1.1799	0.5785	0.0522	0.6307	0	615.6659	615.6659	0.027	0	616.3405
2032	0.5293	3.7547	4.9524	0.0227	1.6836	0.0318	1.7155	0.4699	0.0312	0.5012	0	2,103.81	2,103.81	0.0731	0	2,105.63
2033	0.514	3.8736	4.964	0.0236	1.7386	0.0282	1.7668	0.4678	0.0276	0.4954	0	2,181.54	2,181.54	0.0746	0	2,183.40
2034	9.4118	1.7475	2.5887	0.0108	0.7872	0.0221	0.8092	0.2114	0.0218	0.2332	0	989.1136	989.1136	0.033	0	989.9381
Maximum	9.4118	3.8736	4.964	0.0236	1.7386	0.0522	1.7668	0.5785	0.0522	0.6307	0	2,181.54	2,181.54	0.0746	0	2,183.40

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2031	0.3211	1.5688	2.4209	6.9100e-003	1.1277	0.0522	1.1799	0.5785	0.0522	0.6307	0.0000	615.6652	615.6652	0.0270	0.0000	616.3399
2032	0.5293	3.7547	4.9524	0.0227	1.6836	0.0318	1.7155	0.4699	0.0312	0.5012	0.0000	2,103.8075	2,103.8075	0.0731	0.0000	2,105.6344
2033	0.5140	3.8736	4.9640	0.0236	1.7386	0.0282	1.7668	0.4678	0.0276	0.4954	0.0000	2,181.5363	2,181.5363	0.0746	0.0000	2,183.4014
2034	9.4118	1.7475	2.5887	0.0108	0.7872	0.0221	0.8092	0.2114	0.0218	0.2332	0.0000	989.1133	989.1133	0.0330	0.0000	989.9378
Maximum	9.4118	3.8736	4.9640	0.0236	1.7386	0.0522	1.7668	0.5785	0.0522	0.6307	0.0000	2,181.5363	2,181.5363	0.0746	0.0000	2,183.4014

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
25	1-1-2031	3-31-2031	0.3250	0.3250
26	4-1-2031	6-30-2031	0.4503	0.4503
27	7-1-2031	9-30-2031	0.5205	0.5205
28	10-1-2031	12-31-2031	0.5653	0.5653
29	1-1-2032	3-31-2032	0.9027	0.9027
30	4-1-2032	6-30-2032	1.0981	1.0981
31	7-1-2032	9-30-2032	1.1102	1.1102
32	10-1-2032	12-31-2032	1.1203	1.1203
33	1-1-2033	3-31-2033	1.0836	1.0836
34	4-1-2033	6-30-2033	1.0864	1.0864
35	7-1-2033	9-30-2033	1.0984	1.0984
36	10-1-2033	12-31-2033	1.1077	1.1077
37	1-1-2034	3-31-2034	1.0729	1.0729
38	4-1-2034	6-30-2034	0.7017	0.7017

39	7-1-2034	9-30-2034	3.2928	3.2928
		Highest	3.2928	3.2928

2.2 Overall Operational Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	8.7528	0.0564	4.9058	2.6000e-004		0.0271	0.0271		0.0271	0.0271	0.0000	8.0690	8.0690	7.9500e-003	0.0000	8.2679
Energy	0.2638	2.3853	1.9211	0.0144		0.1823	0.1823		0.1823	0.1823	0.0000	8,471.9227	8,471.9227	0.2920	0.0979	8,508.4051
Mobile	1.4535	9.1145	18.8626	0.1000	10.8954	0.0495	10.9449	2.9181	0.0460	2.9641	0.0000	9,320.0374	9,320.0374	0.3569	0.0000	9,328.9597
Waste						0.0000	0.0000		0.0000	0.0000	295.2219	0.0000	295.2219	17.4471	0.0000	731.3999
Water						0.0000	0.0000		0.0000	0.0000	14.3113	336.5575	350.8688	1.4838	0.0376	399.1633
Total	10.4701	11.5562	25.6895	0.1146	10.8954	0.2589	11.1543	2.9181	0.2554	3.1734	309.5332	18,136.5867	18,446.1199	19.5878	0.1355	18,976.1959

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	8.7528	0.0564	4.9058	2.6000e-004		0.0271	0.0271		0.0271	0.0271	0.0000	8.0690	8.0690	7.9500e-003	0.0000	8.2679
Energy	0.2638	2.3853	1.9211	0.0144		0.1823	0.1823		0.1823	0.1823	0.0000	8,471.9227	8,471.9227	0.2920	0.0979	8,508.4051
Mobile	1.4535	9.1145	18.8626	0.1000	10.8954	0.0495	10.9449	2.9181	0.0460	2.9641	0.0000	9,320.0374	9,320.0374	0.3569	0.0000	9,328.9597

Waste						0.0000	0.0000		0.0000	0.0000	295.2219	0.0000	295.2219	17.4471	0.0000	731.3999
Water						0.0000	0.0000		0.0000	0.0000	14.3113	336.5575	350.8688	1.4838	0.0376	399.1633
Total	10.4701	11.5562	25.6895	0.1146	10.8954	0.2589	11.1543	2.9181	0.2554	3.1734	309.5332	18,136.5867	18,446.1199	19.5878	0.1355	18,976.1959

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/20/2031	5/23/2031	5	90	
2	Site Preparation	Site Preparation	5/26/2031	9/26/2031	5	90	
3	Grading	Grading	9/29/2031	1/30/2032	5	90	
4	Building Construction	Building Construction	2/2/2032	5/19/2034	5	600	
5	Paving	Paving	5/22/2034	8/11/2034	5	60	
6	Architectural Coating	Architectural Coating	8/14/2034	12/29/2034	5	100	

Acres of Grading (Site Preparation Phase): 19.1

Acres of Grading (Grading Phase): 19.1

Acres of Paving: 0

Residential Indoor: 949,725; Residential Outdoor: 316,575; Non-Residential Indoor: 2,486,895; Non-Residential Outdoor: 828,965;

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	158	0.38

Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	207.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1,034.00	322.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	15.00	0.00	564.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0611	0.0000	0.0611	9.2500e-003	0.0000	9.2500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0934	0.4400	0.8513	2.0800e-003		0.0158	0.0158		0.0158	0.0158	0.0000	178.7482	178.7482	7.5400e-003	0.0000	178.9368
Total	0.0934	0.4400	0.8513	2.0800e-003	0.0611	0.0158	0.0769	9.2500e-003	0.0158	0.0251	0.0000	178.7482	178.7482	7.5400e-003	0.0000	178.9368

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3100e-003	0.0402	0.0156	1.9000e-004	4.8500e-003	7.0000e-005	4.9200e-003	1.3300e-003	7.0000e-005	1.4000e-003	0.0000	19.3859	19.3859	1.3400e-003	0.0000	19.4195
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5800e-003	8.6000e-004	0.0119	5.0000e-005	7.4100e-003	4.0000e-005	7.4400e-003	1.9700e-003	3.0000e-005	2.0000e-003	0.0000	4.6854	4.6854	7.0000e-005	0.0000	4.6871
Total	2.8900e-003	0.0411	0.0275	2.4000e-004	0.0123	1.1000e-004	0.0124	3.3000e-003	1.0000e-004	3.4000e-003	0.0000	24.0713	24.0713	1.4100e-003	0.0000	24.1066

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Fugitive Dust					0.0611	0.0000	0.0611	9.2500e-003	0.0000	9.2500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0934	0.4400	0.8513	2.0800e-003		0.0158	0.0158		0.0158	0.0158	0.0000	178.7480	178.7480	7.5400e-003	0.0000	178.9365
Total	0.0934	0.4400	0.8513	2.0800e-003	0.0611	0.0158	0.0769	9.2500e-003	0.0158	0.0251	0.0000	178.7480	178.7480	7.5400e-003	0.0000	178.9365

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3100e-003	0.0402	0.0156	1.9000e-004	4.8500e-003	7.0000e-005	4.9200e-003	1.3300e-003	7.0000e-005	1.4000e-003	0.0000	19.3859	19.3859	1.3400e-003	0.0000	19.4195
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5800e-003	8.6000e-004	0.0119	5.0000e-005	7.4100e-003	4.0000e-005	7.4400e-003	1.9700e-003	3.0000e-005	2.0000e-003	0.0000	4.6854	4.6854	7.0000e-005	0.0000	4.6871
Total	2.8900e-003	0.0411	0.0275	2.4000e-004	0.0123	1.1000e-004	0.0124	3.3000e-003	1.0000e-004	3.4000e-003	0.0000	24.0713	24.0713	1.4100e-003	0.0000	24.1066

3.3 Site Preparation - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.8231	0.0000	0.8231	0.4480	0.0000	0.4480	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1098	0.6151	0.7331	2.1000e-003		0.0197	0.0197		0.0197	0.0197	0.0000	180.0208	180.0208	8.8800e-003	0.0000	180.2428
Total	0.1098	0.6151	0.7331	2.1000e-003	0.8231	0.0197	0.8428	0.4480	0.0197	0.4676	0.0000	180.0208	180.0208	8.8800e-003	0.0000	180.2428

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-003	1.0300e-003	0.0143	6.0000e-005	8.8900e-003	4.0000e-005	8.9300e-003	2.3600e-003	4.0000e-005	2.4000e-003	0.0000	5.6225	5.6225	8.0000e-005	0.0000	5.6246
Total	1.9000e-003	1.0300e-003	0.0143	6.0000e-005	8.8900e-003	4.0000e-005	8.9300e-003	2.3600e-003	4.0000e-005	2.4000e-003	0.0000	5.6225	5.6225	8.0000e-005	0.0000	5.6246

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.8231	0.0000	0.8231	0.4480	0.0000	0.4480	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1098	0.6151	0.7331	2.1000e-003		0.0197	0.0197		0.0197	0.0197	0.0000	180.0205	180.0205	8.8800e-003	0.0000	180.2426
Total	0.1098	0.6151	0.7331	2.1000e-003	0.8231	0.0197	0.8428	0.4480	0.0197	0.4676	0.0000	180.0205	180.0205	8.8800e-003	0.0000	180.2426

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-003	1.0300e-003	0.0143	6.0000e-005	8.8900e-003	4.0000e-005	8.9300e-003	2.3600e-003	4.0000e-005	2.4000e-003	0.0000	5.6225	5.6225	8.0000e-005	0.0000	5.6246
Total	1.9000e-003	1.0300e-003	0.0143	6.0000e-005	8.8900e-003	4.0000e-005	8.9300e-003	2.3600e-003	4.0000e-005	2.4000e-003	0.0000	5.6225	5.6225	8.0000e-005	0.0000	5.6246

3.4 Grading - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2149	0.0000	0.2149	0.1136	0.0000	0.1136	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1115	0.4708	0.7828	2.3800e-003		0.0166	0.0166		0.0166	0.0166	0.0000	222.4832	222.4832	8.9900e-003	0.0000	222.7079
Total	0.1115	0.4708	0.7828	2.3800e-003	0.2149	0.0166	0.2315	0.1136	0.0166	0.1302	0.0000	222.4832	222.4832	8.9900e-003	0.0000	222.7079

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5900e-003	8.7000e-004	0.0120	5.0000e-005	7.4600e-003	4.0000e-005	7.5000e-003	1.9800e-003	3.0000e-005	2.0100e-003	0.0000	4.7201	4.7201	7.0000e-005	0.0000	4.7219

Total	1.5900e-003	8.7000e-004	0.0120	5.0000e-005	7.4600e-003	4.0000e-005	7.5000e-003	1.9800e-003	3.0000e-005	2.0100e-003	0.0000	4.7201	4.7201	7.0000e-005	0.0000	4.7219
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Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2149	0.0000	0.2149	0.1136	0.0000	0.1136	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1115	0.4708	0.7828	2.3800e-003		0.0166	0.0166		0.0166	0.0166	0.0000	222.4829	222.4829	8.9900e-003	0.0000	222.7077
Total	0.1115	0.4708	0.7828	2.3800e-003	0.2149	0.0166	0.2315	0.1136	0.0166	0.1302	0.0000	222.4829	222.4829	8.9900e-003	0.0000	222.7077

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5900e-003	8.7000e-004	0.0120	5.0000e-005	7.4600e-003	4.0000e-005	7.5000e-003	1.9800e-003	3.0000e-005	2.0100e-003	0.0000	4.7201	4.7201	7.0000e-005	0.0000	4.7219
Total	1.5900e-003	8.7000e-004	0.0120	5.0000e-005	7.4600e-003	4.0000e-005	7.5000e-003	1.9800e-003	3.0000e-005	2.0100e-003	0.0000	4.7201	4.7201	7.0000e-005	0.0000	4.7219

3.4 Grading - 2032

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0764	0.0000	0.0764	0.0375	0.0000	0.0375	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0361	0.1523	0.2533	7.7000e-004		5.3700e-003	5.3700e-003		5.3700e-003	5.3700e-003	0.0000	71.9798	71.9798	2.9100e-003	0.0000	72.0526
Total	0.0361	0.1523	0.2533	7.7000e-004	0.0764	5.3700e-003	0.0817	0.0375	5.3700e-003	0.0429	0.0000	71.9798	71.9798	2.9100e-003	0.0000	72.0526

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.8000e-004	2.6000e-004	3.6400e-003	2.0000e-005	2.4100e-003	1.0000e-005	2.4200e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	1.4964	1.4964	2.0000e-005	0.0000	1.4969
Total	4.8000e-004	2.6000e-004	3.6400e-003	2.0000e-005	2.4100e-003	1.0000e-005	2.4200e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	1.4964	1.4964	2.0000e-005	0.0000	1.4969

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Fugitive Dust					0.0764	0.0000	0.0764	0.0375	0.0000	0.0375	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0361	0.1523	0.2533	7.7000e-004		5.3700e-003	5.3700e-003		5.3700e-003	5.3700e-003	0.0000	71.9798	71.9798	2.9100e-003	0.0000	72.0525
Total	0.0361	0.1523	0.2533	7.7000e-004	0.0764	5.3700e-003	0.0817	0.0375	5.3700e-003	0.0429	0.0000	71.9798	71.9798	2.9100e-003	0.0000	72.0525

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.8000e-004	2.6000e-004	3.6400e-003	2.0000e-005	2.4100e-003	1.0000e-005	2.4200e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	1.4964	1.4964	2.0000e-005	0.0000	1.4969
Total	4.8000e-004	2.6000e-004	3.6400e-003	2.0000e-005	2.4100e-003	1.0000e-005	2.4200e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	1.4964	1.4964	2.0000e-005	0.0000	1.4969

3.5 Building Construction - 2032

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1571	0.9522	1.9388	3.7100e-003		0.0178	0.0178		0.0178	0.0178	0.0000	315.4332	315.4332	0.0127	0.0000	315.7496
Total	0.1571	0.9522	1.9388	3.7100e-003		0.0178	0.0178		0.0178	0.0178	0.0000	315.4332	315.4332	0.0127	0.0000	315.7496

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0663	2.5051	0.7031	8.9100e-003	0.2435	2.6600e-003	0.2462	0.0703	2.5500e-003	0.0728	0.0000	870.9358	870.9358	0.0456	0.0000	872.0764
Worker	0.2694	0.1449	2.0536	9.3200e-003	1.3613	6.0000e-003	1.3673	0.3615	5.5200e-003	0.3671	0.0000	843.9627	843.9627	0.0119	0.0000	844.2594
Total	0.3357	2.6500	2.7567	0.0182	1.6048	8.6600e-003	1.6135	0.4318	8.0700e-003	0.4399	0.0000	1,714.8985	1,714.8985	0.0575	0.0000	1,716.3358

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1571	0.9522	1.9388	3.7100e-003		0.0178	0.0178		0.0178	0.0178	0.0000	315.4329	315.4329	0.0127	0.0000	315.7492
Total	0.1571	0.9522	1.9388	3.7100e-003		0.0178	0.0178		0.0178	0.0178	0.0000	315.4329	315.4329	0.0127	0.0000	315.7492

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr										MT/yr					
	Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0663	2.5051	0.7031	8.9100e-003	0.2435	2.6600e-003	0.2462	0.0703	2.5500e-003	0.0728	0.0000	870.9358	870.9358	0.0456	0.0000	872.0764
Worker	0.2694	0.1449	2.0536	9.3200e-003	1.3613	6.0000e-003	1.3673	0.3615	5.5200e-003	0.3671	0.0000	843.9627	843.9627	0.0119	0.0000	844.2594
Total	0.3357	2.6500	2.7567	0.0182	1.6048	8.6600e-003	1.6135	0.4318	8.0700e-003	0.4399	0.0000	1,714.8985	1,714.8985	0.0575	0.0000	1,716.3358

3.5 Building Construction - 2033

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Off-Road	0.1702	1.0315	2.1004	4.0200e-003		0.0193	0.0193		0.0193	0.0193	0.0000	341.7193	341.7193	0.0137	0.0000	342.0621
Total	0.1702	1.0315	2.1004	4.0200e-003		0.0193	0.0193		0.0193	0.0193	0.0000	341.7193	341.7193	0.0137	0.0000	342.0621

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0714	2.6972	0.7593	9.6400e-003	0.2638	2.8500e-003	0.2667	0.0761	2.7200e-003	0.0788	0.0000	941.9022	941.9022	0.0490	0.0000	943.1283
Worker	0.2725	0.1450	2.1043	9.9100e-003	1.4748	6.0800e-003	1.4808	0.3917	5.5900e-003	0.3973	0.0000	897.9152	897.9152	0.0119	0.0000	898.2115

Total	0.3438	2.8421	2.8636	0.0196	1.7386	8.9300e-003	1.7475	0.4678	8.3100e-003	0.4761	0.0000	1,839.8174	1,839.8174	0.0609	0.0000	1,841.3397
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Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1702	1.0315	2.1004	4.0200e-003		0.0193	0.0193		0.0193	0.0193	0.0000	341.7189	341.7189	0.0137	0.0000	342.0617
Total	0.1702	1.0315	2.1004	4.0200e-003		0.0193	0.0193		0.0193	0.0193	0.0000	341.7189	341.7189	0.0137	0.0000	342.0617

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0714	2.6972	0.7593	9.6400e-003	0.2638	2.8500e-003	0.2667	0.0761	2.7200e-003	0.0788	0.0000	941.9022	941.9022	0.0490	0.0000	943.1283
Worker	0.2725	0.1450	2.1043	9.9100e-003	1.4748	6.0800e-003	1.4808	0.3917	5.5900e-003	0.3973	0.0000	897.9152	897.9152	0.0119	0.0000	898.2115
Total	0.3438	2.8421	2.8636	0.0196	1.7386	8.9300e-003	1.7475	0.4678	8.3100e-003	0.4761	0.0000	1,839.8174	1,839.8174	0.0609	0.0000	1,841.3397

3.5 Building Construction - 2034

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0655	0.3967	0.8079	1.5500e-003		7.4100e-003	7.4100e-003		7.4100e-003	7.4100e-003	0.0000	131.4305	131.4305	5.2700e-003	0.0000	131.5623
Total	0.0655	0.3967	0.8079	1.5500e-003		7.4100e-003	7.4100e-003		7.4100e-003	7.4100e-003	0.0000	131.4305	131.4305	5.2700e-003	0.0000	131.5623

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0273	1.0316	0.2911	3.7000e-003	0.1015	1.0800e-003	0.1026	0.0293	1.0300e-003	0.0303	0.0000	361.7918	361.7918	0.0187	0.0000	362.2603
Worker	0.0985	0.0519	0.7647	3.7500e-003	0.5672	2.1800e-003	0.5694	0.1506	2.0100e-003	0.1527	0.0000	339.8356	339.8356	4.1900e-003	0.0000	339.9404
Total	0.1258	1.0835	1.0557	7.4500e-003	0.6687	3.2600e-003	0.6720	0.1799	3.0400e-003	0.1830	0.0000	701.6274	701.6274	0.0229	0.0000	702.2006

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Off-Road	0.0655	0.3967	0.8079	1.5500e-003		7.4100e-003	7.4100e-003		7.4100e-003	7.4100e-003	0.0000	131.4304	131.4304	5.2700e-003	0.0000	131.5622
Total	0.0655	0.3967	0.8079	1.5500e-003		7.4100e-003	7.4100e-003		7.4100e-003	7.4100e-003	0.0000	131.4304	131.4304	5.2700e-003	0.0000	131.5622

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0273	1.0316	0.2911	3.7000e-003	0.1015	1.0800e-003	0.1026	0.0293	1.0300e-003	0.0303	0.0000	361.7918	361.7918	0.0187	0.0000	362.2603
Worker	0.0985	0.0519	0.7647	3.7500e-003	0.5672	2.1800e-003	0.5694	0.1506	2.0100e-003	0.1527	0.0000	339.8356	339.8356	4.1900e-003	0.0000	339.9404
Total	0.1258	1.0835	1.0557	7.4500e-003	0.6687	3.2600e-003	0.6720	0.1799	3.0400e-003	0.1830	0.0000	701.6274	701.6274	0.0229	0.0000	702.2006

3.6 Paving - 2034

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0415	0.2136	0.4755	8.4000e-004		9.9200e-003	9.9200e-003		9.9200e-003	9.9200e-003	0.0000	72.2985	72.2985	3.3900e-003	0.0000	72.3833
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0415	0.2136	0.4755	8.4000e-004		9.9200e-003	9.9200e-003		9.9200e-003	9.9200e-003	0.0000	72.2985	72.2985	3.3900e-003	0.0000	72.3833

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.6000e-004	4.5000e-004	6.6600e-003	3.0000e-005	4.9400e-003	2.0000e-005	4.9600e-003	1.3100e-003	2.0000e-005	1.3300e-003	0.0000	2.9580	2.9580	4.0000e-005	0.0000	2.9589
Total	8.6000e-004	4.5000e-004	6.6600e-003	3.0000e-005	4.9400e-003	2.0000e-005	4.9600e-003	1.3100e-003	2.0000e-005	1.3300e-003	0.0000	2.9580	2.9580	4.0000e-005	0.0000	2.9589

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0415	0.2136	0.4755	8.4000e-004		9.9200e-003	9.9200e-003		9.9200e-003	9.9200e-003	0.0000	72.2985	72.2985	3.3900e-003	0.0000	72.3832
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0415	0.2136	0.4755	8.4000e-004		9.9200e-003	9.9200e-003		9.9200e-003	9.9200e-003	0.0000	72.2985	72.2985	3.3900e-003	0.0000	72.3832

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.6000e-004	4.5000e-004	6.6600e-003	3.0000e-005	4.9400e-003	2.0000e-005	4.9600e-003	1.3100e-003	2.0000e-005	1.3300e-003	0.0000	2.9580	2.9580	4.0000e-005	0.0000	2.9589
Total	8.6000e-004	4.5000e-004	6.6600e-003	3.0000e-005	4.9400e-003	2.0000e-005	4.9600e-003	1.3100e-003	2.0000e-005	1.3300e-003	0.0000	2.9580	2.9580	4.0000e-005	0.0000	2.9589

3.7 Architectural Coating - 2034

Unmitigated Construction On-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	9.1518					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.5400e-003	0.0428	0.0899	1.5000e-004		1.0200e-003	1.0200e-003		1.0200e-003	1.0200e-003	0.0000	12.7663	12.7663	5.2000e-004	0.0000	12.7792
Total	9.1584	0.0428	0.0899	1.5000e-004		1.0200e-003	1.0200e-003		1.0200e-003	1.0200e-003	0.0000	12.7663	12.7663	5.2000e-004	0.0000	12.7792

Unmitigated Construction Off-Site

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0197	0.0104	0.1531	7.5000e-004	0.1136	4.4000e-004	0.1140	0.0302	4.0000e-004	0.0306	0.0000	68.0329	68.0329	8.4000e-004	0.0000	68.0538

Total	0.0197	0.0104	0.1531	7.5000e-004	0.1136	4.4000e-004	0.1140	0.0302	4.0000e-004	0.0306	0.0000	68.0329	68.0329	8.4000e-004	0.0000	68.0538
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Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	9.1518					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.5400e-003	0.0428	0.0899	1.5000e-004		1.0200e-003	1.0200e-003		1.0200e-003	1.0200e-003	0.0000	12.7663	12.7663	5.2000e-004	0.0000	12.7792
Total	9.1584	0.0428	0.0899	1.5000e-004		1.0200e-003	1.0200e-003		1.0200e-003	1.0200e-003	0.0000	12.7663	12.7663	5.2000e-004	0.0000	12.7792

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0197	0.0104	0.1531	7.5000e-004	0.1136	4.4000e-004	0.1140	0.0302	4.0000e-004	0.0306	0.0000	68.0329	68.0329	8.4000e-004	0.0000	68.0538
Total	0.0197	0.0104	0.1531	7.5000e-004	0.1136	4.4000e-004	0.1140	0.0302	4.0000e-004	0.0306	0.0000	68.0329	68.0329	8.4000e-004	0.0000	68.0538

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.4535	9.1145	18.8626	0.1000	10.8954	0.0495	10.9449	2.9181	0.0460	2.9641	0.0000	9,320.0374	9,320.0374	0.3569	0.0000	9,328.9597
Unmitigated	1.4535	9.1145	18.8626	0.1000	10.8954	0.0495	10.9449	2.9181	0.0460	2.9641	0.0000	9,320.0374	9,320.0374	0.3569	0.0000	9,328.9597

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	665.98	665.98	665.98	2,274,378	2,274,378
Day-Care Center	324.12	28.86	27.38	348,322	348,322
University/College (4Yr)	10,539.41	8,055.60	0.00	26,070,590	26,070,590
Total	11,529.51	8,750.44	693.36	28,693,291	28,693,291

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.00	19.00	41.00	86	11	3
Day-Care Center	16.60	8.40	6.90	12.70	82.30	5.00	28	58	14
University/College (4Yr)	16.60	8.40	6.90	6.40	88.60	5.00	91	9	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735
Day-Care Center	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735
University/College (4Yr)	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	5,861.3786	5,861.3786	0.2420	0.0501	5,882.3478
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	5,861.3786	5,861.3786	0.2420	0.0501	5,882.3478
NaturalGas Mitigated	0.2638	2.3853	1.9211	0.0144		0.1823	0.1823		0.1823	0.1823	0.0000	2,610.5441	2,610.5441	0.0500	0.0479	2,626.0573
NaturalGas Unmitigated	0.2638	2.3853	1.9211	0.0144		0.1823	0.1823		0.1823	0.1823	0.0000	2,610.5441	2,610.5441	0.0500	0.0479	2,626.0573

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	4.32274e+006	0.0233	0.1992	0.0848	1.2700e-003		0.0161	0.0161		0.0161	0.0161	0.0000	230.6781	230.6781	4.4200e-003	4.2300e-003	232.0489
Day-Care Center	186888	1.0100e-003	9.1600e-003	7.7000e-003	5.0000e-005		7.0000e-004	7.0000e-004		7.0000e-004	7.0000e-004	0.0000	9.9731	9.9731	1.9000e-004	1.8000e-004	10.0323
University/College (4Yr)	4.44101e+007	0.2395	2.1770	1.8287	0.0131		0.1655	0.1655		0.1655	0.1655	0.0000	2,369.8930	2,369.8930	0.0454	0.0435	2,383.9761

Total		0.2638	2.3853	1.9211	0.0144		0.1823	0.1823		0.1823	0.1823	0.0000	2,610.5442	2,610.5442	0.0500	0.0479	2,626.0573
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Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	4.32274e+006	0.0233	0.1992	0.0848	1.2700e-003		0.0161	0.0161		0.0161	0.0161	0.0000	230.6781	230.6781	4.4200e-003	4.2300e-003	232.0489
Day-Care Center	186888	1.0100e-003	9.1600e-003	7.7000e-003	5.0000e-005		7.0000e-004	7.0000e-004		7.0000e-004	7.0000e-004	0.0000	9.9731	9.9731	1.9000e-004	1.8000e-004	10.0323
University/College (4Yr)	4.44101e+007	0.2395	2.1770	1.8287	0.0131		0.1655	0.1655		0.1655	0.1655	0.0000	2,369.8930	2,369.8930	0.0454	0.0435	2,383.9761
Total		0.2638	2.3853	1.9211	0.0144		0.1823	0.1823		0.1823	0.1823	0.0000	2,610.5442	2,610.5442	0.0500	0.0479	2,626.0573

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.85728e+006	591.7684	0.0244	5.0500e-003	593.8855
Day-Care Center	106382	33.8957	1.4000e-003	2.9000e-004	34.0170
University/College (4Yr)	1.64324e+007	5,235.7144	0.2162	0.0447	5,254.4454
Total		5,861.3786	0.2420	0.0501	5,882.3478

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.85728e+006	591.7684	0.0244	5.0500e-003	593.8855
Day-Care Center	106382	33.8957	1.4000e-003	2.9000e-004	34.0170
University/College (4Yr)	1.64324e+007	5,235.7144	0.2162	0.0447	5,254.4454
Total		5,861.3786	0.2420	0.0501	5,882.3478

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	8.7528	0.0564	4.9058	2.6000e-004		0.0271	0.0271		0.0271	0.0271	0.0000	8.0690	8.0690	7.9500e-003	0.0000	8.2679
Unmitigated	8.7528	0.0564	4.9058	2.6000e-004		0.0271	0.0271		0.0271	0.0271	0.0000	8.0690	8.0690	7.9500e-003	0.0000	8.2679

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.9152					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.6857					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1520	0.0564	4.9058	2.6000e-004		0.0271	0.0271		0.0271	0.0271	0.0000	8.0690	8.0690	7.9500e-003	0.0000	8.2679
Total	8.7528	0.0564	4.9058	2.6000e-004		0.0271	0.0271		0.0271	0.0271	0.0000	8.0690	8.0690	7.9500e-003	0.0000	8.2679

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.9152					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.6857					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1520	0.0564	4.9058	2.6000e-004		0.0271	0.0271		0.0271	0.0271	0.0000	8.0690	8.0690	7.9500e-003	0.0000	8.2679
Total	8.7528	0.0564	4.9058	2.6000e-004		0.0271	0.0271		0.0271	0.0271	0.0000	8.0690	8.0690	7.9500e-003	0.0000	8.2679

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	350.8688	1.4838	0.0376	399.1633
Unmitigated	350.8688	1.4838	0.0376	399.1633

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	30.5572 / 19.2643	204.6629	1.0038	0.0252	237.2593
Day-Care Center	0.179394 / 0.461298	2.4341	5.9400e-003	1.6000e-004	2.6299
University/College (4Yr)	14.3732 / 22.4812	143.7718	0.4741	0.0123	159.2741
Total		350.8688	1.4838	0.0376	399.1633

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
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Land Use	Mgal	MT/yr			
Apartments Mid Rise	30.5572 / 19.2643	204.6629	1.0038	0.0252	237.2593
Day-Care Center	0.179394 / 0.461298	2.4341	5.9400e-003	1.6000e-004	2.6299
University/College (4Yr)	14.3732 / 22.4812	143.7718	0.4741	0.0123	159.2741
Total		350.8688	1.4838	0.0376	399.1633

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	295.2219	17.4471	0.0000	731.3999
Unmitigated	295.2219	17.4471	0.0000	731.3999

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			

Apartments Mid Rise	215.74	43.7933	2.5881	0.0000	108.4960
Day-Care Center	13.5	2.7404	0.1620	0.0000	6.7892
University/College (4Yr)	1225.12	248.6883	14.6971	0.0000	616.1147
Total		295.2219	17.4471	0.0000	731.3999

Mitigated

Land Use	Waste Disposed tons	Total CO2	CH4	N2O	CO2e
		MT/yr			
Apartments Mid Rise	215.74	43.7933	2.5881	0.0000	108.4960
Day-Care Center	13.5	2.7404	0.1620	0.0000	6.7892
University/College (4Yr)	1225.12	248.6883	14.6971	0.0000	616.1147
Total		295.2219	17.4471	0.0000	731.3999

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Campus Construction Summer 2035

CSUDH Campus Master Plan EIR (Buildout 2035 Campus Construction) - South Coast Air Basin, Summer

CSUDH Campus Master Plan EIR (Buildout 2035 Campus Construction)
South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
University/College (4Yr)	6,713.00	Student	11.80	1,639,960.00	0
Apartments Mid Rise	469.00	Dwelling Unit	6.30	469,000.00	1288
Day-Care Center	74.00	Student	1.00	17,970.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2035
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -
 Land Use - Master Plan
 Construction Phase - Adjusted.
 Grading - Master Plan
 Demolition - Master Plan
 Vehicle Trips - Master Plan
 Woodstoves - No woodstove and fireplace.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	100.00
tblConstructionPhase	NumDays	300.00	600.00
tblConstructionPhase	NumDays	20.00	90.00
tblConstructionPhase	NumDays	30.00	90.00
tblConstructionPhase	NumDays	20.00	60.00
tblConstructionPhase	NumDays	10.00	90.00
tblConstructionPhase	PhaseEndDate	7/14/2026	12/29/2034
tblConstructionPhase	PhaseEndDate	5/19/2026	5/19/2034
tblConstructionPhase	PhaseEndDate	1/28/2025	5/23/2031
tblConstructionPhase	PhaseEndDate	3/25/2025	1/30/2032
tblConstructionPhase	PhaseEndDate	6/16/2026	8/11/2034
tblConstructionPhase	PhaseEndDate	2/11/2025	9/26/2031
tblConstructionPhase	PhaseStartDate	6/17/2026	8/14/2034
tblConstructionPhase	PhaseStartDate	3/26/2025	2/2/2032
tblConstructionPhase	PhaseStartDate	1/1/2025	1/20/2031
tblConstructionPhase	PhaseStartDate	2/12/2025	9/29/2031
tblConstructionPhase	PhaseStartDate	5/20/2026	5/22/2034
tblConstructionPhase	PhaseStartDate	1/29/2025	5/26/2031
tblFireplaces	NumberGas	398.65	0.00
tblFireplaces	NumberNoFireplace	46.90	0.00
tblFireplaces	NumberWood	23.45	0.00
tblGrading	AcresOfGrading	225.00	19.10
tblGrading	AcresOfGrading	0.00	19.10
tblLandUse	LandUseSquareFeet	1,233,832.41	1,639,960.00
tblLandUse	LandUseSquareFeet	4,182.69	17,970.00
tblLandUse	LotAcreage	28.32	11.80
tblLandUse	LotAcreage	12.34	6.30
tblLandUse	LotAcreage	0.10	1.00
tblLandUse	Population	1,341.00	1,288.00

tblVehicleTrips	HO_TTP	40.60	41.00
tblVehicleTrips	HS_TTP	19.20	19.00
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	6.39	1.42
tblVehicleTrips	ST_TR	1.30	1.20
tblVehicleTrips	SU_TR	5.86	1.42
tblVehicleTrips	WD_TR	6.65	1.42
tblVehicleTrips	WD_TR	1.71	1.57
tblWoodstoves	NumberCatalytic	23.45	0.00
tblWoodstoves	NumberNoncatalytic	23.45	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2031	3.3273	13.8688	23.4069	0.0716	18.4925	0.489	18.9301	10.0083	0.4889	10.4459	0	7,373.84	7,373.84	0.294	0	7,381.19
2032	4.0865	29.7009	40.3986	0.1876	13.6182	0.4889	13.8384	3.6583	0.4888	3.8826	0	19,130.28	19,130.28	0.6413	0	19,146.31
2033	3.9333	29.495	39.3934	0.186	13.6182	0.2166	13.8349	3.6583	0.2119	3.8703	0	18,971.62	18,971.62	0.6293	0	18,987.36
2034	183.5597	29.3145	38.4202	0.1846	13.6182	0.3313	13.8315	3.6583	0.3312	3.8672	0	18,834.26	18,834.26	0.6181	0	18,849.71
Maximum	183.5597	29.7009	40.3986	0.1876	18.4925	0.489	18.9301	10.0083	0.4889	10.4459	0	19,130.28	19,130.28	0.6413	0	19,146.31

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2031	3.3273	13.8688	23.4069	0.0716	18.4925	0.4890	18.9301	10.0083	0.4889	10.4459	0.0000	7,373.8442	7,373.8442	0.2940	0.0000	7,381.1929
2032	4.0865	29.7009	40.3986	0.1876	13.6182	0.4889	13.8384	3.6583	0.4888	3.8826	0.0000	19,130.2808	19,130.2808	0.6413	0.0000	19,146.3140
2033	3.9333	29.4950	39.3934	0.1860	13.6182	0.2166	13.8349	3.6583	0.2119	3.8703	0.0000	18,971.6249	18,971.6249	0.6293	0.0000	18,987.3574
2034	183.5597	29.3145	38.4202	0.1846	13.6182	0.3313	13.8315	3.6583	0.3312	3.8672	0.0000	18,834.2603	18,834.2603	0.6181	0.0000	18,849.7137
Maximum	183.5597	29.7009	40.3986	0.1876	18.4925	0.4890	18.9301	10.0083	0.4889	10.4459	0.0000	19,130.2808	19,130.2808	0.6413	0.0000	19,146.3140

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	48.3438	0.4510	39.2461	2.0900e-003		0.2170	0.2170		0.2170	0.2170	0.0000	71.1564	71.1564	0.0702	0.0000	72.9101
Energy	1.4454	13.0702	10.5266	0.0788		0.9986	0.9986		0.9986	0.9986		15,767.8484	15,767.8484	0.3022	0.2891	15,861.5488
Mobile	10.2794	58.8591	130.1906	0.6836	73.1080	0.3262	73.4342	19.5505	0.3031	19.8536		70,211.3268	70,211.3268	2.5908		70,276.0971
Total	60.0686	72.3804	179.9633	0.7646	73.1080	1.5419	74.6499	19.5505	1.5188	21.0693	0.0000	86,050.3316	86,050.3316	2.9632	0.2891	86,210.5560

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	48.3438	0.4510	39.2461	2.0900e-003		0.2170	0.2170		0.2170	0.2170	0.0000	71.1564	71.1564	0.0702	0.0000	72.9101
Energy	1.4454	13.0702	10.5266	0.0788		0.9986	0.9986		0.9986	0.9986		15,767.8484	15,767.8484	0.3022	0.2891	15,861.5488
Mobile	10.2794	58.8591	130.1906	0.6836	73.1080	0.3262	73.4342	19.5505	0.3031	19.8536		70,211.3268	70,211.3268	2.5908		70,276.0971
Total	60.0686	72.3804	179.9633	0.7646	73.1080	1.5419	74.6499	19.5505	1.5188	21.0693	0.0000	86,050.3316	86,050.3316	2.9632	0.2891	86,210.5560

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/20/2031	5/23/2031	5	90	
2	Site Preparation	Site Preparation	5/26/2031	9/26/2031	5	90	
3	Grading	Grading	9/29/2031	1/30/2032	5	90	
4	Building Construction	Building Construction	2/2/2032	5/19/2034	5	600	
5	Paving	Paving	5/22/2034	8/11/2034	5	60	
6	Architectural Coating	Architectural Coating	8/14/2034	12/29/2034	5	100	

Acres of Grading (Site Preparation Phase): 19.1

Acres of Grading (Grading Phase): 19.1

Acres of Paving: 0

Residential Indoor: 949,725; Residential Outdoor: 316,575; Non-Residential Indoor: 2,486,895; Non-Residential Outdoor: 828,965; Striped

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	207.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1,034.00	322.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	15.00	0.00	564.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.3570	0.0000	1.3570	0.2055	0.0000	0.2055			0.0000			0.0000
Off-Road	2.0746	9.7770	18.9168	0.0462		0.3511	0.3511		0.3511	0.3511		4,378.5819	4,378.5819	0.1847		4,383.2000
Total	2.0746	9.7770	18.9168	0.0462	1.3570	0.3511	1.7081	0.2055	0.3511	0.5565		4,378.5819	4,378.5819	0.1847		4,383.2000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0287	0.8741	0.3397	4.3600e-003	0.1095	1.6000e-003	0.1111	0.0300	1.5300e-003	0.0315		478.2009	478.2009	0.0326		479.0149
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0350	0.0170	0.2873	1.2100e-003	0.1677	7.8000e-004	0.1684	0.0445	7.2000e-004	0.0452		120.5517	120.5517	1.8300e-003		120.5974
Total	0.0637	0.8910	0.6270	5.5700e-003	0.2771	2.3800e-003	0.2795	0.0745	2.2500e-003	0.0767		598.7526	598.7526	0.0344		599.6123

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.3570	0.0000	1.3570	0.2055	0.0000	0.2055			0.0000			0.0000
Off-Road	2.0746	9.7770	18.9168	0.0462		0.3511	0.3511		0.3511	0.3511	0.0000	4,378.5819	4,378.5819	0.1847		4,383.2000
Total	2.0746	9.7770	18.9168	0.0462	1.3570	0.3511	1.7081	0.2055	0.3511	0.5565	0.0000	4,378.5819	4,378.5819	0.1847		4,383.2000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0287	0.8741	0.3397	4.3600e-003	0.1095	1.6000e-003	0.1111	0.0300	1.5300e-003	0.0315		478.2009	478.2009	0.0326		479.0149
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0350	0.0170	0.2873	1.2100e-003	0.1677	7.8000e-004	0.1684	0.0445	7.2000e-004	0.0452		120.5517	120.5517	1.8300e-003		120.5974
Total	0.0637	0.8910	0.6270	5.5700e-003	0.2771	2.3800e-003	0.2795	0.0745	2.2500e-003	0.0767		598.7526	598.7526	0.0344		599.6123

3.3 Site Preparation - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day					
Fugitive Dust					18.2913	0.0000	18.2913	9.9550	0.0000	9.9550			0.0000			0.0000
Off-Road	2.4399	13.6680	16.2918	0.0466		0.4367	0.4367		0.4367	0.4367		4,409.7537	4,409.7537	0.2176		4,415.1936
Total	2.4399	13.6680	16.2918	0.0466	18.2913	0.4367	18.7280	9.9550	0.4367	10.3916		4,409.7537	4,409.7537	0.2176		4,415.1936

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0420	0.0203	0.3447	1.4500e-003	0.2012	9.3000e-004	0.2021	0.0534	8.6000e-004	0.0542		144.6621	144.6621	2.1900e-003		144.7169
Total	0.0420	0.0203	0.3447	1.4500e-003	0.2012	9.3000e-004	0.2021	0.0534	8.6000e-004	0.0542		144.6621	144.6621	2.1900e-003		144.7169

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.2913	0.0000	18.2913	9.9550	0.0000	9.9550			0.0000			0.0000
Off-Road	2.4399	13.6680	16.2918	0.0466		0.4367	0.4367		0.4367	0.4367	0.0000	4,409.7537	4,409.7537	0.2176		4,415.1936

Total	2.4399	13.6680	16.2918	0.0466	18.2913	0.4367	18.7280	9.9550	0.4367	10.3916	0.0000	4,409.7537	4,409.7537	0.2176		4,415.1936
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Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0420	0.0203	0.3447	1.4500e-003	0.2012	9.3000e-004	0.2021	0.0534	8.6000e-004	0.0542		144.6621	144.6621	2.1900e-003		144.7169
Total	0.0420	0.0203	0.3447	1.4500e-003	0.2012	9.3000e-004	0.2021	0.0534	8.6000e-004	0.0542		144.6621	144.6621	2.1900e-003		144.7169

3.4 Grading - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2472	0.0000	6.2472	3.3345	0.0000	3.3345			0.0000			0.0000
Off-Road	3.2807	13.8462	23.0239	0.0699		0.4879	0.4879		0.4879	0.4879		7,213.1086	7,213.1086	0.2915		7,220.3963
Total	3.2807	13.8462	23.0239	0.0699	6.2472	0.4879	6.7351	3.3345	0.4879	3.8225		7,213.1086	7,213.1086	0.2915		7,220.3963

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0466	0.0226	0.3830	1.6100e-003	0.2236	1.0400e-003	0.2246	0.0593	9.5000e-004	0.0602		160.7356	160.7356	2.4400e-003		160.7966
Total	0.0466	0.0226	0.3830	1.6100e-003	0.2236	1.0400e-003	0.2246	0.0593	9.5000e-004	0.0602		160.7356	160.7356	2.4400e-003		160.7966

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2472	0.0000	6.2472	3.3345	0.0000	3.3345			0.0000			0.0000
Off-Road	3.2807	13.8462	23.0239	0.0699		0.4879	0.4879		0.4879	0.4879	0.0000	7,213.1086	7,213.1086	0.2915		7,220.3963
Total	3.2807	13.8462	23.0239	0.0699	6.2472	0.4879	6.7351	3.3345	0.4879	3.8225	0.0000	7,213.1086	7,213.1086	0.2915		7,220.3963

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0466	0.0226	0.3830	1.6100e-003	0.2236	1.0400e-003	0.2246	0.0593	9.5000e-004	0.0602		160.7356	160.7356	2.4400e-003		160.7966
Total	0.0466	0.0226	0.3830	1.6100e-003	0.2236	1.0400e-003	0.2246	0.0593	9.5000e-004	0.0602		160.7356	160.7356	2.4400e-003		160.7966

3.4 Grading - 2032

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2472	0.0000	6.2472	3.3345	0.0000	3.3345			0.0000			0.0000
Off-Road	3.2807	13.8462	23.0239	0.0699		0.4879	0.4879		0.4879	0.4879		7,213.1086	7,213.1086	0.2915		7,220.3963
Total	3.2807	13.8462	23.0239	0.0699	6.2472	0.4879	6.7351	3.3345	0.4879	3.8225		7,213.1086	7,213.1086	0.2915		7,220.3963

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0433	0.0207	0.3607	1.5800e-003	0.2236	9.7000e-004	0.2245	0.0593	8.9000e-004	0.0602		157.5233	157.5233	2.2400e-003		157.5792
Total	0.0433	0.0207	0.3607	1.5800e-003	0.2236	9.7000e-004	0.2245	0.0593	8.9000e-004	0.0602		157.5233	157.5233	2.2400e-003		157.5792

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2472	0.0000	6.2472	3.3345	0.0000	3.3345			0.0000			0.0000
Off-Road	3.2807	13.8462	23.0239	0.0699		0.4879	0.4879		0.4879	0.4879	0.0000	7,213.1086	7,213.1086	0.2915		7,220.3963
Total	3.2807	13.8462	23.0239	0.0699	6.2472	0.4879	6.7351	3.3345	0.4879	3.8225	0.0000	7,213.1086	7,213.1086	0.2915		7,220.3963

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0433	0.0207	0.3607	1.5800e-003	0.2236	9.7000e-004	0.2245	0.0593	8.9000e-004	0.0602		157.5233	157.5233	2.2400e-003		157.5792
Total	0.0433	0.0207	0.3607	1.5800e-003	0.2236	9.7000e-004	0.2245	0.0593	8.9000e-004	0.0602		157.5233	157.5233	2.2400e-003		157.5792

3.5 Building Construction - 2032

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529
Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5409	20.6945	5.5912	0.0751	2.0605	0.0220	2.0826	0.5932	0.0210	0.6142		8,088.7811	8,088.7811	0.4095		8,099.0190
Worker	2.2364	1.0717	18.6505	0.0816	11.5577	0.0500	11.6077	3.0652	0.0460	3.1112		8,143.9529	8,143.9529	0.1156		8,146.8422
Total	2.7773	21.7662	24.2416	0.1567	13.6182	0.0720	13.6902	3.6583	0.0670	3.7254		16,232.7341	16,232.7341	0.5251		16,245.8611

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529

Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529
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Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5409	20.6945	5.5912	0.0751	2.0605	0.0220	2.0826	0.5932	0.0210	0.6142		8,088.7811	8,088.7811	0.4095		8,099.0190
Worker	2.2364	1.0717	18.6505	0.0816	11.5577	0.0500	11.6077	3.0652	0.0460	3.1112		8,143.9529	8,143.9529	0.1156		8,146.8422
Total	2.7773	21.7662	24.2416	0.1567	13.6182	0.0720	13.6902	3.6583	0.0670	3.7254		16,232.7341	16,232.7341	0.5251		16,245.8611

3.5 Building Construction - 2033

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529
Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5373	20.5704	5.5735	0.0750	2.0605	0.0218	2.0823	0.5932	0.0208	0.6140		8,075.0985	8,075.0985	0.4064		8,085.2593
Worker	2.0868	0.9899	17.6630	0.0801	11.5577	0.0467	11.6044	3.0652	0.0430	3.1081		7,998.9797	7,998.9797	0.1066		8,001.6452
Total	2.6241	21.5604	23.2365	0.1551	13.6182	0.0685	13.6867	3.6583	0.0638	3.7221		16,074.0781	16,074.0781	0.5131		16,086.9045

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529
Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.5373	20.5704	5.5735	0.0750	2.0605	0.0218	2.0823	0.5932	0.0208	0.6140		8,075.0985	8,075.0985	0.4064		8,085.2593
Worker	2.0868	0.9899	17.6630	0.0801	11.5577	0.0467	11.6044	3.0652	0.0430	3.1081		7,998.9797	7,998.9797	0.1066		8,001.6452
Total	2.6241	21.5604	23.2365	0.1551	13.6182	0.0685	13.6867	3.6583	0.0638	3.7221		16,074.0781	16,074.0781	0.5131		16,086.9045

3.5 Building Construction - 2034

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529
Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5341	20.4586	5.5544	0.0748	2.0606	0.0215	2.0821	0.5932	0.0206	0.6137		8,064.6366	8,064.6366	0.4038		8,074.7314
Worker	1.9599	0.9214	16.7088	0.0788	11.5577	0.0436	11.6013	3.0652	0.0401	3.1053		7,872.0770	7,872.0770	0.0981		7,874.5294
Total	2.4940	21.3799	22.2632	0.1537	13.6182	0.0651	13.6834	3.6583	0.0607	3.7190		15,936.7136	15,936.7136	0.5019		15,949.2609

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529
Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5341	20.4586	5.5544	0.0748	2.0606	0.0215	2.0821	0.5932	0.0206	0.6137		8,064.6366	8,064.6366	0.4038		8,074.7314
Worker	1.9599	0.9214	16.7088	0.0788	11.5577	0.0436	11.6013	3.0652	0.0401	3.1053		7,872.0770	7,872.0770	0.0981		7,874.5294
Total	2.4940	21.3799	22.2632	0.1537	13.6182	0.0651	13.6834	3.6583	0.0607	3.7190		15,936.7136	15,936.7136	0.5019		15,949.2609

3.6 Paving - 2034

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3845	7.1202	15.8495	0.0281		0.3306	0.3306		0.3306	0.3306		2,656.5168	2,656.5168	0.1245		2,659.6302
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3845	7.1202	15.8495	0.0281		0.3306	0.3306		0.3306	0.3306		2,656.5168	2,656.5168	0.1245		2,659.6302

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0284	0.0134	0.2424	1.1400e-003	0.1677	6.3000e-004	0.1683	0.0445	5.8000e-004	0.0451		114.1984	114.1984	1.4200e-003		114.2340
Total	0.0284	0.0134	0.2424	1.1400e-003	0.1677	6.3000e-004	0.1683	0.0445	5.8000e-004	0.0451		114.1984	114.1984	1.4200e-003		114.2340

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3845	7.1202	15.8495	0.0281		0.3306	0.3306		0.3306	0.3306	0.0000	2,656.5168	2,656.5168	0.1245		2,659.6302

Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3845	7.1202	15.8495	0.0281		0.3306	0.3306		0.3306	0.3306	0.0000	2,656.5168	2,656.5168	0.1245		2,659.6302

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0284	0.0134	0.2424	1.1400e-003	0.1677	6.3000e-004	0.1683	0.0445	5.8000e-004	0.0451		114.1984	114.1984	1.4200e-003		114.2340
Total	0.0284	0.0134	0.2424	1.1400e-003	0.1677	6.3000e-004	0.1683	0.0445	5.8000e-004	0.0451		114.1984	114.1984	1.4200e-003		114.2340

3.7 Architectural Coating - 2034

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	183.0366					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1308	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203		281.4481	281.4481	0.0114		281.7328
Total	183.1674	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203		281.4481	281.4481	0.0114		281.7328

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3924	0.1845	3.3450	0.0158	2.3138	8.7400e-003	2.3225	0.6136	8.0400e-003	0.6217		1,575.9381	1,575.9381	0.0196		1,576.4290
Total	0.3924	0.1845	3.3450	0.0158	2.3138	8.7400e-003	2.3225	0.6136	8.0400e-003	0.6217		1,575.9381	1,575.9381	0.0196		1,576.4290

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	183.0366					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1308	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203	0.0000	281.4481	281.4481	0.0114		281.7328
Total	183.1674	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203	0.0000	281.4481	281.4481	0.0114		281.7328

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.3924	0.1845	3.3450	0.0158	2.3138	8.7400e-003	2.3225	0.6136	8.0400e-003	0.6217		1,575.9381	1,575.9381	0.0196	1,576.4290
Total	0.3924	0.1845	3.3450	0.0158	2.3138	8.7400e-003	2.3225	0.6136	8.0400e-003	0.6217		1,575.9381	1,575.9381	0.0196	1,576.4290

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	10.2794	58.8591	130.1906	0.6836	73.1080	0.3262	73.4342	19.5505	0.3031	19.8536		70,211.3268	70,211.3268	2.5908		70,276.0971
Unmitigated	10.2794	58.8591	130.1906	0.6836	73.1080	0.3262	73.4342	19.5505	0.3031	19.8536		70,211.3268	70,211.3268	2.5908		70,276.0971

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	665.98	665.98	665.98	2,274,378	2,274,378
Day-Care Center	324.12	28.86	27.38	348,322	348,322
University/College (4Yr)	10,539.41	8,055.60	0.00	26,070,590	26,070,590
Total	11,529.51	8,750.44	693.36	28,693,291	28,693,291

4.3 Trip Type Information

	Miles	Trip %	Trip Purpose %
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Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.00	19.00	41.00	86	11	3
Day-Care Center	16.60	8.40	6.90	12.70	82.30	5.00	28	58	14
University/College (4Yr)	16.60	8.40	6.90	6.40	88.60	5.00	91	9	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735
Day-Care Center	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735
University/College (4Yr)	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.4454	13.0702	10.5266	0.0788		0.9986	0.9986		0.9986	0.9986		15,767.8484	15,767.8484	0.3022	0.2891	15,861.5488
NaturalGas Unmitigated	1.4454	13.0702	10.5266	0.0788		0.9986	0.9986		0.9986	0.9986		15,767.8484	15,767.8484	0.3022	0.2891	15,861.5488

5.2 Energy by Land Use - NaturalGas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	11843.1	0.1277	1.0914	0.4644	6.9700e-003		0.0882	0.0882		0.0882	0.0882		1,393.3102	1,393.3102	0.0267	0.0255	1,401.5899
Day-Care Center	512.022	5.5200e-003	0.0502	0.0422	3.0000e-004		3.8200e-003	3.8200e-003		3.8200e-003	3.8200e-003		60.2379	60.2379	1.1500e-003	1.1000e-003	60.5958
University/College (4Yr)	121672	1.3121	11.9286	10.0200	0.0716		0.9066	0.9066		0.9066	0.9066		14,314.3003	14,314.3003	0.2744	0.2624	14,399.3631
Total		1.4454	13.0702	10.5266	0.0788		0.9986	0.9986		0.9986	0.9986		15,767.8484	15,767.8484	0.3022	0.2891	15,861.5488

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	11.8431	0.1277	1.0914	0.4644	6.9700e-003		0.0882	0.0882		0.0882	0.0882		1,393.3102	1,393.3102	0.0267	0.0255	1,401.5899
Day-Care Center	0.512022	5.5200e-003	0.0502	0.0422	3.0000e-004		3.8200e-003	3.8200e-003		3.8200e-003	3.8200e-003		60.2379	60.2379	1.1500e-003	1.1000e-003	60.5958
University/College (4Yr)	121.672	1.3121	11.9286	10.0200	0.0716		0.9066	0.9066		0.9066	0.9066		14,314.3003	14,314.3003	0.2744	0.2624	14,399.3631
Total		1.4454	13.0702	10.5266	0.0788		0.9986	0.9986		0.9986	0.9986		15,767.8484	15,767.8484	0.3022	0.2891	15,861.5488

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	48.3438	0.4510	39.2461	2.0900e-003		0.2170	0.2170		0.2170	0.2170	0.0000	71.1564	71.1564	0.0702	0.0000	72.9101
Unmitigated	48.3438	0.4510	39.2461	2.0900e-003		0.2170	0.2170		0.2170	0.2170	0.0000	71.1564	71.1564	0.0702	0.0000	72.9101

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	5.0147					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	42.1132					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2159	0.4510	39.2461	2.0900e-003		0.2170	0.2170		0.2170	0.2170		71.1564	71.1564	0.0702		72.9101
Total	48.3438	0.4510	39.2461	2.0900e-003		0.2170	0.2170		0.2170	0.2170	0.0000	71.1564	71.1564	0.0702	0.0000	72.9101

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	5.0147					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Consumer Products	42.1132				0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2159	0.4510	39.2461	2.0900e-003	0.2170	0.2170		0.2170	0.2170		71.1564	71.1564	0.0702		72.9101
Total	48.3438	0.4510	39.2461	2.0900e-003	0.2170	0.2170		0.2170	0.2170	0.0000	71.1564	71.1564	0.0702	0.0000	72.9101

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Campus Construction Winter 2035

CSUDH Campus Master Plan EIR (Buildout 2035 Campus Construction) - South Coast Air Basin, Winter

CSUDH Campus Master Plan EIR (Buildout 2035 Campus Construction)
South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
University/College (4Yr)	6,713.00	Student	11.80	1,639,960.00	0
Apartments Mid Rise	469.00	Dwelling Unit	6.30	469,000.00	1288
Day-Care Center	74.00	Student	1.00	17,970.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2035
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -
 Land Use - Master Plan
 Construction Phase - Adjusted.
 Grading - Master Plan
 Demolition - Master Plan
 Vehicle Trips - Master Plan
 Woodstoves - No woodstove and fireplace.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	100.00
tblConstructionPhase	NumDays	300.00	600.00
tblConstructionPhase	NumDays	20.00	90.00
tblConstructionPhase	NumDays	30.00	90.00
tblConstructionPhase	NumDays	20.00	60.00
tblConstructionPhase	NumDays	10.00	90.00
tblConstructionPhase	PhaseEndDate	7/14/2026	12/29/2034
tblConstructionPhase	PhaseEndDate	5/19/2026	5/19/2034
tblConstructionPhase	PhaseEndDate	1/28/2025	5/23/2031
tblConstructionPhase	PhaseEndDate	3/25/2025	1/30/2032
tblConstructionPhase	PhaseEndDate	6/16/2026	8/11/2034
tblConstructionPhase	PhaseEndDate	2/11/2025	9/26/2031
tblConstructionPhase	PhaseStartDate	6/17/2026	8/14/2034
tblConstructionPhase	PhaseStartDate	3/26/2025	2/2/2032
tblConstructionPhase	PhaseStartDate	1/1/2025	1/20/2031
tblConstructionPhase	PhaseStartDate	2/12/2025	9/29/2031
tblConstructionPhase	PhaseStartDate	5/20/2026	5/22/2034
tblConstructionPhase	PhaseStartDate	1/29/2025	5/26/2031
tblFireplaces	NumberGas	398.65	0.00
tblFireplaces	NumberNoFireplace	46.90	0.00
tblFireplaces	NumberWood	23.45	0.00
tblGrading	AcresOfGrading	225.00	19.10
tblGrading	AcresOfGrading	0.00	19.10
tblLandUse	LandUseSquareFeet	1,233,832.41	1,639,960.00
tblLandUse	LandUseSquareFeet	4,182.69	17,970.00
tblLandUse	LotAcreage	28.32	11.80
tblLandUse	LotAcreage	12.34	6.30
tblLandUse	LotAcreage	0.10	1.00
tblLandUse	Population	1,341.00	1,288.00

tblVehicleTrips	HO_TTP	40.60	41.00
tblVehicleTrips	HS_TTP	19.20	19.00
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	6.39	1.42
tblVehicleTrips	ST_TR	1.30	1.20
tblVehicleTrips	SU_TR	5.86	1.42
tblVehicleTrips	WD_TR	6.65	1.42
tblVehicleTrips	WD_TR	1.71	1.57
tblWoodstoves	NumberCatalytic	23.45	0.00
tblWoodstoves	NumberNoncatalytic	23.45	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2031	3.3333	13.8709	23.3657	0.0715	18.4925	0.489	18.9301	10.0083	0.4889	10.4459	0	7,363.75	7,363.75	0.2938	0	7,371.10
2032	4.4056	29.6908	38.8741	0.1806	13.6182	0.4889	13.8388	3.6583	0.4888	3.8826	0	18,407.48	18,407.48	0.6544	0	18,423.84
2033	4.236	29.4753	37.9513	0.179	13.6182	0.217	13.8353	3.6583	0.2123	3.8707	0	18,257.02	18,257.02	0.6425	0	18,273.08
2034	183.6124	29.2866	37.0592	0.1777	13.6182	0.3313	13.8319	3.6583	0.3312	3.8675	0	18,126.55	18,126.55	0.6316	0	18,142.34
Maximum	183.6124	29.6908	38.8741	0.1806	18.4925	0.489	18.9301	10.0083	0.4889	10.4459	0	18,407.48	18,407.48	0.6544	0	18,423.84

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2031	3.3333	13.8709	23.3657	0.0715	18.4925	0.4890	18.9301	10.0083	0.4889	10.4459	0.0000	7,363.7545	7,363.7545	0.2938	0.0000	7,371.0988
2032	4.4056	29.6908	38.8741	0.1806	13.6182	0.4889	13.8388	3.6583	0.4888	3.8826	0.0000	18,407.4762	18,407.4762	0.6544	0.0000	18,423.8362
2033	4.2360	29.4753	37.9513	0.1790	13.6182	0.2170	13.8353	3.6583	0.2123	3.8707	0.0000	18,257.0198	18,257.0198	0.6425	0.0000	18,273.0835
2034	183.6124	29.2866	37.0592	0.1777	13.6182	0.3313	13.8319	3.6583	0.3312	3.8675	0.0000	18,126.5541	18,126.5541	0.6316	0.0000	18,142.3443
Maximum	183.6124	29.6908	38.8741	0.1806	18.4925	0.4890	18.9301	10.0083	0.4889	10.4459	0.0000	18,407.4762	18,407.4762	0.6544	0.0000	18,423.8362

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	48.3438	0.4510	39.2461	2.0900e-003		0.2170	0.2170		0.2170	0.2170	0.0000	71.1564	71.1564	0.0702	0.0000	72.9101
Energy	1.4454	13.0702	10.5266	0.0788		0.9986	0.9986		0.9986	0.9986		15,767.8484	15,767.8484	0.3022	0.2891	15,861.5488
Mobile	9.8376	59.2600	122.7886	0.6498	73.1080	0.3271	73.4351	19.5505	0.3039	19.8544		66,792.0062	66,792.0062	2.6190		66,857.4811
Total	59.6268	72.7812	172.5613	0.7308	73.1080	1.5427	74.6507	19.5505	1.5196	21.0701	0.0000	82,631.0110	82,631.0110	2.9914	0.2891	82,791.9401

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	48.3438	0.4510	39.2461	2.0900e-003		0.2170	0.2170		0.2170	0.2170	0.0000	71.1564	71.1564	0.0702	0.0000	72.9101
Energy	1.4454	13.0702	10.5266	0.0788		0.9986	0.9986		0.9986	0.9986		15,767.8484	15,767.8484	0.3022	0.2891	15,861.5488
Mobile	9.8376	59.2600	122.7886	0.6498	73.1080	0.3271	73.4351	19.5505	0.3039	19.8544		66,792.0062	66,792.0062	2.6190		66,857.4811
Total	59.6268	72.7812	172.5613	0.7308	73.1080	1.5427	74.6507	19.5505	1.5196	21.0701	0.0000	82,631.0110	82,631.0110	2.9914	0.2891	82,791.9401

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/20/2031	5/23/2031	5	90	
2	Site Preparation	Site Preparation	5/26/2031	9/26/2031	5	90	
3	Grading	Grading	9/29/2031	1/30/2032	5	90	
4	Building Construction	Building Construction	2/2/2032	5/19/2034	5	600	
5	Paving	Paving	5/22/2034	8/11/2034	5	60	
6	Architectural Coating	Architectural Coating	8/14/2034	12/29/2034	5	100	

Acres of Grading (Site Preparation Phase): 19.1

Acres of Grading (Grading Phase): 19.1

Acres of Paving: 0

Residential Indoor: 949,725; Residential Outdoor: 316,575; Non-Residential Indoor: 2,486,895; Non-Residential Outdoor: 828,965; Striped

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	207.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1,034.00	322.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	15.00	0.00	564.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.3570	0.0000	1.3570	0.2055	0.0000	0.2055			0.0000			0.0000
Off-Road	2.0746	9.7770	18.9168	0.0462		0.3511	0.3511		0.3511	0.3511		4,378.5819	4,378.5819	0.1847		4,383.2000
Total	2.0746	9.7770	18.9168	0.0462	1.3570	0.3511	1.7081	0.2055	0.3511	0.5565		4,378.5819	4,378.5819	0.1847		4,383.2000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0295	0.8790	0.3534	4.2900e-003	0.1095	1.6200e-003	0.1111	0.0300	1.5500e-003	0.0315		470.2765	470.2765	0.0334		471.1105
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0395	0.0185	0.2563	1.1300e-003	0.1677	7.8000e-004	0.1684	0.0445	7.2000e-004	0.0452		112.9844	112.9844	1.7000e-003		113.0268
Total	0.0690	0.8976	0.6097	5.4200e-003	0.2771	2.4000e-003	0.2795	0.0745	2.2700e-003	0.0767		583.2610	583.2610	0.0351		584.1374

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.3570	0.0000	1.3570	0.2055	0.0000	0.2055			0.0000			0.0000
Off-Road	2.0746	9.7770	18.9168	0.0462		0.3511	0.3511		0.3511	0.3511	0.0000	4,378.5819	4,378.5819	0.1847		4,383.2000
Total	2.0746	9.7770	18.9168	0.0462	1.3570	0.3511	1.7081	0.2055	0.3511	0.5565	0.0000	4,378.5819	4,378.5819	0.1847		4,383.2000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0295	0.8790	0.3534	4.2900e-003	0.1095	1.6200e-003	0.1111	0.0300	1.5500e-003	0.0315		470.2765	470.2765	0.0334		471.1105
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0395	0.0185	0.2563	1.1300e-003	0.1677	7.8000e-004	0.1684	0.0445	7.2000e-004	0.0452		112.9844	112.9844	1.7000e-003		113.0268
Total	0.0690	0.8976	0.6097	5.4200e-003	0.2771	2.4000e-003	0.2795	0.0745	2.2700e-003	0.0767		583.2610	583.2610	0.0351		584.1374

3.3 Site Preparation - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day					
Fugitive Dust					18.2913	0.0000	18.2913	9.9550	0.0000	9.9550			0.0000			0.0000
Off-Road	2.4399	13.6680	16.2918	0.0466		0.4367	0.4367		0.4367	0.4367		4,409.7537	4,409.7537	0.2176		4,415.1936
Total	2.4399	13.6680	16.2918	0.0466	18.2913	0.4367	18.7280	9.9550	0.4367	10.3916		4,409.7537	4,409.7537	0.2176		4,415.1936

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0474	0.0223	0.3076	1.3600e-003	0.2012	9.3000e-004	0.2021	0.0534	8.6000e-004	0.0542		135.5813	135.5813	2.0400e-003		135.6322
Total	0.0474	0.0223	0.3076	1.3600e-003	0.2012	9.3000e-004	0.2021	0.0534	8.6000e-004	0.0542		135.5813	135.5813	2.0400e-003		135.6322

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.2913	0.0000	18.2913	9.9550	0.0000	9.9550			0.0000			0.0000
Off-Road	2.4399	13.6680	16.2918	0.0466		0.4367	0.4367		0.4367	0.4367	0.0000	4,409.7537	4,409.7537	0.2176		4,415.1936

Total	2.4399	13.6680	16.2918	0.0466	18.2913	0.4367	18.7280	9.9550	0.4367	10.3916	0.0000	4,409.7537	4,409.7537	0.2176		4,415.1936
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Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0474	0.0223	0.3076	1.3600e-003	0.2012	9.3000e-004	0.2021	0.0534	8.6000e-004	0.0542		135.5813	135.5813	2.0400e-003		135.6322
Total	0.0474	0.0223	0.3076	1.3600e-003	0.2012	9.3000e-004	0.2021	0.0534	8.6000e-004	0.0542		135.5813	135.5813	2.0400e-003		135.6322

3.4 Grading - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2472	0.0000	6.2472	3.3345	0.0000	3.3345			0.0000			0.0000
Off-Road	3.2807	13.8462	23.0239	0.0699		0.4879	0.4879		0.4879	0.4879		7,213.1086	7,213.1086	0.2915		7,220.3963
Total	3.2807	13.8462	23.0239	0.0699	6.2472	0.4879	6.7351	3.3345	0.4879	3.8225		7,213.1086	7,213.1086	0.2915		7,220.3963

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0527	0.0247	0.3418	1.5100e-003	0.2236	1.0400e-003	0.2246	0.0593	9.5000e-004	0.0602		150.6459	150.6459	2.2600e-003		150.7025
Total	0.0527	0.0247	0.3418	1.5100e-003	0.2236	1.0400e-003	0.2246	0.0593	9.5000e-004	0.0602		150.6459	150.6459	2.2600e-003		150.7025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2472	0.0000	6.2472	3.3345	0.0000	3.3345			0.0000			0.0000
Off-Road	3.2807	13.8462	23.0239	0.0699		0.4879	0.4879		0.4879	0.4879	0.0000	7,213.1086	7,213.1086	0.2915		7,220.3963
Total	3.2807	13.8462	23.0239	0.0699	6.2472	0.4879	6.7351	3.3345	0.4879	3.8225	0.0000	7,213.1086	7,213.1086	0.2915		7,220.3963

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0527	0.0247	0.3418	1.5100e-003	0.2236	1.0400e-003	0.2246	0.0593	9.5000e-004	0.0602		150.6459	150.6459	2.2600e-003	150.7025
Total	0.0527	0.0247	0.3418	1.5100e-003	0.2236	1.0400e-003	0.2246	0.0593	9.5000e-004	0.0602		150.6459	150.6459	2.2600e-003	150.7025

3.4 Grading - 2032

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2472	0.0000	6.2472	3.3345	0.0000	3.3345			0.0000			0.0000
Off-Road	3.2807	13.8462	23.0239	0.0699		0.4879	0.4879		0.4879	0.4879		7,213.1086	7,213.1086	0.2915		7,220.3963
Total	3.2807	13.8462	23.0239	0.0699	6.2472	0.4879	6.7351	3.3345	0.4879	3.8225		7,213.1086	7,213.1086	0.2915		7,220.3963

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0489	0.0227	0.3213	1.4800e-003	0.2236	9.7000e-004	0.2245	0.0593	8.9000e-004	0.0602		147.6150	147.6150	2.0700e-003		147.6668
Total	0.0489	0.0227	0.3213	1.4800e-003	0.2236	9.7000e-004	0.2245	0.0593	8.9000e-004	0.0602		147.6150	147.6150	2.0700e-003		147.6668

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2472	0.0000	6.2472	3.3345	0.0000	3.3345			0.0000			0.0000
Off-Road	3.2807	13.8462	23.0239	0.0699		0.4879	0.4879		0.4879	0.4879	0.0000	7,213.1086	7,213.1086	0.2915		7,220.3963
Total	3.2807	13.8462	23.0239	0.0699	6.2472	0.4879	6.7351	3.3345	0.4879	3.8225	0.0000	7,213.1086	7,213.1086	0.2915		7,220.3963

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0489	0.0227	0.3213	1.4800e-003	0.2236	9.7000e-004	0.2245	0.0593	8.9000e-004	0.0602		147.6150	147.6150	2.0700e-003		147.6668
Total	0.0489	0.0227	0.3213	1.4800e-003	0.2236	9.7000e-004	0.2245	0.0593	8.9000e-004	0.0602		147.6150	147.6150	2.0700e-003		147.6668

3.5 Building Construction - 2032

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529
Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5675	20.5847	6.1040	0.0732	2.0605	0.0225	2.0830	0.5932	0.0215	0.6147		7,878.2338	7,878.2338	0.4311		7,889.0104
Worker	2.5290	1.1715	16.6131	0.0764	11.5577	0.0500	11.6077	3.0652	0.0460	3.1112		7,631.6956	7,631.6956	0.1071		7,634.3729
Total	3.0965	21.7562	22.7171	0.1496	13.6182	0.0725	13.6907	3.6583	0.0675	3.7258		15,509.9294	15,509.9294	0.5382		15,523.3833

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529

Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529
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Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5675	20.5847	6.1040	0.0732	2.0605	0.0225	2.0830	0.5932	0.0215	0.6147		7,878.2338	7,878.2338	0.4311		7,889.0104
Worker	2.5290	1.1715	16.6131	0.0764	11.5577	0.0500	11.6077	3.0652	0.0460	3.1112		7,631.6956	7,631.6956	0.1071		7,634.3729
Total	3.0965	21.7562	22.7171	0.1496	13.6182	0.0725	13.6907	3.6583	0.0675	3.7258		15,509.9294	15,509.9294	0.5382		15,523.3833

3.5 Building Construction - 2033

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529
Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5637	20.4593	6.0851	0.0730	2.0605	0.0222	2.0827	0.5932	0.0212	0.6144		7,864.5922	7,864.5922	0.4276		7,875.2823
Worker	2.3632	1.0814	15.7093	0.0751	11.5577	0.0467	11.6044	3.0652	0.0430	3.1081		7,494.8808	7,494.8808	0.0987		7,497.3484
Total	2.9269	21.5407	21.7943	0.1481	13.6182	0.0689	13.6871	3.6583	0.0642	3.7225		15,359.4730	15,359.4730	0.5263		15,372.6307

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529
Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.5637	20.4593	6.0851	0.0730	2.0605	0.0222	2.0827	0.5932	0.0212	0.6144		7,864.5922	7,864.5922	0.4276		7,875.2823
Worker	2.3632	1.0814	15.7093	0.0751	11.5577	0.0467	11.6044	3.0652	0.0430	3.1081		7,494.8808	7,494.8808	0.0987		7,497.3484
Total	2.9269	21.5407	21.7943	0.1481	13.6182	0.0689	13.6871	3.6583	0.0642	3.7225		15,359.4730	15,359.4730	0.5263		15,372.6307

3.5 Building Construction - 2034

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529
Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5603	20.3461	6.0649	0.0729	2.0606	0.0219	2.0824	0.5932	0.0209	0.6141		7,853.9367	7,853.9367	0.4247		7,864.5530
Worker	2.2231	1.0059	14.8373	0.0738	11.5577	0.0436	11.6013	3.0652	0.0401	3.1053		7,375.0706	7,375.0706	0.0907		7,377.3384
Total	2.7834	21.3520	20.9022	0.1468	13.6182	0.0655	13.6837	3.6583	0.0610	3.7194		15,229.0073	15,229.0073	0.5154		15,241.8915

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529
Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5603	20.3461	6.0649	0.0729	2.0606	0.0219	2.0824	0.5932	0.0209	0.6141		7,853.9367	7,853.9367	0.4247		7,864.5530
Worker	2.2231	1.0059	14.8373	0.0738	11.5577	0.0436	11.6013	3.0652	0.0401	3.1053		7,375.0706	7,375.0706	0.0907		7,377.3384
Total	2.7834	21.3520	20.9022	0.1468	13.6182	0.0655	13.6837	3.6583	0.0610	3.7194		15,229.0073	15,229.0073	0.5154		15,241.8915

3.6 Paving - 2034

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3845	7.1202	15.8495	0.0281		0.3306	0.3306		0.3306	0.3306		2,656.5168	2,656.5168	0.1245		2,659.6302
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3845	7.1202	15.8495	0.0281		0.3306	0.3306		0.3306	0.3306		2,656.5168	2,656.5168	0.1245		2,659.6302

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0323	0.0146	0.2152	1.0700e-003	0.1677	6.3000e-004	0.1683	0.0445	5.8000e-004	0.0451		106.9885	106.9885	1.3200e-003		107.0214
Total	0.0323	0.0146	0.2152	1.0700e-003	0.1677	6.3000e-004	0.1683	0.0445	5.8000e-004	0.0451		106.9885	106.9885	1.3200e-003		107.0214

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3845	7.1202	15.8495	0.0281		0.3306	0.3306		0.3306	0.3306	0.0000	2,656.5168	2,656.5168	0.1245		2,659.6302

Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3845	7.1202	15.8495	0.0281		0.3306	0.3306		0.3306	0.3306	0.0000	2,656.5168	2,656.5168	0.1245		2,659.6302

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0323	0.0146	0.2152	1.0700e-003	0.1677	6.3000e-004	0.1683	0.0445	5.8000e-004	0.0451		106.9885	106.9885	1.3200e-003		107.0214
Total	0.0323	0.0146	0.2152	1.0700e-003	0.1677	6.3000e-004	0.1683	0.0445	5.8000e-004	0.0451		106.9885	106.9885	1.3200e-003		107.0214

3.7 Architectural Coating - 2034

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	183.0366					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1308	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203		281.4481	281.4481	0.0114		281.7328
Total	183.1674	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203		281.4481	281.4481	0.0114		281.7328

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4451	0.2014	2.9703	0.0148	2.3138	8.7400e-003	2.3225	0.6136	8.0400e-003	0.6217		1,476.4406	1,476.4406	0.0182		1,476.8946
Total	0.4451	0.2014	2.9703	0.0148	2.3138	8.7400e-003	2.3225	0.6136	8.0400e-003	0.6217		1,476.4406	1,476.4406	0.0182		1,476.8946

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	183.0366					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1308	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203	0.0000	281.4481	281.4481	0.0114		281.7328
Total	183.1674	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203	0.0000	281.4481	281.4481	0.0114		281.7328

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.4451	0.2014	2.9703	0.0148	2.3138	8.7400e-003	2.3225	0.6136	8.0400e-003	0.6217		1,476.4406	1,476.4406	0.0182	1,476.8946
Total	0.4451	0.2014	2.9703	0.0148	2.3138	8.7400e-003	2.3225	0.6136	8.0400e-003	0.6217		1,476.4406	1,476.4406	0.0182	1,476.8946

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.8376	59.2600	122.7886	0.6498	73.1080	0.3271	73.4351	19.5505	0.3039	19.8544		66,792.0062	66,792.0062	2.6190		66,857.4811
Unmitigated	9.8376	59.2600	122.7886	0.6498	73.1080	0.3271	73.4351	19.5505	0.3039	19.8544		66,792.0062	66,792.0062	2.6190		66,857.4811

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	665.98	665.98	665.98	2,274,378	2,274,378
Day-Care Center	324.12	28.86	27.38	348,322	348,322
University/College (4Yr)	10,539.41	8,055.60	0.00	26,070,590	26,070,590
Total	11,529.51	8,750.44	693.36	28,693,291	28,693,291

4.3 Trip Type Information

Miles	Trip %	Trip Purpose %
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Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.00	19.00	41.00	86	11	3
Day-Care Center	16.60	8.40	6.90	12.70	82.30	5.00	28	58	14
University/College (4Yr)	16.60	8.40	6.90	6.40	88.60	5.00	91	9	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735
Day-Care Center	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735
University/College (4Yr)	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	1.4454	13.0702	10.5266	0.0788		0.9986	0.9986		0.9986	0.9986		15,767.8484	15,767.8484	0.3022	0.2891	15,861.5488
NaturalGas Unmitigated	1.4454	13.0702	10.5266	0.0788		0.9986	0.9986		0.9986	0.9986		15,767.8484	15,767.8484	0.3022	0.2891	15,861.5488

5.2 Energy by Land Use - NaturalGas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	11843.1	0.1277	1.0914	0.4644	6.9700e-003		0.0882	0.0882		0.0882	0.0882		1,393.3102	1,393.3102	0.0267	0.0255	1,401.5899
Day-Care Center	512.022	5.5200e-003	0.0502	0.0422	3.0000e-004		3.8200e-003	3.8200e-003		3.8200e-003	3.8200e-003		60.2379	60.2379	1.1500e-003	1.1000e-003	60.5958
University/College (4Yr)	121672	1.3121	11.9286	10.0200	0.0716		0.9066	0.9066		0.9066	0.9066		14,314.3003	14,314.3003	0.2744	0.2624	14,399.3631
Total		1.4454	13.0702	10.5266	0.0788		0.9986	0.9986		0.9986	0.9986		15,767.8484	15,767.8484	0.3022	0.2891	15,861.5488

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	11.8431	0.1277	1.0914	0.4644	6.9700e-003		0.0882	0.0882		0.0882	0.0882		1,393.3102	1,393.3102	0.0267	0.0255	1,401.5899
Day-Care Center	0.512022	5.5200e-003	0.0502	0.0422	3.0000e-004		3.8200e-003	3.8200e-003		3.8200e-003	3.8200e-003		60.2379	60.2379	1.1500e-003	1.1000e-003	60.5958
University/College (4Yr)	121.672	1.3121	11.9286	10.0200	0.0716		0.9066	0.9066		0.9066	0.9066		14,314.3003	14,314.3003	0.2744	0.2624	14,399.3631
Total		1.4454	13.0702	10.5266	0.0788		0.9986	0.9986		0.9986	0.9986		15,767.8484	15,767.8484	0.3022	0.2891	15,861.5488

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	48.3438	0.4510	39.2461	2.0900e-003		0.2170	0.2170		0.2170	0.2170	0.0000	71.1564	71.1564	0.0702	0.0000	72.9101
Unmitigated	48.3438	0.4510	39.2461	2.0900e-003		0.2170	0.2170		0.2170	0.2170	0.0000	71.1564	71.1564	0.0702	0.0000	72.9101

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	5.0147					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	42.1132					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2159	0.4510	39.2461	2.0900e-003		0.2170	0.2170		0.2170	0.2170		71.1564	71.1564	0.0702		72.9101
Total	48.3438	0.4510	39.2461	2.0900e-003		0.2170	0.2170		0.2170	0.2170	0.0000	71.1564	71.1564	0.0702	0.0000	72.9101

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	5.0147					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000

Consumer Products	42.1132				0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.2159	0.4510	39.2461	2.0900e-003	0.2170	0.2170		0.2170	0.2170		71.1564	71.1564	0.0702		72.9101
Total	48.3438	0.4510	39.2461	2.0900e-003	0.2170	0.2170		0.2170	0.2170	0.0000	71.1564	71.1564	0.0702	0.0000	72.9101

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Uni Village Construction Annual 2035

CSUDH Campus Master Plan EIR (Buildout 2035 University Village Construction) - South Coast Air Basin, Annual

CSUDH Campus Master Plan EIR (Buildout 2035 University Village Construction)
South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	1,086.00	Dwelling Unit	13.30	1,086,000.00	3106

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2035
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -
 Land Use - Master Plan
 Construction Phase - Adjusted.
 Demolition -
 Grading - Master Plan
 Vehicle Trips - Master Plan
 Woodstoves - No woodstove and fireplace.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	60.00

tblFireplaces	NumberGas	923.10	0.00
tblFireplaces	NumberNoFireplace	108.60	0.00
tblFireplaces	NumberWood	54.30	0.00
tblGrading	AcresOfGrading	75.00	13.30
tblGrading	AcresOfGrading	0.00	13.30
tblLandUse	LotAcreage	28.58	13.30
tblVehicleTrips	ST_TR	6.39	5.75
tblVehicleTrips	SU_TR	5.86	5.27
tblVehicleTrips	WD_TR	6.65	5.99
tblWoodstoves	NumberCatalytic	54.30	0.00
tblWoodstoves	NumberNoncatalytic	54.30	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2026	0.4882	2.9913	4.444	0.0142	1.2242	0.0907	1.315	0.3667	0.0847	0.4514	0	1,289.54	1,289.54	0.1255	0	1,292.67
2027	3.6217	1.2008	2.0872	6.70E-03	0.5139	0.0353	0.5492	0.1373	0.0331	0.1705	0	609.0527	609.0527	0.0475	0	610.2393
Maximum	3.6217	2.9913	4.444	0.0142	1.2242	0.0907	1.315	0.3667	0.0847	0.4514	0	1,289.54	1,289.54	0.1255	0	1,292.67

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2026	0.4882	2.9913	4.4440	0.0142	1.2242	0.0907	1.3150	0.3667	0.0847	0.4514	0.0000	1,289.5375	1,289.5375	0.1255	0.0000	1,292.6744
2027	3.6217	1.2008	2.0872	6.7000e-003	0.5139	0.0353	0.5492	0.1373	0.0331	0.1705	0.0000	609.0525	609.0525	0.0475	0.0000	610.2391
Maximum	3.6217	2.9913	4.4440	0.0142	1.2242	0.0907	1.3150	0.3667	0.0847	0.4514	0.0000	1,289.5375	1,289.5375	0.1255	0.0000	1,292.6744

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2026	3-31-2026	0.9310	0.9310
2	4-1-2026	6-30-2026	0.8338	0.8338
3	7-1-2026	9-30-2026	0.8430	0.8430
4	10-1-2026	12-31-2026	0.8559	0.8559
5	1-1-2027	3-31-2027	0.8272	0.8272
6	4-1-2027	6-30-2027	1.1159	1.1159
7	7-1-2027	9-30-2027	2.8823	2.8823
		Highest	2.8823	2.8823

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	4.5977	0.1288	11.1602	5.9000e-004		0.0621	0.0621		0.0621	0.0621	0.0000	18.2943	18.2943	0.0174	0.0000	18.7296
Energy	0.0540	0.4612	0.1963	2.9400e-003		0.0373	0.0373		0.0373	0.0373	0.0000	1,904.4284	1,904.4284	0.0668	0.0215	1,912.5048

Mobile	1.0288	6.3701	13.9725	0.0750	8.2476	0.0369	8.2845	2.2089	0.0343	2.2432	0.0000	6,990.3829	6,990.3829	0.2636	0.0000	6,996.9729
Waste						0.0000	0.0000		0.0000	0.0000	101.4062	0.0000	101.4062	5.9929	0.0000	251.2295
Water						0.0000	0.0000		0.0000	0.0000	22.4480	451.4622	473.9102	2.3243	0.0583	549.3894
Total	5.6805	6.9601	25.3289	0.0785	8.2476	0.1363	8.3839	2.2089	0.1337	2.3426	123.8542	9,364.5678	9,488.4220	8.6650	0.0798	9,728.8263

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	4.5977	0.1288	11.1602	5.9000e-004		0.0621	0.0621		0.0621	0.0621	0.0000	18.2943	18.2943	0.0174	0.0000	18.7296
Energy	0.0540	0.4612	0.1963	2.9400e-003		0.0373	0.0373		0.0373	0.0373	0.0000	1,904.4284	1,904.4284	0.0668	0.0215	1,912.5048
Mobile	1.0288	6.3701	13.9725	0.0750	8.2476	0.0369	8.2845	2.2089	0.0343	2.2432	0.0000	6,990.3829	6,990.3829	0.2636	0.0000	6,996.9729
Waste						0.0000	0.0000		0.0000	0.0000	101.4062	0.0000	101.4062	5.9929	0.0000	251.2295
Water						0.0000	0.0000		0.0000	0.0000	22.4480	451.4622	473.9102	2.3243	0.0583	549.3894
Total	5.6805	6.9601	25.3289	0.0785	8.2476	0.1363	8.3839	2.2089	0.1337	2.3426	123.8542	9,364.5678	9,488.4220	8.6650	0.0798	9,728.8263

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2026	1/28/2026	5	20	

2	Site Preparation	Site Preparation	1/29/2026	2/11/2026	5	10
3	Grading	Grading	2/12/2026	3/25/2026	5	30
4	Building Construction	Building Construction	3/26/2026	5/19/2027	5	300
5	Paving	Paving	5/20/2027	6/16/2027	5	20
6	Architectural Coating	Architectural Coating	6/17/2027	9/8/2027	5	60

Acres of Grading (Site Preparation Phase): 13.3

Acres of Grading (Grading Phase): 13.3

Acres of Paving: 0

Residential Indoor: 2,199,150; Residential Outdoor: 733,050; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36

Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	752.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	782.00	116.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	156.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0814	0.0000	0.0814	0.0123	0.0000	0.0123	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0209	0.1920	0.1942	3.9000e-004		8.5300e-003	8.5300e-003		7.9200e-003	7.9200e-003	0.0000	33.9977	33.9977	9.4900e-003	0.0000	34.2350
Total	0.0209	0.1920	0.1942	3.9000e-004	0.0814	8.5300e-003	0.0899	0.0123	7.9200e-003	0.0202	0.0000	33.9977	33.9977	9.4900e-003	0.0000	34.2350

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.7900e-003	0.0573	0.0204	2.7000e-004	6.4600e-003	1.0000e-004	6.5700e-003	1.7700e-003	1.0000e-004	1.8700e-003	0.0000	26.3421	26.3421	1.8400e-003	0.0000	26.3881
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.7000e-004	2.9000e-004	3.6100e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.1935	1.1935	2.0000e-005	0.0000	1.1941
Total	2.2600e-003	0.0576	0.0240	2.8000e-004	8.1100e-003	1.1000e-004	8.2300e-003	2.2100e-003	1.1000e-004	2.3200e-003	0.0000	27.5356	27.5356	1.8600e-003	0.0000	27.5822

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0814	0.0000	0.0814	0.0123	0.0000	0.0123	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0209	0.1920	0.1942	3.9000e-004		8.5300e-003	8.5300e-003		7.9200e-003	7.9200e-003	0.0000	33.9976	33.9976	9.4900e-003	0.0000	34.2349
Total	0.0209	0.1920	0.1942	3.9000e-004	0.0814	8.5300e-003	0.0899	0.0123	7.9200e-003	0.0202	0.0000	33.9976	33.9976	9.4900e-003	0.0000	34.2349

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	1.7900e-003	0.0573	0.0204	2.7000e-004	6.4600e-003	1.0000e-004	6.5700e-003	1.7700e-003	1.0000e-004	1.8700e-003	0.0000	26.3421	26.3421	1.8400e-003	0.0000	26.3881
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.7000e-004	2.9000e-004	3.6100e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.1935	1.1935	2.0000e-005	0.0000	1.1941
Total	2.2600e-003	0.0576	0.0240	2.8000e-004	8.1100e-003	1.1000e-004	8.2300e-003	2.2100e-003	1.1000e-004	2.3200e-003	0.0000	27.5356	27.5356	1.8600e-003	0.0000	27.5822

3.3 Site Preparation - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0974	0.0000	0.0974	0.0504	0.0000	0.0504	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0124	0.1262	0.0896	1.9000e-004		5.4300e-003	5.4300e-003		5.0000e-003	5.0000e-003	0.0000	16.7335	16.7335	5.4100e-003	0.0000	16.8688
Total	0.0124	0.1262	0.0896	1.9000e-004	0.0974	5.4300e-003	0.1028	0.0504	5.0000e-003	0.0554	0.0000	16.7335	16.7335	5.4100e-003	0.0000	16.8688

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	1.7000e-004	2.1600e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.7161	0.7161	1.0000e-005	0.0000	0.7165
Total	2.8000e-004	1.7000e-004	2.1600e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.7161	0.7161	1.0000e-005	0.0000	0.7165

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0974	0.0000	0.0974	0.0504	0.0000	0.0504	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0124	0.1262	0.0896	1.9000e-004		5.4300e-003	5.4300e-003		5.0000e-003	5.0000e-003	0.0000	16.7335	16.7335	5.4100e-003	0.0000	16.8688
Total	0.0124	0.1262	0.0896	1.9000e-004	0.0974	5.4300e-003	0.1028	0.0504	5.0000e-003	0.0554	0.0000	16.7335	16.7335	5.4100e-003	0.0000	16.8688

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	1.7000e-004	2.1600e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.7161	0.7161	1.0000e-005	0.0000	0.7165
Total	2.8000e-004	1.7000e-004	2.1600e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.7161	0.7161	1.0000e-005	0.0000	0.7165

3.4 Grading - 2026

Unmitigated Construction On-Site

Off-Road	0.0435	0.4191	0.3950	9.3000e-004		0.0170	0.0170		0.0156	0.0156	0.0000	81.7592	81.7592	0.0264	0.0000	82.4203
Total	0.0435	0.4191	0.3950	9.3000e-004	0.0974	0.0170	0.1143	0.0504	0.0156	0.0660	0.0000	81.7592	81.7592	0.0264	0.0000	82.4203

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.5000e-004	5.8000e-004	7.2100e-003	3.0000e-005	3.2900e-003	2.0000e-005	3.3100e-003	8.7000e-004	2.0000e-005	8.9000e-004	0.0000	2.3870	2.3870	5.0000e-005	0.0000	2.3882
Total	9.5000e-004	5.8000e-004	7.2100e-003	3.0000e-005	3.2900e-003	2.0000e-005	3.3100e-003	8.7000e-004	2.0000e-005	8.9000e-004	0.0000	2.3870	2.3870	5.0000e-005	0.0000	2.3882

3.5 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1374	1.2532	1.6165	2.7100e-003		0.0530	0.0530		0.0499	0.0499	0.0000	233.0791	233.0791	0.0548	0.0000	234.4488
Total	0.1374	1.2532	1.6165	2.7100e-003		0.0530	0.0530		0.0499	0.0499	0.0000	233.0791	233.0791	0.0548	0.0000	234.4488

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0217	0.7905	0.2254	2.7500e-003	0.0735	8.9000e-004	0.0744	0.0212	8.5000e-004	0.0221	0.0000	268.0060	268.0060	0.0148	0.0000	268.3767
Worker	0.2487	0.1520	1.8900	6.9100e-003	0.8623	5.7500e-003	0.8680	0.2290	5.3000e-003	0.2343	0.0000	625.3238	625.3238	0.0126	0.0000	625.6384
Total	0.2705	0.9424	2.1155	9.6600e-003	0.9357	6.6400e-003	0.9424	0.2502	6.1500e-003	0.2563	0.0000	893.3298	893.3298	0.0274	0.0000	894.0151

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1374	1.2532	1.6165	2.7100e-003		0.0530	0.0530		0.0499	0.0499	0.0000	233.0788	233.0788	0.0548	0.0000	234.4485
Total	0.1374	1.2532	1.6165	2.7100e-003		0.0530	0.0530		0.0499	0.0499	0.0000	233.0788	233.0788	0.0548	0.0000	234.4485

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0217	0.7905	0.2254	2.7500e-003	0.0735	8.9000e-004	0.0744	0.0212	8.5000e-004	0.0221	0.0000	268.0060	268.0060	0.0148	0.0000	268.3767
Worker	0.2487	0.1520	1.8900	6.9100e-003	0.8623	5.7500e-003	0.8680	0.2290	5.3000e-003	0.2343	0.0000	625.3238	625.3238	0.0126	0.0000	625.6384
Total	0.2705	0.9424	2.1155	9.6600e-003	0.9357	6.6400e-003	0.9424	0.2502	6.1500e-003	0.2563	0.0000	893.3298	893.3298	0.0274	0.0000	894.0151

3.5 Building Construction - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0677	0.6173	0.7962	1.3300e-003		0.0261	0.0261		0.0246	0.0246	0.0000	114.8001	114.8001	0.0270	0.0000	115.4748
Total	0.0677	0.6173	0.7962	1.3300e-003		0.0261	0.0261		0.0246	0.0246	0.0000	114.8001	114.8001	0.0270	0.0000	115.4748

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0105	0.3857	0.1092	1.3500e-003	0.0362	4.3000e-004	0.0366	0.0104	4.1000e-004	0.0109	0.0000	131.3680	131.3680	7.1900e-003	0.0000	131.5478
Worker	0.1169	0.0691	0.8729	3.2900e-003	0.4247	2.6800e-003	0.4274	0.1128	2.4700e-003	0.1153	0.0000	298.0195	298.0195	5.6900e-003	0.0000	298.1617
Total	0.1274	0.4547	0.9820	4.6400e-003	0.4609	3.1100e-003	0.4640	0.1232	2.8800e-003	0.1261	0.0000	429.3875	429.3875	0.0129	0.0000	429.7094

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0677	0.6173	0.7962	1.3300e-003		0.0261	0.0261		0.0246	0.0246	0.0000	114.8000	114.8000	0.0270	0.0000	115.4746
Total	0.0677	0.6173	0.7962	1.3300e-003		0.0261	0.0261		0.0246	0.0246	0.0000	114.8000	114.8000	0.0270	0.0000	115.4746

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0105	0.3857	0.1092	1.3500e-003	0.0362	4.3000e-004	0.0366	0.0104	4.1000e-004	0.0109	0.0000	131.3680	131.3680	7.1900e-003	0.0000	131.5478
Worker	0.1169	0.0691	0.8729	3.2900e-003	0.4247	2.6800e-003	0.4274	0.1128	2.4700e-003	0.1153	0.0000	298.0195	298.0195	5.6900e-003	0.0000	298.1617
Total	0.1274	0.4547	0.9820	4.6400e-003	0.4609	3.1100e-003	0.4640	0.1232	2.8800e-003	0.1261	0.0000	429.3875	429.3875	0.0129	0.0000	429.7094

3.6 Paving - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.1500e-003	0.0858	0.1458	2.3000e-004		4.1900e-003	4.1900e-003		3.8500e-003	3.8500e-003	0.0000	20.0193	20.0193	6.4700e-003	0.0000	20.1811
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.1500e-003	0.0858	0.1458	2.3000e-004		4.1900e-003	4.1900e-003		3.8500e-003	3.8500e-003	0.0000	20.0193	20.0193	6.4700e-003	0.0000	20.1811

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.5000e-004	2.7000e-004	3.3800e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.1549	1.1549	2.0000e-005	0.0000	1.1554
Total	4.5000e-004	2.7000e-004	3.3800e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.1549	1.1549	2.0000e-005	0.0000	1.1554

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.1500e-003	0.0858	0.1458	2.3000e-004		4.1900e-003	4.1900e-003		3.8500e-003	3.8500e-003	0.0000	20.0192	20.0192	6.4700e-003	0.0000	20.1811

Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.1500e-003	0.0858	0.1458	2.3000e-004		4.1900e-003	4.1900e-003		3.8500e-003	3.8500e-003	0.0000	20.0192	20.0192	6.4700e-003	0.0000	20.1811

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.5000e-004	2.7000e-004	3.3800e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.1549	1.1549	2.0000e-005	0.0000	1.1554
Total	4.5000e-004	2.7000e-004	3.3800e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.1549	1.1549	2.0000e-005	0.0000	1.1554

3.7 Architectural Coating - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.3977					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.1300e-003	0.0344	0.0543	9.0000e-005		1.5500e-003	1.5500e-003		1.5500e-003	1.5500e-003	0.0000	7.6598	7.6598	4.2000e-004	0.0000	7.6702
Total	3.4028	0.0344	0.0543	9.0000e-005		1.5500e-003	1.5500e-003		1.5500e-003	1.5500e-003	0.0000	7.6598	7.6598	4.2000e-004	0.0000	7.6702

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0141	8.3500e-003	0.1055	4.0000e-004	0.0514	3.2000e-004	0.0517	0.0136	3.0000e-004	0.0139	0.0000	36.0312	36.0312	6.9000e-004	0.0000	36.0484
Total	0.0141	8.3500e-003	0.1055	4.0000e-004	0.0514	3.2000e-004	0.0517	0.0136	3.0000e-004	0.0139	0.0000	36.0312	36.0312	6.9000e-004	0.0000	36.0484

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.3977					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.1300e-003	0.0344	0.0543	9.0000e-005		1.5500e-003	1.5500e-003		1.5500e-003	1.5500e-003	0.0000	7.6598	7.6598	4.2000e-004	0.0000	7.6702
Total	3.4028	0.0344	0.0543	9.0000e-005		1.5500e-003	1.5500e-003		1.5500e-003	1.5500e-003	0.0000	7.6598	7.6598	4.2000e-004	0.0000	7.6702

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0141	8.3500e-003	0.1055	4.0000e-004	0.0514	3.2000e-004	0.0517	0.0136	3.0000e-004	0.0139	0.0000	36.0312	36.0312	6.9000e-004	0.0000	36.0484
Total	0.0141	8.3500e-003	0.1055	4.0000e-004	0.0514	3.2000e-004	0.0517	0.0136	3.0000e-004	0.0139	0.0000	36.0312	36.0312	6.9000e-004	0.0000	36.0484

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.0288	6.3701	13.9725	0.0750	8.2476	0.0369	8.2845	2.2089	0.0343	2.2432	0.0000	6,990.3829	6,990.3829	0.2636	0.0000	6,996.9729
Unmitigated	1.0288	6.3701	13.9725	0.0750	8.2476	0.0369	8.2845	2.2089	0.0343	2.2432	0.0000	6,990.3829	6,990.3829	0.2636	0.0000	6,996.9729

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	6,505.14	6,244.50	5723.22	21,720,111	21,720,111
Total	6,505.14	6,244.50	5,723.22	21,720,111	21,720,111

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by

Apartments Mid Rise	1.00096e+007	0.0540	0.4612	0.1963	2.9400e-003		0.0373	0.0373		0.0373	0.0373	0.0000	534.1502	534.1502	0.0102	9.7900e-003	537.3244
Total		0.0540	0.4612	0.1963	2.9400e-003		0.0373	0.0373		0.0373	0.0373	0.0000	534.1502	534.1502	0.0102	9.7900e-003	537.3244

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.00096e+007	0.0540	0.4612	0.1963	2.9400e-003		0.0373	0.0373		0.0373	0.0373	0.0000	534.1502	534.1502	0.0102	9.7900e-003	537.3244
Total		0.0540	0.4612	0.1963	2.9400e-003		0.0373	0.0373		0.0373	0.0373	0.0000	534.1502	534.1502	0.0102	9.7900e-003	537.3244

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	4.30065e+006	1,370.2782	0.0566	0.0117	1,375.1805
Total		1,370.2782	0.0566	0.0117	1,375.1805

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	4.30065e+006	1,370.2782	0.0566	0.0117	1,375.1805
Total		1,370.2782	0.0566	0.0117	1,375.1805

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	4.5977	0.1288	11.1602	5.9000e-004		0.0621	0.0621		0.0621	0.0621	0.0000	18.2943	18.2943	0.0174	0.0000	18.7296
Unmitigated	4.5977	0.1288	11.1602	5.9000e-004		0.0621	0.0621		0.0621	0.0621	0.0000	18.2943	18.2943	0.0174	0.0000	18.7296

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.3398					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.9243					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.3337	0.1288	11.1602	5.9000e-004		0.0621	0.0621		0.0621	0.0621	0.0000	18.2943	18.2943	0.0174	0.0000	18.7296
Total	4.5977	0.1288	11.1602	5.9000e-004		0.0621	0.0621		0.0621	0.0621	0.0000	18.2943	18.2943	0.0174	0.0000	18.7296

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.3398					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.9243					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.3337	0.1288	11.1602	5.9000e-004		0.0621	0.0621		0.0621	0.0621	0.0000	18.2943	18.2943	0.0174	0.0000	18.7296
Total	4.5977	0.1288	11.1602	5.9000e-004		0.0621	0.0621		0.0621	0.0621	0.0000	18.2943	18.2943	0.0174	0.0000	18.7296

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	473.9102	2.3243	0.0583	549.3894
Unmitigated	473.9102	2.3243	0.0583	549.3894

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	70.7573 / 44.6078	473.9102	2.3243	0.0583	549.3894
Total		473.9102	2.3243	0.0583	549.3894

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			

Apartments Mid Rise	70.7573 / 44.6078	473.9102	2.3243	0.0583	549.3894
Total		473.9102	2.3243	0.0583	549.3894

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	101.4062	5.9929	0.0000	251.2295
Unmitigated	101.4062	5.9929	0.0000	251.2295

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	499.56	101.4062	5.9929	0.0000	251.2295
Total		101.4062	5.9929	0.0000	251.2295

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	499.56	101.4062	5.9929	0.0000	251.2295
Total		101.4062	5.9929	0.0000	251.2295

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Uni Village Construction Summer 2035

CSUDH Campus Master Plan EIR (Buildout 2035 University Village Construction) - South Coast Air Basin, Summer

CSUDH Campus Master Plan EIR (Buildout 2035 University Village Construction)
South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	1,086.00	Dwelling Unit	13.30	1,086,000.00	3106

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2035
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -
 Land Use - Master Plan
 Construction Phase - Adjusted.
 Demolition -
 Grading - Master Plan
 Vehicle Trips - Master Plan
 Woodstoves - No woodstove and fireplace.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	60.00

tblFireplaces	NumberGas	923.10	0.00
tblFireplaces	NumberNoFireplace	108.60	0.00
tblFireplaces	NumberWood	54.30	0.00
tblGrading	AcresOfGrading	75.00	13.30
tblGrading	AcresOfGrading	0.00	13.30
tblLandUse	LotAcreage	28.58	13.30
tblVehicleTrips	ST_TR	6.39	5.75
tblVehicleTrips	SU_TR	5.86	5.27
tblVehicleTrips	WD_TR	6.65	5.99
tblWoodstoves	NumberCatalytic	54.30	0.00
tblWoodstoves	NumberNoncatalytic	54.30	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2026	4.0559	27.9771	38.5795	0.1268	19.6779	1.1324	20.766	10.1363	1.0418	11.1374	0	12,729.54	12,729.54	1.9469	0	12,752.17
2027	113.8981	21.4244	37.2907	0.1243	9.4832	0.5903	10.0734	2.5318	0.5543	3.0861	0	12,482.29	12,482.29	0.8909	0	12,504.56
Maximum	113.8981	27.9771	38.5795	0.1268	19.6779	1.1324	20.766	10.1363	1.0418	11.1374	0	12,729.54	12,729.54	1.9469	0	12,752.17

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2026	4.0559	27.9771	38.5795	0.1268	19.6779	1.1324	20.7660	10.1363	1.0418	11.1374	0.0000	12,729.5389	12,729.5389	1.9469	0.0000	12,752.1695
2027	113.8981	21.4244	37.2907	0.1243	9.4832	0.5903	10.0734	2.5318	0.5543	3.0861	0.0000	12,482.2916	12,482.2916	0.8909	0.0000	12,504.5637
Maximum	113.8981	27.9771	38.5795	0.1268	19.6779	1.1324	20.7660	10.1363	1.0418	11.1374	0.0000	12,729.5389	12,729.5389	1.9469	0.0000	12,752.1695

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	26.0340	1.0301	89.2815	4.7300e-003		0.4969	0.4969		0.4969	0.4969	0.0000	161.3278	161.3278	0.1536	0.0000	165.1672
Energy	0.2957	2.5273	1.0754	0.0161		0.2043	0.2043		0.2043	0.2043		3,226.3004	3,226.3004	0.0618	0.0592	3,245.4726
Mobile	6.1758	34.9476	82.5555	0.4377	47.2352	0.2078	47.4430	12.6316	0.1931	12.8247		44,933.1056	44,933.1056	1.6346		44,973.9714
Total	32.5056	38.5050	172.9124	0.4585	47.2352	0.9090	48.1442	12.6316	0.8943	13.5259	0.0000	48,320.7338	48,320.7338	1.8500	0.0592	48,384.6112

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day						
	Area	Energy	Mobile	Total	Area	Energy	Mobile	Total	Area	Energy	Mobile	Total	Area	Energy	Mobile	Total	
Area	26.0340	1.0301	89.2815	4.7300e-003	0.4969	0.4969	0.4969	0.4969	0.0000	161.3278	161.3278	0.1536	0.0000	165.1672			
Energy	0.2957	2.5273	1.0754	0.0161	0.2043	0.2043	0.2043	0.2043		3,226.3004	3,226.3004	0.0618	0.0592	3,245.4726			
Mobile	6.1758	34.9476	82.5555	0.4377	47.2352	0.2078	47.4430	12.6316	0.1931	12.8247	44,933.1056	44,933.1056	1.6346		44,973.9714		
Total	32.5056	38.5050	172.9124	0.4585	47.2352	0.9090	48.1442	12.6316	0.8943	13.5259	0.0000	48,320.7338	48,320.7338	1.8500	0.0592	48,384.6112	

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2026	1/28/2026	5	20	
2	Site Preparation	Site Preparation	1/29/2026	2/11/2026	5	10	
3	Grading	Grading	2/12/2026	3/25/2026	5	30	
4	Building Construction	Building Construction	3/26/2026	5/19/2027	5	300	
5	Paving	Paving	5/20/2027	6/16/2027	5	20	
6	Architectural Coating	Architectural Coating	6/17/2027	9/8/2027	5	60	

Acres of Grading (Site Preparation Phase): 13.3

Acres of Grading (Grading Phase): 13.3

Acres of Paving: 0

Residential Indoor: 2,199,150; Residential Outdoor: 733,050; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73

Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	752.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	782.00	116.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	156.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					8.1363	0.0000	8.1363	1.2319	0.0000	1.2319			0.0000				0.0000
Off-Road	2.0926	19.1966	19.4184	0.0388		0.8528	0.8528		0.7920	0.7920		3,747.5996	3,747.5996	1.0464			3,773.7606
Total	2.0926	19.1966	19.4184	0.0388	8.1363	0.8528	8.9891	1.2319	0.7920	2.0239		3,747.5996	3,747.5996	1.0464			3,773.7606

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.1771	5.5969	1.9964	0.0267	0.6567	0.0104	0.6671	0.1800	9.9400e-003	0.1899		2,924.4229	2,924.4229	0.2005			2,929.4348
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0475	0.0257	0.3905	1.3800e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		138.1165	138.1165	2.7900e-003			138.1864
Total	0.2246	5.6226	2.3868	0.0281	0.8244	0.0115	0.8359	0.2244	0.0110	0.2354		3,062.5394	3,062.5394	0.2033			3,067.6211

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1363	0.0000	8.1363	1.2319	0.0000	1.2319			0.0000			0.0000
Off-Road	2.0926	19.1966	19.4184	0.0388		0.8528	0.8528		0.7920	0.7920	0.0000	3,747.5996	3,747.5996	1.0464		3,773.7606
Total	2.0926	19.1966	19.4184	0.0388	8.1363	0.8528	8.9891	1.2319	0.7920	2.0239	0.0000	3,747.5996	3,747.5996	1.0464		3,773.7606

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1771	5.5969	1.9964	0.0267	0.6567	0.0104	0.6671	0.1800	9.9400e-003	0.1899		2,924.4229	2,924.4229	0.2005		2,929.4348
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0475	0.0257	0.3905	1.3800e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		138.1165	138.1165	2.7900e-003		138.1864
Total	0.2246	5.6226	2.3868	0.0281	0.8244	0.0115	0.8359	0.2244	0.0110	0.2354		3,062.5394	3,062.5394	0.2033		3,067.6211

3.3 Site Preparation - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.4767	0.0000	19.4767	10.0830	0.0000	10.0830			0.0000			0.0000

Off-Road	2.4727	25.2339	17.9118	0.0381		1.0868	1.0868		0.9999	0.9999		3,689.1037	3,689.1037	1.1931		3,718.9320
Total	2.4727	25.2339	17.9118	0.0381	19.4767	1.0868	20.5635	10.0830	0.9999	11.0828		3,689.1037	3,689.1037	1.1931		3,718.9320

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0570	0.0308	0.4686	1.6600e-003	0.2012	1.3200e-003	0.2025	0.0534	1.2100e-003	0.0546		165.7398	165.7398	3.3500e-003		165.8236
Total	0.0570	0.0308	0.4686	1.6600e-003	0.2012	1.3200e-003	0.2025	0.0534	1.2100e-003	0.0546		165.7398	165.7398	3.3500e-003		165.8236

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.4767	0.0000	19.4767	10.0830	0.0000	10.0830			0.0000			0.0000
Off-Road	2.4727	25.2339	17.9118	0.0381		1.0868	1.0868		0.9999	0.9999	0.0000	3,689.1037	3,689.1037	1.1931		3,718.9320
Total	2.4727	25.2339	17.9118	0.0381	19.4767	1.0868	20.5635	10.0830	0.9999	11.0828	0.0000	3,689.1037	3,689.1037	1.1931		3,718.9320

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0570	0.0308	0.4686	1.6600e-003	0.2012	1.3200e-003	0.2025	0.0534	1.2100e-003	0.0546		165.7398	165.7398	3.3500e-003		165.8236
Total	0.0570	0.0308	0.4686	1.6600e-003	0.2012	1.3200e-003	0.2025	0.0534	1.2100e-003	0.0546		165.7398	165.7398	3.3500e-003		165.8236

3.4 Grading - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.4922	0.0000	6.4922	3.3610	0.0000	3.3610			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404		6,008.2814	6,008.2814	1.9432		6,056.8614
Total	2.9012	27.9429	26.3311	0.0621	6.4922	1.1309	7.6231	3.3610	1.0404	4.4014		6,008.2814	6,008.2814	1.9432		6,056.8614

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0634	0.0343	0.5206	1.8500e-003	0.2236	1.4600e-003	0.2250	0.0593	1.3500e-003	0.0606		184.1553	184.1553	3.7300e-003		184.2485
Total	0.0634	0.0343	0.5206	1.8500e-003	0.2236	1.4600e-003	0.2250	0.0593	1.3500e-003	0.0606		184.1553	184.1553	3.7300e-003		184.2485

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.4922	0.0000	6.4922	3.3610	0.0000	3.3610			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404	0.0000	6,008.2814	6,008.2814	1.9432		6,056.8614
Total	2.9012	27.9429	26.3311	0.0621	6.4922	1.1309	7.6231	3.3610	1.0404	4.4014	0.0000	6,008.2814	6,008.2814	1.9432		6,056.8614

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0634	0.0343	0.5206	1.8500e-003	0.2236	1.4600e-003	0.2250	0.0593	1.3500e-003	0.0606		184.1553	184.1553	3.7300e-003		184.2485
Total	0.0634	0.0343	0.5206	1.8500e-003	0.2236	1.4600e-003	0.2250	0.0593	1.3500e-003	0.0606		184.1553	184.1553	3.7300e-003		184.2485

3.5 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2117	7.7906	2.1390	0.0277	0.7423	8.7100e-003	0.7510	0.2137	8.3300e-003	0.2220		2,972.5920	2,972.5920	0.1586		2,976.5564
Worker	2.4768	1.3392	20.3558	0.0722	8.7409	0.0573	8.7982	2.3181	0.0527	2.3708		7,200.4725	7,200.4725	0.1457		7,204.1150
Total	2.6885	9.1297	22.4948	0.0999	9.4832	0.0660	9.5492	2.5318	0.0610	2.5928		10,173.0646	10,173.0646	0.3043		10,180.6714

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2117	7.7906	2.1390	0.0277	0.7423	8.7100e-003	0.7510	0.2137	8.3300e-003	0.2220		2,972.5920	2,972.5920	0.1586		2,976.5564
Worker	2.4768	1.3392	20.3558	0.0722	8.7409	0.0573	8.7982	2.3181	0.0527	2.3708		7,200.4725	7,200.4725	0.1457		7,204.1150
Total	2.6885	9.1297	22.4948	0.0999	9.4832	0.0660	9.5492	2.5318	0.0610	2.5928		10,173.0646	10,173.0646	0.3043		10,180.6714

3.5 Building Construction - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981

Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474	2,556.4744	0.6010		2,571.498
												4				1

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2076	7.7193	2.1036	0.0275	0.7423	8.5600e-003	0.7508	0.2137	8.1800e-003	0.2219		2,958.1550	2,958.1550	0.1562		2,962.0599
Worker	2.3609	1.2354	19.1025	0.0699	8.7409	0.0541	8.7951	2.3181	0.0498	2.3679		6,967.6622	6,967.6622	0.1337		6,971.0057
Total	2.5685	8.9547	21.2060	0.0974	9.4832	0.0627	9.5459	2.5318	0.0580	2.5898		9,925.8172	9,925.8172	0.2899		9,933.0656

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2076	7.7193	2.1036	0.0275	0.7423	8.5600e-003	0.7508	0.2137	8.1800e-003	0.2219		2,958.1550	2,958.1550	0.1562		2,962.0599
Worker	2.3609	1.2354	19.1025	0.0699	8.7409	0.0541	8.7951	2.3181	0.0498	2.3679		6,967.6622	6,967.6622	0.1337		6,971.0057
Total	2.5685	8.9547	21.2060	0.0974	9.4832	0.0627	9.5459	2.5318	0.0580	2.5898		9,925.8172	9,925.8172	0.2899		9,933.0656

3.6 Paving - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0453	0.0237	0.3664	1.3400e-003	0.1677	1.0400e-003	0.1687	0.0445	9.6000e-004	0.0454		133.6508	133.6508	2.5700e-003		133.7149
Total	0.0453	0.0237	0.3664	1.3400e-003	0.1677	1.0400e-003	0.1687	0.0445	9.6000e-004	0.0454		133.6508	133.6508	2.5700e-003		133.7149

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0453	0.0237	0.3664	1.3400e-003	0.1677	1.0400e-003	0.1687	0.0445	9.6000e-004	0.0454		133.6508	133.6508	2.5700e-003		133.7149
Total	0.0453	0.0237	0.3664	1.3400e-003	0.1677	1.0400e-003	0.1687	0.0445	9.6000e-004	0.0454		133.6508	133.6508	2.5700e-003		133.7149

3.7 Architectural Coating - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	113.2562					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	113.4271	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4710	0.2465	3.8107	0.0139	1.7437	0.0108	1.7545	0.4624	9.9400e-003	0.4724		1,389.9684	1,389.9684	0.0267		1,390.6354
Total	0.4710	0.2465	3.8107	0.0139	1.7437	0.0108	1.7545	0.4624	9.9400e-003	0.4724		1,389.9684	1,389.9684	0.0267		1,390.6354

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	113.2562					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	113.4271	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4710	0.2465	3.8107	0.0139	1.7437	0.0108	1.7545	0.4624	9.9400e-003	0.4724		1,389.9684	1,389.9684	0.0267		1,390.6354
Total	0.4710	0.2465	3.8107	0.0139	1.7437	0.0108	1.7545	0.4624	9.9400e-003	0.4724		1,389.9684	1,389.9684	0.0267		1,390.6354

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day									lb/day						
NaturalGas Mitigated	0.2957	2.5273	1.0754	0.0161		0.2043	0.2043		0.2043	0.2043		3,226.3004	3,226.3004	0.0618	0.0592	3,245.4726
NaturalGas Unmitigated	0.2957	2.5273	1.0754	0.0161		0.2043	0.2043		0.2043	0.2043		3,226.3004	3,226.3004	0.0618	0.0592	3,245.4726

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	27423.6	0.2957	2.5273	1.0754	0.0161		0.2043	0.2043		0.2043	0.2043		3,226.3004	3,226.3004	0.0618	0.0592	3,245.4726
Total		0.2957	2.5273	1.0754	0.0161		0.2043	0.2043		0.2043	0.2043		3,226.3004	3,226.3004	0.0618	0.0592	3,245.4726

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	27.4236	0.2957	2.5273	1.0754	0.0161		0.2043	0.2043		0.2043	0.2043		3,226.3004	3,226.3004	0.0618	0.0592	3,245.4726
Total		0.2957	2.5273	1.0754	0.0161		0.2043	0.2043		0.2043	0.2043		3,226.3004	3,226.3004	0.0618	0.0592	3,245.4726

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	26.0340	1.0301	89.2815	4.7300e-003		0.4969	0.4969		0.4969	0.4969	0.0000	161.3278	161.3278	0.1536	0.0000	165.1672
Unmitigated	26.0340	1.0301	89.2815	4.7300e-003		0.4969	0.4969		0.4969	0.4969	0.0000	161.3278	161.3278	0.1536	0.0000	165.1672

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.8618					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	21.5028					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.6695	1.0301	89.2815	4.7300e-003		0.4969	0.4969		0.4969	0.4969		161.3278	161.3278	0.1536		165.1672
Total	26.0340	1.0301	89.2815	4.7300e-003		0.4969	0.4969		0.4969	0.4969	0.0000	161.3278	161.3278	0.1536	0.0000	165.1672

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.8618					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	21.5028					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.6695	1.0301	89.2815	4.7300e-003		0.4969	0.4969		0.4969	0.4969		161.3278	161.3278	0.1536		165.1672
Total	26.0340	1.0301	89.2815	4.7300e-003		0.4969	0.4969		0.4969	0.4969	0.0000	161.3278	161.3278	0.1536	0.0000	165.1672

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Uni Village Construction Winter 2035

CSUDH Campus Master Plan EIR (Buildout 2035 University Village Construction) - South Coast Air Basin, Winter

CSUDH Campus Master Plan EIR (Buildout 2035 University Village Construction)
South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	1,086.00	Dwelling Unit	13.30	1,086,000.00	3106

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2035
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Master Plan
- Construction Phase - Adjusted.
- Demolition -
- Grading - Master Plan
- Vehicle Trips - Master Plan
- Woodstoves - No woodstove and fireplace.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	60.00

tblFireplaces	NumberGas	923.10	0.00
tblFireplaces	NumberNoFireplace	108.60	0.00
tblFireplaces	NumberWood	54.30	0.00
tblGrading	AcresOfGrading	75.00	13.30
tblGrading	AcresOfGrading	0.00	13.30
tblLandUse	LotAcreage	28.58	13.30
tblVehicleTrips	ST_TR	6.39	5.75
tblVehicleTrips	SU_TR	5.86	5.27
tblVehicleTrips	WD_TR	6.65	5.99
tblWoodstoves	NumberCatalytic	54.30	0.00
tblWoodstoves	NumberNoncatalytic	54.30	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2026	4.3592	27.9805	36.7104	0.1216	19.6779	1.1324	20.766	10.1363	1.0418	11.1374	0	12,202.79	12,202.79	1.9467	0	12,225.40
2027	113.9551	21.5037	35.5271	0.1193	9.4832	0.5905	10.0737	2.5318	0.5545	3.0863	0	11,970.34	11,970.34	0.8905	0	11,992.60
Maximum	113.9551	27.9805	36.7104	0.1216	19.6779	1.1324	20.766	10.1363	1.0418	11.1374	0	12,202.79	12,202.79	1.9467	0	12,225.40

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2026	4.3592	27.9805	36.7104	0.1216	19.6779	1.1324	20.7660	10.1363	1.0418	11.1374	0.0000	12,202.7868	12,202.7868	1.9467	0.0000	12,225.3966
2027	113.9551	21.5037	35.5271	0.1193	9.4832	0.5905	10.0737	2.5318	0.5545	3.0863	0.0000	11,970.3408	11,970.3408	0.8905	0.0000	11,992.6030
Maximum	113.9551	27.9805	36.7104	0.1216	19.6779	1.1324	20.7660	10.1363	1.0418	11.1374	0.0000	12,202.7868	12,202.7868	1.9467	0.0000	12,225.3966

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	26.0340	1.0301	89.2815	4.7300e-003		0.4969	0.4969		0.4969	0.4969	0.0000	161.3278	161.3278	0.1536	0.0000	165.1672
Energy	0.2957	2.5273	1.0754	0.0161		0.2043	0.2043		0.2043	0.2043		3,226.3004	3,226.3004	0.0618	0.0592	3,245.4726
Mobile	5.9218	35.2704	77.4913	0.4162	47.2352	0.2083	47.4435	12.6316	0.1935	12.8252		42,768.7250	42,768.7250	1.6479		42,809.9223
Total	32.2516	38.8278	167.8482	0.4371	47.2352	0.9095	48.1447	12.6316	0.8947	13.5263	0.0000	46,156.3531	46,156.3531	1.8633	0.0592	46,220.5621

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day						
	Area	Energy	Mobile	Total	Area	Energy	Mobile	Total	Area	Energy	Mobile	Total	Area	Energy	Mobile	Total	
Area	26.0340	1.0301	89.2815	4.7300e-003	0.4969	0.4969	0.4969	0.4969	0.0000	161.3278	161.3278	0.1536	0.0000	165.1672			
Energy	0.2957	2.5273	1.0754	0.0161	0.2043	0.2043	0.2043	0.2043		3,226.3004	3,226.3004	0.0618	0.0592	3,245.4726			
Mobile	5.9218	35.2704	77.4913	0.4162	47.2352	0.2083	47.4435	12.6316	0.1935	12.8252	42,768.7250	42,768.7250	1.6479		42,809.9223		
Total	32.2516	38.8278	167.8482	0.4371	47.2352	0.9095	48.1447	12.6316	0.8947	13.5263	0.0000	46,156.3531	46,156.3531	1.8633	0.0592	46,220.5621	

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2026	1/28/2026	5	20	
2	Site Preparation	Site Preparation	1/29/2026	2/11/2026	5	10	
3	Grading	Grading	2/12/2026	3/25/2026	5	30	
4	Building Construction	Building Construction	3/26/2026	5/19/2027	5	300	
5	Paving	Paving	5/20/2027	6/16/2027	5	20	
6	Architectural Coating	Architectural Coating	6/17/2027	9/8/2027	5	60	

Acres of Grading (Site Preparation Phase): 13.3

Acres of Grading (Grading Phase): 13.3

Acres of Paving: 0

Residential Indoor: 2,199,150; Residential Outdoor: 733,050; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73

Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	752.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	782.00	116.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	156.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					8.1363	0.0000	8.1363	1.2319	0.0000	1.2319			0.0000				0.0000
Off-Road	2.0926	19.1966	19.4184	0.0388		0.8528	0.8528		0.7920	0.7920		3,747.5996	3,747.5996	1.0464			3,773.7606
Total	2.0926	19.1966	19.4184	0.0388	8.1363	0.8528	8.9891	1.2319	0.7920	2.0239		3,747.5996	3,747.5996	1.0464			3,773.7606

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.1816	5.6313	2.0816	0.0263	0.6567	0.0106	0.6673	0.1800	0.0101	0.1901		2,875.1168	2,875.1168	0.2061			2,880.2681
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0531	0.0282	0.3508	1.3000e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		129.5211	129.5211	2.6000e-003			129.5862
Total	0.2347	5.6595	2.4324	0.0276	0.8244	0.0117	0.8361	0.2244	0.0112	0.2356		3,004.6379	3,004.6379	0.2087			3,009.8543

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.1363	0.0000	8.1363	1.2319	0.0000	1.2319			0.0000			0.0000
Off-Road	2.0926	19.1966	19.4184	0.0388		0.8528	0.8528		0.7920	0.7920	0.0000	3,747.5996	3,747.5996	1.0464		3,773.7606
Total	2.0926	19.1966	19.4184	0.0388	8.1363	0.8528	8.9891	1.2319	0.7920	2.0239	0.0000	3,747.5996	3,747.5996	1.0464		3,773.7606

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1816	5.6313	2.0816	0.0263	0.6567	0.0106	0.6673	0.1800	0.0101	0.1901		2,875.1168	2,875.1168	0.2061		2,880.2681
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0531	0.0282	0.3508	1.3000e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		129.5211	129.5211	2.6000e-003		129.5862
Total	0.2347	5.6595	2.4324	0.0276	0.8244	0.0117	0.8361	0.2244	0.0112	0.2356		3,004.6379	3,004.6379	0.2087		3,009.8543

3.3 Site Preparation - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.4767	0.0000	19.4767	10.0830	0.0000	10.0830			0.0000			0.0000

Off-Road	2.4727	25.2339	17.9118	0.0381		1.0868	1.0868		0.9999	0.9999		3,689.1037	3,689.1037	1.1931		3,718.9320
Total	2.4727	25.2339	17.9118	0.0381	19.4767	1.0868	20.5635	10.0830	0.9999	11.0828		3,689.1037	3,689.1037	1.1931		3,718.9320

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0638	0.0338	0.4210	1.5600e-003	0.2012	1.3200e-003	0.2025	0.0534	1.2100e-003	0.0546		155.4253	155.4253	3.1200e-003		155.5034
Total	0.0638	0.0338	0.4210	1.5600e-003	0.2012	1.3200e-003	0.2025	0.0534	1.2100e-003	0.0546		155.4253	155.4253	3.1200e-003		155.5034

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.4767	0.0000	19.4767	10.0830	0.0000	10.0830			0.0000			0.0000
Off-Road	2.4727	25.2339	17.9118	0.0381		1.0868	1.0868		0.9999	0.9999	0.0000	3,689.1037	3,689.1037	1.1931		3,718.9320
Total	2.4727	25.2339	17.9118	0.0381	19.4767	1.0868	20.5635	10.0830	0.9999	11.0828	0.0000	3,689.1037	3,689.1037	1.1931		3,718.9320

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0638	0.0338	0.4210	1.5600e-003	0.2012	1.3200e-003	0.2025	0.0534	1.2100e-003	0.0546		155.4253	155.4253	3.1200e-003		155.5034
Total	0.0638	0.0338	0.4210	1.5600e-003	0.2012	1.3200e-003	0.2025	0.0534	1.2100e-003	0.0546		155.4253	155.4253	3.1200e-003		155.5034

3.4 Grading - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.4922	0.0000	6.4922	3.3610	0.0000	3.3610			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404		6,008.2814	6,008.2814	1.9432		6,056.8614
Total	2.9012	27.9429	26.3311	0.0621	6.4922	1.1309	7.6231	3.3610	1.0404	4.4014		6,008.2814	6,008.2814	1.9432		6,056.8614

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0708	0.0376	0.4678	1.7300e-003	0.2236	1.4600e-003	0.2250	0.0593	1.3500e-003	0.0606		172.6947	172.6947	3.4700e-003		172.7815
Total	0.0708	0.0376	0.4678	1.7300e-003	0.2236	1.4600e-003	0.2250	0.0593	1.3500e-003	0.0606		172.6947	172.6947	3.4700e-003		172.7815

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.4922	0.0000	6.4922	3.3610	0.0000	3.3610			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404	0.0000	6,008.2814	6,008.2814	1.9432		6,056.8614
Total	2.9012	27.9429	26.3311	0.0621	6.4922	1.1309	7.6231	3.3610	1.0404	4.4014	0.0000	6,008.2814	6,008.2814	1.9432		6,056.8614

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0708	0.0376	0.4678	1.7300e-003	0.2236	1.4600e-003	0.2250	0.0593	1.3500e-003	0.0606		172.6947	172.6947	3.4700e-003		172.7815
Total	0.0708	0.0376	0.4678	1.7300e-003	0.2236	1.4600e-003	0.2250	0.0593	1.3500e-003	0.0606		172.6947	172.6947	3.4700e-003		172.7815

3.5 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2224	7.7509	2.3366	0.0269	0.7423	9.0400e-003	0.7513	0.2137	8.6400e-003	0.2223		2,893.9480	2,893.9480	0.1677		2,898.1408
Worker	2.7694	1.4686	18.2892	0.0677	8.7409	0.0573	8.7982	2.3181	0.0527	2.3708		6,752.3645	6,752.3645	0.1357		6,755.7577
Total	2.9918	9.2195	20.6258	0.0946	9.4832	0.0663	9.5495	2.5318	0.0613	2.5932		9,646.3125	9,646.3125	0.3034		9,653.8985

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2224	7.7509	2.3366	0.0269	0.7423	9.0400e-003	0.7513	0.2137	8.6400e-003	0.2223		2,893.9480	2,893.9480	0.1677		2,898.1408
Worker	2.7694	1.4686	18.2892	0.0677	8.7409	0.0573	8.7982	2.3181	0.0527	2.3708		6,752.3645	6,752.3645	0.1357		6,755.7577
Total	2.9918	9.2195	20.6258	0.0946	9.4832	0.0663	9.5495	2.5318	0.0613	2.5932		9,646.3125	9,646.3125	0.3034		9,653.8985

3.5 Building Construction - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981

Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.474	2,556.4744	0.6010		2,571.498
												4				1

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2180	7.6794	2.2978	0.0268	0.7423	8.8500e-003	0.7511	0.2137	8.4600e-003	0.2221		2,880.2197	2,880.2197	0.1650		2,884.3456
Worker	2.6470	1.3545	17.1446	0.0655	8.7409	0.0541	8.7951	2.3181	0.0498	2.3679		6,533.6468	6,533.6468	0.1245		6,536.7594
Total	2.8650	9.0340	19.4424	0.0923	9.4832	0.0630	9.5462	2.5318	0.0583	2.5901		9,413.8664	9,413.8664	0.2895		9,421.1050

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2180	7.6794	2.2978	0.0268	0.7423	8.8500e-003	0.7511	0.2137	8.4600e-003	0.2221		2,880.2197	2,880.2197	0.1650		2,884.3456
Worker	2.6470	1.3545	17.1446	0.0655	8.7409	0.0541	8.7951	2.3181	0.0498	2.3679		6,533.6468	6,533.6468	0.1245		6,536.7594
Total	2.8650	9.0340	19.4424	0.0923	9.4832	0.0630	9.5462	2.5318	0.0583	2.5901		9,413.8664	9,413.8664	0.2895		9,421.1050

3.6 Paving - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0508	0.0260	0.3289	1.2600e-003	0.1677	1.0400e-003	0.1687	0.0445	9.6000e-004	0.0454		125.3257	125.3257	2.3900e-003		125.3854
Total	0.0508	0.0260	0.3289	1.2600e-003	0.1677	1.0400e-003	0.1687	0.0445	9.6000e-004	0.0454		125.3257	125.3257	2.3900e-003		125.3854

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0508	0.0260	0.3289	1.2600e-003	0.1677	1.0400e-003	0.1687	0.0445	9.6000e-004	0.0454		125.3257	125.3257	2.3900e-003		125.3854
Total	0.0508	0.0260	0.3289	1.2600e-003	0.1677	1.0400e-003	0.1687	0.0445	9.6000e-004	0.0454		125.3257	125.3257	2.3900e-003		125.3854

3.7 Architectural Coating - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	113.2562					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	113.4271	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5281	0.2702	3.4202	0.0131	1.7437	0.0108	1.7545	0.4624	9.9400e-003	0.4724		1,303.3873	1,303.3873	0.0248		1,304.0083
Total	0.5281	0.2702	3.4202	0.0131	1.7437	0.0108	1.7545	0.4624	9.9400e-003	0.4724		1,303.3873	1,303.3873	0.0248		1,304.0083

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	113.2562					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	113.4271	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5281	0.2702	3.4202	0.0131	1.7437	0.0108	1.7545	0.4624	9.9400e-003	0.4724		1,303.3873	1,303.3873	0.0248		1,304.0083
Total	0.5281	0.2702	3.4202	0.0131	1.7437	0.0108	1.7545	0.4624	9.9400e-003	0.4724		1,303.3873	1,303.3873	0.0248		1,304.0083

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
--	-----	-----	----	-----	---------------	--------------	------------	----------------	---------------	-------------	----------	-----------	-----------	-----	-----	------

Category	lb/day									lb/day						
NaturalGas Mitigated	0.2957	2.5273	1.0754	0.0161		0.2043	0.2043		0.2043	0.2043		3,226.3004	3,226.3004	0.0618	0.0592	3,245.4726
NaturalGas Unmitigated	0.2957	2.5273	1.0754	0.0161		0.2043	0.2043		0.2043	0.2043		3,226.3004	3,226.3004	0.0618	0.0592	3,245.4726

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day									lb/day						
Apartments Mid Rise	27423.6	0.2957	2.5273	1.0754	0.0161		0.2043	0.2043		0.2043	0.2043		3,226.3004	3,226.3004	0.0618	0.0592	3,245.4726
Total		0.2957	2.5273	1.0754	0.0161		0.2043	0.2043		0.2043	0.2043		3,226.3004	3,226.3004	0.0618	0.0592	3,245.4726

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day									lb/day						
Apartments Mid Rise	27.4236	0.2957	2.5273	1.0754	0.0161		0.2043	0.2043		0.2043	0.2043		3,226.3004	3,226.3004	0.0618	0.0592	3,245.4726
Total		0.2957	2.5273	1.0754	0.0161		0.2043	0.2043		0.2043	0.2043		3,226.3004	3,226.3004	0.0618	0.0592	3,245.4726

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	26.0340	1.0301	89.2815	4.7300e-003		0.4969	0.4969		0.4969	0.4969	0.0000	161.3278	161.3278	0.1536	0.0000	165.1672
Unmitigated	26.0340	1.0301	89.2815	4.7300e-003		0.4969	0.4969		0.4969	0.4969	0.0000	161.3278	161.3278	0.1536	0.0000	165.1672

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.8618					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	21.5028					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.6695	1.0301	89.2815	4.7300e-003		0.4969	0.4969		0.4969	0.4969		161.3278	161.3278	0.1536		165.1672
Total	26.0340	1.0301	89.2815	4.7300e-003		0.4969	0.4969		0.4969	0.4969	0.0000	161.3278	161.3278	0.1536	0.0000	165.1672

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.8618					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	21.5028					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.6695	1.0301	89.2815	4.7300e-003		0.4969	0.4969		0.4969	0.4969		161.3278	161.3278	0.1536		165.1672
Total	26.0340	1.0301	89.2815	4.7300e-003		0.4969	0.4969		0.4969	0.4969	0.0000	161.3278	161.3278	0.1536	0.0000	165.1672

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

CSU Dominguez Hills

CalEEMod Air Quality Output Sheets

***Kpet gcugf 'Uwf gpv'J qwkpi 'Cngt pc vkg+**

Operational 2025

Campus Operational Annual 2025

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Day-Care Center	18.00	Student	0.02	1,017.00	0
High School	0.00	Student	0.00	0.00	0
University/College (4Yr)	2,169.00	Student	9.15	256,200.00	0
Apartments Mid Rise	167.00	Dwelling Unit	4.20	167,000.00	500

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - .

Vehicle Trips - Adjusted trip rates by Luke 9/13/18.

Landscape Equipment -

Mobile Land Use Mitigation -

Woodstoves - *

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Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0500e-003	1.5800e-003	0.0175	5.0000e-005	5.0500e-003	4.0000e-005	5.0900e-003	1.3400e-003	4.0000e-005	1.3800e-003	0.0000	4.5477	4.5477	1.3000e-004	0.0000	4.5510
Total	2.0500e-003	1.5800e-003	0.0175	5.0000e-005	5.0500e-003	4.0000e-005	5.0900e-003	1.3400e-003	4.0000e-005	1.3800e-003	0.0000	4.5477	4.5477	1.3000e-004	0.0000	4.5510

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.7586	0.0201	1.7484	9.0000e-005		9.6500e-003	9.6500e-003		9.6500e-003	9.6500e-003	0.0000	2.8675	2.8675	2.8400e-003	0.0000	2.9384
Energy	0.0458	0.4115	0.3163	2.5000e-003		0.0316	0.0316		0.0316	0.0316	0.0000	1,483.5101	1,483.5101	0.0512	0.0171	1,489.8886
Mobile	0.7611	3.7242	9.9291	0.0414	3.8211	0.0303	3.8514	1.0236	0.0281	1.0517	0.0000	3,831.0298	3,831.0298	0.1681	0.0000	3,835.2329
Waste						0.0000	0.0000		0.0000	0.0000	96.6136	0.0000	96.6136	5.7097	0.0000	239.3560
Water						0.0000	0.0000		0.0000	0.0000	4.9391	114.9820	119.9211	0.5120	0.0130	136.5844
Total	2.5654	4.1558	11.9938	0.0440	3.8211	0.0715	3.8926	1.0236	0.0694	1.0930	101.5527	5,432.3893	5,533.9420	6.4439	0.0301	5,704.0002

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.7586	0.0201	1.7484	9.0000e-005		9.6500e-003	9.6500e-003		9.6500e-003	9.6500e-003	0.0000	2.8675	2.8675	2.8400e-003	0.0000	2.9384
Energy	0.0458	0.4115	0.3163	2.5000e-003		0.0316	0.0316		0.0316	0.0316	0.0000	1,483.5101	1,483.5101	0.0512	0.0171	1,489.8886
Mobile	0.7611	3.7242	9.9291	0.0414	3.8211	0.0303	3.8514	1.0236	0.0281	1.0517	0.0000	3,831.0298	3,831.0298	0.1681	0.0000	3,835.2329
Waste						0.0000	0.0000		0.0000	0.0000	96.6136	0.0000	96.6136	5.7097	0.0000	239.3560
Water						0.0000	0.0000		0.0000	0.0000	4.9391	114.9820	119.9211	0.5120	0.0130	136.5844
Total	2.5654	4.1558	11.9938	0.0440	3.8211	0.0715	3.8926	1.0236	0.0694	1.0930	101.5527	5,432.3893	5,533.9420	6.4439	0.0301	5,704.0002

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

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				SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0500e-003	1.5800e-003	0.0175	5.0000e-005	5.0500e-003	4.0000e-005	5.0900e-003	1.3400e-003	4.0000e-005	1.3800e-003	0.0000	4.5477	4.5477	1.3000e-004	0.0000	4.5510
Total	2.0500e-003	1.5800e-003	0.0175	5.0000e-005	5.0500e-003	4.0000e-005	5.0900e-003	1.3400e-003	4.0000e-005	1.3800e-003	0.0000	4.5477	4.5477	1.3000e-004	0.0000	4.5510

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.7611	3.7242	9.9291	0.0414	3.8211	0.0303	3.8514	1.0236	0.0281	1.0517	0.0000	3,831.0298	3,831.0298	0.1681	0.0000	3,835.2329
Unmitigated	0.7611	3.7242	9.9291	0.0414	3.8211	0.0303	3.8514	1.0236	0.0281	1.0517	0.0000	3,831.0298	3,831.0298	0.1681	0.0000	3,835.2329

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	237.14	237.14	237.14	809,853	809,853
Day-Care Center	78.84	7.02	6.66	84,727	84,727
High School	0.00	0.00	0.00		
University/College (4Yr)	3,708.99	2,819.70	0.00	9,168,144	9,168,144
Total	4,024.97	3,063.86	243.80	10,062,724	10,062,724

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.00	19.00	41.00	86	11	3
Day-Care Center	16.60	8.40	6.90	12.70	82.30	5.00	28	58	14
High School	16.60	8.40	6.90	77.80	17.20	5.00	75	19	6
University/College (4Yr)	16.60	8.40	6.90	6.40	88.60	5.00	91	9	0

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827
Day-Care Center	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827
High School	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827
University/College (4Yr)	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,030.5740	1,030.5740	0.0426	8.8000e-003	1,034.2609
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,030.5740	1,030.5740	0.0426	8.8000e-003	1,034.2609
NaturalGas Mitigated	0.0458	0.4115	0.3163	2.5000e-003		0.0316	0.0316		0.0316	0.0316	0.0000	452.9361	452.9361	8.6800e-003	8.3000e-003	455.6277
NaturalGas Unmitigated	0.0458	0.4115	0.3163	2.5000e-003		0.0316	0.0316		0.0316	0.0316	0.0000	452.9361	452.9361	8.6800e-003	8.3000e-003	455.6277

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.53923e+006	8.3000e-003	0.0709	0.0302	4.5000e-004		5.7300e-003	5.7300e-003		5.7300e-003	5.7300e-003	0.0000	82.1391	82.1391	1.5700e-003	1.5100e-003	82.6272
Day-Care Center	10576.8	6.0000e-005	5.2000e-004	4.4000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.5644	0.5644	1.0000e-005	1.0000e-005	0.5678
High School	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
University/College (4Yr)	6.9379e+006	0.0374	0.3401	0.2857	2.0400e-003		0.0259	0.0259		0.0259	0.0259	0.0000	370.2326	370.2326	7.1000e-003	6.7900e-003	372.4327
Total		0.0458	0.4115	0.3163	2.4900e-003		0.0316	0.0316		0.0316	0.0316	0.0000	452.9361	452.9361	8.6800e-003	8.3100e-003	455.6277

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5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.53923e+006	8.3000e-003	0.0709	0.0302	4.5000e-004		5.7300e-003	5.7300e-003		5.7300e-003	5.7300e-003	0.0000	82.1391	82.1391	1.5700e-003	1.5100e-003	82.6272
Day-Care Center	10576.8	6.0000e-005	5.2000e-004	4.4000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.5644	0.5644	1.0000e-005	1.0000e-005	0.5678
High School	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
University/College (4Yr)	6.9379e+006	0.0374	0.3401	0.2857	2.0400e-003		0.0259	0.0259		0.0259	0.0259	0.0000	370.2326	370.2326	7.1000e-003	6.7900e-003	372.4327
Total		0.0458	0.4115	0.3163	2.4900e-003		0.0316	0.0316		0.0316	0.0316	0.0000	452.9361	452.9361	8.6800e-003	8.3100e-003	455.6277

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	661333	210.7150	8.7000e-003	1.8000e-003	211.4688
Day-Care Center	6020.64	1.9183	8.0000e-005	2.0000e-005	1.9252
High School	0	0.0000	0.0000	0.0000	0.0000
University/College (4Yr)	2.56712e+006	817.9407	0.0338	6.9900e-003	820.8669
Total		1,030.5740	0.0426	8.8100e-003	1,034.2609

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5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	661333	210.7150	8.7000e-003	1.8000e-003	211.4688
Day-Care Center	6020.64	1.9183	8.0000e-005	2.0000e-005	1.9252
High School	0	0.0000	0.0000	0.0000	0.0000
University/College (4Yr)	2.56712e+006	817.9407	0.0338	6.9900e-003	820.8669
Total		1,030.5740	0.0426	8.8100e-003	1,034.2609

6.0 Area Detail

6.1 Mitigation Measures Area

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.7586	0.0201	1.7484	9.0000e-005		9.6500e-003	9.6500e-003		9.6500e-003	9.6500e-003	0.0000	2.8675	2.8675	2.8400e-003	0.0000	2.9384
Unmitigated	1.7586	0.0201	1.7484	9.0000e-005		9.6500e-003	9.6500e-003		9.6500e-003	9.6500e-003	0.0000	2.8675	2.8675	2.8400e-003	0.0000	2.9384

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1715					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.5329					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0542	0.0201	1.7484	9.0000e-005		9.6500e-003	9.6500e-003		9.6500e-003	9.6500e-003	0.0000	2.8675	2.8675	2.8400e-003	0.0000	2.9384
Total	1.7586	0.0201	1.7484	9.0000e-005		9.6500e-003	9.6500e-003		9.6500e-003	9.6500e-003	0.0000	2.8675	2.8675	2.8400e-003	0.0000	2.9384

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1715					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.5329					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0542	0.0201	1.7484	9.0000e-005		9.6500e-003	9.6500e-003		9.6500e-003	9.6500e-003	0.0000	2.8675	2.8675	2.8400e-003	0.0000	2.9384
Total	1.7586	0.0201	1.7484	9.0000e-005		9.6500e-003	9.6500e-003		9.6500e-003	9.6500e-003	0.0000	2.8675	2.8675	2.8400e-003	0.0000	2.9384

7.0 Water Detail

7.1 Mitigation Measures Water

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	119.9211	0.5120	0.0130	136.5844
Unmitigated	119.9211	0.5120	0.0130	136.5844

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	10.8807 / 6.85959	72.8757	0.3574	8.9600e-003	84.4825
Day-Care Center	0.0436363 / 0.112208	0.5921	1.4500e-003	4.0000e-005	0.6397
High School	0 / 0	0.0000	0.0000	0.0000	0.0000
University/College (4Yr)	4.64405 / 7.26376	46.4533	0.1532	3.9600e-003	51.4622
Total		119.9211	0.5120	0.0130	136.5844

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	10.8807 / 6.85959	72.8757	0.3574	8.9600e-003	84.4825
Day-Care Center	0.0436363 / 0.112208	0.5921	1.4500e-003	4.0000e-005	0.6397
High School	0 / 0	0.0000	0.0000	0.0000	0.0000
University/College (4Yr)	4.64405 / 7.26376	46.4533	0.1532	3.9600e-003	51.4622
Total		119.9211	0.5120	0.0130	136.5844

8.0 Waste Detail

8.1 Mitigation Measures Waste

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	96.6136	5.7097	0.0000	239.3560
Unmitigated	96.6136	5.7097	0.0000	239.3560

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	76.82	15.5938	0.9216	0.0000	38.6329
Day-Care Center	3.29	0.6678	0.0395	0.0000	1.6546
High School	0	0.0000	0.0000	0.0000	0.0000
University/College (4Yr)	395.84	80.3519	4.7487	0.0000	199.0685
Total		96.6136	5.7097	0.0000	239.3560

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	76.82	15.5938	0.9216	0.0000	38.6329
Day-Care Center	3.29	0.6678	0.0395	0.0000	1.6546
High School	0	0.0000	0.0000	0.0000	0.0000
University/College (4Yr)	395.84	80.3519	4.7487	0.0000	199.0685
Total		96.6136	5.7097	0.0000	239.3560

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

Equipment Type	Number
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11.0 Vegetation

Campus Operational Summer 2025

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

CSUDH Campus Master Plan EIR
South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Day-Care Center	18.00	Student	0.02	1,017.00	0
High School	0.00	Student	0.00	0.00	0
University/College (4Yr)	2,169.00	Student	9.15	256,200.00	0
Apartments Mid Rise	167.00	Dwelling Unit	4.20	167,000.00	500

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - .

Vehicle Trips - Adjusted trip rates by Luke 9/13/18.

Landscape Equipment -

Mobile Land Use Mitigation -

Woodstoves - *

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	141.95	0.00
tblFireplaces	NumberNoFireplace	16.70	0.00
tblFireplaces	NumberWood	8.35	0.00
tblLandUse	LandUseSquareFeet	1,017.41	1,017.00
tblLandUse	LandUseSquareFeet	398,656.71	256,200.00
tblLandUse	LotAcreage	4.39	4.20
tblLandUse	Population	478.00	500.00
tblVehicleTrips	HO_TTP	40.60	41.00
tblVehicleTrips	HS_TTP	19.20	19.00
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	6.39	1.42
tblVehicleTrips	SU_TR	5.86	1.42
tblVehicleTrips	WD_TR	6.65	1.42
tblWoodstoves	NumberCatalytic	8.35	0.00
tblWoodstoves	NumberNoncatalytic	8.35	0.00

2.0 Emissions Summary

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.7728	0.1606	13.9874	7.4000e-004		0.0772	0.0772		0.0772	0.0772	0.0000	25.2869	25.2869	0.0250	0.0000	25.9119
Energy	0.2508	2.2550	1.7331	0.0137		0.1733	0.1733		0.1733	0.1733		2,735.7621	2,735.7621	0.0524	0.0502	2,752.0193
Mobile	5.3953	23.7642	68.5510	0.2833	25.6396	0.1994	25.8390	6.8580	0.1852	7.0432		28,908.6819	28,908.6819	1.2281		28,939.3841
Total	15.4189	26.1798	84.2714	0.2977	25.6396	0.4498	26.0894	6.8580	0.4356	7.2936	0.0000	31,669.7308	31,669.7308	1.3055	0.0502	31,717.3153

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.7728	0.1606	13.9874	7.4000e-004		0.0772	0.0772		0.0772	0.0772	0.0000	25.2869	25.2869	0.0250	0.0000	25.9119
Energy	0.2508	2.2550	1.7331	0.0137		0.1733	0.1733		0.1733	0.1733		2,735.7621	2,735.7621	0.0524	0.0502	2,752.0193
Mobile	5.3953	23.7642	68.5510	0.2833	25.6396	0.1994	25.8390	6.8580	0.1852	7.0432		28,908.6819	28,908.6819	1.2281		28,939.3841
Total	15.4189	26.1798	84.2714	0.2977	25.6396	0.4498	26.0894	6.8580	0.4356	7.2936	0.0000	31,669.7308	31,669.7308	1.3055	0.0502	31,717.3153

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.3953	23.7642	68.5510	0.2833	25.6396	0.1994	25.8390	6.8580	0.1852	7.0432		28,908.68 19	28,908.68 19	1.2281		28,939.38 41
Unmitigated	5.3953	23.7642	68.5510	0.2833	25.6396	0.1994	25.8390	6.8580	0.1852	7.0432		28,908.68 19	28,908.68 19	1.2281		28,939.38 41

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	237.14	237.14	237.14	809,853	809,853
Day-Care Center	78.84	7.02	6.66	84,727	84,727
High School	0.00	0.00	0.00		
University/College (4Yr)	3,708.99	2,819.70	0.00	9,168,144	9,168,144
Total	4,024.97	3,063.86	243.80	10,062,724	10,062,724

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.00	19.00	41.00	86	11	3
Day-Care Center	16.60	8.40	6.90	12.70	82.30	5.00	28	58	14
High School	16.60	8.40	6.90	77.80	17.20	5.00	75	19	6
University/College (4Yr)	16.60	8.40	6.90	6.40	88.60	5.00	91	9	0

4.4 Fleet Mix

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827
Day-Care Center	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827
High School	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827
University/College (4Yr)	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
NaturalGas Mitigated	0.2508	2.2550	1.7331	0.0137		0.1733	0.1733		0.1733	0.1733		2,735.7621	2,735.7621	0.0524	0.0502	2,752.0193
NaturalGas Unmitigated	0.2508	2.2550	1.7331	0.0137		0.1733	0.1733		0.1733	0.1733		2,735.7621	2,735.7621	0.0524	0.0502	2,752.0193

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	4217.07	0.0455	0.3886	0.1654	2.4800e-003		0.0314	0.0314		0.0314	0.0314		496.1254	496.1254	9.5100e-003	9.1000e-003	499.0736
Day-Care Center	28.9775	3.1000e-004	2.8400e-003	2.3900e-003	2.0000e-005		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		3.4091	3.4091	7.0000e-005	6.0000e-005	3.4294
High School	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
University/College (4Yr)	19007.9	0.2050	1.8635	1.5654	0.0112		0.1416	0.1416		0.1416	0.1416		2,236.2276	2,236.2276	0.0429	0.0410	2,249.5163
Total		0.2508	2.2550	1.7331	0.0137		0.1733	0.1733		0.1733	0.1733		2,735.7621	2,735.7621	0.0524	0.0502	2,752.0193

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	4.21707	0.0455	0.3886	0.1654	2.4800e-003		0.0314	0.0314		0.0314	0.0314		496.1254	496.1254	9.5100e-003	9.1000e-003	499.0736
Day-Care Center	0.0289775	3.1000e-004	2.8400e-003	2.3900e-003	2.0000e-005		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		3.4091	3.4091	7.0000e-005	6.0000e-005	3.4294
High School	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
University/College (4Yr)	19.0079	0.2050	1.8635	1.5654	0.0112		0.1416	0.1416		0.1416	0.1416		2,236.2276	2,236.2276	0.0429	0.0410	2,249.5163
Total		0.2508	2.2550	1.7331	0.0137		0.1733	0.1733		0.1733	0.1733		2,735.7621	2,735.7621	0.0524	0.0502	2,752.0193

6.0 Area Detail

6.1 Mitigation Measures Area

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.7728	0.1606	13.9874	7.4000e-004		0.0772	0.0772		0.0772	0.0772	0.0000	25.2869	25.2869	0.0250	0.0000	25.9119
Unmitigated	9.7728	0.1606	13.9874	7.4000e-004		0.0772	0.0772		0.0772	0.0772	0.0000	25.2869	25.2869	0.0250	0.0000	25.9119

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.9396					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.3995					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.4338	0.1606	13.9874	7.4000e-004		0.0772	0.0772		0.0772	0.0772		25.2869	25.2869	0.0250		25.9119
Total	9.7728	0.1606	13.9874	7.4000e-004		0.0772	0.0772		0.0772	0.0772	0.0000	25.2869	25.2869	0.0250	0.0000	25.9119

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.9396					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.3995					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.4338	0.1606	13.9874	7.4000e-004		0.0772	0.0772		0.0772	0.0772		25.2869	25.2869	0.0250		25.9119
Total	9.7728	0.1606	13.9874	7.4000e-004		0.0772	0.0772		0.0772	0.0772	0.0000	25.2869	25.2869	0.0250	0.0000	25.9119

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Campus Operational Winter 2025

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

CSUDH Campus Master Plan EIR
South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Day-Care Center	18.00	Student	0.02	1,017.00	0
High School	0.00	Student	0.00	0.00	0
University/College (4Yr)	2,169.00	Student	9.15	256,200.00	0
Apartments Mid Rise	167.00	Dwelling Unit	4.20	167,000.00	500

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - .

Vehicle Trips - Adjusted trip rates by Luke 9/13/18.

Landscape Equipment -

Mobile Land Use Mitigation -

Woodstoves - *

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	141.95	0.00
tblFireplaces	NumberNoFireplace	16.70	0.00
tblFireplaces	NumberWood	8.35	0.00
tblLandUse	LandUseSquareFeet	1,017.41	1,017.00
tblLandUse	LandUseSquareFeet	398,656.71	256,200.00
tblLandUse	LotAcreage	4.39	4.20
tblLandUse	Population	478.00	500.00
tblVehicleTrips	HO_TTP	40.60	41.00
tblVehicleTrips	HS_TTP	19.20	19.00
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	6.39	1.42
tblVehicleTrips	SU_TR	5.86	1.42
tblVehicleTrips	WD_TR	6.65	1.42
tblWoodstoves	NumberCatalytic	8.35	0.00
tblWoodstoves	NumberNoncatalytic	8.35	0.00

2.0 Emissions Summary

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.7728	0.1606	13.9874	7.4000e-004		0.0772	0.0772		0.0772	0.0772	0.0000	25.2869	25.2869	0.0250	0.0000	25.9119
Energy	0.2508	2.2550	1.7331	0.0137		0.1733	0.1733		0.1733	0.1733		2,735.7621	2,735.7621	0.0524	0.0502	2,752.0193
Mobile	5.1574	24.1691	64.5036	0.2689	25.6396	0.2002	25.8399	6.8580	0.1860	7.0440		27,455.1997	27,455.1997	1.2296		27,485.9393
Total	15.1810	26.5846	80.2241	0.2833	25.6396	0.4506	26.0903	6.8580	0.4364	7.2944	0.0000	30,216.2486	30,216.2486	1.3070	0.0502	30,263.8705

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.7728	0.1606	13.9874	7.4000e-004		0.0772	0.0772		0.0772	0.0772	0.0000	25.2869	25.2869	0.0250	0.0000	25.9119
Energy	0.2508	2.2550	1.7331	0.0137		0.1733	0.1733		0.1733	0.1733		2,735.7621	2,735.7621	0.0524	0.0502	2,752.0193
Mobile	5.1574	24.1691	64.5036	0.2689	25.6396	0.2002	25.8399	6.8580	0.1860	7.0440		27,455.1997	27,455.1997	1.2296		27,485.9393
Total	15.1810	26.5846	80.2241	0.2833	25.6396	0.4506	26.0903	6.8580	0.4364	7.2944	0.0000	30,216.2486	30,216.2486	1.3070	0.0502	30,263.8705

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.7 Architectural Coating - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2270	0.1532	1.7001	4.9500e-003	0.5142	3.9200e-003	0.5181	0.1364	3.6100e-003	0.1400		493.5116	493.5116	0.0142		493.8667
Total	0.2270	0.1532	1.7001	4.9500e-003	0.5142	3.9200e-003	0.5181	0.1364	3.6100e-003	0.1400		493.5116	493.5116	0.0142		493.8667

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.1574	24.1691	64.5036	0.2689	25.6396	0.2002	25.8399	6.8580	0.1860	7.0440		27,455.19 97	27,455.19 97	1.2296		27,485.93 93
Unmitigated	5.1574	24.1691	64.5036	0.2689	25.6396	0.2002	25.8399	6.8580	0.1860	7.0440		27,455.19 97	27,455.19 97	1.2296		27,485.93 93

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	237.14	237.14	237.14	809,853	809,853
Day-Care Center	78.84	7.02	6.66	84,727	84,727
High School	0.00	0.00	0.00		
University/College (4Yr)	3,708.99	2,819.70	0.00	9,168,144	9,168,144
Total	4,024.97	3,063.86	243.80	10,062,724	10,062,724

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.00	19.00	41.00	86	11	3
Day-Care Center	16.60	8.40	6.90	12.70	82.30	5.00	28	58	14
High School	16.60	8.40	6.90	77.80	17.20	5.00	75	19	6
University/College (4Yr)	16.60	8.40	6.90	6.40	88.60	5.00	91	9	0

4.4 Fleet Mix

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827
Day-Care Center	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827
High School	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827
University/College (4Yr)	0.553907	0.042339	0.204535	0.114490	0.014186	0.005810	0.021866	0.032691	0.002129	0.001663	0.004844	0.000713	0.000827

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
NaturalGas Mitigated	0.2508	2.2550	1.7331	0.0137		0.1733	0.1733		0.1733	0.1733		2,735.7621	2,735.7621	0.0524	0.0502	2,752.0193
NaturalGas Unmitigated	0.2508	2.2550	1.7331	0.0137		0.1733	0.1733		0.1733	0.1733		2,735.7621	2,735.7621	0.0524	0.0502	2,752.0193

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	4217.07	0.0455	0.3886	0.1654	2.4800e-003		0.0314	0.0314		0.0314	0.0314		496.1254	496.1254	9.5100e-003	9.1000e-003	499.0736
Day-Care Center	28.9775	3.1000e-004	2.8400e-003	2.3900e-003	2.0000e-005		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		3.4091	3.4091	7.0000e-005	6.0000e-005	3.4294
High School	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
University/College (4Yr)	19007.9	0.2050	1.8635	1.5654	0.0112		0.1416	0.1416		0.1416	0.1416		2,236.2276	2,236.2276	0.0429	0.0410	2,249.5163
Total		0.2508	2.2550	1.7331	0.0137		0.1733	0.1733		0.1733	0.1733		2,735.7621	2,735.7621	0.0524	0.0502	2,752.0193

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	4.21707	0.0455	0.3886	0.1654	2.4800e-003		0.0314	0.0314		0.0314	0.0314		496.1254	496.1254	9.5100e-003	9.1000e-003	499.0736
Day-Care Center	0.0289775	3.1000e-004	2.8400e-003	2.3900e-003	2.0000e-005		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004		3.4091	3.4091	7.0000e-005	6.0000e-005	3.4294
High School	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
University/College (4Yr)	19.0079	0.2050	1.8635	1.5654	0.0112		0.1416	0.1416		0.1416	0.1416		2,236.2276	2,236.2276	0.0429	0.0410	2,249.5163
Total		0.2508	2.2550	1.7331	0.0137		0.1733	0.1733		0.1733	0.1733		2,735.7621	2,735.7621	0.0524	0.0502	2,752.0193

6.0 Area Detail

6.1 Mitigation Measures Area

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.7728	0.1606	13.9874	7.4000e-004		0.0772	0.0772		0.0772	0.0772	0.0000	25.2869	25.2869	0.0250	0.0000	25.9119
Unmitigated	9.7728	0.1606	13.9874	7.4000e-004		0.0772	0.0772		0.0772	0.0772	0.0000	25.2869	25.2869	0.0250	0.0000	25.9119

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.9396					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.3995					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.4338	0.1606	13.9874	7.4000e-004		0.0772	0.0772		0.0772	0.0772		25.2869	25.2869	0.0250		25.9119
Total	9.7728	0.1606	13.9874	7.4000e-004		0.0772	0.0772		0.0772	0.0772	0.0000	25.2869	25.2869	0.0250	0.0000	25.9119

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.9396					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.3995					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.4338	0.1606	13.9874	7.4000e-004		0.0772	0.0772		0.0772	0.0772		25.2869	25.2869	0.0250		25.9119
Total	9.7728	0.1606	13.9874	7.4000e-004		0.0772	0.0772		0.0772	0.0772	0.0000	25.2869	25.2869	0.0250	0.0000	25.9119

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Operational 2035

Campus Operational Annual 2035

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

CSUDH Campus Master Plan EIR
South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Day-Care Center	92.00	Student	0.12	17,846.00	0
High School	0.00	Student	0.00	0.00	0
University/College (4Yr)	8,882.00	Student	37.48	1,208,975.00	0
Apartments Mid Rise	817.00	Dwelling Unit	20.60	817,000.00	2028

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2035
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - .

Vehicle Trips - Adjusted per Luke's assumptions.

Woodstoves - *

Landscape Equipment -

Mobile Land Use Mitigation -

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	694.45	0.00
tblFireplaces	NumberNoFireplace	81.70	0.00
tblFireplaces	NumberWood	40.85	0.00
tblLandUse	LandUseSquareFeet	5,200.10	17,846.00
tblLandUse	LandUseSquareFeet	1,632,489.11	1,208,975.00
tblLandUse	LotAcreage	21.50	20.60
tblLandUse	Population	2,337.00	2,028.00
tblVehicleTrips	HO_TTP	40.60	41.00
tblVehicleTrips	HS_TTP	19.20	19.00
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	6.39	1.42
tblVehicleTrips	SU_TR	5.86	1.42
tblVehicleTrips	WD_TR	6.65	1.42
tblWoodstoves	NumberCatalytic	40.85	0.00
tblWoodstoves	NumberNoncatalytic	40.85	0.00

2.0 Emissions Summary

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	8.4710	0.0979	8.5097	4.5000e-004		0.0471	0.0471		0.0471	0.0471	0.0000	13.9855	13.9855	0.0137	0.0000	14.3274
Energy	0.2181	1.9609	1.5034	0.0119		0.1507	0.1507		0.1507	0.1507	0.0000	7,083.1089	7,083.1089	0.2447	0.0816	7,113.5545
Mobile	2.1202	13.2909	27.5518	0.1461	15.9248	0.0723	15.9971	4.2651	0.0672	4.3323	0.0000	13,618.4617	13,618.4617	0.5213	0.0000	13,631.4930
Waste						0.0000	0.0000		0.0000	0.0000	408.7365	0.0000	408.7365	24.1556	0.0000	1,012.6274
Water						0.0000	0.0000		0.0000	0.0000	22.9917	526.7832	549.7749	2.3832	0.0603	627.3126
Total	10.8094	15.3497	37.5649	0.1584	15.9248	0.2702	16.1950	4.2651	0.2650	4.5301	431.7283	21,242.3393	21,674.0676	27.3185	0.1419	22,399.3150

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	8.4710	0.0979	8.5097	4.5000e-004		0.0471	0.0471		0.0471	0.0471	0.0000	13.9855	13.9855	0.0137	0.0000	14.3274
Energy	0.2181	1.9609	1.5034	0.0119		0.1507	0.1507		0.1507	0.1507	0.0000	7,083.1089	7,083.1089	0.2447	0.0816	7,113.5545
Mobile	2.1202	13.2909	27.5518	0.1461	15.9248	0.0723	15.9971	4.2651	0.0672	4.3323	0.0000	13,618.4617	13,618.4617	0.5213	0.0000	13,631.4930
Waste						0.0000	0.0000		0.0000	0.0000	408.7365	0.0000	408.7365	24.1556	0.0000	1,012.6274
Water						0.0000	0.0000		0.0000	0.0000	22.9917	526.7832	549.7749	2.3832	0.0603	627.3126
Total	10.8094	15.3497	37.5649	0.1584	15.9248	0.2702	16.1950	4.2651	0.2650	4.5301	431.7283	21,242.3393	21,674.0676	27.3185	0.1419	22,399.3150

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0289	0.0190	0.2296	7.9000e-004	0.0909	6.4000e-004	0.0916	0.0242	5.9000e-004	0.0247	0.0000	71.1635	71.1635	1.5900e-003	0.0000	71.2032
Total	0.0289	0.0190	0.2296	7.9000e-004	0.0909	6.4000e-004	0.0916	0.0242	5.9000e-004	0.0247	0.0000	71.1635	71.1635	1.5900e-003	0.0000	71.2032

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.1202	13.2909	27.5518	0.1461	15.9248	0.0723	15.9971	4.2651	0.0672	4.3323	0.0000	13,618.46 17	13,618.46 17	0.5213	0.0000	13,631.49 30
Unmitigated	2.1202	13.2909	27.5518	0.1461	15.9248	0.0723	15.9971	4.2651	0.0672	4.3323	0.0000	13,618.46 17	13,618.46 17	0.5213	0.0000	13,631.49 30

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,160.14	1,160.14	1160.14	3,961,976	3,961,976
Day-Care Center	402.96	35.88	34.04	433,049	433,049
High School	0.00	0.00	0.00		
University/College (4Yr)	15,188.22	11,546.60	0.00	37,543,317	37,543,317
Total	16,751.32	12,742.62	1,194.18	41,938,342	41,938,342

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.00	19.00	41.00	86	11	3
Day-Care Center	16.60	8.40	6.90	12.70	82.30	5.00	28	58	14
High School	16.60	8.40	6.90	77.80	17.20	5.00	75	19	6
University/College (4Yr)	16.60	8.40	6.90	6.40	88.60	5.00	91	9	0

4.4 Fleet Mix

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735
Day-Care Center	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735
High School	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735
University/College (4Yr)	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	4,924.2824	4,924.2824	0.2033	0.0421	4,941.8992
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	4,924.2824	4,924.2824	0.2033	0.0421	4,941.8992
NaturalGas Mitigated	0.2181	1.9609	1.5034	0.0119		0.1507	0.1507		0.1507	0.1507	0.0000	2,158.8265	2,158.8265	0.0414	0.0396	2,171.6554
NaturalGas Unmitigated	0.2181	1.9609	1.5034	0.0119		0.1507	0.1507		0.1507	0.1507	0.0000	2,158.8265	2,158.8265	0.0414	0.0396	2,171.6554

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	7.53024e+006	0.0406	0.3470	0.1477	2.2100e-003		0.0281	0.0281		0.0281	0.0281	0.0000	401.8423	401.8423	7.7000e-003	7.3700e-003	404.2302
Day-Care Center	185598	1.0000e-003	9.1000e-003	7.6400e-003	5.0000e-005		6.9000e-004	6.9000e-004		6.9000e-004	6.9000e-004	0.0000	9.9042	9.9042	1.9000e-004	1.8000e-004	9.9631
High School	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
University/College (4Yr)	3.2739e+007	0.1765	1.6049	1.3481	9.6300e-003		0.1220	0.1220		0.1220	0.1220	0.0000	1,747.0800	1,747.0800	0.0335	0.0320	1,757.4620
Total		0.2181	1.9609	1.5034	0.0119		0.1507	0.1507		0.1507	0.1507	0.0000	2,158.8265	2,158.8265	0.0414	0.0396	2,171.6554

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	7.53024e+006	0.0406	0.3470	0.1477	2.2100e-003		0.0281	0.0281		0.0281	0.0281	0.0000	401.8423	401.8423	7.7000e-003	7.3700e-003	404.2302
Day-Care Center	185598	1.0000e-003	9.1000e-003	7.6400e-003	5.0000e-005		6.9000e-004	6.9000e-004		6.9000e-004	6.9000e-004	0.0000	9.9042	9.9042	1.9000e-004	1.8000e-004	9.9631
High School	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
University/College (4Yr)	3.2739e+007	0.1765	1.6049	1.3481	9.6300e-003		0.1220	0.1220		0.1220	0.1220	0.0000	1,747.0800	1,747.0800	0.0335	0.0320	1,757.4620
Total		0.2181	1.9609	1.5034	0.0119		0.1507	0.1507		0.1507	0.1507	0.0000	2,158.8265	2,158.8265	0.0414	0.0396	2,171.6554

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	3.23539e+006	1,030.8631	0.0426	8.8100e-003	1,034.5510
Day-Care Center	105648	33.6618	1.3900e-003	2.9000e-004	33.7822
High School	0	0.0000	0.0000	0.0000	0.0000
University/College (4Yr)	1.21139e+007	3,859.7575	0.1594	0.0330	3,873.5659
Total		4,924.2824	0.2033	0.0421	4,941.8992

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	3.23539e+006	1,030.8631	0.0426	8.8100e-003	1,034.5510
Day-Care Center	105648	33.6618	1.3900e-003	2.9000e-004	33.7822
High School	0	0.0000	0.0000	0.0000	0.0000
University/College (4Yr)	1.21139e+007	3,859.7575	0.1594	0.0330	3,873.5659
Total		4,924.2824	0.2033	0.0421	4,941.8992

6.0 Area Detail

6.1 Mitigation Measures Area

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	8.4710	0.0979	8.5097	4.5000e-004		0.0471	0.0471		0.0471	0.0471	0.0000	13.9855	13.9855	0.0137	0.0000	14.3274
Unmitigated	8.4710	0.0979	8.5097	4.5000e-004		0.0471	0.0471		0.0471	0.0471	0.0000	13.9855	13.9855	0.0137	0.0000	14.3274

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.8242					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.3854					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2615	0.0979	8.5097	4.5000e-004		0.0471	0.0471		0.0471	0.0471	0.0000	13.9855	13.9855	0.0137	0.0000	14.3274
Total	8.4710	0.0979	8.5097	4.5000e-004		0.0471	0.0471		0.0471	0.0471	0.0000	13.9855	13.9855	0.0137	0.0000	14.3274

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.8242					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.3854					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2615	0.0979	8.5097	4.5000e-004		0.0471	0.0471		0.0471	0.0471	0.0000	13.9855	13.9855	0.0137	0.0000	14.3274
Total	8.4710	0.0979	8.5097	4.5000e-004		0.0471	0.0471		0.0471	0.0471	0.0000	13.9855	13.9855	0.0137	0.0000	14.3274

7.0 Water Detail

7.1 Mitigation Measures Water

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	549.7749	2.3832	0.0603	627.3126
Unmitigated	549.7749	2.3832	0.0603	627.3126

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	53.2308 / 33.5586	356.5236	1.7486	0.0439	413.3068
Day-Care Center	0.22303 / 0.573506	3.0262	7.3900e-003	2.0000e-004	3.2696
High School	0 / 0	0.0000	0.0000	0.0000	0.0000
University/College (4Yr)	19.0173 / 29.7449	190.2251	0.6273	0.0162	210.7363
Total		549.7749	2.3832	0.0603	627.3126

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	53.2308 / 33.5586	356.5236	1.7486	0.0439	413.3068
Day-Care Center	0.22303 / 0.573506	3.0262	7.3900e-003	2.0000e-004	3.2696
High School	0 / 0	0.0000	0.0000	0.0000	0.0000
University/College (4Yr)	19.0173 / 29.7449	190.2251	0.6273	0.0162	210.7363
Total		549.7749	2.3832	0.0603	627.3126

8.0 Waste Detail

8.1 Mitigation Measures Waste

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	408.7365	24.1556	0.0000	1,012.627 4
Unmitigated	408.7365	24.1556	0.0000	1,012.627 4

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	375.82	76.2881	4.5085	0.0000	189.0005
Day-Care Center	16.79	3.4082	0.2014	0.0000	8.4437
High School	0	0.0000	0.0000	0.0000	0.0000
University/College (4Yr)	1620.96	329.0402	19.4457	0.0000	815.1833
Total		408.7365	24.1556	0.0000	1,012.627 4

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	375.82	76.2881	4.5085	0.0000	189.0005
Day-Care Center	16.79	3.4082	0.2014	0.0000	8.4437
High School	0	0.0000	0.0000	0.0000	0.0000
University/College (4Yr)	1620.96	329.0402	19.4457	0.0000	815.1833
Total		408.7365	24.1556	0.0000	1,012.6274

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

Equipment Type	Number
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11.0 Vegetation

Campus Operational Summer 2035

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

CSUDH Campus Master Plan EIR
South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Day-Care Center	92.00	Student	0.12	17,846.00	0
High School	0.00	Student	0.00	0.00	0
University/College (4Yr)	8,882.00	Student	37.48	1,208,975.00	0
Apartments Mid Rise	817.00	Dwelling Unit	20.60	817,000.00	2028

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2035
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - .

Vehicle Trips - Adjusted per Luke's assumptions.

Woodstoves - *

Landscape Equipment -

Mobile Land Use Mitigation -

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	694.45	0.00
tblFireplaces	NumberNoFireplace	81.70	0.00
tblFireplaces	NumberWood	40.85	0.00
tblLandUse	LandUseSquareFeet	5,200.10	17,846.00
tblLandUse	LandUseSquareFeet	1,632,489.11	1,208,975.00
tblLandUse	LotAcreage	21.50	20.60
tblLandUse	Population	2,337.00	2,028.00
tblVehicleTrips	HO_TTP	40.60	41.00
tblVehicleTrips	HS_TTP	19.20	19.00
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	6.39	1.42
tblVehicleTrips	SU_TR	5.86	1.42
tblVehicleTrips	WD_TR	6.65	1.42
tblWoodstoves	NumberCatalytic	40.85	0.00
tblWoodstoves	NumberNoncatalytic	40.85	0.00

2.0 Emissions Summary

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	47.0756	0.7831	68.0776	3.6300e-003		0.3770	0.3770		0.3770	0.3770	0.0000	123.3312	123.3312	0.1206	0.0000	126.3461
Energy	1.1953	10.7449	8.2377	0.0652		0.8258	0.8258		0.8258	0.8258		13,039.4461	13,039.4461	0.2499	0.2391	13,116.9330
Mobile	14.9597	85.6307	189.7509	0.9967	106.6112	0.4755	107.0867	28.5099	0.4418	28.9518		102,358.9121	102,358.9121	3.7755		102,453.3003
Total	63.2306	97.1587	266.0662	1.0655	106.6112	1.6784	108.2896	28.5099	1.6447	30.1546	0.0000	115,521.6894	115,521.6894	4.1460	0.2391	115,696.5794

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	47.0756	0.7831	68.0776	3.6300e-003		0.3770	0.3770		0.3770	0.3770	0.0000	123.3312	123.3312	0.1206	0.0000	126.3461
Energy	1.1953	10.7449	8.2377	0.0652		0.8258	0.8258		0.8258	0.8258		13,039.4461	13,039.4461	0.2499	0.2391	13,116.9330
Mobile	14.9597	85.6307	189.7509	0.9967	106.6112	0.4755	107.0867	28.5099	0.4418	28.9518		102,358.9121	102,358.9121	3.7755		102,453.3003
Total	63.2306	97.1587	266.0662	1.0655	106.6112	1.6784	108.2896	28.5099	1.6447	30.1546	0.0000	115,521.6894	115,521.6894	4.1460	0.2391	115,696.5794

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.7722	0.4494	6.6165	0.0220	2.4703	0.0171	2.4873	0.6551	0.0157	0.6708		2,195.9778	2,195.9778	0.0493		2,197.2097
Total	0.7722	0.4494	6.6165	0.0220	2.4703	0.0171	2.4873	0.6551	0.0157	0.6708		2,195.9778	2,195.9778	0.0493		2,197.2097

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	14.9597	85.6307	189.7509	0.9967	106.6112	0.4755	107.0867	28.5099	0.4418	28.9518		102,358.9121	102,358.9121	3.7755		102,453.3003
Unmitigated	14.9597	85.6307	189.7509	0.9967	106.6112	0.4755	107.0867	28.5099	0.4418	28.9518		102,358.9121	102,358.9121	3.7755		102,453.3003

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,160.14	1,160.14	1160.14	3,961,976	3,961,976
Day-Care Center	402.96	35.88	34.04	433,049	433,049
High School	0.00	0.00	0.00		
University/College (4Yr)	15,188.22	11,546.60	0.00	37,543,317	37,543,317
Total	16,751.32	12,742.62	1,194.18	41,938,342	41,938,342

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.00	19.00	41.00	86	11	3
Day-Care Center	16.60	8.40	6.90	12.70	82.30	5.00	28	58	14
High School	16.60	8.40	6.90	77.80	17.20	5.00	75	19	6
University/College (4Yr)	16.60	8.40	6.90	6.40	88.60	5.00	91	9	0

4.4 Fleet Mix

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735
Day-Care Center	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735
High School	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735
University/College (4Yr)	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
NaturalGas Mitigated	1.1953	10.7449	8.2377	0.0652		0.8258	0.8258		0.8258	0.8258		13,039.4461	13,039.4461	0.2499	0.2391	13,116.9330
NaturalGas Unmitigated	1.1953	10.7449	8.2377	0.0652		0.8258	0.8258		0.8258	0.8258		13,039.4461	13,039.4461	0.2499	0.2391	13,116.9330

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	20630.8	0.2225	1.9013	0.8091	0.0121		0.1537	0.1537		0.1537	0.1537		2,427.1523	2,427.1523	0.0465	0.0445	2,441.5756
Day-Care Center	508.489	5.4800e-003	0.0499	0.0419	3.0000e-004		3.7900e-003	3.7900e-003		3.7900e-003	3.7900e-003		59.8222	59.8222	1.1500e-003	1.1000e-003	60.1777
High School	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
University/College (4Yr)	89696	0.9673	8.7937	7.3867	0.0528		0.6683	0.6683		0.6683	0.6683		10,552.4716	10,552.4716	0.2023	0.1935	10,615.1796
Total		1.1953	10.7449	8.2377	0.0652		0.8258	0.8258		0.8258	0.8258		13,039.4461	13,039.4461	0.2499	0.2391	13,116.9330

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	20.6308	0.2225	1.9013	0.8091	0.0121		0.1537	0.1537		0.1537	0.1537		2,427.1523	2,427.1523	0.0465	0.0445	2,441.5756
Day-Care Center	0.508489	5.4800e-003	0.0499	0.0419	3.0000e-004		3.7900e-003	3.7900e-003		3.7900e-003	3.7900e-003		59.8222	59.8222	1.1500e-003	1.1000e-003	60.1777
High School	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
University/College (4Yr)	89.696	0.9673	8.7937	7.3867	0.0528		0.6683	0.6683		0.6683	0.6683		10,552.4716	10,552.4716	0.2023	0.1935	10,615.1796
Total		1.1953	10.7449	8.2377	0.0652		0.8258	0.8258		0.8258	0.8258		13,039.4461	13,039.4461	0.2499	0.2391	13,116.9330

6.0 Area Detail

6.1 Mitigation Measures Area

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	47.0756	0.7831	68.0776	3.6300e-003		0.3770	0.3770		0.3770	0.3770	0.0000	123.3312	123.3312	0.1206	0.0000	126.3461
Unmitigated	47.0756	0.7831	68.0776	3.6300e-003		0.3770	0.3770		0.3770	0.3770	0.0000	123.3312	123.3312	0.1206	0.0000	126.3461

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.5164					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	40.4677					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0916	0.7831	68.0776	3.6300e-003		0.3770	0.3770		0.3770	0.3770		123.3312	123.3312	0.1206		126.3461
Total	47.0756	0.7831	68.0776	3.6300e-003		0.3770	0.3770		0.3770	0.3770	0.0000	123.3312	123.3312	0.1206	0.0000	126.3461

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.5164					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	40.4677					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0916	0.7831	68.0776	3.6300e-003		0.3770	0.3770		0.3770	0.3770		123.3312	123.3312	0.1206		126.3461
Total	47.0756	0.7831	68.0776	3.6300e-003		0.3770	0.3770		0.3770	0.3770	0.0000	123.3312	123.3312	0.1206	0.0000	126.3461

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Campus Operational Winter 2035

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

CSUDH Campus Master Plan EIR
South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Day-Care Center	92.00	Student	0.12	17,846.00	0
High School	0.00	Student	0.00	0.00	0
University/College (4Yr)	8,882.00	Student	37.48	1,208,975.00	0
Apartments Mid Rise	817.00	Dwelling Unit	20.60	817,000.00	2028

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2035
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - .

Vehicle Trips - Adjusted per Luke's assumptions.

Woodstoves - *

Landscape Equipment -

Mobile Land Use Mitigation -

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	694.45	0.00
tblFireplaces	NumberNoFireplace	81.70	0.00
tblFireplaces	NumberWood	40.85	0.00
tblLandUse	LandUseSquareFeet	5,200.10	17,846.00
tblLandUse	LandUseSquareFeet	1,632,489.11	1,208,975.00
tblLandUse	LotAcreage	21.50	20.60
tblLandUse	Population	2,337.00	2,028.00
tblVehicleTrips	HO_TTP	40.60	41.00
tblVehicleTrips	HS_TTP	19.20	19.00
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	6.39	1.42
tblVehicleTrips	SU_TR	5.86	1.42
tblVehicleTrips	WD_TR	6.65	1.42
tblWoodstoves	NumberCatalytic	40.85	0.00
tblWoodstoves	NumberNoncatalytic	40.85	0.00

2.0 Emissions Summary

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	47.0756	0.7831	68.0776	3.6300e-003		0.3770	0.3770		0.3770	0.3770	0.0000	123.3312	123.3312	0.1206	0.0000	126.3461
Energy	1.1953	10.7449	8.2377	0.0652		0.8258	0.8258		0.8258	0.8258		13,039.4461	13,039.4461	0.2499	0.2391	13,116.9330
Mobile	14.3174	86.2195	178.9383	0.9474	106.6112	0.4768	107.0880	28.5099	0.4430	28.9530		97,375.5546	97,375.5546	3.8163		97,470.9624
Total	62.5883	97.7474	255.2536	1.0162	106.6112	1.6796	108.2908	28.5099	1.6459	30.1558	0.0000	110,538.3319	110,538.3319	4.1868	0.2391	110,714.2414

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	47.0756	0.7831	68.0776	3.6300e-003		0.3770	0.3770		0.3770	0.3770	0.0000	123.3312	123.3312	0.1206	0.0000	126.3461
Energy	1.1953	10.7449	8.2377	0.0652		0.8258	0.8258		0.8258	0.8258		13,039.4461	13,039.4461	0.2499	0.2391	13,116.9330
Mobile	14.3174	86.2195	178.9383	0.9474	106.6112	0.4768	107.0880	28.5099	0.4430	28.9530		97,375.5546	97,375.5546	3.8163		97,470.9624
Total	62.5883	97.7474	255.2536	1.0162	106.6112	1.6796	108.2908	28.5099	1.6459	30.1558	0.0000	110,538.3319	110,538.3319	4.1868	0.2391	110,714.2414

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.8582	0.4931	5.9570	0.0207	2.4703	0.0171	2.4873	0.6551	0.0157	0.6708		2,059.372 0	2,059.372 0	0.0460		2,060.521 2
Total	0.8582	0.4931	5.9570	0.0207	2.4703	0.0171	2.4873	0.6551	0.0157	0.6708		2,059.372 0	2,059.372 0	0.0460		2,060.521 2

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	14.3174	86.2195	178.9383	0.9474	106.6112	0.4768	107.0880	28.5099	0.4430	28.9530		97,375.55 46	97,375.55 46	3.8163		97,470.96 24
Unmitigated	14.3174	86.2195	178.9383	0.9474	106.6112	0.4768	107.0880	28.5099	0.4430	28.9530		97,375.55 46	97,375.55 46	3.8163		97,470.96 24

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,160.14	1,160.14	1160.14	3,961,976	3,961,976
Day-Care Center	402.96	35.88	34.04	433,049	433,049
High School	0.00	0.00	0.00		
University/College (4Yr)	15,188.22	11,546.60	0.00	37,543,317	37,543,317
Total	16,751.32	12,742.62	1,194.18	41,938,342	41,938,342

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.00	19.00	41.00	86	11	3
Day-Care Center	16.60	8.40	6.90	12.70	82.30	5.00	28	58	14
High School	16.60	8.40	6.90	77.80	17.20	5.00	75	19	6
University/College (4Yr)	16.60	8.40	6.90	6.40	88.60	5.00	91	9	0

4.4 Fleet Mix

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735
Day-Care Center	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735
High School	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735
University/College (4Yr)	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
NaturalGas Mitigated	1.1953	10.7449	8.2377	0.0652		0.8258	0.8258		0.8258	0.8258		13,039.4461	13,039.4461	0.2499	0.2391	13,116.9330
NaturalGas Unmitigated	1.1953	10.7449	8.2377	0.0652		0.8258	0.8258		0.8258	0.8258		13,039.4461	13,039.4461	0.2499	0.2391	13,116.9330

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	20630.8	0.2225	1.9013	0.8091	0.0121		0.1537	0.1537		0.1537	0.1537		2,427.1523	2,427.1523	0.0465	0.0445	2,441.5756
Day-Care Center	508.489	5.4800e-003	0.0499	0.0419	3.0000e-004		3.7900e-003	3.7900e-003		3.7900e-003	3.7900e-003		59.8222	59.8222	1.1500e-003	1.1000e-003	60.1777
High School	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
University/College (4Yr)	89696	0.9673	8.7937	7.3867	0.0528		0.6683	0.6683		0.6683	0.6683		10,552.4716	10,552.4716	0.2023	0.1935	10,615.1796
Total		1.1953	10.7449	8.2377	0.0652		0.8258	0.8258		0.8258	0.8258		13,039.4461	13,039.4461	0.2499	0.2391	13,116.9330

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	20.6308	0.2225	1.9013	0.8091	0.0121		0.1537	0.1537		0.1537	0.1537		2,427.1523	2,427.1523	0.0465	0.0445	2,441.5756
Day-Care Center	0.508489	5.4800e-003	0.0499	0.0419	3.0000e-004		3.7900e-003	3.7900e-003		3.7900e-003	3.7900e-003		59.8222	59.8222	1.1500e-003	1.1000e-003	60.1777
High School	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
University/College (4Yr)	89.696	0.9673	8.7937	7.3867	0.0528		0.6683	0.6683		0.6683	0.6683		10,552.4716	10,552.4716	0.2023	0.1935	10,615.1796
Total		1.1953	10.7449	8.2377	0.0652		0.8258	0.8258		0.8258	0.8258		13,039.4461	13,039.4461	0.2499	0.2391	13,116.9330

6.0 Area Detail

6.1 Mitigation Measures Area

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	47.0756	0.7831	68.0776	3.6300e-003		0.3770	0.3770		0.3770	0.3770	0.0000	123.3312	123.3312	0.1206	0.0000	126.3461
Unmitigated	47.0756	0.7831	68.0776	3.6300e-003		0.3770	0.3770		0.3770	0.3770	0.0000	123.3312	123.3312	0.1206	0.0000	126.3461

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.5164					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	40.4677					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0916	0.7831	68.0776	3.6300e-003		0.3770	0.3770		0.3770	0.3770		123.3312	123.3312	0.1206		126.3461
Total	47.0756	0.7831	68.0776	3.6300e-003		0.3770	0.3770		0.3770	0.3770	0.0000	123.3312	123.3312	0.1206	0.0000	126.3461

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	4.5164					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	40.4677					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0916	0.7831	68.0776	3.6300e-003		0.3770	0.3770		0.3770	0.3770		123.3312	123.3312	0.1206		126.3461
Total	47.0756	0.7831	68.0776	3.6300e-003		0.3770	0.3770		0.3770	0.3770	0.0000	123.3312	123.3312	0.1206	0.0000	126.3461

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Uni Village Operational Annual 2035

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

CSUDH Campus Master Plan EIR
South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	720.92	1000sqft	33.00	720,918.00	0
Apartments Mid Rise	1,969.00	Dwelling Unit	31.80	1,969,000.00	5631
Regional Shopping Center	96.09	1000sqft	2.20	96,085.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2035
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - .

Vehicle Trips - *

Woodstoves - *

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	1,673.65	0.00
tblFireplaces	NumberNoFireplace	196.90	0.00
tblFireplaces	NumberWood	98.45	0.00
tblLandUse	LandUseSquareFeet	720,920.00	720,918.00
tblLandUse	LandUseSquareFeet	96,090.00	96,085.00
tblLandUse	LotAcreage	16.55	33.00
tblLandUse	LotAcreage	51.82	31.80
tblLandUse	LotAcreage	2.21	2.20
tblVehicleTrips	HO_TTP	40.60	41.00
tblVehicleTrips	HS_TTP	19.20	19.00
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	6.39	5.75
tblVehicleTrips	ST_TR	2.46	2.21
tblVehicleTrips	ST_TR	49.97	44.97
tblVehicleTrips	SU_TR	5.86	5.27
tblVehicleTrips	SU_TR	1.05	0.95
tblVehicleTrips	SU_TR	25.24	22.72
tblVehicleTrips	WD_TR	6.65	5.99
tblVehicleTrips	WD_TR	11.03	9.93
tblVehicleTrips	WD_TR	42.70	38.43
tblWoodstoves	NumberCatalytic	98.45	0.00
tblWoodstoves	NumberNoncatalytic	98.45	0.00

2.0 Emissions Summary

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

2.2 Overall Operational
Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	11.6679	0.2335	20.2446	1.0700e-003		0.1126	0.1126		0.1126	0.1126	0.0000	33.1892	33.1892	0.0316	0.0000	33.9798
Energy	0.1392	1.2118	0.6714	7.5900e-003		0.0962	0.0962		0.0962	0.0962	0.0000	7,258.8649	7,258.8649	0.2692	0.0755	7,288.0911
Mobile	3.1888	19.9020	42.1059	0.2242	24.5268	0.1108	24.6376	6.5689	0.1030	6.6719	0.0000	20,905.2668	20,905.2668	0.7958	0.0000	20,925.1612
Waste						0.0000	0.0000		0.0000	0.0000	340.4341	0.0000	340.4341	20.1191	0.0000	843.4111
Water						0.0000	0.0000		0.0000	0.0000	83.6084	1,673.0919	1,756.7003	8.6565	0.2171	2,037.7948
Total	14.9959	21.3474	63.0218	0.2329	24.5268	0.3196	24.8464	6.5689	0.3118	6.8807	424.0425	29,870.4127	30,294.4552	29.8722	0.2926	31,128.4381

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	11.6679	0.2335	20.2446	1.0700e-003		0.1126	0.1126		0.1126	0.1126	0.0000	33.1892	33.1892	0.0316	0.0000	33.9798
Energy	0.1392	1.2118	0.6714	7.5900e-003		0.0962	0.0962		0.0962	0.0962	0.0000	7,258.8649	7,258.8649	0.2692	0.0755	7,288.0911
Mobile	3.1888	19.9020	42.1059	0.2242	24.5268	0.1108	24.6376	6.5689	0.1030	6.6719	0.0000	20,905.2668	20,905.2668	0.7958	0.0000	20,925.1612
Waste						0.0000	0.0000		0.0000	0.0000	340.4341	0.0000	340.4341	20.1191	0.0000	843.4111
Water						0.0000	0.0000		0.0000	0.0000	83.6084	1,673.0919	1,756.7003	8.6565	0.2171	2,037.7948
Total	14.9959	21.3474	63.0218	0.2329	24.5268	0.3196	24.8464	6.5689	0.3118	6.8807	424.0425	29,870.4127	30,294.4552	29.8722	0.2926	31,128.4381

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0439	0.0289	0.3491	1.2000e-003	0.1382	9.7000e-004	0.1392	0.0367	9.0000e-004	0.0376	0.0000	108.1943	108.1943	2.4200e-003	0.0000	108.2547
Total	0.0439	0.0289	0.3491	1.2000e-003	0.1382	9.7000e-004	0.1392	0.0367	9.0000e-004	0.0376	0.0000	108.1943	108.1943	2.4200e-003	0.0000	108.2547

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.1888	19.9020	42.1059	0.2242	24.5268	0.1108	24.6376	6.5689	0.1030	6.6719	0.0000	20,905.2668	20,905.2668	0.7958	0.0000	20,925.1612
Unmitigated	3.1888	19.9020	42.1059	0.2242	24.5268	0.1108	24.6376	6.5689	0.1030	6.6719	0.0000	20,905.2668	20,905.2668	0.7958	0.0000	20,925.1612

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	11,794.31	11,321.75	10376.63	39,356,374	39,356,374
General Office Building	7,158.74	1,593.23	684.87	17,520,967	17,520,967
Regional Shopping Center	3,692.74	4,321.17	2183.16	7,714,563	7,714,563
Total	22,645.78	17,236.15	13,244.67	64,591,905	64,591,905

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.00	19.00	41.00	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735
General Office Building	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735
Regional Shopping Center	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	5,881.5189	5,881.5189	0.2428	0.0502	5,902.5602
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	5,881.5189	5,881.5189	0.2428	0.0502	5,902.5602
NaturalGas Mitigated	0.1392	1.2118	0.6714	7.5900e-003		0.0962	0.0962		0.0962	0.0962	0.0000	1,377.3461	1,377.3461	0.0264	0.0253	1,385.5310
NaturalGas Unmitigated	0.1392	1.2118	0.6714	7.5900e-003		0.0962	0.0962		0.0962	0.0962	0.0000	1,377.3461	1,377.3461	0.0264	0.0253	1,385.5310

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.81482e+007	0.0979	0.8362	0.3559	5.3400e-003		0.0676	0.0676		0.0676	0.0676	0.0000	968.4547	968.4547	0.0186	0.0178	974.2097
General Office Building	7.50476e+006	0.0405	0.3679	0.3090	2.2100e-003		0.0280	0.0280		0.0280	0.0280	0.0000	400.4824	400.4824	7.6800e-003	7.3400e-003	402.8623
Regional Shopping Center	157579	8.5000e-004	7.7200e-003	6.4900e-003	5.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	8.4090	8.4090	1.6000e-004	1.5000e-004	8.4590
Total		0.1392	1.2118	0.6714	7.6000e-003		0.0962	0.0962		0.0962	0.0962	0.0000	1,377.3461	1,377.3461	0.0264	0.0253	1,385.5310

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	1.81482e+007	0.0979	0.8362	0.3559	5.3400e-003		0.0676	0.0676		0.0676	0.0676	0.0000	968.4547	968.4547	0.0186	0.0178	974.2097
General Office Building	7.50476e+006	0.0405	0.3679	0.3090	2.2100e-003		0.0280	0.0280		0.0280	0.0280	0.0000	400.4824	400.4824	7.6800e-003	7.3400e-003	402.8623
Regional Shopping Center	157579	8.5000e-004	7.7200e-003	6.4900e-003	5.0000e-005		5.9000e-004	5.9000e-004		5.9000e-004	5.9000e-004	0.0000	8.4090	8.4090	1.6000e-004	1.5000e-004	8.4590
Total		0.1392	1.2118	0.6714	7.6000e-003		0.0962	0.0962		0.0962	0.0962	0.0000	1,377.3461	1,377.3461	0.0264	0.0253	1,385.5310

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	7.7974e+006	2,484.4179	0.1026	0.0212	2,493.3060
General Office Building	9.36472e+006	2,983.8020	0.1232	0.0255	2,994.4766
Regional Shopping Center	1.29715e+006	413.2990	0.0171	3.5300e-003	414.7776
Total		5,881.5188	0.2428	0.0502	5,902.5602

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	7.7974e+006	2,484.4179	0.1026	0.0212	2,493.3060
General Office Building	9.36472e+006	2,983.8020	0.1232	0.0255	2,994.4766
Regional Shopping Center	1.29715e+006	413.2990	0.0171	3.5300e-003	414.7776
Total		5,881.5188	0.2428	0.0502	5,902.5602

6.0 Area Detail

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	11.6679	0.2335	20.2446	1.0700e-003		0.1126	0.1126		0.1126	0.1126	0.0000	33.1892	33.1892	0.0316	0.0000	33.9798
Unmitigated	11.6679	0.2335	20.2446	1.0700e-003		0.1126	0.1126		0.1126	0.1126	0.0000	33.1892	33.1892	0.0316	0.0000	33.9798

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.9947					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	10.0672					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.6059	0.2335	20.2446	1.0700e-003		0.1126	0.1126		0.1126	0.1126	0.0000	33.1892	33.1892	0.0316	0.0000	33.9798
Total	11.6679	0.2335	20.2446	1.0700e-003		0.1126	0.1126		0.1126	0.1126	0.0000	33.1892	33.1892	0.0316	0.0000	33.9798

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.9947					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	10.0672					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.6059	0.2335	20.2446	1.0700e-003		0.1126	0.1126		0.1126	0.1126	0.0000	33.1892	33.1892	0.0316	0.0000	33.9798
Total	11.6679	0.2335	20.2446	1.0700e-003		0.1126	0.1126		0.1126	0.1126	0.0000	33.1892	33.1892	0.0316	0.0000	33.9798

7.0 Water Detail

7.1 Mitigation Measures Water

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1,756.700 3	8.6565	0.2171	2,037.794 8
Unmitigated	1,756.700 3	8.6565	0.2171	2,037.794 8

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	128.288 / 80.8774	859.2350	4.2141	0.1057	996.0845
General Office Building	128.132 / 78.5324	850.2353	4.2086	0.1055	986.8893
Regional Shopping Center	7.11763 / 4.36242	47.2300	0.2338	5.8600e-003	54.8210
Total		1,756.700 3	8.6565	0.2171	2,037.794 8

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	128.288 / 80.8774	859.2350	4.2141	0.1057	996.0845
General Office Building	128.132 / 78.5324	850.2353	4.2086	0.1055	986.8893
Regional Shopping Center	7.11763 / 4.36242	47.2300	0.2338	5.8600e-003	54.8210
Total		1,756.7003	8.6565	0.2171	2,037.7948

8.0 Waste Detail

8.1 Mitigation Measures Waste

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	340.4341	20.1191	0.0000	843.4111
Unmitigated	340.4341	20.1191	0.0000	843.4111

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	905.74	183.8570	10.8656	0.0000	455.4980
General Office Building	670.46	136.0973	8.0431	0.0000	337.1754
Regional Shopping Center	100.89	20.4798	1.2103	0.0000	50.7377
Total		340.4341	20.1191	0.0000	843.4111

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	905.74	183.8570	10.8656	0.0000	455.4980
General Office Building	670.46	136.0973	8.0431	0.0000	337.1754
Regional Shopping Center	100.89	20.4798	1.2103	0.0000	50.7377
Total		340.4341	20.1191	0.0000	843.4111

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

11.0 Vegetation

Uni Village Operational Summer 2035

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

CSUDH Campus Master Plan EIR
South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	720.92	1000sqft	33.00	720,918.00	0
Apartments Mid Rise	1,969.00	Dwelling Unit	31.80	1,969,000.00	5631
Regional Shopping Center	96.09	1000sqft	2.20	96,085.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2035
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - .

Vehicle Trips - *

Woodstoves - *

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	1,673.65	0.00
tblFireplaces	NumberNoFireplace	196.90	0.00
tblFireplaces	NumberWood	98.45	0.00
tblLandUse	LandUseSquareFeet	720,920.00	720,918.00
tblLandUse	LandUseSquareFeet	96,090.00	96,085.00
tblLandUse	LotAcreage	16.55	33.00
tblLandUse	LotAcreage	51.82	31.80
tblLandUse	LotAcreage	2.21	2.20
tblVehicleTrips	HO_TTP	40.60	41.00
tblVehicleTrips	HS_TTP	19.20	19.00
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	6.39	5.75
tblVehicleTrips	ST_TR	2.46	2.21
tblVehicleTrips	ST_TR	49.97	44.97
tblVehicleTrips	SU_TR	5.86	5.27
tblVehicleTrips	SU_TR	1.05	0.95
tblVehicleTrips	SU_TR	25.24	22.72
tblVehicleTrips	WD_TR	6.65	5.99
tblVehicleTrips	WD_TR	11.03	9.93
tblVehicleTrips	WD_TR	42.70	38.43
tblWoodstoves	NumberCatalytic	98.45	0.00
tblWoodstoves	NumberNoncatalytic	98.45	0.00

2.0 Emissions Summary

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	65.4609	1.8683	161.9570	8.5800e-003		0.9011	0.9011		0.9011	0.9011	0.0000	292.6783	292.6783	0.2789	0.0000	299.6509
Energy	0.7626	6.6402	3.6787	0.0416		0.5269	0.5269		0.5269	0.5269		8,319.2557	8,319.2557	0.1595	0.1525	8,368.6928
Mobile	21.1823	120.8125	273.2579	1.4397	154.4531	0.6858	155.1388	41.3038	0.6372	41.9410		147,839.0990	147,839.0990	5.4284		147,974.8094
Total	87.4058	129.3210	438.8935	1.4898	154.4531	2.1138	156.5669	41.3038	2.0652	43.3690	0.0000	156,451.0330	156,451.0330	5.8668	0.1525	156,643.1531

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	65.4609	1.8683	161.9570	8.5800e-003		0.9011	0.9011		0.9011	0.9011	0.0000	292.6783	292.6783	0.2789	0.0000	299.6509
Energy	0.7626	6.6402	3.6787	0.0416		0.5269	0.5269		0.5269	0.5269		8,319.2557	8,319.2557	0.1595	0.1525	8,368.6928
Mobile	21.1823	120.8125	273.2579	1.4397	154.4531	0.6858	155.1388	41.3038	0.6372	41.9410		147,839.0990	147,839.0990	5.4284		147,974.8094
Total	87.4058	129.3210	438.8935	1.4898	154.4531	2.1138	156.5669	41.3038	2.0652	43.3690	0.0000	156,451.0330	156,451.0330	5.8668	0.1525	156,643.1531

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.1740	0.6833	10.0594	0.0335	3.7557	0.0259	3.7816	0.9960	0.0239	1.0199		3,338.681 2	3,338.681 2	0.0749		3,340.554 2
Total	1.1740	0.6833	10.0594	0.0335	3.7557	0.0259	3.7816	0.9960	0.0239	1.0199		3,338.681 2	3,338.681 2	0.0749		3,340.554 2

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	21.1823	120.8125	273.2579	1.4397	154.4531	0.6858	155.1388	41.3038	0.6372	41.9410		147,839.0990	147,839.0990	5.4284		147,974.8094
Unmitigated	21.1823	120.8125	273.2579	1.4397	154.4531	0.6858	155.1388	41.3038	0.6372	41.9410		147,839.0990	147,839.0990	5.4284		147,974.8094

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	11,794.31	11,321.75	10376.63	39,356,374	39,356,374
General Office Building	7,158.74	1,593.23	684.87	17,520,967	17,520,967
Regional Shopping Center	3,692.74	4,321.17	2183.16	7,714,563	7,714,563
Total	22,645.78	17,236.15	13,244.67	64,591,905	64,591,905

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.00	19.00	41.00	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735
General Office Building	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735
Regional Shopping Center	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7626	6.6402	3.6787	0.0416		0.5269	0.5269		0.5269	0.5269		8,319.2557	8,319.2557	0.1595	0.1525	8,368.6928
NaturalGas Unmitigated	0.7626	6.6402	3.6787	0.0416		0.5269	0.5269		0.5269	0.5269		8,319.2557	8,319.2557	0.1595	0.1525	8,368.6928

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	49721	0.5362	4.5821	1.9498	0.0293		0.3705	0.3705		0.3705	0.3705		5,849.5261	5,849.5261	0.1121	0.1072	5,884.2870
General Office Building	20561	0.2217	2.0158	1.6933	0.0121		0.1532	0.1532		0.1532	0.1532		2,418.9384	2,418.9384	0.0464	0.0444	2,433.3129
Regional Shopping Center	431.724	4.6600e-003	0.0423	0.0356	2.5000e-004		3.2200e-003	3.2200e-003		3.2200e-003	3.2200e-003		50.7911	50.7911	9.7000e-004	9.3000e-004	51.0929
Total		0.7626	6.6402	3.6787	0.0416		0.5269	0.5269		0.5269	0.5269		8,319.2556	8,319.2556	0.1595	0.1525	8,368.6928

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	49.721	0.5362	4.5821	1.9498	0.0293		0.3705	0.3705		0.3705	0.3705		5,849.5261	5,849.5261	0.1121	0.1072	5,884.2870
General Office Building	20.561	0.2217	2.0158	1.6933	0.0121		0.1532	0.1532		0.1532	0.1532		2,418.9384	2,418.9384	0.0464	0.0444	2,433.3129
Regional Shopping Center	0.431724	4.6600e-003	0.0423	0.0356	2.5000e-004		3.2200e-003	3.2200e-003		3.2200e-003	3.2200e-003		50.7911	50.7911	9.7000e-004	9.3000e-004	51.0929
Total		0.7626	6.6402	3.6787	0.0416		0.5269	0.5269		0.5269	0.5269		8,319.2556	8,319.2556	0.1595	0.1525	8,368.6928

6.0 Area Detail

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	65.4609	1.8683	161.9570	8.5800e-003		0.9011	0.9011		0.9011	0.9011	0.0000	292.6783	292.6783	0.2789	0.0000	299.6509
Unmitigated	65.4609	1.8683	161.9570	8.5800e-003		0.9011	0.9011		0.9011	0.9011	0.0000	292.6783	292.6783	0.2789	0.0000	299.6509

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	5.4505					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	55.1629					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.8476	1.8683	161.9570	8.5800e-003		0.9011	0.9011		0.9011	0.9011		292.6783	292.6783	0.2789		299.6509
Total	65.4609	1.8683	161.9570	8.5800e-003		0.9011	0.9011		0.9011	0.9011	0.0000	292.6783	292.6783	0.2789	0.0000	299.6509

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	5.4505					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	55.1629					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.8476	1.8683	161.9570	8.5800e-003		0.9011	0.9011		0.9011	0.9011		292.6783	292.6783	0.2789		299.6509
Total	65.4609	1.8683	161.9570	8.5800e-003		0.9011	0.9011		0.9011	0.9011	0.0000	292.6783	292.6783	0.2789	0.0000	299.6509

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Uni Village Operational Winter 2035

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

CSUDH Campus Master Plan EIR
South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	720.92	1000sqft	33.00	720,918.00	0
Apartments Mid Rise	1,969.00	Dwelling Unit	31.80	1,969,000.00	5631
Regional Shopping Center	96.09	1000sqft	2.20	96,085.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2035
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - .

Vehicle Trips - *

Woodstoves - *

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

Table Name	Column Name	Default Value	New Value
tblFireplaces	NumberGas	1,673.65	0.00
tblFireplaces	NumberNoFireplace	196.90	0.00
tblFireplaces	NumberWood	98.45	0.00
tblLandUse	LandUseSquareFeet	720,920.00	720,918.00
tblLandUse	LandUseSquareFeet	96,090.00	96,085.00
tblLandUse	LotAcreage	16.55	33.00
tblLandUse	LotAcreage	51.82	31.80
tblLandUse	LotAcreage	2.21	2.20
tblVehicleTrips	HO_TTP	40.60	41.00
tblVehicleTrips	HS_TTP	19.20	19.00
tblVehicleTrips	HW_TTP	40.20	40.00
tblVehicleTrips	ST_TR	6.39	5.75
tblVehicleTrips	ST_TR	2.46	2.21
tblVehicleTrips	ST_TR	49.97	44.97
tblVehicleTrips	SU_TR	5.86	5.27
tblVehicleTrips	SU_TR	1.05	0.95
tblVehicleTrips	SU_TR	25.24	22.72
tblVehicleTrips	WD_TR	6.65	5.99
tblVehicleTrips	WD_TR	11.03	9.93
tblVehicleTrips	WD_TR	42.70	38.43
tblWoodstoves	NumberCatalytic	98.45	0.00
tblWoodstoves	NumberNoncatalytic	98.45	0.00

2.0 Emissions Summary

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	65.4609	1.8683	161.9570	8.5800e-003		0.9011	0.9011		0.9011	0.9011	0.0000	292.6783	292.6783	0.2789	0.0000	299.6509
Energy	0.7626	6.6402	3.6787	0.0416		0.5269	0.5269		0.5269	0.5269		8,319.2557	8,319.2557	0.1595	0.1525	8,368.6928
Mobile	20.2850	121.7326	257.2965	1.3687	154.4531	0.6875	155.1406	41.3038	0.6389	41.9426		140,666.6887	140,666.6887	5.4823		140,803.7457
Total	86.5085	130.2411	422.9321	1.4189	154.4531	2.1155	156.5686	41.3038	2.0669	43.3707	0.0000	149,278.6226	149,278.6226	5.9206	0.1525	149,472.0894

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	65.4609	1.8683	161.9570	8.5800e-003		0.9011	0.9011		0.9011	0.9011	0.0000	292.6783	292.6783	0.2789	0.0000	299.6509
Energy	0.7626	6.6402	3.6787	0.0416		0.5269	0.5269		0.5269	0.5269		8,319.2557	8,319.2557	0.1595	0.1525	8,368.6928
Mobile	20.2850	121.7326	257.2965	1.3687	154.4531	0.6875	155.1406	41.3038	0.6389	41.9426		140,666.6887	140,666.6887	5.4823		140,803.7457
Total	86.5085	130.2411	422.9321	1.4189	154.4531	2.1155	156.5686	41.3038	2.0669	43.3707	0.0000	149,278.6226	149,278.6226	5.9206	0.1525	149,472.0894

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	20.2850	121.7326	257.2965	1.3687	154.4531	0.6875	155.1406	41.3038	0.6389	41.9426		140,666.6887	140,666.6887	5.4823		140,803.7457
Unmitigated	20.2850	121.7326	257.2965	1.3687	154.4531	0.6875	155.1406	41.3038	0.6389	41.9426		140,666.6887	140,666.6887	5.4823		140,803.7457

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	11,794.31	11,321.75	10376.63	39,356,374	39,356,374
General Office Building	7,158.74	1,593.23	684.87	17,520,967	17,520,967
Regional Shopping Center	3,692.74	4,321.17	2183.16	7,714,563	7,714,563
Total	22,645.78	17,236.15	13,244.67	64,591,905	64,591,905

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	14.70	5.90	8.70	40.00	19.00	41.00	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735
General Office Building	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735
Regional Shopping Center	0.554218	0.041286	0.206644	0.110669	0.012238	0.005777	0.022663	0.036578	0.002204	0.001416	0.004855	0.000716	0.000735

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7626	6.6402	3.6787	0.0416		0.5269	0.5269		0.5269	0.5269		8,319.2557	8,319.2557	0.1595	0.1525	8,368.6928
NaturalGas Unmitigated	0.7626	6.6402	3.6787	0.0416		0.5269	0.5269		0.5269	0.5269		8,319.2557	8,319.2557	0.1595	0.1525	8,368.6928

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	49721	0.5362	4.5821	1.9498	0.0293		0.3705	0.3705		0.3705	0.3705		5,849.5261	5,849.5261	0.1121	0.1072	5,884.2870
General Office Building	20561	0.2217	2.0158	1.6933	0.0121		0.1532	0.1532		0.1532	0.1532		2,418.9384	2,418.9384	0.0464	0.0444	2,433.3129
Regional Shopping Center	431.724	4.6600e-003	0.0423	0.0356	2.5000e-004		3.2200e-003	3.2200e-003		3.2200e-003	3.2200e-003		50.7911	50.7911	9.7000e-004	9.3000e-004	51.0929
Total		0.7626	6.6402	3.6787	0.0416		0.5269	0.5269		0.5269	0.5269		8,319.2556	8,319.2556	0.1595	0.1525	8,368.6928

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	49.721	0.5362	4.5821	1.9498	0.0293		0.3705	0.3705		0.3705	0.3705		5,849.5261	5,849.5261	0.1121	0.1072	5,884.2870
General Office Building	20.561	0.2217	2.0158	1.6933	0.0121		0.1532	0.1532		0.1532	0.1532		2,418.9384	2,418.9384	0.0464	0.0444	2,433.3129
Regional Shopping Center	0.431724	4.6600e-003	0.0423	0.0356	2.5000e-004		3.2200e-003	3.2200e-003		3.2200e-003	3.2200e-003		50.7911	50.7911	9.7000e-004	9.3000e-004	51.0929
Total		0.7626	6.6402	3.6787	0.0416		0.5269	0.5269		0.5269	0.5269		8,319.2556	8,319.2556	0.1595	0.1525	8,368.6928

6.0 Area Detail

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	65.4609	1.8683	161.9570	8.5800e-003		0.9011	0.9011		0.9011	0.9011	0.0000	292.6783	292.6783	0.2789	0.0000	299.6509
Unmitigated	65.4609	1.8683	161.9570	8.5800e-003		0.9011	0.9011		0.9011	0.9011	0.0000	292.6783	292.6783	0.2789	0.0000	299.6509

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	5.4505					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	55.1629					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.8476	1.8683	161.9570	8.5800e-003		0.9011	0.9011		0.9011	0.9011		292.6783	292.6783	0.2789		299.6509
Total	65.4609	1.8683	161.9570	8.5800e-003		0.9011	0.9011		0.9011	0.9011	0.0000	292.6783	292.6783	0.2789	0.0000	299.6509

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	5.4505					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	55.1629					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.8476	1.8683	161.9570	8.5800e-003		0.9011	0.9011		0.9011	0.9011		292.6783	292.6783	0.2789		299.6509
Total	65.4609	1.8683	161.9570	8.5800e-003		0.9011	0.9011		0.9011	0.9011	0.0000	292.6783	292.6783	0.2789	0.0000	299.6509

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Construction 2025

Campus Construction Annual 2025

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

CSUDH Campus Master Plan EIR
South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Day-Care Center	110.00	Student	1.00	5,800.00	0
University/College (4Yr)	2,169.00	Student	11.80	1,862,200.00	0
Apartments Mid Rise	317.00	Dwelling Unit	4.20	317,000.00	800

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - .

Grading - Updated to reflect Luke's inputs

Vehicle Trips - Adjusted trip rates by Luke 9/13/18.

Landscape Equipment -

Mobile Land Use Mitigation -

Construction Phase - *

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	100.00
tblGrading	AcresOfGrading	75.00	17.03
tblGrading	AcresOfGrading	0.00	17.03
tblLandUse	LandUseSquareFeet	6,217.51	5,800.00
tblLandUse	LandUseSquareFeet	398,656.71	1,862,200.00
tblLandUse	LotAcreage	0.14	1.00
tblLandUse	LotAcreage	9.15	11.80
tblLandUse	LotAcreage	8.34	4.20
tblLandUse	Population	907.00	800.00

2.0 Emissions Summary

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
18	12-12-2022	3-11-2023	0.7747	0.7747
19	3-12-2023	6-11-2023	1.4738	1.4738
20	6-12-2023	9-11-2023	1.5094	1.5094
21	9-12-2023	12-11-2023	1.5067	1.5067
22	12-12-2023	3-11-2024	1.4712	1.4712
23	3-12-2024	6-11-2024	1.1612	1.1612
24	6-12-2024	9-11-2024	6.2261	6.2261
25	9-12-2024	9-30-2024	1.3267	1.3267
		Highest	6.2261	6.2261

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	9.9995	0.1201	5.3102	5.3200e-003		0.3209	0.3209		0.3209	0.3209	33.6714	70.1016	103.7730	0.1057	2.2900e-003	107.0959
Energy	0.2880	2.6096	2.1362	0.0157		0.1990	0.1990		0.1990	0.1990	0.0000	9,206.3409	9,206.3409	0.3170	0.1066	9,246.0174
Mobile	1.2525	6.1351	16.4524	0.0687	6.3517	0.0502	6.4019	1.7015	0.0467	1.7482	0.0000	6,361.1712	6,361.1712	0.2786	0.0000	6,368.1355
Waste						0.0000	0.0000		0.0000	0.0000	114.0261	0.0000	114.0261	6.7388	0.0000	282.4949
Water						0.0000	0.0000		0.0000	0.0000	8.1105	180.2941	188.4045	0.8405	0.0212	215.7365
Total	11.5400	8.8648	23.8988	0.0897	6.3517	0.5701	6.9218	1.7015	0.5665	2.2681	155.8080	15,817.9077	15,973.7157	8.2805	0.1301	16,219.4803

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2023	1/27/2023	5	20	
2	Site Preparation	Site Preparation	1/28/2023	2/10/2023	5	10	
3	Grading	Grading	2/11/2023	3/24/2023	5	30	
4	Building Construction	Building Construction	3/25/2023	5/17/2024	5	300	
5	Paving	Paving	5/18/2024	6/14/2024	5	20	
6	Architectural Coating	Architectural Coating	6/15/2024	11/1/2024	5	100	

Acres of Grading (Site Preparation Phase): 17.03

Acres of Grading (Grading Phase): 17.03

Acres of Paving: 0

Residential Indoor: 641,925; Residential Outdoor: 213,975; Non-Residential Indoor: 2,802,000; Non-Residential Outdoor: 934,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1,013.00	340.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	203.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0227	0.2148	0.1964	3.9000e-004		9.9800e-003	9.9800e-003		9.2800e-003	9.2800e-003	0.0000	33.9921	33.9921	9.5200e-003	0.0000	34.2301
Total	0.0227	0.2148	0.1964	3.9000e-004		9.9800e-003	9.9800e-003		9.2800e-003	9.2800e-003	0.0000	33.9921	33.9921	9.5200e-003	0.0000	34.2301

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

3.2 Demolition - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5000e-004	3.8000e-004	4.4600e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3320	1.3320	3.0000e-005	0.0000	1.3328
Total	5.5000e-004	3.8000e-004	4.4600e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3320	1.3320	3.0000e-005	0.0000	1.3328

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0227	0.2148	0.1964	3.9000e-004		9.9800e-003	9.9800e-003		9.2800e-003	9.2800e-003	0.0000	33.9920	33.9920	9.5200e-003	0.0000	34.2300
Total	0.0227	0.2148	0.1964	3.9000e-004		9.9800e-003	9.9800e-003		9.2800e-003	9.2800e-003	0.0000	33.9920	33.9920	9.5200e-003	0.0000	34.2300

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

3.2 Demolition - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5000e-004	3.8000e-004	4.4600e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3320	1.3320	3.0000e-005	0.0000	1.3328
Total	5.5000e-004	3.8000e-004	4.4600e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3320	1.3320	3.0000e-005	0.0000	1.3328

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0994	0.0000	0.0994	0.0506	0.0000	0.0506	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1376	0.0912	1.9000e-004		6.3300e-003	6.3300e-003		5.8200e-003	5.8200e-003	0.0000	16.7254	16.7254	5.4100e-003	0.0000	16.8606
Total	0.0133	0.1376	0.0912	1.9000e-004	0.0994	6.3300e-003	0.1057	0.0506	5.8200e-003	0.0565	0.0000	16.7254	16.7254	5.4100e-003	0.0000	16.8606

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

3.3 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e-004	2.3000e-004	2.6700e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.7992	0.7992	2.0000e-005	0.0000	0.7997
Total	3.3000e-004	2.3000e-004	2.6700e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.7992	0.7992	2.0000e-005	0.0000	0.7997

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0994	0.0000	0.0994	0.0506	0.0000	0.0506	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1376	0.0912	1.9000e-004		6.3300e-003	6.3300e-003		5.8200e-003	5.8200e-003	0.0000	16.7253	16.7253	5.4100e-003	0.0000	16.8606
Total	0.0133	0.1376	0.0912	1.9000e-004	0.0994	6.3300e-003	0.1057	0.0506	5.8200e-003	0.0565	0.0000	16.7253	16.7253	5.4100e-003	0.0000	16.8606

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

3.3 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3000e-004	2.3000e-004	2.6700e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.7992	0.7992	2.0000e-005	0.0000	0.7997
Total	3.3000e-004	2.3000e-004	2.6700e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.7992	0.7992	2.0000e-005	0.0000	0.7997

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0994	0.0000	0.0994	0.0506	0.0000	0.0506	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0498	0.5177	0.4208	9.3000e-004		0.0214	0.0214		0.0197	0.0197	0.0000	81.8028	81.8028	0.0265	0.0000	82.4642
Total	0.0498	0.5177	0.4208	9.3000e-004	0.0994	0.0214	0.1207	0.0506	0.0197	0.0703	0.0000	81.8028	81.8028	0.0265	0.0000	82.4642

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3.4 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-003	7.6000e-004	8.9100e-003	3.0000e-005	3.2900e-003	2.0000e-005	3.3100e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	2.6641	2.6641	6.0000e-005	0.0000	2.6656
Total	1.1000e-003	7.6000e-004	8.9100e-003	3.0000e-005	3.2900e-003	2.0000e-005	3.3100e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	2.6641	2.6641	6.0000e-005	0.0000	2.6656

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0994	0.0000	0.0994	0.0506	0.0000	0.0506	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0498	0.5177	0.4208	9.3000e-004		0.0214	0.0214		0.0197	0.0197	0.0000	81.8027	81.8027	0.0265	0.0000	82.4641
Total	0.0498	0.5177	0.4208	9.3000e-004	0.0994	0.0214	0.1207	0.0506	0.0197	0.0703	0.0000	81.8027	81.8027	0.0265	0.0000	82.4641

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3.4 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e-003	7.6000e-004	8.9100e-003	3.0000e-005	3.2900e-003	2.0000e-005	3.3100e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	2.6641	2.6641	6.0000e-005	0.0000	2.6656
Total	1.1000e-003	7.6000e-004	8.9100e-003	3.0000e-005	3.2900e-003	2.0000e-005	3.3100e-003	8.7000e-004	2.0000e-005	9.0000e-004	0.0000	2.6641	2.6641	6.0000e-005	0.0000	2.6656

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1573	1.4385	1.6244	2.6900e-003		0.0700	0.0700		0.0658	0.0658	0.0000	231.8048	231.8048	0.0551	0.0000	233.1833
Total	0.1573	1.4385	1.6244	2.6900e-003		0.0700	0.0700		0.0658	0.0658	0.0000	231.8048	231.8048	0.0551	0.0000	233.1833

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3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0681	2.3543	0.7092	8.1500e-003	0.2143	2.7300e-003	0.2170	0.0618	2.6100e-003	0.0644	0.0000	792.9876	792.9876	0.0453	0.0000	794.1195
Worker	0.3723	0.2554	3.0101	9.9500e-003	1.1114	7.9300e-003	1.1193	0.2952	7.3000e-003	0.3025	0.0000	899.5619	899.5619	0.0212	0.0000	900.0927
Total	0.4403	2.6097	3.7192	0.0181	1.3257	0.0107	1.3363	0.3570	9.9100e-003	0.3669	0.0000	1,692.5495	1,692.5495	0.0665	0.0000	1,694.2122

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1573	1.4385	1.6244	2.6900e-003		0.0700	0.0700		0.0658	0.0658	0.0000	231.8045	231.8045	0.0551	0.0000	233.1830
Total	0.1573	1.4385	1.6244	2.6900e-003		0.0700	0.0700		0.0658	0.0658	0.0000	231.8045	231.8045	0.0551	0.0000	233.1830

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3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0681	2.3543	0.7092	8.1500e-003	0.2143	2.7300e-003	0.2170	0.0618	2.6100e-003	0.0644	0.0000	792.9876	792.9876	0.0453	0.0000	794.1195
Worker	0.3723	0.2554	3.0101	9.9500e-003	1.1114	7.9300e-003	1.1193	0.2952	7.3000e-003	0.3025	0.0000	899.5619	899.5619	0.0212	0.0000	900.0927
Total	0.4403	2.6097	3.7192	0.0181	1.3257	0.0107	1.3363	0.3570	9.9100e-003	0.3669	0.0000	1,692.5495	1,692.5495	0.0665	0.0000	1,694.2122

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0736	0.6722	0.8083	1.3500e-003		0.0307	0.0307		0.0288	0.0288	0.0000	115.9246	115.9246	0.0274	0.0000	116.6099
Total	0.0736	0.6722	0.8083	1.3500e-003		0.0307	0.0307		0.0288	0.0288	0.0000	115.9246	115.9246	0.0274	0.0000	116.6099

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3.5 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0333	1.1742	0.3444	4.0600e-003	0.1071	1.3500e-003	0.1085	0.0309	1.2900e-003	0.0322	0.0000	395.0722	395.0722	0.0223	0.0000	395.6297
Worker	0.1764	0.1163	1.4033	4.8100e-003	0.5557	3.9100e-003	0.5596	0.1476	3.6000e-003	0.1512	0.0000	434.9237	434.9237	9.7200e-003	0.0000	435.1667
Total	0.2097	1.2906	1.7477	8.8700e-003	0.6628	5.2600e-003	0.6681	0.1785	4.8900e-003	0.1834	0.0000	829.9959	829.9959	0.0320	0.0000	830.7964

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0736	0.6722	0.8083	1.3500e-003		0.0307	0.0307		0.0288	0.0288	0.0000	115.9244	115.9244	0.0274	0.0000	116.6097
Total	0.0736	0.6722	0.8083	1.3500e-003		0.0307	0.0307		0.0288	0.0288	0.0000	115.9244	115.9244	0.0274	0.0000	116.6097

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3.5 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0333	1.1742	0.3444	4.0600e-003	0.1071	1.3500e-003	0.1085	0.0309	1.2900e-003	0.0322	0.0000	395.0722	395.0722	0.0223	0.0000	395.6297
Worker	0.1764	0.1163	1.4033	4.8100e-003	0.5557	3.9100e-003	0.5596	0.1476	3.6000e-003	0.1512	0.0000	434.9237	434.9237	9.7200e-003	0.0000	435.1667
Total	0.2097	1.2906	1.7477	8.8700e-003	0.6628	5.2600e-003	0.6681	0.1785	4.8900e-003	0.1834	0.0000	829.9959	829.9959	0.0320	0.0000	830.7964

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8800e-003	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1885
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.8800e-003	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1885

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3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	3.4000e-004	4.1600e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.2880	1.2880	3.0000e-005	0.0000	1.2888
Total	5.2000e-004	3.4000e-004	4.1600e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.2880	1.2880	3.0000e-005	0.0000	1.2888

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.8800e-003	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1884
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.8800e-003	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1884

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3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e-004	3.4000e-004	4.1600e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.2880	1.2880	3.0000e-005	0.0000	1.2888
Total	5.2000e-004	3.4000e-004	4.1600e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.2880	1.2880	3.0000e-005	0.0000	1.2888

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	9.6500					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0400e-003	0.0609	0.0905	1.5000e-004		3.0500e-003	3.0500e-003		3.0500e-003	3.0500e-003	0.0000	12.7663	12.7663	7.2000e-004	0.0000	12.7842
Total	9.6590	0.0609	0.0905	1.5000e-004		3.0500e-003	3.0500e-003		3.0500e-003	3.0500e-003	0.0000	12.7663	12.7663	7.2000e-004	0.0000	12.7842

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3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0353	0.0233	0.2812	9.6000e-004	0.1114	7.8000e-004	0.1121	0.0296	7.2000e-004	0.0303	0.0000	87.1565	87.1565	1.9500e-003	0.0000	87.2052
Total	0.0353	0.0233	0.2812	9.6000e-004	0.1114	7.8000e-004	0.1121	0.0296	7.2000e-004	0.0303	0.0000	87.1565	87.1565	1.9500e-003	0.0000	87.2052

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	9.6500					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.0400e-003	0.0609	0.0905	1.5000e-004		3.0500e-003	3.0500e-003		3.0500e-003	3.0500e-003	0.0000	12.7663	12.7663	7.2000e-004	0.0000	12.7842
Total	9.6590	0.0609	0.0905	1.5000e-004		3.0500e-003	3.0500e-003		3.0500e-003	3.0500e-003	0.0000	12.7663	12.7663	7.2000e-004	0.0000	12.7842

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3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0353	0.0233	0.2812	9.6000e-004	0.1114	7.8000e-004	0.1121	0.0296	7.2000e-004	0.0303	0.0000	87.1565	87.1565	1.9500e-003	0.0000	87.2052
Total	0.0353	0.0233	0.2812	9.6000e-004	0.1114	7.8000e-004	0.1121	0.0296	7.2000e-004	0.0303	0.0000	87.1565	87.1565	1.9500e-003	0.0000	87.2052

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Campus Construction Summer 2025

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CSUDH Campus Master Plan EIR
South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Day-Care Center	110.00	Student	1.00	5,800.00	0
University/College (4Yr)	2,169.00	Student	11.80	1,862,200.00	0
Apartments Mid Rise	317.00	Dwelling Unit	4.20	317,000.00	800

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - .

Grading - Updated to reflect Luke's inputs

Vehicle Trips - Adjusted trip rates by Luke 9/13/18.

Landscape Equipment -

Mobile Land Use Mitigation -

Construction Phase - *

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Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	100.00
tblGrading	AcresOfGrading	75.00	17.03
tblGrading	AcresOfGrading	0.00	17.03
tblLandUse	LandUseSquareFeet	6,217.51	5,800.00
tblLandUse	LandUseSquareFeet	398,656.71	1,862,200.00
tblLandUse	LotAcreage	0.14	1.00
tblLandUse	LotAcreage	9.15	11.80
tblLandUse	LotAcreage	8.34	4.20
tblLandUse	Population	907.00	800.00

2.0 Emissions Summary

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2023	1/27/2023	5	20	
2	Site Preparation	Site Preparation	1/28/2023	2/10/2023	5	10	
3	Grading	Grading	2/11/2023	3/24/2023	5	30	
4	Building Construction	Building Construction	3/25/2023	5/17/2024	5	300	
5	Paving	Paving	5/18/2024	6/14/2024	5	20	
6	Architectural Coating	Architectural Coating	6/15/2024	11/1/2024	5	100	

Acres of Grading (Site Preparation Phase): 17.03

Acres of Grading (Grading Phase): 17.03

Acres of Paving: 0

Residential Indoor: 641,925; Residential Outdoor: 213,975; Non-Residential Indoor: 2,802,000; Non-Residential Outdoor: 934,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1,013.00	340.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	203.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280		3,746.9840	3,746.9840	1.0494		3,773.2183
Total	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280		3,746.9840	3,746.9840	1.0494		3,773.2183

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.2 Demolition - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0554	0.0335	0.4810	1.5500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0456		154.1265	154.1265	3.6500e-003		154.2177
Total	0.0554	0.0335	0.4810	1.5500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0456		154.1265	154.1265	3.6500e-003		154.2177

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280	0.0000	3,746.9840	3,746.9840	1.0494		3,773.2183
Total	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280	0.0000	3,746.9840	3,746.9840	1.0494		3,773.2183

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.2 Demolition - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0554	0.0335	0.4810	1.5500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0456		154.1265	154.1265	3.6500e-003		154.2177
Total	0.0554	0.0335	0.4810	1.5500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0456		154.1265	154.1265	3.6500e-003		154.2177

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.8723	0.0000	19.8723	10.1257	0.0000	10.1257			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.3081	3,687.3081	1.1926		3,717.1219
Total	2.6595	27.5242	18.2443	0.0381	19.8723	1.2660	21.1383	10.1257	1.1647	11.2904		3,687.3081	3,687.3081	1.1926		3,717.1219

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.3 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0665	0.0402	0.5772	1.8600e-003	0.2012	1.4100e-003	0.2026	0.0534	1.3000e-003	0.0547		184.9518	184.9518	4.3800e-003		185.0613
Total	0.0665	0.0402	0.5772	1.8600e-003	0.2012	1.4100e-003	0.2026	0.0534	1.3000e-003	0.0547		184.9518	184.9518	4.3800e-003		185.0613

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.8723	0.0000	19.8723	10.1257	0.0000	10.1257			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219
Total	2.6595	27.5242	18.2443	0.0381	19.8723	1.2660	21.1383	10.1257	1.1647	11.2904	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.3 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0665	0.0402	0.5772	1.8600e-003	0.2012	1.4100e-003	0.2026	0.0534	1.3000e-003	0.0547		184.9518	184.9518	4.3800e-003		185.0613
Total	0.0665	0.0402	0.5772	1.8600e-003	0.2012	1.4100e-003	0.2026	0.0534	1.3000e-003	0.0547		184.9518	184.9518	4.3800e-003		185.0613

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.6241	0.0000	6.6241	3.3752	0.0000	3.3752			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105		6,011.4777	6,011.4777	1.9442		6,060.0836
Total	3.3217	34.5156	28.0512	0.0621	6.6241	1.4245	8.0486	3.3752	1.3105	4.6858		6,011.4777	6,011.4777	1.9442		6,060.0836

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.4 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0738	0.0446	0.6413	2.0600e-003	0.2236	1.5700e-003	0.2251	0.0593	1.4400e-003	0.0607		205.5020	205.5020	4.8700e-003		205.6236
Total	0.0738	0.0446	0.6413	2.0600e-003	0.2236	1.5700e-003	0.2251	0.0593	1.4400e-003	0.0607		205.5020	205.5020	4.8700e-003		205.6236

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.6241	0.0000	6.6241	3.3752	0.0000	3.3752			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836
Total	3.3217	34.5156	28.0512	0.0621	6.6241	1.4245	8.0486	3.3752	1.3105	4.6858	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.4 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0738	0.0446	0.6413	2.0600e-003	0.2236	1.5700e-003	0.2251	0.0593	1.4400e-003	0.0607		205.5020	205.5020	4.8700e-003		205.6236
Total	0.0738	0.0446	0.6413	2.0600e-003	0.2236	1.5700e-003	0.2251	0.0593	1.4400e-003	0.0607		205.5020	205.5020	4.8700e-003		205.6236

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6658	23.3155	6.7572	0.0824	2.1756	0.0267	2.2023	0.6263	0.0255	0.6518		8,841.2398	8,841.2398	0.4859		8,853.3876
Worker	3.7398	2.2605	32.4809	0.1044	11.3230	0.0793	11.4022	3.0029	0.0730	3.0759		10,408.6756	10,408.6756	0.2465		10,414.8369
Total	4.4056	25.5760	39.2381	0.1868	13.4985	0.1060	13.6045	3.6292	0.0985	3.7277		19,249.9154	19,249.9154	0.7324		19,268.2245

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6658	23.3155	6.7572	0.0824	2.1756	0.0267	2.2023	0.6263	0.0255	0.6518		8,841.2398	8,841.2398	0.4859		8,853.3876
Worker	3.7398	2.2605	32.4809	0.1044	11.3230	0.0793	11.4022	3.0029	0.0730	3.0759		10,408.6756	10,408.6756	0.2465		10,414.8369
Total	4.4056	25.5760	39.2381	0.1868	13.4985	0.1060	13.6045	3.6292	0.0985	3.7277		19,249.9154	19,249.9154	0.7324		19,268.2245

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.5 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6514	23.2538	6.5653	0.0821	2.1756	0.0264	2.2020	0.6263	0.0252	0.6515		8,808.8238	8,808.8238	0.4788		8,820.7948
Worker	3.5395	2.0600	30.3279	0.1010	11.3230	0.0782	11.4012	3.0029	0.0720	3.0749		10,065.7262	10,065.7262	0.2259		10,071.3731
Total	4.1909	25.3138	36.8932	0.1830	13.4985	0.1046	13.6032	3.6292	0.0972	3.7264		18,874.5501	18,874.5501	0.7047		18,892.1679

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.5 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6514	23.2538	6.5653	0.0821	2.1756	0.0264	2.2020	0.6263	0.0252	0.6515		8,808.8238	8,808.8238	0.4788		8,820.7948
Worker	3.5395	2.0600	30.3279	0.1010	11.3230	0.0782	11.4012	3.0029	0.0720	3.0749		10,065.7262	10,065.7262	0.2259		10,071.3731
Total	4.1909	25.3138	36.8932	0.1830	13.4985	0.1046	13.6032	3.6292	0.0972	3.7264		18,874.5501	18,874.5501	0.7047		18,892.1679

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0524	0.0305	0.4491	1.4900e-003	0.1677	1.1600e-003	0.1688	0.0445	1.0700e-003	0.0455		149.0483	149.0483	3.3400e-003		149.1319
Total	0.0524	0.0305	0.4491	1.4900e-003	0.1677	1.1600e-003	0.1688	0.0445	1.0700e-003	0.0455		149.0483	149.0483	3.3400e-003		149.1319

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0524	0.0305	0.4491	1.4900e-003	0.1677	1.1600e-003	0.1688	0.0445	1.0700e-003	0.0455		149.0483	149.0483	3.3400e-003		149.1319
Total	0.0524	0.0305	0.4491	1.4900e-003	0.1677	1.1600e-003	0.1688	0.0445	1.0700e-003	0.0455		149.0483	149.0483	3.3400e-003		149.1319

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	192.9991					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	193.1798	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.7093	0.4128	6.0776	0.0202	2.2691	0.0157	2.2847	0.6018	0.0144	0.6162		2,017.1199	2,017.1199	0.0453		2,018.2515
Total	0.7093	0.4128	6.0776	0.0202	2.2691	0.0157	2.2847	0.6018	0.0144	0.6162		2,017.1199	2,017.1199	0.0453		2,018.2515

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	192.9991					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	193.1798	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.7093	0.4128	6.0776	0.0202	2.2691	0.0157	2.2847	0.6018	0.0144	0.6162		2,017.1199	2,017.1199	0.0453		2,018.2515
Total	0.7093	0.4128	6.0776	0.0202	2.2691	0.0157	2.2847	0.6018	0.0144	0.6162		2,017.1199	2,017.1199	0.0453		2,018.2515

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Campus Construction Winter 2025

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

CSUDH Campus Master Plan EIR
South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Day-Care Center	110.00	Student	1.00	5,800.00	0
University/College (4Yr)	2,169.00	Student	11.80	1,862,200.00	0
Apartments Mid Rise	317.00	Dwelling Unit	4.20	317,000.00	800

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2025
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - .

Grading - Updated to reflect Luke's inputs

Vehicle Trips - Adjusted trip rates by Luke 9/13/18.

Landscape Equipment -

Mobile Land Use Mitigation -

Construction Phase - *

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	100.00
tblGrading	AcresOfGrading	75.00	17.03
tblGrading	AcresOfGrading	0.00	17.03
tblLandUse	LandUseSquareFeet	6,217.51	5,800.00
tblLandUse	LandUseSquareFeet	398,656.71	1,862,200.00
tblLandUse	LotAcreage	0.14	1.00
tblLandUse	LotAcreage	9.15	11.80
tblLandUse	LotAcreage	8.34	4.20
tblLandUse	Population	907.00	800.00

2.0 Emissions Summary

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2023	1/27/2023	5	20	
2	Site Preparation	Site Preparation	1/28/2023	2/10/2023	5	10	
3	Grading	Grading	2/11/2023	3/24/2023	5	30	
4	Building Construction	Building Construction	3/25/2023	5/17/2024	5	300	
5	Paving	Paving	5/18/2024	6/14/2024	5	20	
6	Architectural Coating	Architectural Coating	6/15/2024	11/1/2024	5	100	

Acres of Grading (Site Preparation Phase): 17.03

Acres of Grading (Grading Phase): 17.03

Acres of Paving: 0

Residential Indoor: 641,925; Residential Outdoor: 213,975; Non-Residential Indoor: 2,802,000; Non-Residential Outdoor: 934,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1,013.00	340.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	203.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280		3,746.9840	3,746.9840	1.0494		3,773.2183
Total	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280		3,746.9840	3,746.9840	1.0494		3,773.2183

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.2 Demolition - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0614	0.0367	0.4338	1.4500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0456		144.5539	144.5539	3.4100e-003		144.6391
Total	0.0614	0.0367	0.4338	1.4500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0456		144.5539	144.5539	3.4100e-003		144.6391

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280	0.0000	3,746.9840	3,746.9840	1.0494		3,773.2183
Total	2.2691	21.4844	19.6434	0.0388		0.9975	0.9975		0.9280	0.9280	0.0000	3,746.9840	3,746.9840	1.0494		3,773.2183

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.2 Demolition - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0614	0.0367	0.4338	1.4500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0456		144.5539	144.5539	3.4100e-003		144.6391
Total	0.0614	0.0367	0.4338	1.4500e-003	0.1677	1.1700e-003	0.1688	0.0445	1.0800e-003	0.0456		144.5539	144.5539	3.4100e-003		144.6391

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.8723	0.0000	19.8723	10.1257	0.0000	10.1257			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.3081	3,687.3081	1.1926		3,717.1219
Total	2.6595	27.5242	18.2443	0.0381	19.8723	1.2660	21.1383	10.1257	1.1647	11.2904		3,687.3081	3,687.3081	1.1926		3,717.1219

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.3 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0736	0.0441	0.5205	1.7400e-003	0.2012	1.4100e-003	0.2026	0.0534	1.3000e-003	0.0547		173.4647	173.4647	4.0900e-003		173.5669
Total	0.0736	0.0441	0.5205	1.7400e-003	0.2012	1.4100e-003	0.2026	0.0534	1.3000e-003	0.0547		173.4647	173.4647	4.0900e-003		173.5669

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.8723	0.0000	19.8723	10.1257	0.0000	10.1257			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219
Total	2.6595	27.5242	18.2443	0.0381	19.8723	1.2660	21.1383	10.1257	1.1647	11.2904	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.3 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0736	0.0441	0.5205	1.7400e-003	0.2012	1.4100e-003	0.2026	0.0534	1.3000e-003	0.0547		173.4647	173.4647	4.0900e-003		173.5669
Total	0.0736	0.0441	0.5205	1.7400e-003	0.2012	1.4100e-003	0.2026	0.0534	1.3000e-003	0.0547		173.4647	173.4647	4.0900e-003		173.5669

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.6241	0.0000	6.6241	3.3752	0.0000	3.3752			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105		6,011.4777	6,011.4777	1.9442		6,060.0836
Total	3.3217	34.5156	28.0512	0.0621	6.6241	1.4245	8.0486	3.3752	1.3105	4.6858		6,011.4777	6,011.4777	1.9442		6,060.0836

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.4 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0818	0.0490	0.5784	1.9300e-003	0.2236	1.5700e-003	0.2251	0.0593	1.4400e-003	0.0607		192.7385	192.7385	4.5400e-003		192.8521
Total	0.0818	0.0490	0.5784	1.9300e-003	0.2236	1.5700e-003	0.2251	0.0593	1.4400e-003	0.0607		192.7385	192.7385	4.5400e-003		192.8521

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.6241	0.0000	6.6241	3.3752	0.0000	3.3752			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836
Total	3.3217	34.5156	28.0512	0.0621	6.6241	1.4245	8.0486	3.3752	1.3105	4.6858	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.4 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0818	0.0490	0.5784	1.9300e-003	0.2236	1.5700e-003	0.2251	0.0593	1.4400e-003	0.0607		192.7385	192.7385	4.5400e-003		192.8521
Total	0.0818	0.0490	0.5784	1.9300e-003	0.2236	1.5700e-003	0.2251	0.0593	1.4400e-003	0.0607		192.7385	192.7385	4.5400e-003		192.8521

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.7003	23.1898	7.3819	0.0802	2.1756	0.0281	2.2036	0.6263	0.0268	0.6531		8,603.0239	8,603.0239	0.5154		8,615.9093
Worker	4.1441	2.4810	29.2934	0.0979	11.3230	0.0793	11.4022	3.0029	0.0730	3.0759		9,762.2058	9,762.2058	0.2302		9,767.9608
Total	4.8444	25.6708	36.6752	0.1781	13.4985	0.1074	13.6059	3.6292	0.0998	3.7290		18,365.2298	18,365.2298	0.7456		18,383.8701

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.7003	23.1898	7.3819	0.0802	2.1756	0.0281	2.2036	0.6263	0.0268	0.6531		8,603.0239	8,603.0239	0.5154		8,615.9093
Worker	4.1441	2.4810	29.2934	0.0979	11.3230	0.0793	11.4022	3.0029	0.0730	3.0759		9,762.2058	9,762.2058	0.2302		9,767.9608
Total	4.8444	25.6708	36.6752	0.1781	13.4985	0.1074	13.6059	3.6292	0.0998	3.7290		18,365.2298	18,365.2298	0.7456		18,383.8701

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.5 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6846	23.1355	7.1718	0.0799	2.1756	0.0276	2.2032	0.6263	0.0264	0.6527		8,573.1704	8,573.1704	0.5074		8,585.8561
Worker	3.9338	2.2602	27.3049	0.0947	11.3230	0.0782	11.4012	3.0029	0.0720	3.0749		9,439.5647	9,439.5647	0.2107		9,444.8325
Total	4.6184	25.3957	34.4768	0.1746	13.4985	0.1058	13.6044	3.6292	0.0984	3.7276		18,012.7351	18,012.7351	0.7181		18,030.6886

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.5 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6846	23.1355	7.1718	0.0799	2.1756	0.0276	2.2032	0.6263	0.0264	0.6527		8,573.1704	8,573.1704	0.5074		8,585.8561
Worker	3.9338	2.2602	27.3049	0.0947	11.3230	0.0782	11.4012	3.0029	0.0720	3.0749		9,439.5647	9,439.5647	0.2107		9,444.8325
Total	4.6184	25.3957	34.4768	0.1746	13.4985	0.1058	13.6044	3.6292	0.0984	3.7276		18,012.7351	18,012.7351	0.7181		18,030.6886

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0583	0.0335	0.4043	1.4000e-003	0.1677	1.1600e-003	0.1688	0.0445	1.0700e-003	0.0455		139.7764	139.7764	3.1200e-003		139.8544
Total	0.0583	0.0335	0.4043	1.4000e-003	0.1677	1.1600e-003	0.1688	0.0445	1.0700e-003	0.0455		139.7764	139.7764	3.1200e-003		139.8544

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0583	0.0335	0.4043	1.4000e-003	0.1677	1.1600e-003	0.1688	0.0445	1.0700e-003	0.0455		139.7764	139.7764	3.1200e-003		139.8544
Total	0.0583	0.0335	0.4043	1.4000e-003	0.1677	1.1600e-003	0.1688	0.0445	1.0700e-003	0.0455		139.7764	139.7764	3.1200e-003		139.8544

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	192.9991					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	193.1798	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.7883	0.4529	5.4718	0.0190	2.2691	0.0157	2.2847	0.6018	0.0144	0.6162		1,891.640 3	1,891.640 3	0.0422		1,892.696 0
Total	0.7883	0.4529	5.4718	0.0190	2.2691	0.0157	2.2847	0.6018	0.0144	0.6162		1,891.640 3	1,891.640 3	0.0422		1,892.696 0

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	192.9991					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	193.1798	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.7883	0.4529	5.4718	0.0190	2.2691	0.0157	2.2847	0.6018	0.0144	0.6162		1,891.640 3	1,891.640 3	0.0422		1,892.696 0
Total	0.7883	0.4529	5.4718	0.0190	2.2691	0.0157	2.2847	0.6018	0.0144	0.6162		1,891.640 3	1,891.640 3	0.0422		1,892.696 0

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Campus Construction Annual 2035

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

CSUDH Campus Master Plan EIR
South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Day-Care Center	74.00	Student	1.00	17,970.00	0
University/College (4Yr)	6,713.00	Student	11.80	1,639,960.00	0
Apartments Mid Rise	650.00	Dwelling Unit	16.40	650,000.00	1528

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2035
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - *

Grading - *

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	35.00	100.00
tblConstructionPhase	NumDays	440.00	600.00
tblConstructionPhase	NumDays	30.00	90.00
tblConstructionPhase	NumDays	45.00	90.00
tblConstructionPhase	NumDays	35.00	60.00
tblConstructionPhase	NumDays	20.00	90.00
tblGrading	AcresOfGrading	225.00	29.20
tblGrading	AcresOfGrading	0.00	29.20
tblLandUse	LandUseSquareFeet	4,182.69	17,970.00
tblLandUse	LandUseSquareFeet	1,233,832.41	1,639,960.00
tblLandUse	LotAcreage	0.10	1.00
tblLandUse	LotAcreage	28.32	11.80
tblLandUse	LotAcreage	17.11	16.40
tblLandUse	Population	1,859.00	1,528.00

2.0 Emissions Summary

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2031	0.3198	1.5286	2.4053	6.7200e-003	1.0725	0.0522	1.1246	0.5691	0.0521	0.6212	0.0000	596.2801	596.2801	0.0256	0.0000	596.9211
2032	0.5671	3.9208	5.2521	0.0244	1.8745	0.0327	1.9072	0.5201	0.0321	0.5522	0.0000	2,261.3061	2,261.3061	0.0773	0.0000	2,263.2376
2033	0.5525	4.0510	5.2734	0.0254	1.9396	0.0291	1.9687	0.5215	0.0284	0.5500	0.0000	2,350.0054	2,350.0054	0.0790	0.0000	2,351.9802
2034	9.9945	1.8162	2.7212	0.0116	0.8787	0.0225	0.9012	0.2358	0.0222	0.2580	0.0000	1,061.7327	1,061.7327	0.0347	0.0000	1,062.6006
Maximum	9.9945	4.0510	5.2734	0.0254	1.9396	0.0522	1.9687	0.5691	0.0521	0.6212	0.0000	2,350.0054	2,350.0054	0.0790	0.0000	2,351.9802

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2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2031	0.3198	1.5286	2.4053	6.7200e-003	1.0725	0.0522	1.1246	0.5691	0.0521	0.6212	0.0000	596.2794	596.2794	0.0256	0.0000	596.9204
2032	0.5671	3.9208	5.2521	0.0244	1.8745	0.0327	1.9072	0.5201	0.0321	0.5522	0.0000	2,261.3056	2,261.3056	0.0773	0.0000	2,263.2371
2033	0.5525	4.0510	5.2734	0.0254	1.9396	0.0291	1.9687	0.5215	0.0284	0.5500	0.0000	2,350.0050	2,350.0050	0.0790	0.0000	2,351.9797
2034	9.9945	1.8162	2.7212	0.0116	0.8787	0.0225	0.9012	0.2358	0.0222	0.2580	0.0000	1,061.7324	1,061.7324	0.0347	0.0000	1,062.6004
Maximum	9.9945	4.0510	5.2734	0.0254	1.9396	0.0522	1.9687	0.5691	0.0521	0.6212	0.0000	2,350.0050	2,350.0050	0.0790	0.0000	2,351.9797

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-20-2031	4-19-2031	0.3828	0.3828
2	4-20-2031	7-19-2031	0.4707	0.4707
3	7-20-2031	10-19-2031	0.5275	0.5275
4	10-20-2031	1-19-2032	0.5652	0.5652
5	1-20-2032	4-19-2032	1.0750	1.0750
6	4-20-2032	7-19-2032	1.1523	1.1523
7	7-20-2032	10-19-2032	1.1674	1.1674
8	10-20-2032	1-19-2033	1.1737	1.1737

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9	1-20-2033	4-19-2033	1.1352	1.1352
10	4-20-2033	7-19-2033	1.1395	1.1395
11	7-20-2033	10-19-2033	1.1542	1.1542
12	10-20-2033	1-19-2034	1.1602	1.1602
13	1-20-2034	4-19-2034	1.1236	1.1236
14	4-20-2034	7-19-2034	0.5769	0.5769
15	7-20-2034	9-30-2034	3.4363	3.4363
		Highest	3.4363	3.4363

2.2 Overall Operational
Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	11.6482	0.2464	10.8978	0.0109		0.6581	0.6581		0.6581	0.6581	69.0424	143.7938	212.8362	0.2168	4.6900e-003	219.6515
Energy	0.2728	2.4622	1.9538	0.0149		0.1885	0.1885		0.1885	0.1885	0.0000	8,789.3274	8,789.3274	0.3032	0.1015	8,827.1559
Mobile	2.1461	13.4120	28.2010	0.1500	16.3891	0.0742	16.4632	4.3894	0.0689	4.4583	0.0000	13,982.9449	13,982.9449	0.5332	0.0000	13,996.2737
Waste						0.0000	0.0000		0.0000	0.0000	312.1230	0.0000	312.1230	18.4459	0.0000	773.2714
Water						0.0000	0.0000		0.0000	0.0000	18.0526	411.8012	429.8538	1.8712	0.0473	490.7282
Total	14.0670	16.1206	41.0526	0.1758	16.3891	0.9208	17.3098	4.3894	0.9155	5.3049	399.2180	23,327.8674	23,727.0854	21.3702	0.1535	24,307.0808

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	11.6482	0.2464	10.8978	0.0109		0.6581	0.6581		0.6581	0.6581	69.0424	143.7938	212.8362	0.2168	4.6900e-003	219.6515
Energy	0.2728	2.4622	1.9538	0.0149		0.1885	0.1885		0.1885	0.1885	0.0000	8,789.3274	8,789.3274	0.3032	0.1015	8,827.1559
Mobile	2.1461	13.4120	28.2010	0.1500	16.3891	0.0742	16.4632	4.3894	0.0689	4.4583	0.0000	13,982.9449	13,982.9449	0.5332	0.0000	13,996.2737
Waste						0.0000	0.0000		0.0000	0.0000	312.1230	0.0000	312.1230	18.4459	0.0000	773.2714
Water						0.0000	0.0000		0.0000	0.0000	18.0526	411.8012	429.8538	1.8712	0.0473	490.7282
Total	14.0670	16.1206	41.0526	0.1758	16.3891	0.9208	17.3098	4.3894	0.9155	5.3049	399.2180	23,327.8674	23,727.0854	21.3702	0.1535	24,307.0808

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/20/2031	5/25/2031	5	90	
2	Site Preparation	Site Preparation	5/26/2031	9/26/2031	5	90	
3	Grading	Grading	9/29/2031	2/1/2032	5	90	
4	Building Construction	Building Construction	2/2/2032	5/21/2034	5	600	
5	Paving	Paving	5/22/2034	8/13/2034	5	60	
6	Architectural Coating	Architectural Coating	8/14/2034	12/31/2034	5	100	

Acres of Grading (Site Preparation Phase): 29.2

Acres of Grading (Grading Phase): 29.2

Acres of Paving: 0

Residential Indoor: 1,316,250; Residential Outdoor: 438,750; Non-Residential Indoor: 2,486,895; Non-Residential Outdoor: 828,965; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	233.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1,164.00	341.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0934	0.4400	0.8513	2.0800e-003		0.0158	0.0158		0.0158	0.0158	0.0000	178.7482	178.7482	7.5400e-003	0.0000	178.9368
Total	0.0934	0.4400	0.8513	2.0800e-003		0.0158	0.0158		0.0158	0.0158	0.0000	178.7482	178.7482	7.5400e-003	0.0000	178.9368

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3.2 Demolition - 2031

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5800e-003	8.6000e-004	0.0119	5.0000e-005	7.4100e-003	4.0000e-005	7.4400e-003	1.9700e-003	3.0000e-005	2.0000e-003	0.0000	4.6854	4.6854	7.0000e-005	0.0000	4.6871
Total	1.5800e-003	8.6000e-004	0.0119	5.0000e-005	7.4100e-003	4.0000e-005	7.4400e-003	1.9700e-003	3.0000e-005	2.0000e-003	0.0000	4.6854	4.6854	7.0000e-005	0.0000	4.6871

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0934	0.4400	0.8513	2.0800e-003		0.0158	0.0158		0.0158	0.0158	0.0000	178.7480	178.7480	7.5400e-003	0.0000	178.9365
Total	0.0934	0.4400	0.8513	2.0800e-003		0.0158	0.0158		0.0158	0.0158	0.0000	178.7480	178.7480	7.5400e-003	0.0000	178.9365

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3.2 Demolition - 2031

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5800e-003	8.6000e-004	0.0119	5.0000e-005	7.4100e-003	4.0000e-005	7.4400e-003	1.9700e-003	3.0000e-005	2.0000e-003	0.0000	4.6854	4.6854	7.0000e-005	0.0000	4.6871
Total	1.5800e-003	8.6000e-004	0.0119	5.0000e-005	7.4100e-003	4.0000e-005	7.4400e-003	1.9700e-003	3.0000e-005	2.0000e-003	0.0000	4.6854	4.6854	7.0000e-005	0.0000	4.6871

3.3 Site Preparation - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.8285	0.0000	0.8285	0.4486	0.0000	0.4486	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1098	0.6151	0.7331	2.1000e-003		0.0197	0.0197		0.0197	0.0197	0.0000	180.0208	180.0208	8.8800e-003	0.0000	180.2428
Total	0.1098	0.6151	0.7331	2.1000e-003	0.8285	0.0197	0.8481	0.4486	0.0197	0.4682	0.0000	180.0208	180.0208	8.8800e-003	0.0000	180.2428

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3.3 Site Preparation - 2031

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-003	1.0300e-003	0.0143	6.0000e-005	8.8900e-003	4.0000e-005	8.9300e-003	2.3600e-003	4.0000e-005	2.4000e-003	0.0000	5.6225	5.6225	8.0000e-005	0.0000	5.6246
Total	1.9000e-003	1.0300e-003	0.0143	6.0000e-005	8.8900e-003	4.0000e-005	8.9300e-003	2.3600e-003	4.0000e-005	2.4000e-003	0.0000	5.6225	5.6225	8.0000e-005	0.0000	5.6246

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.8285	0.0000	0.8285	0.4486	0.0000	0.4486	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1098	0.6151	0.7331	2.1000e-003		0.0197	0.0197		0.0197	0.0197	0.0000	180.0205	180.0205	8.8800e-003	0.0000	180.2426
Total	0.1098	0.6151	0.7331	2.1000e-003	0.8285	0.0197	0.8481	0.4486	0.0197	0.4682	0.0000	180.0205	180.0205	8.8800e-003	0.0000	180.2426

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3.3 Site Preparation - 2031

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9000e-003	1.0300e-003	0.0143	6.0000e-005	8.8900e-003	4.0000e-005	8.9300e-003	2.3600e-003	4.0000e-005	2.4000e-003	0.0000	5.6225	5.6225	8.0000e-005	0.0000	5.6246
Total	1.9000e-003	1.0300e-003	0.0143	6.0000e-005	8.8900e-003	4.0000e-005	8.9300e-003	2.3600e-003	4.0000e-005	2.4000e-003	0.0000	5.6225	5.6225	8.0000e-005	0.0000	5.6246

3.4 Grading - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2202	0.0000	0.2202	0.1142	0.0000	0.1142	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1115	0.4708	0.7828	2.3800e-003		0.0166	0.0166		0.0166	0.0166	0.0000	222.4832	222.4832	8.9900e-003	0.0000	222.7079
Total	0.1115	0.4708	0.7828	2.3800e-003	0.2202	0.0166	0.2368	0.1142	0.0166	0.1308	0.0000	222.4832	222.4832	8.9900e-003	0.0000	222.7079

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3.4 Grading - 2031

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5900e-003	8.7000e-004	0.0120	5.0000e-005	7.4600e-003	4.0000e-005	7.5000e-003	1.9800e-003	3.0000e-005	2.0100e-003	0.0000	4.7201	4.7201	7.0000e-005	0.0000	4.7219
Total	1.5900e-003	8.7000e-004	0.0120	5.0000e-005	7.4600e-003	4.0000e-005	7.5000e-003	1.9800e-003	3.0000e-005	2.0100e-003	0.0000	4.7201	4.7201	7.0000e-005	0.0000	4.7219

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2202	0.0000	0.2202	0.1142	0.0000	0.1142	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1115	0.4708	0.7828	2.3800e-003		0.0166	0.0166		0.0166	0.0166	0.0000	222.4829	222.4829	8.9900e-003	0.0000	222.7077
Total	0.1115	0.4708	0.7828	2.3800e-003	0.2202	0.0166	0.2368	0.1142	0.0166	0.1308	0.0000	222.4829	222.4829	8.9900e-003	0.0000	222.7077

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3.4 Grading - 2031

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5900e-003	8.7000e-004	0.0120	5.0000e-005	7.4600e-003	4.0000e-005	7.5000e-003	1.9800e-003	3.0000e-005	2.0100e-003	0.0000	4.7201	4.7201	7.0000e-005	0.0000	4.7219
Total	1.5900e-003	8.7000e-004	0.0120	5.0000e-005	7.4600e-003	4.0000e-005	7.5000e-003	1.9800e-003	3.0000e-005	2.0100e-003	0.0000	4.7201	4.7201	7.0000e-005	0.0000	4.7219

3.4 Grading - 2032

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0817	0.0000	0.0817	0.0381	0.0000	0.0381	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0361	0.1523	0.2533	7.7000e-004		5.3700e-003	5.3700e-003		5.3700e-003	5.3700e-003	0.0000	71.9798	71.9798	2.9100e-003	0.0000	72.0526
Total	0.0361	0.1523	0.2533	7.7000e-004	0.0817	5.3700e-003	0.0871	0.0381	5.3700e-003	0.0435	0.0000	71.9798	71.9798	2.9100e-003	0.0000	72.0526

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3.4 Grading - 2032

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.8000e-004	2.6000e-004	3.6400e-003	2.0000e-005	2.4100e-003	1.0000e-005	2.4200e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	1.4964	1.4964	2.0000e-005	0.0000	1.4969
Total	4.8000e-004	2.6000e-004	3.6400e-003	2.0000e-005	2.4100e-003	1.0000e-005	2.4200e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	1.4964	1.4964	2.0000e-005	0.0000	1.4969

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0817	0.0000	0.0817	0.0381	0.0000	0.0381	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0361	0.1523	0.2533	7.7000e-004		5.3700e-003	5.3700e-003		5.3700e-003	5.3700e-003	0.0000	71.9798	71.9798	2.9100e-003	0.0000	72.0525
Total	0.0361	0.1523	0.2533	7.7000e-004	0.0817	5.3700e-003	0.0871	0.0381	5.3700e-003	0.0435	0.0000	71.9798	71.9798	2.9100e-003	0.0000	72.0525

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3.4 Grading - 2032

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.8000e-004	2.6000e-004	3.6400e-003	2.0000e-005	2.4100e-003	1.0000e-005	2.4200e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	1.4964	1.4964	2.0000e-005	0.0000	1.4969
Total	4.8000e-004	2.6000e-004	3.6400e-003	2.0000e-005	2.4100e-003	1.0000e-005	2.4200e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	1.4964	1.4964	2.0000e-005	0.0000	1.4969

3.5 Building Construction - 2032

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1571	0.9522	1.9388	3.7100e-003		0.0178	0.0178		0.0178	0.0178	0.0000	315.4332	315.4332	0.0127	0.0000	315.7496
Total	0.1571	0.9522	1.9388	3.7100e-003		0.0178	0.0178		0.0178	0.0178	0.0000	315.4332	315.4332	0.0127	0.0000	315.7496

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3.5 Building Construction - 2032

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0702	2.6529	0.7446	9.4400e-003	0.2579	2.8200e-003	0.2607	0.0744	2.7000e-003	0.0771	0.0000	922.3264	922.3264	0.0483	0.0000	923.5344
Worker	0.3032	0.1632	2.3118	0.0105	1.5325	6.7600e-003	1.5392	0.4070	6.2100e-003	0.4132	0.0000	950.0702	950.0702	0.0134	0.0000	950.4042
Total	0.3735	2.8160	3.0563	0.0199	1.7904	9.5800e-003	1.7999	0.4814	8.9100e-003	0.4903	0.0000	1,872.3967	1,872.3967	0.0617	0.0000	1,873.9385

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1571	0.9522	1.9388	3.7100e-003		0.0178	0.0178		0.0178	0.0178	0.0000	315.4329	315.4329	0.0127	0.0000	315.7492
Total	0.1571	0.9522	1.9388	3.7100e-003		0.0178	0.0178		0.0178	0.0178	0.0000	315.4329	315.4329	0.0127	0.0000	315.7492

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3.5 Building Construction - 2032

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0702	2.6529	0.7446	9.4400e-003	0.2579	2.8200e-003	0.2607	0.0744	2.7000e-003	0.0771	0.0000	922.3264	922.3264	0.0483	0.0000	923.5344
Worker	0.3032	0.1632	2.3118	0.0105	1.5325	6.7600e-003	1.5392	0.4070	6.2100e-003	0.4132	0.0000	950.0702	950.0702	0.0134	0.0000	950.4042
Total	0.3735	2.8160	3.0563	0.0199	1.7904	9.5800e-003	1.7999	0.4814	8.9100e-003	0.4903	0.0000	1,872.3967	1,872.3967	0.0617	0.0000	1,873.9385

3.5 Building Construction - 2033

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1702	1.0315	2.1004	4.0200e-003		0.0193	0.0193		0.0193	0.0193	0.0000	341.7193	341.7193	0.0137	0.0000	342.0621
Total	0.1702	1.0315	2.1004	4.0200e-003		0.0193	0.0193		0.0193	0.0193	0.0000	341.7193	341.7193	0.0137	0.0000	342.0621

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3.5 Building Construction - 2033

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0756	2.8563	0.8041	0.0102	0.2794	3.0200e-003	0.2824	0.0806	2.8900e-003	0.0835	0.0000	997.4803	997.4803	0.0519	0.0000	998.7787
Worker	0.3067	0.1632	2.3689	0.0112	1.6602	6.8400e-003	1.6670	0.4409	6.2900e-003	0.4472	0.0000	1,010.8059	1,010.8059	0.0133	0.0000	1,011.1394
Total	0.3823	3.0195	3.1730	0.0214	1.9396	9.8600e-003	1.9494	0.5215	9.1800e-003	0.5307	0.0000	2,008.2861	2,008.2861	0.0653	0.0000	2,009.9181

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1702	1.0315	2.1004	4.0200e-003		0.0193	0.0193		0.0193	0.0193	0.0000	341.7189	341.7189	0.0137	0.0000	342.0617
Total	0.1702	1.0315	2.1004	4.0200e-003		0.0193	0.0193		0.0193	0.0193	0.0000	341.7189	341.7189	0.0137	0.0000	342.0617

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3.5 Building Construction - 2033

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0756	2.8563	0.8041	0.0102	0.2794	3.0200e-003	0.2824	0.0806	2.8900e-003	0.0835	0.0000	997.4803	997.4803	0.0519	0.0000	998.7787
Worker	0.3067	0.1632	2.3689	0.0112	1.6602	6.8400e-003	1.6670	0.4409	6.2900e-003	0.4472	0.0000	1,010.8059	1,010.8059	0.0133	0.0000	1,011.1394
Total	0.3823	3.0195	3.1730	0.0214	1.9396	9.8600e-003	1.9494	0.5215	9.1800e-003	0.5307	0.0000	2,008.2861	2,008.2861	0.0653	0.0000	2,009.9181

3.5 Building Construction - 2034

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0655	0.3967	0.8079	1.5500e-003		7.4100e-003	7.4100e-003		7.4100e-003	7.4100e-003	0.0000	131.4305	131.4305	5.2700e-003	0.0000	131.5623
Total	0.0655	0.3967	0.8079	1.5500e-003		7.4100e-003	7.4100e-003		7.4100e-003	7.4100e-003	0.0000	131.4305	131.4305	5.2700e-003	0.0000	131.5623

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3.5 Building Construction - 2034

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0289	1.0925	0.3082	3.9200e-003	0.1075	1.1500e-003	0.1086	0.0310	1.1000e-003	0.0321	0.0000	383.1398	383.1398	0.0198	0.0000	383.6359
Worker	0.1109	0.0584	0.8608	4.2200e-003	0.6385	2.4600e-003	0.6410	0.1696	2.2600e-003	0.1718	0.0000	382.5616	382.5616	4.7200e-003	0.0000	382.6795
Total	0.1398	1.1509	1.1690	8.1400e-003	0.7460	3.6100e-003	0.7496	0.2006	3.3600e-003	0.2039	0.0000	765.7014	765.7014	0.0246	0.0000	766.3154

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0655	0.3967	0.8079	1.5500e-003		7.4100e-003	7.4100e-003		7.4100e-003	7.4100e-003	0.0000	131.4304	131.4304	5.2700e-003	0.0000	131.5622
Total	0.0655	0.3967	0.8079	1.5500e-003		7.4100e-003	7.4100e-003		7.4100e-003	7.4100e-003	0.0000	131.4304	131.4304	5.2700e-003	0.0000	131.5622

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3.5 Building Construction - 2034

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0289	1.0925	0.3082	3.9200e-003	0.1075	1.1500e-003	0.1086	0.0310	1.1000e-003	0.0321	0.0000	383.1398	383.1398	0.0198	0.0000	383.6359
Worker	0.1109	0.0584	0.8608	4.2200e-003	0.6385	2.4600e-003	0.6410	0.1696	2.2600e-003	0.1718	0.0000	382.5616	382.5616	4.7200e-003	0.0000	382.6795
Total	0.1398	1.1509	1.1690	8.1400e-003	0.7460	3.6100e-003	0.7496	0.2006	3.3600e-003	0.2039	0.0000	765.7014	765.7014	0.0246	0.0000	766.3154

3.6 Paving - 2034

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0415	0.2136	0.4755	8.4000e-004		9.9200e-003	9.9200e-003		9.9200e-003	9.9200e-003	0.0000	72.2985	72.2985	3.3900e-003	0.0000	72.3833
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0415	0.2136	0.4755	8.4000e-004		9.9200e-003	9.9200e-003		9.9200e-003	9.9200e-003	0.0000	72.2985	72.2985	3.3900e-003	0.0000	72.3833

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3.6 Paving - 2034

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.6000e-004	4.5000e-004	6.6600e-003	3.0000e-005	4.9400e-003	2.0000e-005	4.9600e-003	1.3100e-003	2.0000e-005	1.3300e-003	0.0000	2.9580	2.9580	4.0000e-005	0.0000	2.9589
Total	8.6000e-004	4.5000e-004	6.6600e-003	3.0000e-005	4.9400e-003	2.0000e-005	4.9600e-003	1.3100e-003	2.0000e-005	1.3300e-003	0.0000	2.9580	2.9580	4.0000e-005	0.0000	2.9589

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0415	0.2136	0.4755	8.4000e-004		9.9200e-003	9.9200e-003		9.9200e-003	9.9200e-003	0.0000	72.2985	72.2985	3.3900e-003	0.0000	72.3832
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0415	0.2136	0.4755	8.4000e-004		9.9200e-003	9.9200e-003		9.9200e-003	9.9200e-003	0.0000	72.2985	72.2985	3.3900e-003	0.0000	72.3832

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3.6 Paving - 2034

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.6000e-004	4.5000e-004	6.6600e-003	3.0000e-005	4.9400e-003	2.0000e-005	4.9600e-003	1.3100e-003	2.0000e-005	1.3300e-003	0.0000	2.9580	2.9580	4.0000e-005	0.0000	2.9589
Total	8.6000e-004	4.5000e-004	6.6600e-003	3.0000e-005	4.9400e-003	2.0000e-005	4.9600e-003	1.3100e-003	2.0000e-005	1.3300e-003	0.0000	2.9580	2.9580	4.0000e-005	0.0000	2.9589

3.7 Architectural Coating - 2034

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	9.7181					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.5400e-003	0.0428	0.0899	1.5000e-004		1.0200e-003	1.0200e-003		1.0200e-003	1.0200e-003	0.0000	12.7663	12.7663	5.2000e-004	0.0000	12.7792
Total	9.7247	0.0428	0.0899	1.5000e-004		1.0200e-003	1.0200e-003		1.0200e-003	1.0200e-003	0.0000	12.7663	12.7663	5.2000e-004	0.0000	12.7792

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

3.7 Architectural Coating - 2034

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0222	0.0117	0.1723	8.5000e-004	0.1278	4.9000e-004	0.1283	0.0339	4.5000e-004	0.0344	0.0000	76.5780	76.5780	9.4000e-004	0.0000	76.6017
Total	0.0222	0.0117	0.1723	8.5000e-004	0.1278	4.9000e-004	0.1283	0.0339	4.5000e-004	0.0344	0.0000	76.5780	76.5780	9.4000e-004	0.0000	76.6017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	9.7181					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.5400e-003	0.0428	0.0899	1.5000e-004		1.0200e-003	1.0200e-003		1.0200e-003	1.0200e-003	0.0000	12.7663	12.7663	5.2000e-004	0.0000	12.7792
Total	9.7247	0.0428	0.0899	1.5000e-004		1.0200e-003	1.0200e-003		1.0200e-003	1.0200e-003	0.0000	12.7663	12.7663	5.2000e-004	0.0000	12.7792

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

3.7 Architectural Coating - 2034

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0222	0.0117	0.1723	8.5000e-004	0.1278	4.9000e-004	0.1283	0.0339	4.5000e-004	0.0344	0.0000	76.5780	76.5780	9.4000e-004	0.0000	76.6017
Total	0.0222	0.0117	0.1723	8.5000e-004	0.1278	4.9000e-004	0.1283	0.0339	4.5000e-004	0.0344	0.0000	76.5780	76.5780	9.4000e-004	0.0000	76.6017

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Campus Construction Summer 2035

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

CSUDH Campus Master Plan EIR
South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Day-Care Center	74.00	Student	1.00	17,970.00	0
University/College (4Yr)	6,713.00	Student	11.80	1,639,960.00	0
Apartments Mid Rise	650.00	Dwelling Unit	16.40	650,000.00	1528

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2035
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - *

Grading - *

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	35.00	100.00
tblConstructionPhase	NumDays	440.00	600.00
tblConstructionPhase	NumDays	30.00	90.00
tblConstructionPhase	NumDays	45.00	90.00
tblConstructionPhase	NumDays	35.00	60.00
tblConstructionPhase	NumDays	20.00	90.00
tblGrading	AcresOfGrading	225.00	29.20
tblGrading	AcresOfGrading	0.00	29.20
tblLandUse	LandUseSquareFeet	4,182.69	17,970.00
tblLandUse	LandUseSquareFeet	1,233,832.41	1,639,960.00
tblLandUse	LotAcreage	0.10	1.00
tblLandUse	LotAcreage	28.32	11.80
tblLandUse	LotAcreage	17.11	16.40
tblLandUse	Population	1,859.00	1,528.00

2.0 Emissions Summary

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2031	3.3273	13.8688	23.4069	0.0716	18.6115	0.4890	19.0491	10.0212	0.4889	10.4587	0.0000	7,373.844 2	7,373.844 2	0.2940	0.0000	7,381.192 9
2032	4.3995	31.0567	43.0734	0.2023	15.1929	0.4889	15.4206	4.0787	0.4888	4.3009	0.0000	20,631.47 04	20,631.47 04	0.6800	0.0000	20,648.47 09
2033	4.2273	30.8332	41.9430	0.2005	15.1929	0.2238	15.4167	4.0787	0.2186	4.2973	0.0000	20,453.78 03	20,453.78 03	0.6667	0.0000	20,470.44 74
2034	194.9346	30.6376	40.8486	0.1990	15.1929	0.3313	15.4129	4.0787	0.3312	4.2938	0.0000	20,299.84 35	20,299.84 35	0.6543	0.0000	20,316.20 09
Maximum	194.9346	31.0567	43.0734	0.2023	18.6115	0.4890	19.0491	10.0212	0.4889	10.4587	0.0000	20,631.47 04	20,631.47 04	0.6800	0.0000	20,648.47 09

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/20/2031	5/25/2031	5	90	
2	Site Preparation	Site Preparation	5/26/2031	9/26/2031	5	90	
3	Grading	Grading	9/29/2031	2/1/2032	5	90	
4	Building Construction	Building Construction	2/2/2032	5/21/2034	5	600	
5	Paving	Paving	5/22/2034	8/13/2034	5	60	
6	Architectural Coating	Architectural Coating	8/14/2034	12/31/2034	5	100	

Acres of Grading (Site Preparation Phase): 29.2

Acres of Grading (Grading Phase): 29.2

Acres of Paving: 0

Residential Indoor: 1,316,250; Residential Outdoor: 438,750; Non-Residential Indoor: 2,486,895; Non-Residential Outdoor: 828,965; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	233.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1,164.00	341.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0746	9.7770	18.9168	0.0462		0.3511	0.3511		0.3511	0.3511		4,378.5819	4,378.5819	0.1847		4,383.2000
Total	2.0746	9.7770	18.9168	0.0462		0.3511	0.3511		0.3511	0.3511		4,378.5819	4,378.5819	0.1847		4,383.2000

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.2 Demolition - 2031

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0350	0.0170	0.2873	1.2100e-003	0.1677	7.8000e-004	0.1684	0.0445	7.2000e-004	0.0452		120.5517	120.5517	1.8300e-003		120.5974
Total	0.0350	0.0170	0.2873	1.2100e-003	0.1677	7.8000e-004	0.1684	0.0445	7.2000e-004	0.0452		120.5517	120.5517	1.8300e-003		120.5974

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0746	9.7770	18.9168	0.0462		0.3511	0.3511		0.3511	0.3511	0.0000	4,378.5819	4,378.5819	0.1847		4,383.2000
Total	2.0746	9.7770	18.9168	0.0462		0.3511	0.3511		0.3511	0.3511	0.0000	4,378.5819	4,378.5819	0.1847		4,383.2000

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.2 Demolition - 2031

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0350	0.0170	0.2873	1.2100e-003	0.1677	7.8000e-004	0.1684	0.0445	7.2000e-004	0.0452		120.5517	120.5517	1.8300e-003		120.5974
Total	0.0350	0.0170	0.2873	1.2100e-003	0.1677	7.8000e-004	0.1684	0.0445	7.2000e-004	0.0452		120.5517	120.5517	1.8300e-003		120.5974

3.3 Site Preparation - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.4103	0.0000	18.4103	9.9678	0.0000	9.9678			0.0000			0.0000
Off-Road	2.4399	13.6680	16.2918	0.0466		0.4367	0.4367		0.4367	0.4367		4,409.7537	4,409.7537	0.2176		4,415.1936
Total	2.4399	13.6680	16.2918	0.0466	18.4103	0.4367	18.8470	9.9678	0.4367	10.4045		4,409.7537	4,409.7537	0.2176		4,415.1936

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.3 Site Preparation - 2031

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0420	0.0203	0.3447	1.4500e-003	0.2012	9.3000e-004	0.2021	0.0534	8.6000e-004	0.0542		144.6621	144.6621	2.1900e-003		144.7169
Total	0.0420	0.0203	0.3447	1.4500e-003	0.2012	9.3000e-004	0.2021	0.0534	8.6000e-004	0.0542		144.6621	144.6621	2.1900e-003		144.7169

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.4103	0.0000	18.4103	9.9678	0.0000	9.9678			0.0000			0.0000
Off-Road	2.4399	13.6680	16.2918	0.0466		0.4367	0.4367		0.4367	0.4367	0.0000	4,409.7537	4,409.7537	0.2176		4,415.1936
Total	2.4399	13.6680	16.2918	0.0466	18.4103	0.4367	18.8470	9.9678	0.4367	10.4045	0.0000	4,409.7537	4,409.7537	0.2176		4,415.1936

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.3 Site Preparation - 2031

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0420	0.0203	0.3447	1.4500e-003	0.2012	9.3000e-004	0.2021	0.0534	8.6000e-004	0.0542		144.6621	144.6621	2.1900e-003		144.7169
Total	0.0420	0.0203	0.3447	1.4500e-003	0.2012	9.3000e-004	0.2021	0.0534	8.6000e-004	0.0542		144.6621	144.6621	2.1900e-003		144.7169

3.4 Grading - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.3662	0.0000	6.3662	3.3474	0.0000	3.3474			0.0000			0.0000
Off-Road	3.2807	13.8462	23.0239	0.0699		0.4879	0.4879		0.4879	0.4879		7,213.1086	7,213.1086	0.2915		7,220.3963
Total	3.2807	13.8462	23.0239	0.0699	6.3662	0.4879	6.8541	3.3474	0.4879	3.8353		7,213.1086	7,213.1086	0.2915		7,220.3963

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.4 Grading - 2031

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0466	0.0226	0.3830	1.6100e-003	0.2236	1.0400e-003	0.2246	0.0593	9.5000e-004	0.0602		160.7356	160.7356	2.4400e-003		160.7966
Total	0.0466	0.0226	0.3830	1.6100e-003	0.2236	1.0400e-003	0.2246	0.0593	9.5000e-004	0.0602		160.7356	160.7356	2.4400e-003		160.7966

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.3662	0.0000	6.3662	3.3474	0.0000	3.3474			0.0000			0.0000
Off-Road	3.2807	13.8462	23.0239	0.0699		0.4879	0.4879		0.4879	0.4879	0.0000	7,213.1086	7,213.1086	0.2915		7,220.3963
Total	3.2807	13.8462	23.0239	0.0699	6.3662	0.4879	6.8541	3.3474	0.4879	3.8353	0.0000	7,213.1086	7,213.1086	0.2915		7,220.3963

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.4 Grading - 2031

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0466	0.0226	0.3830	1.6100e-003	0.2236	1.0400e-003	0.2246	0.0593	9.5000e-004	0.0602		160.7356	160.7356	2.4400e-003		160.7966
Total	0.0466	0.0226	0.3830	1.6100e-003	0.2236	1.0400e-003	0.2246	0.0593	9.5000e-004	0.0602		160.7356	160.7356	2.4400e-003		160.7966

3.4 Grading - 2032

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.3662	0.0000	6.3662	3.3474	0.0000	3.3474			0.0000			0.0000
Off-Road	3.2807	13.8462	23.0239	0.0699		0.4879	0.4879		0.4879	0.4879		7,213.1086	7,213.1086	0.2915		7,220.3963
Total	3.2807	13.8462	23.0239	0.0699	6.3662	0.4879	6.8541	3.3474	0.4879	3.8353		7,213.1086	7,213.1086	0.2915		7,220.3963

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.4 Grading - 2032

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0433	0.0207	0.3607	1.5800e-003	0.2236	9.7000e-004	0.2245	0.0593	8.9000e-004	0.0602		157.5233	157.5233	2.2400e-003		157.5792
Total	0.0433	0.0207	0.3607	1.5800e-003	0.2236	9.7000e-004	0.2245	0.0593	8.9000e-004	0.0602		157.5233	157.5233	2.2400e-003		157.5792

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.3662	0.0000	6.3662	3.3474	0.0000	3.3474			0.0000			0.0000
Off-Road	3.2807	13.8462	23.0239	0.0699		0.4879	0.4879		0.4879	0.4879	0.0000	7,213.1086	7,213.1086	0.2915		7,220.3963
Total	3.2807	13.8462	23.0239	0.0699	6.3662	0.4879	6.8541	3.3474	0.4879	3.8353	0.0000	7,213.1086	7,213.1086	0.2915		7,220.3963

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.4 Grading - 2032

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0433	0.0207	0.3607	1.5800e-003	0.2236	9.7000e-004	0.2245	0.0593	8.9000e-004	0.0602		157.5233	157.5233	2.2400e-003		157.5792
Total	0.0433	0.0207	0.3607	1.5800e-003	0.2236	9.7000e-004	0.2245	0.0593	8.9000e-004	0.0602		157.5233	157.5233	2.2400e-003		157.5792

3.5 Building Construction - 2032

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529
Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.5 Building Construction - 2032

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5728	21.9156	5.9211	0.0795	2.1821	0.0233	2.2054	0.6282	0.0223	0.6505		8,566.0695	8,566.0695	0.4337		8,576.9114
Worker	2.5176	1.2064	20.9953	0.0918	13.0108	0.0563	13.0671	3.4505	0.0518	3.5023		9,167.8542	9,167.8542	0.1301		9,171.1067
Total	3.0904	23.1221	26.9164	0.1714	15.1929	0.0796	15.2725	4.0787	0.0741	4.1528		17,733.9236	17,733.9236	0.5638		17,748.0181

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529
Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.5 Building Construction - 2032

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5728	21.9156	5.9211	0.0795	2.1821	0.0233	2.2054	0.6282	0.0223	0.6505		8,566.0695	8,566.0695	0.4337		8,576.9114
Worker	2.5176	1.2064	20.9953	0.0918	13.0108	0.0563	13.0671	3.4505	0.0518	3.5023		9,167.8542	9,167.8542	0.1301		9,171.1067
Total	3.0904	23.1221	26.9164	0.1714	15.1929	0.0796	15.2725	4.0787	0.0741	4.1528		17,733.9236	17,733.9236	0.5638		17,748.0181

3.5 Building Construction - 2033

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529
Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.5 Building Construction - 2033

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5690	21.7842	5.9024	0.0794	2.1821	0.0230	2.2052	0.6282	0.0220	0.6502		8,551.5794	8,551.5794	0.4304		8,562.3398
Worker	2.3492	1.1144	19.8836	0.0902	13.0108	0.0526	13.0634	3.4505	0.0484	3.4989		9,004.6541	9,004.6541	0.1200		9,007.6548
Total	2.9182	22.8986	25.7860	0.1696	15.1929	0.0757	15.2686	4.0787	0.0704	4.1491		17,556.2335	17,556.2335	0.5505		17,569.9946

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529
Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.5 Building Construction - 2033

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5690	21.7842	5.9024	0.0794	2.1821	0.0230	2.2052	0.6282	0.0220	0.6502		8,551.5794	8,551.5794	0.4304		8,562.3398
Worker	2.3492	1.1144	19.8836	0.0902	13.0108	0.0526	13.0634	3.4505	0.0484	3.4989		9,004.6541	9,004.6541	0.1200		9,007.6548
Total	2.9182	22.8986	25.7860	0.1696	15.1929	0.0757	15.2686	4.0787	0.0704	4.1491		17,556.2335	17,556.2335	0.5505		17,569.9946

3.5 Building Construction - 2034

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529
Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.5 Building Construction - 2034

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5656	21.6657	5.8821	0.0793	2.1821	0.0228	2.2049	0.6282	0.0218	0.6500		8,540.500 2	8,540.500 2	0.4276		8,551.190 8
Worker	2.2063	1.0372	18.8095	0.0887	13.0108	0.0491	13.0599	3.4505	0.0452	3.4957		8,861.796 6	8,861.796 6	0.1104		8,864.557 3
Total	2.7719	22.7029	24.6916	0.1680	15.1929	0.0719	15.2648	4.0787	0.0669	4.1457		17,402.29 68	17,402.29 68	0.5381		17,415.74 81

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.546 8	2,897.546 8	0.1162		2,900.452 9
Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.546 8	2,897.546 8	0.1162		2,900.452 9

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.5 Building Construction - 2034

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5656	21.6657	5.8821	0.0793	2.1821	0.0228	2.2049	0.6282	0.0218	0.6500		8,540.500 2	8,540.500 2	0.4276		8,551.190 8
Worker	2.2063	1.0372	18.8095	0.0887	13.0108	0.0491	13.0599	3.4505	0.0452	3.4957		8,861.796 6	8,861.796 6	0.1104		8,864.557 3
Total	2.7719	22.7029	24.6916	0.1680	15.1929	0.0719	15.2648	4.0787	0.0669	4.1457		17,402.29 68	17,402.29 68	0.5381		17,415.74 81

3.6 Paving - 2034

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3845	7.1202	15.8495	0.0281		0.3306	0.3306		0.3306	0.3306		2,656.516 8	2,656.516 8	0.1245		2,659.630 2
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3845	7.1202	15.8495	0.0281		0.3306	0.3306		0.3306	0.3306		2,656.516 8	2,656.516 8	0.1245		2,659.630 2

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.6 Paving - 2034

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0284	0.0134	0.2424	1.1400e-003	0.1677	6.3000e-004	0.1683	0.0445	5.8000e-004	0.0451		114.1984	114.1984	1.4200e-003		114.2340
Total	0.0284	0.0134	0.2424	1.1400e-003	0.1677	6.3000e-004	0.1683	0.0445	5.8000e-004	0.0451		114.1984	114.1984	1.4200e-003		114.2340

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3845	7.1202	15.8495	0.0281		0.3306	0.3306		0.3306	0.3306	0.0000	2,656.5168	2,656.5168	0.1245		2,659.6302
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3845	7.1202	15.8495	0.0281		0.3306	0.3306		0.3306	0.3306	0.0000	2,656.5168	2,656.5168	0.1245		2,659.6302

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.6 Paving - 2034

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0284	0.0134	0.2424	1.1400e-003	0.1677	6.3000e-004	0.1683	0.0445	5.8000e-004	0.0451		114.1984	114.1984	1.4200e-003		114.2340
Total	0.0284	0.0134	0.2424	1.1400e-003	0.1677	6.3000e-004	0.1683	0.0445	5.8000e-004	0.0451		114.1984	114.1984	1.4200e-003		114.2340

3.7 Architectural Coating - 2034

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	194.3622					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1308	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203		281.4481	281.4481	0.0114		281.7328
Total	194.4930	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203		281.4481	281.4481	0.0114		281.7328

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.7 Architectural Coating - 2034

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4416	0.2076	3.7651	0.0178	2.6044	9.8300e-003	2.6142	0.6907	9.0400e-003	0.6997		1,773.8820	1,773.8820	0.0221		1,774.4346
Total	0.4416	0.2076	3.7651	0.0178	2.6044	9.8300e-003	2.6142	0.6907	9.0400e-003	0.6997		1,773.8820	1,773.8820	0.0221		1,774.4346

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	194.3622					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1308	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203	0.0000	281.4481	281.4481	0.0114		281.7328
Total	194.4930	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203	0.0000	281.4481	281.4481	0.0114		281.7328

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.7 Architectural Coating - 2034

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4416	0.2076	3.7651	0.0178	2.6044	9.8300e-003	2.6142	0.6907	9.0400e-003	0.6997		1,773.8820	1,773.8820	0.0221		1,774.4346
Total	0.4416	0.2076	3.7651	0.0178	2.6044	9.8300e-003	2.6142	0.6907	9.0400e-003	0.6997		1,773.8820	1,773.8820	0.0221		1,774.4346

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Campus Construction Winter 2035

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

CSUDH Campus Master Plan EIR
South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Day-Care Center	74.00	Student	1.00	17,970.00	0
University/College (4Yr)	6,713.00	Student	11.80	1,639,960.00	0
Apartments Mid Rise	650.00	Dwelling Unit	16.40	650,000.00	1528

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2035
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - *

Grading - *

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	35.00	100.00
tblConstructionPhase	NumDays	440.00	600.00
tblConstructionPhase	NumDays	30.00	90.00
tblConstructionPhase	NumDays	45.00	90.00
tblConstructionPhase	NumDays	35.00	60.00
tblConstructionPhase	NumDays	20.00	90.00
tblGrading	AcresOfGrading	225.00	29.20
tblGrading	AcresOfGrading	0.00	29.20
tblLandUse	LandUseSquareFeet	4,182.69	17,970.00
tblLandUse	LandUseSquareFeet	1,233,832.41	1,639,960.00
tblLandUse	LotAcreage	0.10	1.00
tblLandUse	LotAcreage	28.32	11.80
tblLandUse	LotAcreage	17.11	16.40
tblLandUse	Population	1,859.00	1,528.00

2.0 Emissions Summary

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2031	3.3333	13.8709	23.3657	0.0715	18.6115	0.4890	19.0491	10.0212	0.4889	10.4587	0.0000	7,363.7545	7,363.7545	0.2938	0.0000	7,371.0988
2032	4.7570	31.0527	41.3230	0.1945	15.1929	0.4889	15.4211	4.0787	0.4888	4.3014	0.0000	19,831.8384	19,831.8384	0.6933	0.0000	19,849.1709
2033	4.5664	30.8185	40.2854	0.1928	15.1929	0.2242	15.4171	4.0787	0.2190	4.2977	0.0000	19,663.3760	19,663.3760	0.6802	0.0000	19,680.3808
2034	194.9939	30.6136	39.2825	0.1913	15.1929	0.3313	15.4133	4.0787	0.3312	4.2942	0.0000	19,517.2184	19,517.2184	0.6681	0.0000	19,533.9202
Maximum	194.9939	31.0527	41.3230	0.1945	18.6115	0.4890	19.0491	10.0212	0.4889	10.4587	0.0000	19,831.8384	19,831.8384	0.6933	0.0000	19,849.1709

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/20/2031	5/25/2031	5	90	
2	Site Preparation	Site Preparation	5/26/2031	9/26/2031	5	90	
3	Grading	Grading	9/29/2031	2/1/2032	5	90	
4	Building Construction	Building Construction	2/2/2032	5/21/2034	5	600	
5	Paving	Paving	5/22/2034	8/13/2034	5	60	
6	Architectural Coating	Architectural Coating	8/14/2034	12/31/2034	5	100	

Acres of Grading (Site Preparation Phase): 29.2

Acres of Grading (Grading Phase): 29.2

Acres of Paving: 0

Residential Indoor: 1,316,250; Residential Outdoor: 438,750; Non-Residential Indoor: 2,486,895; Non-Residential Outdoor: 828,965; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	233.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	1,164.00	341.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0746	9.7770	18.9168	0.0462		0.3511	0.3511		0.3511	0.3511		4,378.5819	4,378.5819	0.1847		4,383.2000
Total	2.0746	9.7770	18.9168	0.0462		0.3511	0.3511		0.3511	0.3511		4,378.5819	4,378.5819	0.1847		4,383.2000

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.2 Demolition - 2031

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0395	0.0185	0.2563	1.1300e-003	0.1677	7.8000e-004	0.1684	0.0445	7.2000e-004	0.0452		112.9844	112.9844	1.7000e-003		113.0268
Total	0.0395	0.0185	0.2563	1.1300e-003	0.1677	7.8000e-004	0.1684	0.0445	7.2000e-004	0.0452		112.9844	112.9844	1.7000e-003		113.0268

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0746	9.7770	18.9168	0.0462		0.3511	0.3511		0.3511	0.3511	0.0000	4,378.5819	4,378.5819	0.1847		4,383.2000
Total	2.0746	9.7770	18.9168	0.0462		0.3511	0.3511		0.3511	0.3511	0.0000	4,378.5819	4,378.5819	0.1847		4,383.2000

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.2 Demolition - 2031

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0395	0.0185	0.2563	1.1300e-003	0.1677	7.8000e-004	0.1684	0.0445	7.2000e-004	0.0452		112.9844	112.9844	1.7000e-003		113.0268
Total	0.0395	0.0185	0.2563	1.1300e-003	0.1677	7.8000e-004	0.1684	0.0445	7.2000e-004	0.0452		112.9844	112.9844	1.7000e-003		113.0268

3.3 Site Preparation - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.4103	0.0000	18.4103	9.9678	0.0000	9.9678			0.0000			0.0000
Off-Road	2.4399	13.6680	16.2918	0.0466		0.4367	0.4367		0.4367	0.4367		4,409.7537	4,409.7537	0.2176		4,415.1936
Total	2.4399	13.6680	16.2918	0.0466	18.4103	0.4367	18.8470	9.9678	0.4367	10.4045		4,409.7537	4,409.7537	0.2176		4,415.1936

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.3 Site Preparation - 2031

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0474	0.0223	0.3076	1.3600e-003	0.2012	9.3000e-004	0.2021	0.0534	8.6000e-004	0.0542		135.5813	135.5813	2.0400e-003		135.6322
Total	0.0474	0.0223	0.3076	1.3600e-003	0.2012	9.3000e-004	0.2021	0.0534	8.6000e-004	0.0542		135.5813	135.5813	2.0400e-003		135.6322

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.4103	0.0000	18.4103	9.9678	0.0000	9.9678			0.0000			0.0000
Off-Road	2.4399	13.6680	16.2918	0.0466		0.4367	0.4367		0.4367	0.4367	0.0000	4,409.7537	4,409.7537	0.2176		4,415.1936
Total	2.4399	13.6680	16.2918	0.0466	18.4103	0.4367	18.8470	9.9678	0.4367	10.4045	0.0000	4,409.7537	4,409.7537	0.2176		4,415.1936

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.3 Site Preparation - 2031

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0474	0.0223	0.3076	1.3600e-003	0.2012	9.3000e-004	0.2021	0.0534	8.6000e-004	0.0542		135.5813	135.5813	2.0400e-003		135.6322
Total	0.0474	0.0223	0.3076	1.3600e-003	0.2012	9.3000e-004	0.2021	0.0534	8.6000e-004	0.0542		135.5813	135.5813	2.0400e-003		135.6322

3.4 Grading - 2031

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.3662	0.0000	6.3662	3.3474	0.0000	3.3474			0.0000			0.0000
Off-Road	3.2807	13.8462	23.0239	0.0699		0.4879	0.4879		0.4879	0.4879		7,213.1086	7,213.1086	0.2915		7,220.3963
Total	3.2807	13.8462	23.0239	0.0699	6.3662	0.4879	6.8541	3.3474	0.4879	3.8353		7,213.1086	7,213.1086	0.2915		7,220.3963

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.4 Grading - 2031

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0527	0.0247	0.3418	1.5100e-003	0.2236	1.0400e-003	0.2246	0.0593	9.5000e-004	0.0602		150.6459	150.6459	2.2600e-003		150.7025
Total	0.0527	0.0247	0.3418	1.5100e-003	0.2236	1.0400e-003	0.2246	0.0593	9.5000e-004	0.0602		150.6459	150.6459	2.2600e-003		150.7025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.3662	0.0000	6.3662	3.3474	0.0000	3.3474			0.0000			0.0000
Off-Road	3.2807	13.8462	23.0239	0.0699		0.4879	0.4879		0.4879	0.4879	0.0000	7,213.1086	7,213.1086	0.2915		7,220.3963
Total	3.2807	13.8462	23.0239	0.0699	6.3662	0.4879	6.8541	3.3474	0.4879	3.8353	0.0000	7,213.1086	7,213.1086	0.2915		7,220.3963

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.4 Grading - 2031

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0527	0.0247	0.3418	1.5100e-003	0.2236	1.0400e-003	0.2246	0.0593	9.5000e-004	0.0602		150.6459	150.6459	2.2600e-003		150.7025
Total	0.0527	0.0247	0.3418	1.5100e-003	0.2236	1.0400e-003	0.2246	0.0593	9.5000e-004	0.0602		150.6459	150.6459	2.2600e-003		150.7025

3.4 Grading - 2032

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.3662	0.0000	6.3662	3.3474	0.0000	3.3474			0.0000			0.0000
Off-Road	3.2807	13.8462	23.0239	0.0699		0.4879	0.4879		0.4879	0.4879		7,213.1086	7,213.1086	0.2915		7,220.3963
Total	3.2807	13.8462	23.0239	0.0699	6.3662	0.4879	6.8541	3.3474	0.4879	3.8353		7,213.1086	7,213.1086	0.2915		7,220.3963

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.4 Grading - 2032

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0489	0.0227	0.3213	1.4800e-003	0.2236	9.7000e-004	0.2245	0.0593	8.9000e-004	0.0602		147.6150	147.6150	2.0700e-003		147.6668
Total	0.0489	0.0227	0.3213	1.4800e-003	0.2236	9.7000e-004	0.2245	0.0593	8.9000e-004	0.0602		147.6150	147.6150	2.0700e-003		147.6668

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.3662	0.0000	6.3662	3.3474	0.0000	3.3474			0.0000			0.0000
Off-Road	3.2807	13.8462	23.0239	0.0699		0.4879	0.4879		0.4879	0.4879	0.0000	7,213.1086	7,213.1086	0.2915		7,220.3963
Total	3.2807	13.8462	23.0239	0.0699	6.3662	0.4879	6.8541	3.3474	0.4879	3.8353	0.0000	7,213.1086	7,213.1086	0.2915		7,220.3963

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.4 Grading - 2032

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0489	0.0227	0.3213	1.4800e-003	0.2236	9.7000e-004	0.2245	0.0593	8.9000e-004	0.0602		147.6150	147.6150	2.0700e-003		147.6668
Total	0.0489	0.0227	0.3213	1.4800e-003	0.2236	9.7000e-004	0.2245	0.0593	8.9000e-004	0.0602		147.6150	147.6150	2.0700e-003		147.6668

3.5 Building Construction - 2032

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529
Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.5 Building Construction - 2032

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6010	21.7993	6.4642	0.0775	2.1821	0.0238	2.2059	0.6282	0.0227	0.6509		8,343.0986	8,343.0986	0.4565		8,354.5110
Worker	2.8469	1.3187	18.7018	0.0860	13.0108	0.0563	13.0671	3.4505	0.0518	3.5023		8,591.1931	8,591.1931	0.1206		8,594.2070
Total	3.4479	23.1181	25.1660	0.1635	15.1929	0.0801	15.2730	4.0787	0.0745	4.1532		16,934.2917	16,934.2917	0.5771		16,948.7181

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529
Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.5 Building Construction - 2032

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.6010	21.7993	6.4642	0.0775	2.1821	0.0238	2.2059	0.6282	0.0227	0.6509		8,343.0986	8,343.0986	0.4565		8,354.5110
Worker	2.8469	1.3187	18.7018	0.0860	13.0108	0.0563	13.0671	3.4505	0.0518	3.5023		8,591.1931	8,591.1931	0.1206		8,594.2070
Total	3.4479	23.1181	25.1660	0.1635	15.1929	0.0801	15.2730	4.0787	0.0745	4.1532		16,934.2917	16,934.2917	0.5771		16,948.7181

3.5 Building Construction - 2033

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529
Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.5 Building Construction - 2033

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5970	21.6666	6.4441	0.0773	2.1821	0.0235	2.2056	0.6282	0.0224	0.6506		8,328.6520	8,328.6520	0.4528		8,339.9729
Worker	2.6603	1.2173	17.6843	0.0845	13.0108	0.0526	13.0634	3.4505	0.0484	3.4989		8,437.1773	8,437.1773	0.1111		8,439.9550
Total	3.2573	22.8839	24.1284	0.1618	15.1929	0.0761	15.2690	4.0787	0.0708	4.1495		16,765.8292	16,765.8292	0.5640		16,779.9279

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529
Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.5 Building Construction - 2033

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5970	21.6666	6.4441	0.0773	2.1821	0.0235	2.2056	0.6282	0.0224	0.6506		8,328.6520	8,328.6520	0.4528		8,339.9729
Worker	2.6603	1.2173	17.6843	0.0845	13.0108	0.0526	13.0634	3.4505	0.0484	3.4989		8,437.1773	8,437.1773	0.1111		8,439.9550
Total	3.2573	22.8839	24.1284	0.1618	15.1929	0.0761	15.2690	4.0787	0.0708	4.1495		16,765.8292	16,765.8292	0.5640		16,779.9279

3.5 Building Construction - 2034

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529
Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481		2,897.5468	2,897.5468	0.1162		2,900.4529

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.5 Building Construction - 2034

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5934	21.5467	6.4228	0.0772	2.1821	0.0232	2.2053	0.6282	0.0221	0.6503		8,317.3677	8,317.3677	0.4497		8,328.6105
Worker	2.5026	1.1323	16.7027	0.0831	13.0108	0.0491	13.0599	3.4505	0.0452	3.4957		8,302.3039	8,302.3039	0.1021		8,304.8568
Total	3.0960	22.6790	23.1255	0.1603	15.1929	0.0723	15.2652	4.0787	0.0673	4.1460		16,619.6716	16,619.6716	0.5518		16,633.4673

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529
Total	1.3091	7.9346	16.1570	0.0310		0.1481	0.1481		0.1481	0.1481	0.0000	2,897.5468	2,897.5468	0.1162		2,900.4529

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.5 Building Construction - 2034

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.5934	21.5467	6.4228	0.0772	2.1821	0.0232	2.2053	0.6282	0.0221	0.6503		8,317.3677	8,317.3677	0.4497		8,328.6105
Worker	2.5026	1.1323	16.7027	0.0831	13.0108	0.0491	13.0599	3.4505	0.0452	3.4957		8,302.3039	8,302.3039	0.1021		8,304.8568
Total	3.0960	22.6790	23.1255	0.1603	15.1929	0.0723	15.2652	4.0787	0.0673	4.1460		16,619.6716	16,619.6716	0.5518		16,633.4673

3.6 Paving - 2034

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3845	7.1202	15.8495	0.0281		0.3306	0.3306		0.3306	0.3306		2,656.5168	2,656.5168	0.1245		2,659.6302
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3845	7.1202	15.8495	0.0281		0.3306	0.3306		0.3306	0.3306		2,656.5168	2,656.5168	0.1245		2,659.6302

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.6 Paving - 2034

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0323	0.0146	0.2152	1.0700e-003	0.1677	6.3000e-004	0.1683	0.0445	5.8000e-004	0.0451		106.9885	106.9885	1.3200e-003		107.0214
Total	0.0323	0.0146	0.2152	1.0700e-003	0.1677	6.3000e-004	0.1683	0.0445	5.8000e-004	0.0451		106.9885	106.9885	1.3200e-003		107.0214

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3845	7.1202	15.8495	0.0281		0.3306	0.3306		0.3306	0.3306	0.0000	2,656.5168	2,656.5168	0.1245		2,659.6302
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3845	7.1202	15.8495	0.0281		0.3306	0.3306		0.3306	0.3306	0.0000	2,656.5168	2,656.5168	0.1245		2,659.6302

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.6 Paving - 2034

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0323	0.0146	0.2152	1.0700e-003	0.1677	6.3000e-004	0.1683	0.0445	5.8000e-004	0.0451		106.9885	106.9885	1.3200e-003		107.0214
Total	0.0323	0.0146	0.2152	1.0700e-003	0.1677	6.3000e-004	0.1683	0.0445	5.8000e-004	0.0451		106.9885	106.9885	1.3200e-003		107.0214

3.7 Architectural Coating - 2034

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	194.3622					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1308	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203		281.4481	281.4481	0.0114		281.7328
Total	194.4930	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203		281.4481	281.4481	0.0114		281.7328

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.7 Architectural Coating - 2034

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5010	0.2267	3.3434	0.0166	2.6044	9.8300e-003	2.6142	0.6907	9.0400e-003	0.6997		1,661.8873	1,661.8873	0.0204		1,662.3983
Total	0.5010	0.2267	3.3434	0.0166	2.6044	9.8300e-003	2.6142	0.6907	9.0400e-003	0.6997		1,661.8873	1,661.8873	0.0204		1,662.3983

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	194.3622					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1308	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203	0.0000	281.4481	281.4481	0.0114		281.7328
Total	194.4930	0.8563	1.7977	2.9700e-003		0.0203	0.0203		0.0203	0.0203	0.0000	281.4481	281.4481	0.0114		281.7328

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.7 Architectural Coating - 2034

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5010	0.2267	3.3434	0.0166	2.6044	9.8300e-003	2.6142	0.6907	9.0400e-003	0.6997		1,661.8873	1,661.8873	0.0204		1,662.3983
Total	0.5010	0.2267	3.3434	0.0166	2.6044	9.8300e-003	2.6142	0.6907	9.0400e-003	0.6997		1,661.8873	1,661.8873	0.0204		1,662.3983

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	906.00	Dwelling Unit	8.30	906,000.00	2591

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2035
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - .
- Construction Phase - *
- Grading - Updated to reflect phase acreage.
- Vehicle Trips - *
- Woodstoves - *
- Water Mitigation -

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Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	60.00
tblConstructionPhase	NumDays	230.00	300.00
tblConstructionPhase	NumDays	20.00	30.00
tblGrading	AcresOfGrading	15.00	8.30
tblGrading	AcresOfGrading	0.00	8.30
tblLandUse	LotAcreage	23.84	8.30

2.0 Emissions Summary

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2026	3-31-2026	0.6580	0.6580
2	4-1-2026	6-30-2026	0.7706	0.7706
3	7-1-2026	9-30-2026	0.7791	0.7791
4	10-1-2026	12-31-2026	0.7898	0.7898
5	1-1-2027	3-31-2027	0.7643	0.7643
6	4-1-2027	6-30-2027	0.9883	0.9883
7	7-1-2027	9-30-2027	2.4100	2.4100
		Highest	2.4100	2.4100

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	6.8032	0.3424	15.0698	0.0152		0.9169	0.9169		0.9169	0.9169	96.2345	200.1917	296.4262	0.3015	6.5300e-003	305.9106
Energy	0.0450	0.3848	0.1637	2.4600e-003		0.0311	0.0311		0.0311	0.0311	0.0000	1,588.7773	1,588.7773	0.0557	0.0179	1,595.5151
Mobile	0.9532	5.9019	12.9454	0.0695	7.6413	0.0342	7.6756	2.0465	0.0318	2.0784	0.0000	6,476.5656	6,476.5656	0.2442	0.0000	6,482.6712
Waste						0.0000	0.0000		0.0000	0.0000	84.5985	0.0000	84.5985	4.9996	0.0000	209.5892
Water						0.0000	0.0000		0.0000	0.0000	18.7274	376.6342	395.3616	1.9390	0.0486	458.3304
Total	7.8014	6.6291	28.1790	0.0871	7.6413	0.9823	8.6236	2.0465	0.9798	3.0264	199.5603	8,642.1688	8,841.7291	7.5402	0.0731	9,052.0165

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	652.00	97.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	130.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0209	0.1920	0.1942	3.9000e-004		8.5300e-003	8.5300e-003		7.9200e-003	7.9200e-003	0.0000	33.9977	33.9977	9.4900e-003	0.0000	34.2350
Total	0.0209	0.1920	0.1942	3.9000e-004		8.5300e-003	8.5300e-003		7.9200e-003	7.9200e-003	0.0000	33.9977	33.9977	9.4900e-003	0.0000	34.2350

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3.2 Demolition - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.7000e-004	2.9000e-004	3.6100e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.1935	1.1935	2.0000e-005	0.0000	1.1941
Total	4.7000e-004	2.9000e-004	3.6100e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.1935	1.1935	2.0000e-005	0.0000	1.1941

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0209	0.1920	0.1942	3.9000e-004		8.5300e-003	8.5300e-003		7.9200e-003	7.9200e-003	0.0000	33.9976	33.9976	9.4900e-003	0.0000	34.2349
Total	0.0209	0.1920	0.1942	3.9000e-004		8.5300e-003	8.5300e-003		7.9200e-003	7.9200e-003	0.0000	33.9976	33.9976	9.4900e-003	0.0000	34.2349

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3.2 Demolition - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.7000e-004	2.9000e-004	3.6100e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.1935	1.1935	2.0000e-005	0.0000	1.1941
Total	4.7000e-004	2.9000e-004	3.6100e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.1935	1.1935	2.0000e-005	0.0000	1.1941

3.3 Site Preparation - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0947	0.0000	0.0947	0.0501	0.0000	0.0501	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0124	0.1262	0.0896	1.9000e-004		5.4300e-003	5.4300e-003		5.0000e-003	5.0000e-003	0.0000	16.7335	16.7335	5.4100e-003	0.0000	16.8688
Total	0.0124	0.1262	0.0896	1.9000e-004	0.0947	5.4300e-003	0.1002	0.0501	5.0000e-003	0.0551	0.0000	16.7335	16.7335	5.4100e-003	0.0000	16.8688

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3.3 Site Preparation - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	1.7000e-004	2.1600e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.7161	0.7161	1.0000e-005	0.0000	0.7165
Total	2.8000e-004	1.7000e-004	2.1600e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.7161	0.7161	1.0000e-005	0.0000	0.7165

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0947	0.0000	0.0947	0.0501	0.0000	0.0501	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0124	0.1262	0.0896	1.9000e-004		5.4300e-003	5.4300e-003		5.0000e-003	5.0000e-003	0.0000	16.7335	16.7335	5.4100e-003	0.0000	16.8688
Total	0.0124	0.1262	0.0896	1.9000e-004	0.0947	5.4300e-003	0.1002	0.0501	5.0000e-003	0.0551	0.0000	16.7335	16.7335	5.4100e-003	0.0000	16.8688

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3.3 Site Preparation - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	1.7000e-004	2.1600e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.7161	0.7161	1.0000e-005	0.0000	0.7165
Total	2.8000e-004	1.7000e-004	2.1600e-003	1.0000e-005	9.9000e-004	1.0000e-005	9.9000e-004	2.6000e-004	1.0000e-005	2.7000e-004	0.0000	0.7161	0.7161	1.0000e-005	0.0000	0.7165

3.4 Grading - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0947	0.0000	0.0947	0.0501	0.0000	0.0501	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0228	0.2297	0.2181	4.5000e-004		9.3500e-003	9.3500e-003		8.6100e-003	8.6100e-003	0.0000	39.1047	39.1047	0.0127	0.0000	39.4209
Total	0.0228	0.2297	0.2181	4.5000e-004	0.0947	9.3500e-003	0.1041	0.0501	8.6100e-003	0.0587	0.0000	39.1047	39.1047	0.0127	0.0000	39.4209

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3.4 Grading - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.1000e-004	4.4000e-004	5.4100e-003	2.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.6000e-004	2.0000e-005	6.7000e-004	0.0000	1.7903	1.7903	4.0000e-005	0.0000	1.7912
Total	7.1000e-004	4.4000e-004	5.4100e-003	2.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.6000e-004	2.0000e-005	6.7000e-004	0.0000	1.7903	1.7903	4.0000e-005	0.0000	1.7912

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0947	0.0000	0.0947	0.0501	0.0000	0.0501	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0228	0.2297	0.2181	4.5000e-004		9.3500e-003	9.3500e-003		8.6100e-003	8.6100e-003	0.0000	39.1047	39.1047	0.0127	0.0000	39.4209
Total	0.0228	0.2297	0.2181	4.5000e-004	0.0947	9.3500e-003	0.1041	0.0501	8.6100e-003	0.0587	0.0000	39.1047	39.1047	0.0127	0.0000	39.4209

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3.4 Grading - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.1000e-004	4.4000e-004	5.4100e-003	2.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.6000e-004	2.0000e-005	6.7000e-004	0.0000	1.7903	1.7903	4.0000e-005	0.0000	1.7912
Total	7.1000e-004	4.4000e-004	5.4100e-003	2.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.6000e-004	2.0000e-005	6.7000e-004	0.0000	1.7903	1.7903	4.0000e-005	0.0000	1.7912

3.5 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1374	1.2532	1.6165	2.7100e-003		0.0530	0.0530		0.0499	0.0499	0.0000	233.0791	233.0791	0.0548	0.0000	234.4488
Total	0.1374	1.2532	1.6165	2.7100e-003		0.0530	0.0530		0.0499	0.0499	0.0000	233.0791	233.0791	0.0548	0.0000	234.4488

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3.5 Building Construction - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0182	0.6610	0.1885	2.3000e-003	0.0614	7.4000e-004	0.0622	0.0177	7.1000e-004	0.0184	0.0000	224.1084	224.1084	0.0124	0.0000	224.4184
Worker	0.2074	0.1267	1.5758	5.7600e-003	0.7189	4.8000e-003	0.7237	0.1909	4.4200e-003	0.1953	0.0000	521.3697	521.3697	0.0105	0.0000	521.6320
Total	0.2256	0.7877	1.7643	8.0600e-003	0.7804	5.5400e-003	0.7859	0.2087	5.1300e-003	0.2138	0.0000	745.4781	745.4781	0.0229	0.0000	746.0504

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1374	1.2532	1.6165	2.7100e-003		0.0530	0.0530		0.0499	0.0499	0.0000	233.0788	233.0788	0.0548	0.0000	234.4485
Total	0.1374	1.2532	1.6165	2.7100e-003		0.0530	0.0530		0.0499	0.0499	0.0000	233.0788	233.0788	0.0548	0.0000	234.4485

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3.5 Building Construction - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0182	0.6610	0.1885	2.3000e-003	0.0614	7.4000e-004	0.0622	0.0177	7.1000e-004	0.0184	0.0000	224.1084	224.1084	0.0124	0.0000	224.4184
Worker	0.2074	0.1267	1.5758	5.7600e-003	0.7189	4.8000e-003	0.7237	0.1909	4.4200e-003	0.1953	0.0000	521.3697	521.3697	0.0105	0.0000	521.6320
Total	0.2256	0.7877	1.7643	8.0600e-003	0.7804	5.5400e-003	0.7859	0.2087	5.1300e-003	0.2138	0.0000	745.4781	745.4781	0.0229	0.0000	746.0504

3.5 Building Construction - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0677	0.6173	0.7962	1.3300e-003		0.0261	0.0261		0.0246	0.0246	0.0000	114.8001	114.8001	0.0270	0.0000	115.4748
Total	0.0677	0.6173	0.7962	1.3300e-003		0.0261	0.0261		0.0246	0.0246	0.0000	114.8001	114.8001	0.0270	0.0000	115.4748

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3.5 Building Construction - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.7800e-003	0.3225	0.0913	1.1300e-003	0.0303	3.6000e-004	0.0306	8.7300e-003	3.4000e-004	9.0700e-003	0.0000	109.8508	109.8508	6.0100e-003	0.0000	110.0012
Worker	0.0975	0.0576	0.7277	2.7500e-003	0.3541	2.2300e-003	0.3563	0.0940	2.0600e-003	0.0961	0.0000	248.4766	248.4766	4.7400e-003	0.0000	248.5952
Total	0.1063	0.3801	0.8190	3.8800e-003	0.3844	2.5900e-003	0.3869	0.1028	2.4000e-003	0.1052	0.0000	358.3275	358.3275	0.0108	0.0000	358.5963

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0677	0.6173	0.7962	1.3300e-003		0.0261	0.0261		0.0246	0.0246	0.0000	114.8000	114.8000	0.0270	0.0000	115.4746
Total	0.0677	0.6173	0.7962	1.3300e-003		0.0261	0.0261		0.0246	0.0246	0.0000	114.8000	114.8000	0.0270	0.0000	115.4746

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3.5 Building Construction - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	8.7800e-003	0.3225	0.0913	1.1300e-003	0.0303	3.6000e-004	0.0306	8.7300e-003	3.4000e-004	9.0700e-003	0.0000	109.8508	109.8508	6.0100e-003	0.0000	110.0012
Worker	0.0975	0.0576	0.7277	2.7500e-003	0.3541	2.2300e-003	0.3563	0.0940	2.0600e-003	0.0961	0.0000	248.4766	248.4766	4.7400e-003	0.0000	248.5952
Total	0.1063	0.3801	0.8190	3.8800e-003	0.3844	2.5900e-003	0.3869	0.1028	2.4000e-003	0.1052	0.0000	358.3275	358.3275	0.0108	0.0000	358.5963

3.6 Paving - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.1500e-003	0.0858	0.1458	2.3000e-004		4.1900e-003	4.1900e-003		3.8500e-003	3.8500e-003	0.0000	20.0193	20.0193	6.4700e-003	0.0000	20.1811
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.1500e-003	0.0858	0.1458	2.3000e-004		4.1900e-003	4.1900e-003		3.8500e-003	3.8500e-003	0.0000	20.0193	20.0193	6.4700e-003	0.0000	20.1811

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3.6 Paving - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.5000e-004	2.7000e-004	3.3800e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.1549	1.1549	2.0000e-005	0.0000	1.1554
Total	4.5000e-004	2.7000e-004	3.3800e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.1549	1.1549	2.0000e-005	0.0000	1.1554

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.1500e-003	0.0858	0.1458	2.3000e-004		4.1900e-003	4.1900e-003		3.8500e-003	3.8500e-003	0.0000	20.0192	20.0192	6.4700e-003	0.0000	20.1811
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.1500e-003	0.0858	0.1458	2.3000e-004		4.1900e-003	4.1900e-003		3.8500e-003	3.8500e-003	0.0000	20.0192	20.0192	6.4700e-003	0.0000	20.1811

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

3.6 Paving - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.5000e-004	2.7000e-004	3.3800e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.1549	1.1549	2.0000e-005	0.0000	1.1554
Total	4.5000e-004	2.7000e-004	3.3800e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.1549	1.1549	2.0000e-005	0.0000	1.1554

3.7 Architectural Coating - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.8345					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.1300e-003	0.0344	0.0543	9.0000e-005		1.5500e-003	1.5500e-003		1.5500e-003	1.5500e-003	0.0000	7.6598	7.6598	4.2000e-004	0.0000	7.6702
Total	2.8397	0.0344	0.0543	9.0000e-005		1.5500e-003	1.5500e-003		1.5500e-003	1.5500e-003	0.0000	7.6598	7.6598	4.2000e-004	0.0000	7.6702

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3.7 Architectural Coating - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0118	6.9600e-003	0.0879	3.3000e-004	0.0428	2.7000e-004	0.0431	0.0114	2.5000e-004	0.0116	0.0000	30.0260	30.0260	5.7000e-004	0.0000	30.0403
Total	0.0118	6.9600e-003	0.0879	3.3000e-004	0.0428	2.7000e-004	0.0431	0.0114	2.5000e-004	0.0116	0.0000	30.0260	30.0260	5.7000e-004	0.0000	30.0403

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.8345					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.1300e-003	0.0344	0.0543	9.0000e-005		1.5500e-003	1.5500e-003		1.5500e-003	1.5500e-003	0.0000	7.6598	7.6598	4.2000e-004	0.0000	7.6702
Total	2.8397	0.0344	0.0543	9.0000e-005		1.5500e-003	1.5500e-003		1.5500e-003	1.5500e-003	0.0000	7.6598	7.6598	4.2000e-004	0.0000	7.6702

CSUDH Campus Master Plan EIR - South Coast Air Basin, Annual

3.7 Architectural Coating - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0118	6.9600e-003	0.0879	3.3000e-004	0.0428	2.7000e-004	0.0431	0.0114	2.5000e-004	0.0116	0.0000	30.0260	30.0260	5.7000e-004	0.0000	30.0403
Total	0.0118	6.9600e-003	0.0879	3.3000e-004	0.0428	2.7000e-004	0.0431	0.0114	2.5000e-004	0.0116	0.0000	30.0260	30.0260	5.7000e-004	0.0000	30.0403

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Uni Village Construction Summer 2035

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

CSUDH Campus Master Plan EIR
South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	906.00	Dwelling Unit	8.30	906,000.00	2591

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2035
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - .

Construction Phase - *

Grading - Updated to reflect phase acreage.

Vehicle Trips - *

Woodstoves - *

Water Mitigation -

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	60.00
tblConstructionPhase	NumDays	230.00	300.00
tblConstructionPhase	NumDays	20.00	30.00
tblGrading	AcresOfGrading	15.00	8.30
tblGrading	AcresOfGrading	0.00	8.30
tblLandUse	LotAcreage	23.84	8.30

2.0 Emissions Summary

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2026	1/28/2026	5	20	
2	Site Preparation	Site Preparation	1/29/2026	2/11/2026	5	10	
3	Grading	Grading	2/12/2026	3/25/2026	5	30	
4	Building Construction	Building Construction	3/26/2026	5/19/2027	5	300	
5	Paving	Paving	5/20/2027	6/16/2027	5	20	
6	Architectural Coating	Architectural Coating	6/17/2027	9/8/2027	5	60	

Acres of Grading (Site Preparation Phase): 8.3

Acres of Grading (Grading Phase): 8.3

Acres of Paving: 0

Residential Indoor: 1,834,650; Residential Outdoor: 611,550; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	652.00	97.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	130.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0926	19.1966	19.4184	0.0388		0.8528	0.8528		0.7920	0.7920		3,747.5996	3,747.5996	1.0464		3,773.7606
Total	2.0926	19.1966	19.4184	0.0388		0.8528	0.8528		0.7920	0.7920		3,747.5996	3,747.5996	1.0464		3,773.7606

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.2 Demolition - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0475	0.0257	0.3905	1.3800e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		138.1165	138.1165	2.7900e-003		138.1864
Total	0.0475	0.0257	0.3905	1.3800e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		138.1165	138.1165	2.7900e-003		138.1864

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0926	19.1966	19.4184	0.0388		0.8528	0.8528		0.7920	0.7920	0.0000	3,747.5996	3,747.5996	1.0464		3,773.7606
Total	2.0926	19.1966	19.4184	0.0388		0.8528	0.8528		0.7920	0.7920	0.0000	3,747.5996	3,747.5996	1.0464		3,773.7606

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.2 Demolition - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0475	0.0257	0.3905	1.3800e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		138.1165	138.1165	2.7900e-003		138.1864
Total	0.0475	0.0257	0.3905	1.3800e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		138.1165	138.1165	2.7900e-003		138.1864

3.3 Site Preparation - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.9465	0.0000	18.9465	10.0257	0.0000	10.0257			0.0000			0.0000
Off-Road	2.4727	25.2339	17.9118	0.0381		1.0868	1.0868		0.9999	0.9999		3,689.1037	3,689.1037	1.1931		3,718.9320
Total	2.4727	25.2339	17.9118	0.0381	18.9465	1.0868	20.0333	10.0257	0.9999	11.0256		3,689.1037	3,689.1037	1.1931		3,718.9320

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.3 Site Preparation - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0570	0.0308	0.4686	1.6600e-003	0.2012	1.3200e-003	0.2025	0.0534	1.2100e-003	0.0546		165.7398	165.7398	3.3500e-003		165.8236
Total	0.0570	0.0308	0.4686	1.6600e-003	0.2012	1.3200e-003	0.2025	0.0534	1.2100e-003	0.0546		165.7398	165.7398	3.3500e-003		165.8236

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.9465	0.0000	18.9465	10.0257	0.0000	10.0257			0.0000			0.0000
Off-Road	2.4727	25.2339	17.9118	0.0381		1.0868	1.0868		0.9999	0.9999	0.0000	3,689.1037	3,689.1037	1.1931		3,718.9320
Total	2.4727	25.2339	17.9118	0.0381	18.9465	1.0868	20.0333	10.0257	0.9999	11.0256	0.0000	3,689.1037	3,689.1037	1.1931		3,718.9320

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.3 Site Preparation - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0570	0.0308	0.4686	1.6600e-003	0.2012	1.3200e-003	0.2025	0.0534	1.2100e-003	0.0546		165.7398	165.7398	3.3500e-003		165.8236
Total	0.0570	0.0308	0.4686	1.6600e-003	0.2012	1.3200e-003	0.2025	0.0534	1.2100e-003	0.0546		165.7398	165.7398	3.3500e-003		165.8236

3.4 Grading - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.3155	0.0000	6.3155	3.3419	0.0000	3.3419			0.0000			0.0000
Off-Road	1.5227	15.3148	14.5402	0.0297		0.6236	0.6236		0.5737	0.5737		2,873.7052	2,873.7052	0.9294		2,896.9405
Total	1.5227	15.3148	14.5402	0.0297	6.3155	0.6236	6.9391	3.3419	0.5737	3.9156		2,873.7052	2,873.7052	0.9294		2,896.9405

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.4 Grading - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0475	0.0257	0.3905	1.3800e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		138.1165	138.1165	2.7900e-003		138.1864
Total	0.0475	0.0257	0.3905	1.3800e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		138.1165	138.1165	2.7900e-003		138.1864

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.3155	0.0000	6.3155	3.3419	0.0000	3.3419			0.0000			0.0000
Off-Road	1.5227	15.3148	14.5402	0.0297		0.6236	0.6236		0.5737	0.5737	0.0000	2,873.7052	2,873.7052	0.9294		2,896.9405
Total	1.5227	15.3148	14.5402	0.0297	6.3155	0.6236	6.9391	3.3419	0.5737	3.9156	0.0000	2,873.7052	2,873.7052	0.9294		2,896.9405

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.4 Grading - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0475	0.0257	0.3905	1.3800e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		138.1165	138.1165	2.7900e-003		138.1864
Total	0.0475	0.0257	0.3905	1.3800e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		138.1165	138.1165	2.7900e-003		138.1864

3.5 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981

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3.5 Building Construction - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1770	6.5146	1.7886	0.0231	0.6207	7.2900e-003	0.6280	0.1787	6.9600e-003	0.1857		2,485.7020	2,485.7020	0.1326		2,489.0170
Worker	2.0651	1.1165	16.9719	0.0602	7.2878	0.0477	7.3356	1.9328	0.0439	1.9767		6,003.4630	6,003.4630	0.1215		6,006.5000
Total	2.2421	7.6311	18.7605	0.0833	7.9085	0.0550	7.9635	2.1115	0.0509	2.1624		8,489.1650	8,489.1650	0.2541		8,495.5170

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.5 Building Construction - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1770	6.5146	1.7886	0.0231	0.6207	7.2900e-003	0.6280	0.1787	6.9600e-003	0.1857		2,485.7020	2,485.7020	0.1326		2,489.0170
Worker	2.0651	1.1165	16.9719	0.0602	7.2878	0.0477	7.3356	1.9328	0.0439	1.9767		6,003.4630	6,003.4630	0.1215		6,006.5000
Total	2.2421	7.6311	18.7605	0.0833	7.9085	0.0550	7.9635	2.1115	0.0509	2.1624		8,489.1650	8,489.1650	0.2541		8,495.5170

3.5 Building Construction - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.5 Building Construction - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1736	6.4549	1.7590	0.0230	0.6207	7.1600e-003	0.6279	0.1787	6.8400e-003	0.1855		2,473.6296	2,473.6296	0.1306		2,476.8949
Worker	1.9684	1.0301	15.9269	0.0582	7.2878	0.0451	7.3330	1.9328	0.0415	1.9743		5,809.3552	5,809.3552	0.1115		5,812.1429
Total	2.1420	7.4850	17.6859	0.0812	7.9085	0.0523	7.9608	2.1115	0.0484	2.1598		8,282.9848	8,282.9848	0.2421		8,289.0378

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.5 Building Construction - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1736	6.4549	1.7590	0.0230	0.6207	7.1600e-003	0.6279	0.1787	6.8400e-003	0.1855		2,473.6296	2,473.6296	0.1306		2,476.8949
Worker	1.9684	1.0301	15.9269	0.0582	7.2878	0.0451	7.3330	1.9328	0.0415	1.9743		5,809.3552	5,809.3552	0.1115		5,812.1429
Total	2.1420	7.4850	17.6859	0.0812	7.9085	0.0523	7.9608	2.1115	0.0484	2.1598		8,282.9848	8,282.9848	0.2421		8,289.0378

3.6 Paving - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.6 Paving - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0453	0.0237	0.3664	1.3400e-003	0.1677	1.0400e-003	0.1687	0.0445	9.6000e-004	0.0454		133.6508	133.6508	2.5700e-003		133.7149
Total	0.0453	0.0237	0.3664	1.3400e-003	0.1677	1.0400e-003	0.1687	0.0445	9.6000e-004	0.0454		133.6508	133.6508	2.5700e-003		133.7149

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.6 Paving - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0453	0.0237	0.3664	1.3400e-003	0.1677	1.0400e-003	0.1687	0.0445	9.6000e-004	0.0454		133.6508	133.6508	2.5700e-003		133.7149
Total	0.0453	0.0237	0.3664	1.3400e-003	0.1677	1.0400e-003	0.1687	0.0445	9.6000e-004	0.0454		133.6508	133.6508	2.5700e-003		133.7149

3.7 Architectural Coating - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	94.4845					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	94.6553	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.7 Architectural Coating - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3925	0.2054	3.1756	0.0116	1.4531	9.0000e-003	1.4621	0.3854	8.2800e-003	0.3937		1,158.3070	1,158.3070	0.0222		1,158.8628
Total	0.3925	0.2054	3.1756	0.0116	1.4531	9.0000e-003	1.4621	0.3854	8.2800e-003	0.3937		1,158.3070	1,158.3070	0.0222		1,158.8628

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	94.4845					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	94.6553	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319

CSUDH Campus Master Plan EIR - South Coast Air Basin, Summer

3.7 Architectural Coating - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.3925	0.2054	3.1756	0.0116	1.4531	9.0000e-003	1.4621	0.3854	8.2800e-003	0.3937		1,158.3070	1,158.3070	0.0222		1,158.8628
Total	0.3925	0.2054	3.1756	0.0116	1.4531	9.0000e-003	1.4621	0.3854	8.2800e-003	0.3937		1,158.3070	1,158.3070	0.0222		1,158.8628

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Uni Village Construction Winter 2035

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

CSUDH Campus Master Plan EIR
South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Mid Rise	906.00	Dwelling Unit	8.30	906,000.00	2591

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	11			Operational Year	2035
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - .

Construction Phase - *

Grading - Updated to reflect phase acreage.

Vehicle Trips - *

Woodstoves - *

Water Mitigation -

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	60.00
tblConstructionPhase	NumDays	230.00	300.00
tblConstructionPhase	NumDays	20.00	30.00
tblGrading	AcresOfGrading	15.00	8.30
tblGrading	AcresOfGrading	0.00	8.30
tblLandUse	LotAcreage	23.84	8.30

2.0 Emissions Summary

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2026	1/28/2026	5	20	
2	Site Preparation	Site Preparation	1/29/2026	2/11/2026	5	10	
3	Grading	Grading	2/12/2026	3/25/2026	5	30	
4	Building Construction	Building Construction	3/26/2026	5/19/2027	5	300	
5	Paving	Paving	5/20/2027	6/16/2027	5	20	
6	Architectural Coating	Architectural Coating	6/17/2027	9/8/2027	5	60	

Acres of Grading (Site Preparation Phase): 8.3

Acres of Grading (Grading Phase): 8.3

Acres of Paving: 0

Residential Indoor: 1,834,650; Residential Outdoor: 611,550; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	652.00	97.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	130.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0926	19.1966	19.4184	0.0388		0.8528	0.8528		0.7920	0.7920		3,747.5996	3,747.5996	1.0464		3,773.7606
Total	2.0926	19.1966	19.4184	0.0388		0.8528	0.8528		0.7920	0.7920		3,747.5996	3,747.5996	1.0464		3,773.7606

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.2 Demolition - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0531	0.0282	0.3508	1.3000e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		129.5211	129.5211	2.6000e-003		129.5862
Total	0.0531	0.0282	0.3508	1.3000e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		129.5211	129.5211	2.6000e-003		129.5862

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.0926	19.1966	19.4184	0.0388		0.8528	0.8528		0.7920	0.7920	0.0000	3,747.5996	3,747.5996	1.0464		3,773.7606
Total	2.0926	19.1966	19.4184	0.0388		0.8528	0.8528		0.7920	0.7920	0.0000	3,747.5996	3,747.5996	1.0464		3,773.7606

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.2 Demolition - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0531	0.0282	0.3508	1.3000e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		129.5211	129.5211	2.6000e-003		129.5862
Total	0.0531	0.0282	0.3508	1.3000e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		129.5211	129.5211	2.6000e-003		129.5862

3.3 Site Preparation - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.9465	0.0000	18.9465	10.0257	0.0000	10.0257			0.0000			0.0000
Off-Road	2.4727	25.2339	17.9118	0.0381		1.0868	1.0868		0.9999	0.9999		3,689.1037	3,689.1037	1.1931		3,718.9320
Total	2.4727	25.2339	17.9118	0.0381	18.9465	1.0868	20.0333	10.0257	0.9999	11.0256		3,689.1037	3,689.1037	1.1931		3,718.9320

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.3 Site Preparation - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0638	0.0338	0.4210	1.5600e-003	0.2012	1.3200e-003	0.2025	0.0534	1.2100e-003	0.0546		155.4253	155.4253	3.1200e-003		155.5034
Total	0.0638	0.0338	0.4210	1.5600e-003	0.2012	1.3200e-003	0.2025	0.0534	1.2100e-003	0.0546		155.4253	155.4253	3.1200e-003		155.5034

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.9465	0.0000	18.9465	10.0257	0.0000	10.0257			0.0000			0.0000
Off-Road	2.4727	25.2339	17.9118	0.0381		1.0868	1.0868		0.9999	0.9999	0.0000	3,689.1037	3,689.1037	1.1931		3,718.9320
Total	2.4727	25.2339	17.9118	0.0381	18.9465	1.0868	20.0333	10.0257	0.9999	11.0256	0.0000	3,689.1037	3,689.1037	1.1931		3,718.9320

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.3 Site Preparation - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0638	0.0338	0.4210	1.5600e-003	0.2012	1.3200e-003	0.2025	0.0534	1.2100e-003	0.0546		155.4253	155.4253	3.1200e-003		155.5034
Total	0.0638	0.0338	0.4210	1.5600e-003	0.2012	1.3200e-003	0.2025	0.0534	1.2100e-003	0.0546		155.4253	155.4253	3.1200e-003		155.5034

3.4 Grading - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.3155	0.0000	6.3155	3.3419	0.0000	3.3419			0.0000			0.0000
Off-Road	1.5227	15.3148	14.5402	0.0297		0.6236	0.6236		0.5737	0.5737		2,873.7052	2,873.7052	0.9294		2,896.9405
Total	1.5227	15.3148	14.5402	0.0297	6.3155	0.6236	6.9391	3.3419	0.5737	3.9156		2,873.7052	2,873.7052	0.9294		2,896.9405

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.4 Grading - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0531	0.0282	0.3508	1.3000e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		129.5211	129.5211	2.6000e-003		129.5862
Total	0.0531	0.0282	0.3508	1.3000e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		129.5211	129.5211	2.6000e-003		129.5862

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.3155	0.0000	6.3155	3.3419	0.0000	3.3419			0.0000			0.0000
Off-Road	1.5227	15.3148	14.5402	0.0297		0.6236	0.6236		0.5737	0.5737	0.0000	2,873.705 2	2,873.705 2	0.9294		2,896.940 5
Total	1.5227	15.3148	14.5402	0.0297	6.3155	0.6236	6.9391	3.3419	0.5737	3.9156	0.0000	2,873.705 2	2,873.705 2	0.9294		2,896.940 5

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.4 Grading - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0531	0.0282	0.3508	1.3000e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		129.5211	129.5211	2.6000e-003		129.5862
Total	0.0531	0.0282	0.3508	1.3000e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		129.5211	129.5211	2.6000e-003		129.5862

3.5 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.5 Building Construction - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1860	6.4814	1.9539	0.0225	0.6207	7.5600e-003	0.6283	0.1787	7.2200e-003	0.1859		2,419.9393	2,419.9393	0.1402		2,423.4453
Worker	2.3090	1.2245	15.2488	0.0564	7.2878	0.0477	7.3356	1.9328	0.0439	1.9767		5,629.8487	5,629.8487	0.1132		5,632.6778
Total	2.4950	7.7059	17.2027	0.0790	7.9085	0.0553	7.9638	2.1115	0.0512	2.1626		8,049.7879	8,049.7879	0.2534		8,056.1231

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.5 Building Construction - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1860	6.4814	1.9539	0.0225	0.6207	7.5600e-003	0.6283	0.1787	7.2200e-003	0.1859		2,419.9393	2,419.9393	0.1402		2,423.4453
Worker	2.3090	1.2245	15.2488	0.0564	7.2878	0.0477	7.3356	1.9328	0.0439	1.9767		5,629.8487	5,629.8487	0.1132		5,632.6778
Total	2.4950	7.7059	17.2027	0.0790	7.9085	0.0553	7.9638	2.1115	0.0512	2.1626		8,049.7879	8,049.7879	0.2534		8,056.1231

3.5 Building Construction - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.5 Building Construction - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1823	6.4216	1.9214	0.0224	0.6207	7.4000e-003	0.6281	0.1787	7.0700e-003	0.1858		2,408.4596	2,408.4596	0.1380		2,411.9096
Worker	2.2070	1.1294	14.2945	0.0546	7.2878	0.0451	7.3330	1.9328	0.0415	1.9743		5,447.4906	5,447.4906	0.1038		5,450.0859
Total	2.3893	7.5510	16.2159	0.0770	7.9085	0.0525	7.9611	2.1115	0.0486	2.1601		7,855.9502	7,855.9502	0.2418		7,861.9955

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.5 Building Construction - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1823	6.4216	1.9214	0.0224	0.6207	7.4000e-003	0.6281	0.1787	7.0700e-003	0.1858		2,408.4596	2,408.4596	0.1380		2,411.9096
Worker	2.2070	1.1294	14.2945	0.0546	7.2878	0.0451	7.3330	1.9328	0.0415	1.9743		5,447.4906	5,447.4906	0.1038		5,450.0859
Total	2.3893	7.5510	16.2159	0.0770	7.9085	0.0525	7.9611	2.1115	0.0486	2.1601		7,855.9502	7,855.9502	0.2418		7,861.9955

3.6 Paving - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.6 Paving - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0508	0.0260	0.3289	1.2600e-003	0.1677	1.0400e-003	0.1687	0.0445	9.6000e-004	0.0454		125.3257	125.3257	2.3900e-003		125.3854
Total	0.0508	0.0260	0.3289	1.2600e-003	0.1677	1.0400e-003	0.1687	0.0445	9.6000e-004	0.0454		125.3257	125.3257	2.3900e-003		125.3854

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.6 Paving - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0508	0.0260	0.3289	1.2600e-003	0.1677	1.0400e-003	0.1687	0.0445	9.6000e-004	0.0454		125.3257	125.3257	2.3900e-003		125.3854
Total	0.0508	0.0260	0.3289	1.2600e-003	0.1677	1.0400e-003	0.1687	0.0445	9.6000e-004	0.0454		125.3257	125.3257	2.3900e-003		125.3854

3.7 Architectural Coating - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	94.4845					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	94.6553	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.7 Architectural Coating - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4400	0.2252	2.8501	0.0109	1.4531	9.0000e-003	1.4621	0.3854	8.2800e-003	0.3937		1,086.1561	1,086.1561	0.0207		1,086.6736
Total	0.4400	0.2252	2.8501	0.0109	1.4531	9.0000e-003	1.4621	0.3854	8.2800e-003	0.3937		1,086.1561	1,086.1561	0.0207		1,086.6736

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	94.4845					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	94.6553	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319

CSUDH Campus Master Plan EIR - South Coast Air Basin, Winter

3.7 Architectural Coating - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4400	0.2252	2.8501	0.0109	1.4531	9.0000e-003	1.4621	0.3854	8.2800e-003	0.3937		1,086.1561	1,086.1561	0.0207		1,086.6736
Total	0.4400	0.2252	2.8501	0.0109	1.4531	9.0000e-003	1.4621	0.3854	8.2800e-003	0.3937		1,086.1561	1,086.1561	0.0207		1,086.6736

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

B.3 Carbon Monoxide Analysis for Campus Master Plan



CARBON MONOXIDE ANALYSIS FOR CAMPUS MASTER PLAN 2018

INTRODUCTION

A microscale carbon monoxide (CO) analysis was performed to evaluate the potential impacts to ambient air quality associated with traffic changes due to the California State University, Dominguez Hills, Campus Master Plan 2018. CO concentrations were predicted for locations in the study area as described below. The analysis was performed based on the guidance provided by Caltrans' "Transportation Project-Level Carbon Monoxide Protocol" (Caltrans 1997) and EPA's "Guideline for Modeling Carbon Monoxide from Roadway Intersections" (USEPA 1992).

SCREENING

An intersection screening analysis was performed as described in the EPA Guidance. Thirty-seven intersections were evaluated based on changes in level of service (LOS) and overall intersection volumes for the No Project and Plus Master Plan Buildout (Plus Project) scenarios.

Of the thirty-seven intersections screened, twenty showed an LOS of E or F during one or more scenarios in the 2035 analysis year. Those twenty intersections were then ranked by volume, and the two intersections with the highest volume were identified. This process was repeated with the 2025 intersection data, and the same two intersections were identified.

Based on the screening analysis, two locations were selected for a detailed CO modeling analysis: Avalon Boulevard and Victoria Street, and West Artesia and Vermont Avenue. Tables of intersection volumes and LOS for each analysis year and scenario are included in Attachment 1.

MODELING METHODOLOGY

The CO microscale air quality analysis was conducted at the selected modeling sites, following Caltrans' "Transportation Project-Level Carbon Monoxide Protocol" (Caltrans 1997) and EPA's "Guideline for Modeling Carbon Monoxide from Roadway Intersections" (USEPA 1992).

Appendix B of the Caltrans Protocol recommends the use of the CALINE4 dispersion model as well as the latest version of the EMFAC mobile source emissions model. Details about model inputs and options are described in the following sections.

CALINE4 DISPERSION MODEL

Mobile source models are the basic analytical tools used to estimate CO concentrations expected under given traffic, roadway geometry, and meteorological conditions. The mathematical expressions and formulations that comprise the various models attempt to describe an extremely complex physical phenomenon as closely as possible. The dispersion modeling program used in this project for estimating pollutant concentrations near roadway intersections is the CALINE4 dispersion model.

CALINE4 is a line source air quality model based on the Gaussian diffusion equation and employs a mixing zone concept to characterize pollutant dispersion over a roadway. Gaussian models assume that the dispersion of pollutants downwind of a pollution source follows a normal distribution from the center of the pollution source. A complete description of the model is provided in CALINE4 – A Dispersion Model for Predicting Air Pollution Concentrations Near Roadways (Caltrans 1989).

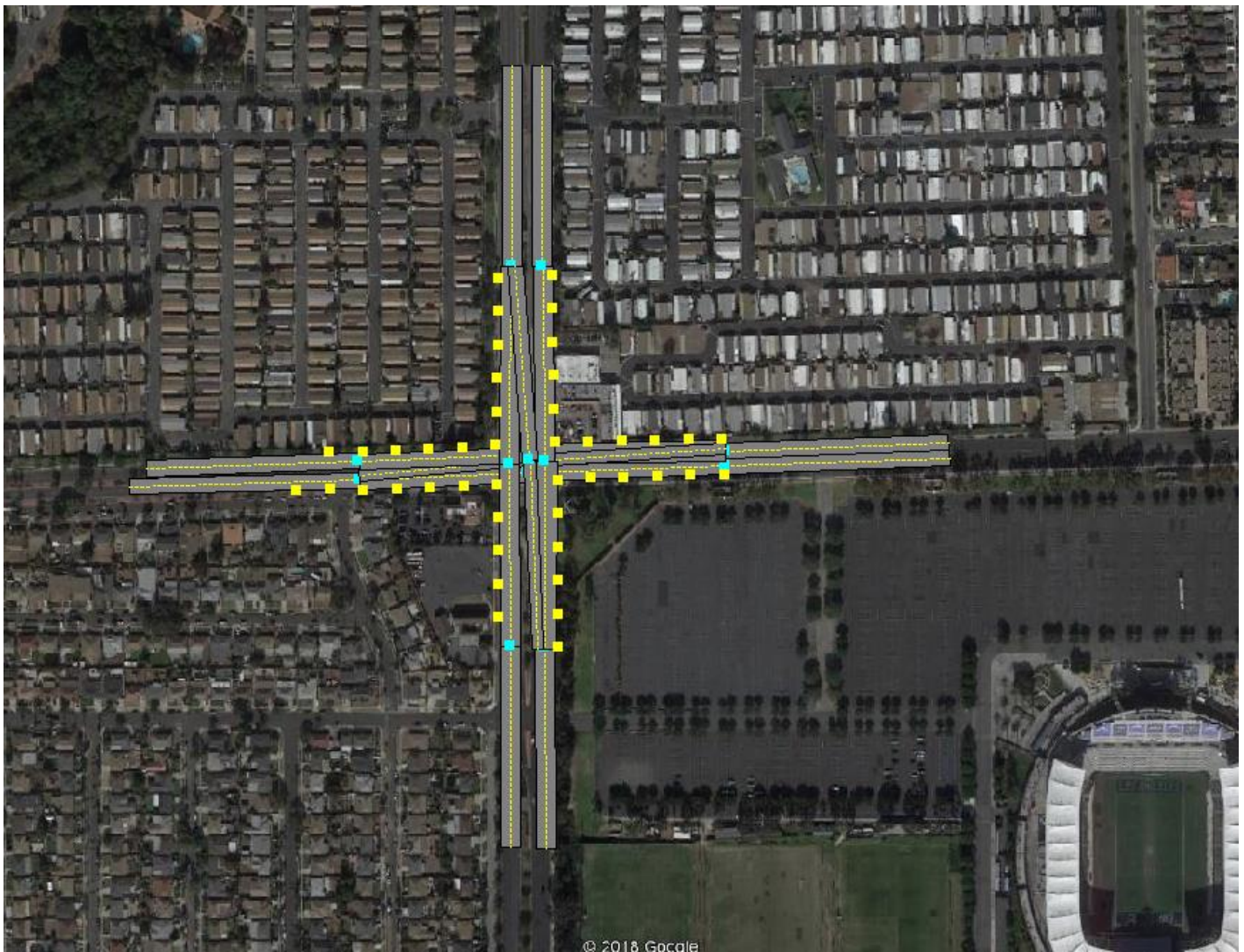
The purpose of the model is to assess air quality impacts near transportation facilities. Given source strength, meteorology, and site geometry, CALINE4 can predict pollutant concentrations for receptors located within 500 meters of the roadway.

CALINE4 represents the roadway a series of straight line segments called links. Link coordinates for this analysis were developed using the methodology in the Caltrans Protocol. Approach and departure segments of an intersection accounted for the acceleration and deceleration that occurs within 150 meters of the traffic signal.

Concentrations are calculated for a series of receptors, representing locations where people may be exposed to vehicle exhaust. As recommended in the Caltrans Protocol, receptors were placed at a distance of 3 meters from the edge of the roadway, which is the closest distance for which modeled concentrations are considered valid, with a height of 1.8 meters. Receptors were spaced 25 m along the roadway, consistent with recommendations in the EPA guidance.

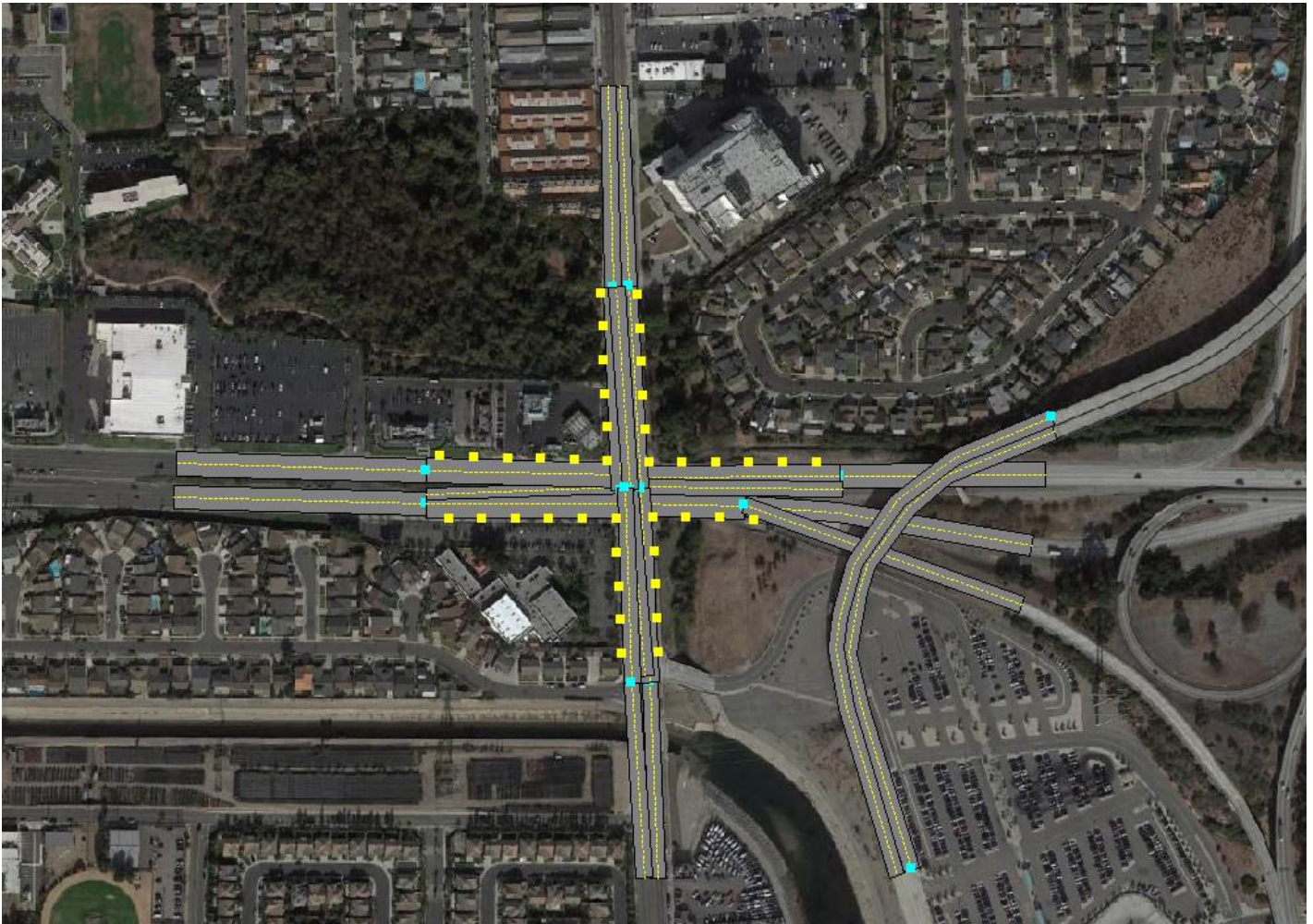
Figure 1 and Figure 2 provide a graphical representation of the links and receptors used to model each intersection.

Figure 1: Avalon and Victoria CALINE4 Model Geometry



Note: gray lines = CO sources (Roadways); yellow dots = receptors

Figure 2: Vermont and Artesia CALINE4 Model Geometry



Note: gray lines = CO sources (Roadways); yellow dots = receptors

Estimates of traffic volumes were obtained from the Transportation Impact Study (WSP 2017).

Dispersion models, such as CALINE4, are sensitive to meteorological input parameters. The meteorological input parameters for CALINE4 are wind speed, wind direction, standard deviation of the wind angle (i.e., sigma theta) and stability class. Dispersion models are also indirectly sensitive to temperature through the emission factors that are used to predict emission source strength. This analysis used a wind speed of 1 m/s, stability class “D”, and a temperature of 9.9 degrees Celsius. These conditions represent a worst-case winter day. The analysis utilized the CALINE4 option to search for the worst wind angle at each receptor to estimate the highest CO concentration at each receptor location.

1-hour average ambient CO concentrations were calculated to estimate the effect during peak-hour traffic conditions, and CO concentrations were estimated at a receptor height of 6 feet. The CO levels estimated by the model are the maximum concentrations which could be expected to occur at each air quality receptor site analyzed, given the assumed simultaneous occurrence of a number of worst-case conditions: peak-hour traffic conditions, conservative vehicular operating conditions, low wind speed, low atmospheric temperature, neutral atmospheric conditions, and maximizing wind direction.



EMFAC EMISSIONS MODEL

The recommended model to calculate emission factors in California is EMFAC. For this analysis, emission factors were calculated using the USEPA approved EMFAC2014 Web Database (Caltrans 2018). EMFAC was run for each analysis year (2025 and 2035) to provide emission factors by speed bin. Emission factors were calculated for the winter season because worst-case CO emissions occur during periods of colder ambient temperatures. The model was run with Los Angeles County defaults, which include vehicle mix, meteorological conditions, and applicable inspection and maintenance programs.

An emission factor was assigned to each modeled link according to the Caltrans Protocol. Emission factors for approach and departure links within 150 meters of the intersection, the Caltrans Protocol provides a methodology to estimate the average speed as a function of traffic volume, average cruise speed, and percentage of red time. Emission factors for external links were based on the average cruise speed.

PREDICTED CONCENTRATIONS

The CALINE4 model was run for each scenario to determine the maximum predicted 1-hour CO concentration at each receptor. The results are summarized in Table 2 and Table 3. The results include a background concentration of 6 ppm. The 8-hour concentrations were calculated by applying a persistence factor of 0.7 to the 1-hour model result, and adding a background concentration of 3.9 ppm. The background values represent the highest 1-hour and 8-hour CO concentration measured within the past 3 years at nearby ambient air monitor, as determined from South Coast Air Quality Management District’s annual Air Quality Data Tables (SCAQMD 2018).

All predicted concentrations are below the National Ambient Air Quality Standards (NAAQS). CO concentrations at Avalon and Victoria increase by a maximum of 0.1 ppm due to the project. CO concentrations at Vermont and Artesia do not increase as a result of the project. Based on these model results, the project is not expected to cause an exceedance of the NAAQS or exacerbate an existing exceedance of the NAAQS.

Attachments 2, 3, and 4 include EMFAC output files, CALINE4 input files, and CALINE4 output files, respectively.

TABLE 2: MAXIMUM MODELED CO CONCENTRATIONS AT AVALON AND VICTORIA (PPM)

Year – averaging period	No Project		Plus Project	
	AM	PM	AM	PM
2025 - 1 hour	6.3	6.3	6.3	6.4
2035 - 1 hour	6.2	6.3	6.3	6.3
2025 – 8 hour	4.1	4.1	4.1	4.2
2035 – 8 hour	4.0	4.1	4.1	4.1
1-hour CO NAAQS; 35 ppm				
8-hour CO NAAQS; 9 ppm				



TABLE 3: MAXIMUM MODELED CO CONCENTRATIONS AT VERMONT AND ARTESIA (PPM)

Year – averaging period	No Project		Plus Project	
	AM	PM	AM	PM
2025 - 1 hour	6.4	6.4	6.4	6.4
2035 - 1 hour	6.3	6.3	6.3	6.3
2025 – 8 hour	4.2	4.2	4.2	4.2
2035 – 8 hour	4.1	4.1	4.1	4.1

1-hour CO NAAQS; 35 ppm
8-hour CO NAAQS: 9 ppm

REFERENCES

US Environmental Protection Agency (USEPA). 1992. "Guideline for Modeling Carbon Monoxide from Roadway Intersections." EPA-454/R-92-005. November 1992.

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South Coast Air Quality Management District (SCAQMD). 2018. Historical Data By Year. <http://www.aqmd.gov/home/air-quality/air-quality-data-studies/historical-data-by-year>, April 2018.

WSP USA. 2017. "Transportation Impact Study." November 2017.

Attachment 1 Intersection Screening Tables

Study ID	Intersection Name	Control Type	2035 Weekday Scenarios									
			AM Peak Hour					PM Peak Hour				
			No Project		Plus Master Plan Build-Out		Project Has Impact?	No Project		Plus Master Plan Build-Out		Project Has Impact?
			total volume	LOS	total volume	LOS		total volume	LOS	total volume	LOS	
1	Victoria St./Drive D	TWSC	1930	D	3890	F	Yes	2830	F	4750	F	No
2	Victoria St./Tamcliff Ave.	Signalized	1570	A	2670	A	No	2530	B	3530	C	No
3	Victoria St./Birchknoll Dr.	Signalized	1650	A	2690	B	No	2420	B	3630	E	Yes
4	Victoria St./Project Service Rd.	TWSC	0	N/A	2260	B	No	0	N/A	3040	C	No
5	Central Ave./Charles Willard St.	TWSC	1810	E	3690	F	Yes	1880	D	3710	F	Yes
6	Central Ave./Beachey Pl.	TWSC	1600	C	3270	F	Yes	1730	C	3300	F	Yes
7	Central Ave./Glenn Curtiss St.	Signalized	1860	A	3380	D	No	1870	A	3470	D	No
8	University Dr./Birchknoll Dr. Ext.	N/A	0	N/A	2220	C	No	0	N/A	2270	C	No
9	University Dr./Toro Center Dr.	TWSC	1340	B	2520	F	Yes	1410	B	2930	F	Yes
10	Albertoni St./SR 91 EB Ramps	Signalized	1900	B	2180	C	No	2560	D	2780	E	Yes
11	Avalon Blvd./SR 91 WB On-Ramp	Signalized	3290	A	3390	A	No	3480	A	3660	A	No
12	Avalon Blvd./Albertoni St.	Signalized	3430	B	3820	C	No	4780	D	5190	E	Yes
13	Avalon Blvd./Victoria St.	Signalized	4000	B	5640	E	Yes	5600	D	7430	F	Yes
14	Central Ave./Artesia Blvd. WB	Signalized	3540	D	4350	F	Yes	3220	C	3940	F	Yes
15	Central Ave./Albertoni St./Artesia Blvd. EB	Signalized	3820	D	5210	F	Yes	4100	C	5730	F	Yes
16	Central Ave./Victoria St.	Signalized	3130	A	5380	F	Yes	3900	B	6200	E	Yes
17	Wilmington Ave./Artesia Blvd. WB	Signalized	3170	C	3190	C	No	2820	C	2830	C	No
18	Wilmington Ave./Artesia Blvd. EB	Signalized	3220	C	3260	C	No	3780	C	3810	C	No
19	Wilmington Ave./Victoria St.	Signalized	2680	A	2720	A	No	3200	A	3250	A	No
20	I-110 SB Off-Ramp/190th St.	Signalized	3470	F	4240	F	Yes	4090	F	4950	F	Yes
21	I-110 NB On-Ramp/190th St.	Signalized	2720	A	3590	B	No	3940	C	4930	D	No
22	Figuroa St./190th St./Victoria St.	Signalized	4140	D	5190	E	Yes	5320	D	6500	F	Yes
23	Broadway/Victoria St.	Signalized	2600	A	3660	C	No	3550	C	4750	E	Yes
24	Main St./Victoria St.	Signalized	3120	B	4350	D	No	4190	E	5620	F	Yes
25	Avalon Blvd./University Dr.	Signalized	2780	A	3040	A	No	3530	B	4160	C	No
26	Avalon Blvd./Del Amo Blvd.	Signalized	4440	D	4880	E	Yes	5390	E	5880	F	Yes
27	Avalon Blvd./I-405 NB Ramps	Signalized	3350	A	3490	A	No	4090	A	4230	A	No
28	Avalon Blvd./I-405 SB Ramps	Signalized	3190	B	3250	B	No	3840	A	3950	A	No
29	Central Ave./University Dr.	Signalized	2210	A	3760	F	Yes	2460	A	3920	F	Yes
30	Wilmington Ave./University Dr.	Signalized	2140	A	2450	B	No	2290	A	2600	C	No
31	Central Ave./Del Amo Blvd.	Signalized	2690	C	2990	D	No	3360	C	3660	D	No
32	Wilmington Ave./Del Amo Blvd.	Signalized	3830	B	4210	C	No	4290	C	4700	C	No
33	W. Artesia Blvd./Crenshaw Blvd.	Signalized	5200	E	5320	E	No	5900	F	5990	F	No
34	W. 190th St./S. Western Ave.	Signalized	6780	D	7300	D	No	7600	D	8210	D	No
35	W. Artesia Blvd./Vermont Ave.	Signalized	7380	D	7440	D	No	8540	F	8580	F	No
36	Alameda St./Compton Blvd.	Signalized	2930	B	2960	B	No	3450	C	3490	C	No
37	Alameda St./SR 91 EB Ramps	Signalized	2100	A	2130	A	No	2380	C	2410	D	No
1st highest					7440					8580		
2nd highest					7300					8210		
3rd highest					5640					7430		
4th highest					5380					6500		

Study ID	Intersection Name	Control Type	2025 Scenarios									
			AM Peak Hour					PM Peak Hour				
			No Project		Plus Phase 1 Build-Out		Project Has Impact?	No Project		Plus Phase 1 Build-Out		Project Has Impact?
			Total Volume	LOS	Total Volume	LOS		Total Volume	LOS	Total Volume	LOS	
1	Victoria St./Drive D	TWSC	1920	D	2690	F	Yes	2810	F	3630	F	No
2	Victoria St./Tamcliff Ave.	Signalized	1560	A	2280	A	No	2510	B	3320	C	No
3	Victoria St./Birchknoll Dr.	Signalized	1640	A	2550	D	No	2400	B	3500	F	Yes
4	Victoria St./Project Service Rd.	TWSC	0	N/A	1710	B	No	0	N/A	2510	B	No
5	Central Ave./Charles Willard St.	TWSC	1790	E	2640	F	Yes	1860	D	2650	F	Yes
6	Central Ave./Beachey Pl.	TWSC	1580	C	2260	F	Yes	1710	C	2350	F	Yes
7	Central Ave./Glenn Curtiss St.	Signalized	1840	A	2500	B	No	1850	A	2510	B	No
8	University Dr./Birchknoll Dr. Ext.	N/A	0	N/A	0	N/A	N/A	0	N/A	0	N/A	N/A
9	University Dr./Toro Center Dr.	TWSC	1320	B	1420	B	No	1390	B	1500	C	No
10	Albertoni St./SR 91 EB Ramps	Signalized	1870	B	1950	B	No	2520	C	2590	D	No
11	Avalon Blvd./SR 91 WB On-Ramp	Signalized	3230	A	3270	A	No	3420	A	3490	A	No
12	Avalon Blvd./Albertoni St.	Signalized	3370	B	3520	B	No	4700	D	4820	D	No
13	Avalon Blvd./Victoria St.	Signalized	3950	B	4790	C	No	5530	D	6440	F	Yes
14	Central Ave./Artesia Blvd. WB	Signalized	3490	C	3830	D	No	3150	C	3570	E	Yes
15	Central Ave./Albertoni St./Artesia Blvd. EB	Signalized	3760	D	4470	F	Yes	4050	C	4920	E	Yes
16	Central Ave./Victoria St.	Signalized	3100	A	4120	D	No	3830	B	4910	D	No
17	Wilmington Ave./Artesia Blvd. WB	Signalized	3110	C	3150	C	No	2750	C	2800	C	No
18	Wilmington Ave./Artesia Blvd. EB	Signalized	3170	C	3200	C	No	3710	C	3730	C	No
19	Wilmington Ave./Victoria St.	Signalized	2630	A	2680	A	No	3150	A	3200	A	No
20	I-110 SB Off-Ramp/190th St.	Signalized	3410	F	3910	F	Yes	4010	F	4510	F	Yes
21	I-110 NB On-Ramp/190th St.	Signalized	2680	A	3220	A	No	3880	C	4440	C	No
22	Figueroa St./190th St./Victoria St.	Signalized	4060	D	4760	E	Yes	5230	D	5960	F	Yes
23	Broadway/Victoria St.	Signalized	2560	A	3270	B	No	3510	C	4230	D	No
24	Main St./Victoria St.	Signalized	3060	B	3850	C	No	4120	E	4970	F	Yes
25	Avalon Blvd./University Dr.	Signalized	2750	A	2870	A	No	3470	B	3600	B	No
26	Avalon Blvd./Del Amo Blvd.	Signalized	4380	D	4550	D	No	5300	E	5530	E	No
27	Avalon Blvd./I-405 NB Ramps	Signalized	3300	A	3330	A	No	4010	A	4070	A	No
28	Avalon Blvd./I-405 SB Ramps	Signalized	3140	A	3150	A	No	3780	A	3810	A	No
29	Central Ave./University Dr.	Signalized	2180	A	2590	C	No	2430	A	2920	B	No
30	Wilmington Ave./University Dr.	Signalized	2120	A	2350	B	No	2250	A	2490	C	No
31	Central Ave./Del Amo Blvd.	Signalized	2630	C	2830	D	No	3290	C	3500	C	No
32	Wilmington Ave./Del Amo Blvd.	Signalized	3760	B	4050	C	No	4210	C	4520	C	No
33	W. Artesia Blvd./Crenshaw Blvd.	Signalized	5140	E	5190	E	No	5810	F	5830	F	No
34	W. 190th St./S. Western Ave.	Signalized	6660	D	6930	D	No	7480	C	7800	D	No
35	W. Artesia Blvd./Vermont Ave.	Signalized	7240	D	7300	D	No	8360	F	8410	F	No
36	Alameda St./Compton Blvd.	Signalized	2870	B	2920	B	No	3400	C	3420	C	No
37	Alameda St./SR 91 EB Ramps	Signalized	2070	A	2090	A	No	2350	C	2360	C	No
1st highest			7300				8410					
2nd highest			6930				7800					
3rd highest			5190				6440					
4th highest			4790				5960					

Attachment 2 EMFAC Output Files

EMFAC2014 (v1.0.7) Emission Rates

Region Type: County

Region: Los Angeles

Calendar Year: 2025

Season: Winter

Vehicle Classification: EMFAC2011 Categories

Units: miles/day for VMT, g/mile for RUNEX, PMBW and PMTW

Region	CalYr	VehClass	MdYr	Speed	Fuel	VMT	ROG_RUNE	TOG_RUNE	CO_RUNEX	NOx_RUNE	CO2_RUNE	PM10_RUNE	PM2_5_RUNEX
Los Angele:	2025	All Other B Aggregate	tec		5 DSL	435.0115	0.269456	0.306755	1.418329	10.54294	2195.826	0.006745	0.006453
Los Angele:	2025	All Other B Aggregate	tec		10 DSL	1706.599	0.218241	0.248451	1.148751	8.096486	1947.019	0.006068	0.005805
Los Angele:	2025	All Other B Aggregate	tec		15 DSL	4367.57	0.153694	0.174969	0.808995	5.016937	1633.516	0.005214	0.004988
Los Angele:	2025	All Other B Aggregate	tec		20 DSL	10829.52	0.111178	0.126567	0.585202	2.990069	1427.01	0.004651	0.00445
Los Angele:	2025	All Other B Aggregate	tec		25 DSL	22702.3	0.081478	0.092756	0.428871	1.763635	1317.044	0.004231	0.004048
Los Angele:	2025	All Other B Aggregate	tec		30 DSL	29050.15	0.060045	0.068357	0.316057	1.177202	1247.049	0.003896	0.003728
Los Angele:	2025	All Other B Aggregate	tec		35 DSL	22156.65	0.044252	0.050378	0.232928	0.848178	1191.637	0.003617	0.003461
Los Angele:	2025	All Other B Aggregate	tec		40 DSL	22375.48	0.032613	0.037127	0.171664	0.643897	1146.136	0.003378	0.003232
Los Angele:	2025	All Other B Aggregate	tec		45 DSL	23058.83	0.024032	0.027358	0.126495	0.508245	1107.734	0.003169	0.003032
Los Angele:	2025	All Other B Aggregate	tec		50 DSL	23113.72	0.017708	0.020159	0.093209	0.413535	1074.684	0.002983	0.002854
Los Angele:	2025	All Other B Aggregate	tec		55 DSL	24240.18	0.013051	0.014857	0.068694	0.345546	1045.824	0.002816	0.002694
Los Angele:	2025	All Other B Aggregate	tec		60 DSL	35964.13	0.011203	0.012753	0.058966	0.318247	1032.652	0.002738	0.002619
Los Angele:	2025	All Other B Aggregate	tec		65 DSL	22076.34	0.011203	0.012753	0.058967	0.318901	1032.654	0.002738	0.002619
Los Angele:	2025	All Other B Aggregate	tec		70 DSL	101.934	0.011285	0.012847	0.059401	0.338613	1034.177	0.00276	0.002641
Los Angele:	2025	All Other B Aggregate	tec		75 DSL	0	0	0	0	0	0	0	0
Los Angele:	2025	All Other B Aggregate	tec		80 DSL	0	0	0	0	0	0	0	0
Los Angele:	2025	All Other B Aggregate	tec		85 DSL	0	0	0	0	0	0	0	0
Los Angele:	2025	All Other B Aggregate	tec		90 DSL	0	0	0	0	0	0	0	0
Los Angele:	2025	LDA	Aggregate		5 GAS	429233.3	0.057998	0.084631	0.947236	0.074779	767.3618	0.011839	0.010885
Los Angele:	2025	LDA	Aggregate		5 DSL	5151.628	0.158322	0.18024	3.041649	0.110332	577.3603	0.026494	0.025348
Los Angele:	2025	LDA	Aggregate		10 GAS	1567864	0.036701	0.053554	0.85355	0.063701	568.4282	0.007468	0.006867
Los Angele:	2025	LDA	Aggregate		10 DSL	18816.14	0.116669	0.13282	2.263555	0.096953	480.2265	0.019741	0.018887
Los Angele:	2025	LDA	Aggregate		15 GAS	4007510	0.024534	0.0358	0.774477	0.055856	437.3805	0.004969	0.004569
Los Angele:	2025	LDA	Aggregate		15 DSL	48093.51	0.061457	0.069964	1.125696	0.075475	394.7606	0.015069	0.014417
Los Angele:	2025	LDA	Aggregate		20 GAS	10670377	0.017311	0.02526	0.70698	0.049936	349.6169	0.003487	0.003207
Los Angele:	2025	LDA	Aggregate		20 DSL	128051.5	0.029053	0.033074	0.462519	0.061154	323.7079	0.011865	0.011352
Los Angele:	2025	LDA	Aggregate		25 GAS	22300471	0.012888	0.018805	0.648473	0.045455	290.1534	0.002581	0.002373
Los Angele:	2025	LDA	Aggregate		25 DSL	267620.8	0.019526	0.022229	0.289101	0.055397	271.3599	0.009669	0.009251

Los Angele:	2025 LDA	Aggregatec	30 GAS	24484834	0.0101	0.014738	0.596995	0.042282	249.926	0.002014	0.001852
Los Angele:	2025 LDA	Aggregatec	30 DSL	293836.5	0.015419	0.017553	0.223334	0.053128	235.0827	0.008221	0.007865
Los Angele:	2025 LDA	Aggregatec	35 GAS	14210773	0.008344	0.012175	0.551798	0.040074	223.4326	0.001657	0.001524
Los Angele:	2025 LDA	Aggregatec	35 DSL	170545.2	0.012812	0.014586	0.182339	0.052237	212.6664	0.007252	0.006938
Los Angele:	2025 LDA	Aggregatec	40 GAS	10034253	0.007272	0.010611	0.512056	0.038135	207.4052	0.001438	0.001322
Los Angele:	2025 LDA	Aggregatec	40 DSL	120424.2	0.011111	0.01265	0.155208	0.051972	199.0836	0.006632	0.006345
Los Angele:	2025 LDA	Aggregatec	45 GAS	8459923	0.006652	0.009707	0.475679	0.036881	199.6577	0.001315	0.001209
Los Angele:	2025 LDA	Aggregatec	45 DSL	101528.5	0.010023	0.01141	0.136896	0.052057	192.222	0.006285	0.006013
Los Angele:	2025 LDA	Aggregatec	50 GAS	7492017	0.006403	0.009343	0.443391	0.036453	199.4545	0.001269	0.001167
Los Angele:	2025 LDA	Aggregatec	50 DSL	89911.67	0.009395	0.010695	0.125157	0.052506	192.6674	0.006161	0.005895
Los Angele:	2025 LDA	Aggregatec	55 GAS	6757227	0.006477	0.009451	0.414673	0.037357	206.6898	0.00129	0.001186
Los Angele:	2025 LDA	Aggregatec	55 DSL	81095.26	0.009155	0.010422	0.118928	0.053393	201.7189	0.006246	0.005976
Los Angele:	2025 LDA	Aggregatec	60 GAS	9297796	0.006843	0.009985	0.38687	0.039362	221.7298	0.001384	0.001272
Los Angele:	2025 LDA	Aggregatec	60 DSL	111582.5	0.009494	0.010809	0.121914	0.054633	218.5567	0.006636	0.006349
Los Angele:	2025 LDA	Aggregatec	65 GAS	4070356	0.007684	0.011213	0.364775	0.041586	247.5308	0.001565	0.001439
Los Angele:	2025 LDA	Aggregatec	65 DSL	48848.92	0.010396	0.011835	0.134086	0.056356	245.7887	0.007351	0.007033
Los Angele:	2025 LDA	Aggregatec	70 GAS	31265.6	0.00898	0.013103	0.380072	0.046911	271.3936	0.001695	0.001559
Los Angele:	2025 LDA	Aggregatec	70 DSL	375.639	0.010632	0.012104	0.144788	0.062119	272.4577	0.007274	0.006959
Los Angele:	2025 LDT1	Aggregatec	5 GAS	37646.91	0.136349	0.19896	2.31215	0.215341	903.1976	0.015785	0.014514
Los Angele:	2025 LDT1	Aggregatec	5 DSL	33.07319	0.574484	0.654012	3.377372	0.577132	816.9538	0.344412	0.329513
Los Angele:	2025 LDT1	Aggregatec	10 GAS	140150.3	0.088353	0.128924	2.00172	0.176914	669.0388	0.010069	0.009258
Los Angele:	2025 LDT1	Aggregatec	10 DSL	122.9233	0.403632	0.459508	2.452806	0.581883	685.907	0.23481	0.224652
Los Angele:	2025 LDT1	Aggregatec	15 GAS	360618.3	0.060628	0.088468	1.766166	0.151326	514.8037	0.006789	0.006242
Los Angele:	2025 LDT1	Aggregatec	15 DSL	316.114	0.267042	0.304009	1.555761	0.583043	568.2195	0.170175	0.162813
Los Angele:	2025 LDT1	Aggregatec	20 GAS	964468.4	0.043782	0.063886	1.578456	0.132898	411.4964	0.004823	0.004434
Los Angele:	2025 LDT1	Aggregatec	20 DSL	845.1252	0.183213	0.208576	1.015095	0.592471	466.5559	0.129311	0.123717
Los Angele:	2025 LDT1	Aggregatec	25 GAS	2014439	0.033278	0.048559	1.427545	0.119744	341.4929	0.00361	0.003319
Los Angele:	2025 LDT1	Aggregatec	25 DSL	1765.264	0.142144	0.161821	0.795349	0.612771	391.2228	0.103448	0.098973
Los Angele:	2025 LDT1	Aggregatec	30 GAS	2207899	0.026509	0.038682	1.302713	0.110885	294.1366	0.002842	0.002614
Los Angele:	2025 LDT1	Aggregatec	30 DSL	1935.079	0.117829	0.134141	0.680717	0.637801	338.3764	0.086713	0.082961
Los Angele:	2025 LDT1	Aggregatec	35 GAS	1270477	0.022205	0.032402	1.201848	0.105411	262.9495	0.002358	0.002168
Los Angele:	2025 LDT1	Aggregatec	35 DSL	1114.299	0.102872	0.117113	0.616618	0.66778	305.7521	0.076711	0.073392
Los Angele:	2025 LDT1	Aggregatec	40 GAS	893090.3	0.019464	0.028402	1.116356	0.100931	244.0757	0.002052	0.001887
Los Angele:	2025 LDT1	Aggregatec	40 DSL	783.6014	0.093697	0.106667	0.587837	0.696317	285.5375	0.070551	0.067499
Los Angele:	2025 LDT1	Aggregatec	45 GAS	756548.3	0.017739	0.025885	1.039803	0.098377	234.9563	0.001872	0.001721
Los Angele:	2025 LDT1	Aggregatec	45 DSL	663.5312	0.088627	0.100896	0.58821	0.720878	275.1296	0.066995	0.064097
Los Angele:	2025 LDT1	Aggregatec	50 GAS	671782.8	0.016933	0.024709	0.977405	0.098584	234.7146	0.001796	0.001651
Los Angele:	2025 LDT1	Aggregatec	50 DSL	589.0542	0.087822	0.09998	0.620594	0.747108	275.4872	0.066688	0.063803
Los Angele:	2025 LDT1	Aggregatec	55 GAS	602109.5	0.016973	0.024767	0.930283	0.103358	243.2285	0.001815	0.001669

Los Angeles:	2025	LDT1	Aggregatec	55 DSL	528.2421	0.0917	0.104395	0.692929	0.780015	288.2889	0.070248	0.067209
Los Angeles:	2025	LDT1	Aggregatec	60 GAS	834332.4	0.017609	0.025694	0.886283	0.111531	260.9692	0.001923	0.001768
Los Angeles:	2025	LDT1	Aggregatec	60 DSL	731.5393	0.099342	0.113094	0.813526	0.806404	311.979	0.076052	0.072762
Los Angeles:	2025	LDT1	Aggregatec	65 GAS	363742.8	0.019396	0.028302	0.863226	0.121916	291.3427	0.002149	0.001976
Los Angeles:	2025	LDT1	Aggregatec	65 DSL	319.0401	0.113795	0.129548	1.013536	0.839018	350.6187	0.087474	0.08369
Los Angeles:	2025	LDT1	Aggregatec	70 GAS	1921.54	0.026918	0.039278	1.076344	0.16751	322.5627	0.002606	0.002396
Los Angeles:	2025	LDT1	Aggregatec	70 DSL	1.750369	0.168315	0.191615	1.385621	1.136625	400.6735	0.152079	0.1455
Los Angeles:	2025	LDT2	Aggregatec	5 GAS	174945.5	0.074031	0.108026	1.16505	0.106424	996.7422	0.011957	0.010994
Los Angeles:	2025	LDT2	Aggregatec	5 DSL	369.5836	0.261339	0.297518	2.49829	0.15098	741.5276	0.011858	0.011345
Los Angeles:	2025	LDT2	Aggregatec	10 GAS	653377.2	0.04694	0.068494	1.049513	0.090387	739.1001	0.007538	0.006931
Los Angeles:	2025	LDT2	Aggregatec	10 DSL	1383.115	0.195448	0.222504	1.871041	0.126381	624.5463	0.010348	0.0099
Los Angeles:	2025	LDT2	Aggregatec	15 GAS	1683059	0.031413	0.045838	0.951807	0.079051	568.9191	0.005014	0.00461
Los Angeles:	2025	LDT2	Aggregatec	15 DSL	3565.312	0.096115	0.10942	0.917367	0.086651	517.9524	0.008705	0.008328
Los Angeles:	2025	LDT2	Aggregatec	20 GAS	4504643	0.022182	0.032369	0.868513	0.070535	454.8709	0.003517	0.003234
Los Angeles:	2025	LDT2	Aggregatec	20 DSL	9546.856	0.038133	0.043412	0.360741	0.059248	425.5923	0.007281	0.006966
Los Angeles:	2025	LDT2	Aggregatec	25 GAS	9407670	0.01652	0.024106	0.796158	0.064121	377.482	0.002603	0.002393
Los Angeles:	2025	LDT2	Aggregatec	25 DSL	19936.74	0.023198	0.02641	0.218355	0.046734	356.8374	0.00617	0.005903
Los Angeles:	2025	LDT2	Aggregatec	30 GAS	10308176	0.01295	0.018896	0.732583	0.059597	325.109	0.002031	0.001868
Los Angeles:	2025	LDT2	Aggregatec	30 DSL	21841.12	0.017623	0.020062	0.165709	0.040283	308.5478	0.005418	0.005183
Los Angeles:	2025	LDT2	Aggregatec	35 GAS	5923078	0.010696	0.015608	0.676528	0.056461	290.5028	0.001672	0.001537
Los Angeles:	2025	LDT2	Aggregatec	35 DSL	12538.58	0.014097	0.016048	0.132453	0.036118	278.4065	0.004876	0.004665
Los Angeles:	2025	LDT2	Aggregatec	40 GAS	4160549	0.009321	0.013601	0.62754	0.053729	269.5911	0.001451	0.001334
Los Angeles:	2025	LDT2	Aggregatec	40 DSL	8803.31	0.011704	0.013324	0.109944	0.033179	259.8084	0.004472	0.004279
Los Angeles:	2025	LDT2	Aggregatec	45 GAS	3527261	0.008529	0.012446	0.583253	0.052005	259.5908	0.001327	0.00122
Los Angeles:	2025	LDT2	Aggregatec	45 DSL	7467.089	0.009999	0.011383	0.093982	0.030983	250.5343	0.004165	0.003985
Los Angeles:	2025	LDT2	Aggregatec	50 GAS	3133456	0.008209	0.011979	0.543928	0.051488	259.3638	0.00128	0.001177
Los Angeles:	2025	LDT2	Aggregatec	50 DSL	6635.286	0.008748	0.009959	0.082317	0.029357	250.9701	0.003935	0.003765
Los Angeles:	2025	LDT2	Aggregatec	55 GAS	2805526	0.008298	0.012109	0.508686	0.052901	268.6721	0.001302	0.001197
Los Angeles:	2025	LDT2	Aggregatec	55 DSL	5936.936	0.00782	0.008903	0.073721	0.028239	262.3614	0.003772	0.003609
Los Angeles:	2025	LDT2	Aggregatec	60 GAS	3892143	0.008769	0.012795	0.475229	0.055912	288.3622	0.001396	0.001284
Los Angeles:	2025	LDT2	Aggregatec	60 DSL	8242.508	0.007492	0.008529	0.071031	0.027892	284.2497	0.003747	0.003585
Los Angeles:	2025	LDT2	Aggregatec	65 GAS	1695680	0.00984	0.014359	0.448407	0.059296	321.8459	0.001579	0.001452
Los Angeles:	2025	LDT2	Aggregatec	65 DSL	3589.425	0.007629	0.008685	0.072984	0.02828	319.2378	0.003853	0.003686
Los Angeles:	2025	LDT2	Aggregatec	70 GAS	8276.526	0.011657	0.01701	0.473254	0.070559	348.0644	0.001737	0.001597
Los Angeles:	2025	LDT2	Aggregatec	70 DSL	16.60922	0.008026	0.009137	0.075864	0.033914	339.1864	0.004141	0.003962
Los Angeles:	2025	LHD1	Aggregatec	5 GAS	4036.069	0.183535	0.267813	2.157248	0.372011	1355.071	0.008254	0.007589
Los Angeles:	2025	LHD1	Aggregatec	5 DSL	3238.709	0.743962	0.846951	3.108984	1.005757	1185.163	0.041608	0.039808
Los Angeles:	2025	LHD1	Aggregatec	10 GAS	17097.1	0.120862	0.176362	1.7118	0.330734	1332.988	0.005247	0.004825
Los Angeles:	2025	LHD1	Aggregatec	10 DSL	13533.27	0.551162	0.627461	2.310404	0.99339	996.7679	0.03325	0.031811

Los Angeles:	2025	LHD1	Aggregatec	15	GAS	43245.7	0.083001	0.121114	1.402164	0.296074	925.8902	0.003505	0.003222
Los Angeles:	2025	LHD1	Aggregatec	15	DSL	34730.83	0.28831	0.328222	1.221257	0.909667	650.6568	0.026093	0.024964
Los Angeles:	2025	LHD1	Aggregatec	20	GAS	96597.39	0.060064	0.087646	1.189373	0.270219	803.7892	0.00247	0.002271
Los Angeles:	2025	LHD1	Aggregatec	20	DSL	84829.06	0.133203	0.151643	0.579288	0.856989	554.3286	0.020882	0.019979
Los Angeles:	2025	LHD1	Aggregatec	25	GAS	181916.4	0.046049	0.067195	1.04538	0.252074	736.8325	0.00184	0.001692
Los Angeles:	2025	LHD1	Aggregatec	25	DSL	165885.1	0.088839	0.101138	0.397105	0.867168	491.7243	0.01739	0.016638
Los Angeles:	2025	LHD1	Aggregatec	30	GAS	205124.6	0.037127	0.054175	0.942215	0.239923	668.7616	0.001447	0.00133
Los Angeles:	2025	LHD1	Aggregatec	30	DSL	213129.6	0.070145	0.079855	0.322034	0.895908	446.6237	0.015066	0.014414
Los Angeles:	2025	LHD1	Aggregatec	35	GAS	148839.9	0.031574	0.046073	0.872071	0.23181	668.8373	0.0012	0.001104
Los Angeles:	2025	LHD1	Aggregatec	35	DSL	162895.8	0.058695	0.06682	0.278799	0.945788	446.8512	0.01355	0.012964
Los Angeles:	2025	LHD1	Aggregatec	40	GAS	137507.5	0.028322	0.041327	0.82846	0.225591	666.3942	0.00105	0.000965
Los Angeles:	2025	LHD1	Aggregatec	40	DSL	144886.1	0.051589	0.05873	0.255916	1.011353	434.9424	0.012582	0.012038
Los Angeles:	2025	LHD1	Aggregatec	45	GAS	136002.5	0.026465	0.038618	0.799547	0.221308	663.2786	0.000965	0.000887
Los Angeles:	2025	LHD1	Aggregatec	45	DSL	141139.2	0.046595	0.053046	0.243117	1.051648	424.3069	0.011859	0.011346
Los Angeles:	2025	LHD1	Aggregatec	50	GAS	130914	0.025904	0.037799	0.79153	0.220193	699.3854	0.000934	0.000859
Los Angeles:	2025	LHD1	Aggregatec	50	DSL	152245.9	0.042397	0.048266	0.233557	1.02973	444.3414	0.011198	0.010713
Los Angeles:	2025	LHD1	Aggregatec	55	GAS	134885.2	0.026781	0.039078	0.815883	0.226671	736.9819	0.000957	0.00088
Los Angeles:	2025	LHD1	Aggregatec	55	DSL	205979.5	0.041276	0.04699	0.245078	1.075204	464.379	0.01111	0.01063
Los Angeles:	2025	LHD1	Aggregatec	60	GAS	213856.3	0.028757	0.041963	0.866026	0.234377	747.7658	0.001029	0.000946
Los Angeles:	2025	LHD1	Aggregatec	60	DSL	457913	0.041962	0.047771	0.269187	1.086728	468.7123	0.011332	0.010841
Los Angeles:	2025	LHD1	Aggregatec	65	GAS	130159.6	0.032594	0.047561	0.970067	0.245475	757.9434	0.001168	0.001074
Los Angeles:	2025	LHD1	Aggregatec	65	DSL	314334.4	0.045862	0.052211	0.321708	1.129989	474.8436	0.012191	0.011664
Los Angeles:	2025	LHD1	Aggregatec	70	GAS	788.5463	0.047757	0.069687	1.402615	0.351574	757.681	0.001478	0.001359
Los Angeles:	2025	LHD1	Aggregatec	70	DSL	1884.04	0.10487	0.119388	0.875284	3.235585	485.3612	0.024275	0.023225
Los Angeles:	2025	LHD2	Aggregatec	5	GAS	1290.25	0.063611	0.092821	0.623827	0.177233	1418.114	0.006821	0.006272
Los Angeles:	2025	LHD2	Aggregatec	5	DSL	1645.889	0.728542	0.829397	2.990899	0.676553	1235.441	0.029999	0.028701
Los Angeles:	2025	LHD2	Aggregatec	10	GAS	5450.305	0.040955	0.059762	0.519018	0.155207	1471.972	0.0043	0.003954
Los Angeles:	2025	LHD2	Aggregatec	10	DSL	6861.614	0.542706	0.617834	2.231513	0.634086	1098.253	0.025388	0.02429
Los Angeles:	2025	LHD2	Aggregatec	15	GAS	13826.96	0.027763	0.040512	0.444618	0.137931	1035.449	0.00286	0.002629
Los Angeles:	2025	LHD2	Aggregatec	15	DSL	17652.7	0.273906	0.311824	1.134002	0.539589	730.8768	0.020795	0.019896
Los Angeles:	2025	LHD2	Aggregatec	20	GAS	30962.03	0.01984	0.02895	0.389906	0.124833	906.1774	0.002006	0.001845
Los Angeles:	2025	LHD2	Aggregatec	20	DSL	43218.06	0.116383	0.132494	0.491382	0.477586	623.224	0.017106	0.016366
Los Angeles:	2025	LHD2	Aggregatec	25	GAS	58262.45	0.014963	0.021834	0.348893	0.11492	819.4205	0.001485	0.001365
Los Angeles:	2025	LHD2	Aggregatec	25	DSL	84437.58	0.073982	0.084223	0.318709	0.463312	555.4447	0.014416	0.013792
Los Angeles:	2025	LHD2	Aggregatec	30	GAS	65606.47	0.011876	0.017329	0.316866	0.107884	740.6374	0.001159	0.001066
Los Angeles:	2025	LHD2	Aggregatec	30	DSL	108381.2	0.057273	0.065201	0.251266	0.466225	500.9751	0.012606	0.012061
Los Angeles:	2025	LHD2	Aggregatec	35	GAS	47481.15	0.009939	0.014502	0.292289	0.102705	740.6516	0.000955	0.000878
Los Angeles:	2025	LHD2	Aggregatec	35	DSL	82622.08	0.046832	0.053315	0.210411	0.480366	501.1166	0.011356	0.010864
Los Angeles:	2025	LHD2	Aggregatec	40	GAS	43759.42	0.008787	0.012822	0.274326	0.098618	723.7464	0.00083	0.000763

Los Angeles:	2025	LHD2	Aggregatec	40 DSL	73208.39	0.04	0.045538	0.185467	0.502086	483.0145	0.010478	0.010025
Los Angeles:	2025	LHD2	Aggregatec	45 GAS	43363.53	0.008158	0.011905	0.260866	0.096194	706.6794	0.00076	0.000699
Los Angeles:	2025	LHD2	Aggregatec	45 DSL	71268.01	0.035187	0.040058	0.169475	0.516278	464.3292	0.009805	0.009381
Los Angeles:	2025	LHD2	Aggregatec	50 GAS	41865.76	0.007959	0.011613	0.252259	0.095521	736.7212	0.000735	0.000675
Los Angeles:	2025	LHD2	Aggregatec	50 DSL	77307.48	0.031502	0.035863	0.158334	0.509517	481.1367	0.009235	0.008835
Los Angeles:	2025	LHD2	Aggregatec	55 GAS	42999.71	0.008145	0.011885	0.248952	0.097457	770.2816	0.000749	0.000688
Los Angeles:	2025	LHD2	Aggregatec	55 DSL	104526	0.029521	0.033608	0.158095	0.527858	498.0342	0.00896	0.008573
Los Angeles:	2025	LHD2	Aggregatec	60 GAS	68341.45	0.008745	0.01276	0.252334	0.100879	778.3284	0.000805	0.00074
Los Angeles:	2025	LHD2	Aggregatec	60 DSL	232969	0.029305	0.033362	0.167831	0.535586	499.63	0.008973	0.008585
Los Angeles:	2025	LHD2	Aggregatec	65 GAS	41612.75	0.009898	0.014443	0.266339	0.10569	785.985	0.000913	0.000839
Los Angeles:	2025	LHD2	Aggregatec	65 DSL	159871.6	0.031111	0.035418	0.193044	0.555415	500.9664	0.00938	0.008974
Los Angeles:	2025	LHD2	Aggregatec	70 GAS	199.1575	0.011406	0.016644	0.292144	0.120649	771.7708	0.000999	0.000918
Los Angeles:	2025	LHD2	Aggregatec	70 DSL	793.46	0.056274	0.064065	0.441111	1.455793	506.0945	0.014974	0.014326
Los Angeles:	2025	MCY	Aggregatec	5 GAS	4582.574	12.52567	15.68725	44.57252	1.555272	563.598	0.012595	0.011751
Los Angeles:	2025	MCY	Aggregatec	10 GAS	16631.93	8.105585	10.15534	33.85749	1.393853	418.3345	0.00816	0.007613
Los Angeles:	2025	MCY	Aggregatec	15 GAS	42414.88	5.543883	6.945098	27.22315	1.277415	322.1328	0.005561	0.005189
Los Angeles:	2025	MCY	Aggregatec	20 GAS	112759.9	3.995845	5.005014	22.79076	1.191028	257.4339	0.003994	0.003726
Los Angeles:	2025	MCY	Aggregatec	25 GAS	235712.1	3.03431	3.799353	19.76273	1.127651	213.485	0.00302	0.002818
Los Angeles:	2025	MCY	Aggregatec	30 GAS	258956.7	2.430424	3.042025	17.73498	1.086429	183.7418	0.002406	0.002245
Los Angeles:	2025	MCY	Aggregatec	35 GAS	150740.6	2.05201	2.566606	16.4168	1.061489	164.0927	0.002017	0.001883
Los Angeles:	2025	MCY	Aggregatec	40 GAS	106600.2	1.813715	2.267627	15.48769	1.041133	152.1235	0.001782	0.001663
Los Angeles:	2025	MCY	Aggregatec	45 GAS	89729.98	1.685423	2.107345	15.0586	1.032876	146.4231	0.001657	0.001547
Los Angeles:	2025	MCY	Aggregatec	50 GAS	79391.29	1.650378	2.063489	15.20126	1.038472	146.2665	0.001622	0.001514
Los Angeles:	2025	MCY	Aggregatec	55 GAS	71758.37	1.713928	2.141844	16.22862	1.067891	151.5965	0.001669	0.001558
Los Angeles:	2025	MCY	Aggregatec	60 GAS	98501.14	1.881694	2.351643	18.37641	1.117726	163.1578	0.001807	0.001687
Los Angeles:	2025	MCY	Aggregatec	65 GAS	43182.61	2.156065	2.693632	21.61262	1.167339	182.179	0.002057	0.001921
Los Angeles:	2025	MCY	Aggregatec	70 GAS	367.0585	2.470205	3.042997	26.48761	1.246683	193.1375	0.00222	0.002077
Los Angeles:	2025	MDV	Aggregatec	5 GAS	97504.41	0.127224	0.18561	1.716257	0.185677	1349.747	0.011947	0.010985
Los Angeles:	2025	MDV	Aggregatec	5 DSL	2329.208	0.157417	0.179209	3.357103	0.101115	907.346	0.011317	0.010828
Los Angeles:	2025	MDV	Aggregatec	10 GAS	362817.5	0.080721	0.117762	1.529215	0.156113	999.9423	0.007553	0.006945
Los Angeles:	2025	MDV	Aggregatec	10 DSL	8701.426	0.117564	0.133839	2.514726	0.085376	770.9342	0.009255	0.008855
Los Angeles:	2025	MDV	Aggregatec	15 GAS	933410.5	0.054215	0.079093	1.377923	0.135861	769.4556	0.005036	0.00463
Los Angeles:	2025	MDV	Aggregatec	15 DSL	22416.48	0.058504	0.066603	1.233539	0.059783	653.9138	0.007526	0.007201
Los Angeles:	2025	MDV	Aggregatec	20 GAS	2496127	0.038429	0.056062	1.251911	0.120873	615.0711	0.003541	0.003256
Los Angeles:	2025	MDV	Aggregatec	20 DSL	60000.66	0.02397	0.027289	0.4856	0.042172	543.1335	0.006172	0.005905
Los Angeles:	2025	MDV	Aggregatec	25 GAS	5213618	0.028746	0.041935	1.145226	0.109839	510.4395	0.002625	0.002413
Los Angeles:	2025	MDV	Aggregatec	25 DSL	125306.6	0.014883	0.016943	0.294162	0.034235	459.2682	0.005171	0.004948
Los Angeles:	2025	MDV	Aggregatec	30 GAS	5714556	0.022626	0.033007	1.052965	0.102188	439.6542	0.002051	0.001886
Los Angeles:	2025	MDV	Aggregatec	30 DSL	137297.6	0.011403	0.012981	0.223343	0.030243	396.6474	0.004501	0.004306

Los Angeles:	2025 MDV	Aggregatec	35 GAS	3288967	0.01878	0.027395	0.973795	0.097164	393.0172	0.00169	0.001554
Los Angeles:	2025 MDV	Aggregatec	35 DSL	78881.43	0.009208	0.010483	0.178649	0.027773	359.8246	0.004036	0.003862
Los Angeles:	2025 MDV	Aggregatec	40 GAS	2312251	0.016409	0.023936	0.904609	0.092777	364.802	0.001467	0.001349
Los Angeles:	2025 MDV	Aggregatec	40 DSL	55405.12	0.007728	0.008798	0.148416	0.02608	336.5282	0.003703	0.003543
Los Angeles:	2025 MDV	Aggregatec	45 GAS	1958513	0.015014	0.021902	0.841456	0.089966	351.1862	0.001342	0.001234
Los Angeles:	2025 MDV	Aggregatec	45 DSL	46975	0.006686	0.007611	0.126972	0.024819	323.8989	0.003462	0.003312
Los Angeles:	2025 MDV	Aggregatec	50 GAS	1738965	0.014449	0.021077	0.786733	0.089341	350.8328	0.001294	0.00119
Los Angeles:	2025 MDV	Aggregatec	50 DSL	41732.03	0.00595	0.006774	0.111346	0.023941	325.5439	0.003304	0.003161
Los Angeles:	2025 MDV	Aggregatec	55 GAS	1558845	0.014629	0.02134	0.740298	0.092345	363.5394	0.001316	0.00121
Los Angeles:	2025 MDV	Aggregatec	55 DSL	37361.19	0.005452	0.006206	0.099952	0.023459	343.5079	0.003226	0.003087
Los Angeles:	2025 MDV	Aggregatec	60 GAS	2159699	0.015443	0.022527	0.696405	0.097984	390.0566	0.00141	0.001296
Los Angeles:	2025 MDV	Aggregatec	60 DSL	51836.94	0.005333	0.006071	0.096456	0.023391	372.0162	0.003266	0.003125
Los Angeles:	2025 MDV	Aggregatec	65 GAS	941654.7	0.017324	0.025269	0.665356	0.104707	435.4381	0.001592	0.001464
Los Angeles:	2025 MDV	Aggregatec	65 DSL	22582.31	0.005558	0.006327	0.099398	0.023874	417.6783	0.003446	0.003297
Los Angeles:	2025 MDV	Aggregatec	70 GAS	5028.912	0.022026	0.032132	0.73989	0.135372	480.5951	0.001718	0.00158
Los Angeles:	2025 MDV	Aggregatec	70 DSL	109.4393	0.006732	0.007664	0.110388	0.031197	443.9865	0.004233	0.00405
Los Angeles:	2025 MH	Aggregatec	5 GAS	394.9953	0.255268	0.372486	3.709917	0.43411	3777.158	0.008252	0.007587
Los Angeles:	2025 MH	Aggregatec	5 DSL	78.654	0.845278	0.962293	2.122849	11.7466	2039.189	0.142141	0.135992
Los Angeles:	2025 MH	Aggregatec	10 GAS	1618.831	0.169553	0.247411	2.868238	0.391736	3225.372	0.005262	0.004838
Los Angeles:	2025 MH	Aggregatec	10 DSL	309.6975	0.63763	0.7259	1.642217	9.821816	1851.889	0.125815	0.120372
Los Angeles:	2025 MH	Aggregatec	15 GAS	4078.587	0.116189	0.169543	2.273778	0.351752	2222.516	0.003524	0.00324
Los Angeles:	2025 MH	Aggregatec	15 DSL	789.2924	0.31666	0.360496	0.893649	6.703389	1520.284	0.094386	0.090303
Los Angeles:	2025 MH	Aggregatec	20 GAS	9366.299	0.083838	0.122337	1.87665	0.321374	1562.093	0.002488	0.002288
Los Angeles:	2025 MH	Aggregatec	20 DSL	1945.991	0.131529	0.149737	0.444095	4.655112	1247.261	0.071194	0.068114
Los Angeles:	2025 MH	Aggregatec	25 GAS	18586.22	0.064627	0.094304	1.630729	0.302845	1364.159	0.001859	0.00171
Los Angeles:	2025 MH	Aggregatec	25 DSL	4086.373	0.086719	0.098723	0.318718	3.796872	1118.827	0.061319	0.058666
Los Angeles:	2025 MH	Aggregatec	30 GAS	22040.99	0.052475	0.076572	1.466071	0.291307	1253.821	0.001466	0.001348
Los Angeles:	2025 MH	Aggregatec	30 DSL	5241.085	0.06894	0.078484	0.265065	3.340641	1050.295	0.056204	0.053773
Los Angeles:	2025 MH	Aggregatec	35 GAS	16418.41	0.045063	0.065756	1.367154	0.285568	1157.972	0.00122	0.001122
Los Angeles:	2025 MH	Aggregatec	35 DSL	4020.238	0.056844	0.064713	0.22899	3.038544	993.5764	0.053975	0.05164
Los Angeles:	2025 MH	Aggregatec	40 GAS	16150.97	0.040757	0.059473	1.315406	0.281526	1077.634	0.00107	0.000984
Los Angeles:	2025 MH	Aggregatec	40 DSL	4083.364	0.048235	0.054912	0.203223	2.822369	948.5141	0.054076	0.051737
Los Angeles:	2025 MH	Aggregatec	45 GAS	16309.66	0.037793	0.055148	1.272708	0.275112	1000.898	0.000984	0.000904
Los Angeles:	2025 MH	Aggregatec	45 DSL	4184.274	0.04156	0.047313	0.180742	2.623686	914.6599	0.054977	0.052598
Los Angeles:	2025 MH	Aggregatec	50 GAS	15561.45	0.036861	0.053787	1.277617	0.27284	935.9877	0.000953	0.000876
Los Angeles:	2025 MH	Aggregatec	50 DSL	4165.303	0.037123	0.042263	0.165242	2.469578	892.4502	0.057826	0.055324
Los Angeles:	2025 MH	Aggregatec	55 GAS	15233.55	0.038644	0.05639	1.369742	0.283732	910.6415	0.00098	0.000901
Los Angeles:	2025 MH	Aggregatec	55 DSL	4398.049	0.035537	0.040457	0.161524	2.418705	882.4597	0.064998	0.062186
Los Angeles:	2025 MH	Aggregatec	60 GAS	19524.94	0.041374	0.060373	1.493372	0.291343	916.0654	0.001054	0.000969

Los Angeles:	2025 MH	Aggregatec	60 DSL	6490.656	0.035696	0.040637	0.160958	2.382418	883.678	0.072465	0.06933
Los Angeles:	2025 MH	Aggregatec	65 GAS	11261.57	0.046842	0.068352	1.728272	0.305154	933.0249	0.001197	0.001101
Los Angeles:	2025 MH	Aggregatec	65 DSL	3986.969	0.038486	0.043814	0.169749	2.428401	896.8074	0.083346	0.079741
Los Angeles:	2025 MH	Aggregatec	70 GAS	94.23552	0.086824	0.126693	3.262416	0.551816	982.8029	0.00156	0.001434
Los Angeles:	2025 MH	Aggregatec	70 DSL	29.0021	0.082594	0.094028	0.360635	4.277612	936.4032	0.2013	0.192592
Los Angeles:	2025 Motor Coa	Aggregatec	5 DSL	200.513	0.577213	0.657113	3.408311	19.18221	3101.694	0.011178	0.010694
Los Angeles:	2025 Motor Coa	Aggregatec	10 DSL	778.8645	0.467482	0.532193	2.760372	14.65436	2750.219	0.010055	0.00962
Los Angeles:	2025 Motor Coa	Aggregatec	15 DSL	1985.042	0.329237	0.374811	1.944066	8.955488	2307.412	0.00864	0.008266
Los Angeles:	2025 Motor Coa	Aggregatec	20 DSL	5053.324	0.238177	0.271146	1.40638	5.206692	2015.742	0.007708	0.007375
Los Angeles:	2025 Motor Coa	Aggregatec	25 DSL	10649.53	0.174547	0.198708	1.030657	2.969153	1860.399	0.007012	0.006709
Los Angeles:	2025 Motor Coa	Aggregatec	30 DSL	14458.11	0.128628	0.146434	0.75952	1.928742	1761.518	0.006457	0.006177
Los Angeles:	2025 Motor Coa	Aggregatec	35 DSL	11302	0.09479	0.107911	0.559712	1.356246	1683.221	0.005994	0.005735
Los Angeles:	2025 Motor Coa	Aggregatec	40 DSL	10589.1	0.069853	0.079523	0.412467	1.006784	1618.925	0.005598	0.005356
Los Angeles:	2025 Motor Coa	Aggregatec	45 DSL	10572.86	0.051477	0.058602	0.303959	0.77979	1564.705	0.005251	0.005024
Los Angeles:	2025 Motor Coa	Aggregatec	50 DSL	10875.67	0.037935	0.043186	0.223996	0.624337	1518.048	0.004943	0.004729
Los Angeles:	2025 Motor Coa	Aggregatec	55 DSL	13270.09	0.027955	0.031825	0.165069	0.514194	1477.256	0.004666	0.004464
Los Angeles:	2025 Motor Coa	Aggregatec	60 DSL	23910.2	0.023998	0.02732	0.141702	0.470995	1458.67	0.004537	0.004341
Los Angeles:	2025 Motor Coa	Aggregatec	65 DSL	16334.33	0.023998	0.02732	0.141702	0.471811	1458.67	0.004537	0.004341
Los Angeles:	2025 Motor Coa	Aggregatec	70 DSL	86.30566	0.023998	0.02732	0.141702	0.477433	1458.67	0.004537	0.004341
Los Angeles:	2025 Motor Coa	Aggregatec	75 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025 Motor Coa	Aggregatec	80 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025 Motor Coa	Aggregatec	85 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025 Motor Coa	Aggregatec	90 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025 OBUS	Aggregatec	5 GAS	643.8105	0.129728	0.189299	0.931016	0.285814	3728.338	0.006699	0.00616
Los Angeles:	2025 OBUS	Aggregatec	10 GAS	2638.388	0.082098	0.119798	0.836706	0.249309	3182.679	0.004219	0.003879
Los Angeles:	2025 OBUS	Aggregatec	15 GAS	6647.826	0.054487	0.079508	0.753153	0.219575	2193.878	0.0028	0.002574
Los Angeles:	2025 OBUS	Aggregatec	20 GAS	15267.6	0.038152	0.055672	0.682421	0.196622	1542.516	0.00196	0.001802
Los Angeles:	2025 OBUS	Aggregatec	25 GAS	30295.99	0.028305	0.041303	0.624923	0.179648	1346.936	0.001449	0.001332
Los Angeles:	2025 OBUS	Aggregatec	30 GAS	35925.96	0.022148	0.032318	0.575075	0.167306	1237.764	0.00113	0.001039
Los Angeles:	2025 OBUS	Aggregatec	35 GAS	26759.33	0.018311	0.02672	0.532735	0.158434	1142.729	0.00093	0.000855
Los Angeles:	2025 OBUS	Aggregatec	40 GAS	26321.72	0.016001	0.023348	0.496669	0.15155	1063.119	0.000807	0.000742
Los Angeles:	2025 OBUS	Aggregatec	45 GAS	26582.66	0.014629	0.021346	0.460985	0.146641	987.8251	0.000738	0.000679
Los Angeles:	2025 OBUS	Aggregatec	50 GAS	25365.05	0.014105	0.020582	0.430241	0.144433	924.0856	0.000712	0.000655
Los Angeles:	2025 OBUS	Aggregatec	55 GAS	24827.78	0.014414	0.021033	0.406822	0.146721	898.5837	0.000726	0.000668
Los Angeles:	2025 OBUS	Aggregatec	60 GAS	31823.76	0.015395	0.022464	0.38386	0.150685	904.1827	0.00078	0.000717
Los Angeles:	2025 OBUS	Aggregatec	65 GAS	18355.37	0.01737	0.025346	0.367088	0.157764	920.9457	0.000884	0.000813
Los Angeles:	2025 OBUS	Aggregatec	70 GAS	152.8552	0.022693	0.033113	0.44464	0.198138	948.4088	0.000994	0.000914
Los Angeles:	2025 PTO	Aggregatec	20 DSL	104877.9	0.198698	0.226203	1.173266	4.08077	1913.695	0.00603	0.005769
Los Angeles:	2025 SBUS	Aggregatec	5 GAS	623.3508	0.190765	0.278364	1.393715	0.428249	1787.408	0.005901	0.005426

Los Angele:	2025 SBUS	Aggregatec	5 DSL	1111.244	0.587826	0.669195	1.345741	13.59614	2245.494	0.077324	0.073979
Los Angele:	2025 SBUS	Aggregatec	10 GAS	2184.813	0.12025	0.175469	1.271512	0.370357	1525.845	0.003713	0.003414
Los Angele:	2025 SBUS	Aggregatec	10 DSL	3894.852	0.457227	0.520518	1.10093	10.96679	2005.995	0.06476	0.061959
Los Angele:	2025 SBUS	Aggregatec	15 GAS	4369.625	0.079819	0.116472	1.161103	0.327005	1051.768	0.002465	0.002266
Los Angele:	2025 SBUS	Aggregatec	15 DSL	7789.704	0.271436	0.309009	0.769299	7.427056	1674.479	0.044855	0.042914
Los Angele:	2025 SBUS	Aggregatec	20 GAS	5931.055	0.055905	0.081576	1.063349	0.293235	739.4806	0.001726	0.001587
Los Angele:	2025 SBUS	Aggregatec	20 DSL	10573.26	0.160882	0.183152	0.548355	5.362364	1438.87	0.03121	0.02986
Los Angele:	2025 SBUS	Aggregatec	25 GAS	9362.57	0.041286	0.060245	0.975975	0.267549	645.7236	0.001275	0.001172
Los Angele:	2025 SBUS	Aggregatec	25 DSL	16690.6	0.117038	0.133238	0.41391	4.516993	1314.585	0.025523	0.024419
Los Angele:	2025 SBUS	Aggregatec	30 GAS	11232.62	0.032167	0.046937	0.898228	0.248028	593.3937	0.000994	0.000914
Los Angele:	2025 SBUS	Aggregatec	30 DSL	20024.33	0.089153	0.101494	0.320615	4.103197	1238.2	0.022273	0.02131
Los Angele:	2025 SBUS	Aggregatec	35 GAS	11528.87	0.026399	0.038522	0.827719	0.234541	547.8462	0.000817	0.000751
Los Angele:	2025 SBUS	Aggregatec	35 DSL	20552.45	0.068296	0.07775	0.250467	3.842754	1177.134	0.020104	0.019235
Los Angele:	2025 SBUS	Aggregatec	40 GAS	7782.599	0.02287	0.033372	0.765232	0.225026	509.6901	0.000709	0.000651
Los Angele:	2025 SBUS	Aggregatec	40 DSL	13873.99	0.053109	0.06046	0.198271	3.669071	1127.647	0.018993	0.018171
Los Angele:	2025 SBUS	Aggregatec	45 GAS	3733.904	0.020914	0.030517	0.709784	0.219042	473.579	0.000648	0.000596
Los Angele:	2025 SBUS	Aggregatec	45 DSL	6656.407	0.042578	0.048472	0.160208	3.555849	1087.521	0.018928	0.018109
Los Angele:	2025 SBUS	Aggregatec	50 GAS	1870.052	0.020232	0.029522	0.661892	0.215132	443.011	0.000626	0.000575
Los Angele:	2025 SBUS	Aggregatec	50 DSL	3333.731	0.035949	0.040925	0.133477	3.485641	1055.342	0.019906	0.019044
Los Angele:	2025 SBUS	Aggregatec	55 GAS	2783.453	0.020395	0.02976	0.611599	0.221499	430.8004	0.000637	0.000586
Los Angele:	2025 SBUS	Aggregatec	55 DSL	4962.046	0.03265	0.03717	0.116031	3.483389	1030.159	0.02193	0.020982
Los Angele:	2025 SBUS	Aggregatec	60 GAS	1549.123	0.021962	0.032047	0.573524	0.224546	433.4769	0.000685	0.00063
Los Angele:	2025 SBUS	Aggregatec	60 DSL	2761.611	0.032163	0.036615	0.1102	3.479292	1019.858	0.023315	0.022306
Los Angele:	2025 SBUS	Aggregatec	65 DSL	0	0	0	0	0	0	0	0
Los Angele:	2025 SBUS	Aggregatec	70 DSL	0	0	0	0	0	0	0	0
Los Angele:	2025 SBUS	Aggregatec	75 DSL	0	0	0	0	0	0	0	0
Los Angele:	2025 SBUS	Aggregatec	80 DSL	0	0	0	0	0	0	0	0
Los Angele:	2025 SBUS	Aggregatec	85 DSL	0	0	0	0	0	0	0	0
Los Angele:	2025 SBUS	Aggregatec	90 DSL	0	0	0	0	0	0	0	0
Los Angele:	2025 T6 Ag	Aggregatec	5 DSL	5.137858	0.2977	0.338908	1.566994	10.25533	2271.25	0.007524	0.007199
Los Angele:	2025 T6 Ag	Aggregatec	10 DSL	20.64975	0.241105	0.27448	1.2691	8.059033	2013.878	0.006768	0.006476
Los Angele:	2025 T6 Ag	Aggregatec	15 DSL	51.40836	0.169805	0.19331	0.893797	5.289562	1689.628	0.005816	0.005565
Los Angele:	2025 T6 Ag	Aggregatec	20 DSL	122.6253	0.122841	0.139845	0.646592	3.467345	1476.05	0.005189	0.004964
Los Angele:	2025 T6 Ag	Aggregatec	25 DSL	260.0896	0.090023	0.102484	0.473851	2.287749	1362.298	0.00472	0.004516
Los Angele:	2025 T6 Ag	Aggregatec	30 DSL	338.1061	0.06634	0.075524	0.349194	1.65583	1289.891	0.004346	0.004158
Los Angele:	2025 T6 Ag	Aggregatec	35 DSL	267.8571	0.048888	0.055655	0.257331	1.272498	1232.557	0.004035	0.00386
Los Angele:	2025 T6 Ag	Aggregatec	40 DSL	280.7363	0.036027	0.041014	0.189635	1.018113	1185.476	0.003768	0.003605
Los Angele:	2025 T6 Ag	Aggregatec	45 DSL	278.9117	0.026549	0.030224	0.139747	0.839204	1145.773	0.003535	0.003382
Los Angele:	2025 T6 Ag	Aggregatec	50 DSL	266.9335	0.019565	0.022273	0.102984	0.708054	1111.608	0.003327	0.003183

Los Angele:	2025 T6 Ag	Aggregatec	55 DSL	292.9419	0.014418	0.016414	0.075891	0.610345	1081.737	0.003141	0.003005
Los Angele:	2025 T6 Ag	Aggregatec	60 DSL	419.5313	0.012377	0.01409	0.065149	0.56998	1068.127	0.003054	0.002922
Los Angele:	2025 T6 Ag	Aggregatec	65 DSL	258.7161	0.012377	0.01409	0.065149	0.571145	1068.127	0.003054	0.002922
Los Angele:	2025 T6 Ag	Aggregatec	70 DSL	5.82338	0.012377	0.01409	0.065149	0.57893	1068.127	0.003054	0.002922
Los Angele:	2025 T6 Ag	Aggregatec	75 DSL	0	0	0	0	0	0	0	0
Los Angele:	2025 T6 Ag	Aggregatec	80 DSL	0	0	0	0	0	0	0	0
Los Angele:	2025 T6 Ag	Aggregatec	85 DSL	0	0	0	0	0	0	0	0
Los Angele:	2025 T6 Ag	Aggregatec	90 DSL	0	0	0	0	0	0	0	0
Los Angele:	2025 T6 CAIRP h	Aggregatec	5 DSL	16.28049	0.233978	0.266366	1.231584	9.097207	2125.677	0.005632	0.005388
Los Angele:	2025 T6 CAIRP h	Aggregatec	10 DSL	67.60144	0.189498	0.215729	0.997453	6.946754	1884.801	0.005066	0.004847
Los Angele:	2025 T6 CAIRP h	Aggregatec	15 DSL	162.1242	0.133459	0.151933	0.702483	4.23169	1581.333	0.004353	0.004165
Los Angele:	2025 T6 CAIRP h	Aggregatec	20 DSL	365.3621	0.096547	0.109911	0.508192	2.445201	1381.444	0.003884	0.003716
Los Angele:	2025 T6 CAIRP h	Aggregatec	25 DSL	788.8066	0.070754	0.080548	0.372425	1.385851	1274.983	0.003533	0.00338
Los Angele:	2025 T6 CAIRP h	Aggregatec	30 DSL	1049.391	0.052141	0.059358	0.274451	0.89542	1200.321	0.003253	0.003112
Los Angele:	2025 T6 CAIRP h	Aggregatec	35 DSL	875.8708	0.038424	0.043743	0.20225	0.627171	1140.38	0.00302	0.002889
Los Angele:	2025 T6 CAIRP h	Aggregatec	40 DSL	961.9187	0.028316	0.032235	0.149044	0.464377	1090.482	0.00282	0.002698
Los Angele:	2025 T6 CAIRP h	Aggregatec	45 DSL	912.6532	0.020867	0.023755	0.109835	0.358088	1047.835	0.002646	0.002531
Los Angele:	2025 T6 CAIRP h	Aggregatec	50 DSL	819.2142	0.015377	0.017506	0.08094	0.28509	1010.648	0.00249	0.002383
Los Angele:	2025 T6 CAIRP h	Aggregatec	55 DSL	957.4519	0.011332	0.0129	0.059647	0.233915	983.4906	0.002351	0.002249
Los Angele:	2025 T6 CAIRP h	Aggregatec	60 DSL	1306.374	0.009728	0.011074	0.051204	0.213447	971.117	0.002286	0.002187
Los Angele:	2025 T6 CAIRP h	Aggregatec	65 DSL	810.9062	0.009728	0.011074	0.051204	0.213895	971.117	0.002286	0.002187
Los Angele:	2025 T6 CAIRP h	Aggregatec	70 DSL	38.75169	0.009728	0.011074	0.051204	0.216575	971.117	0.002286	0.002187
Los Angele:	2025 T6 CAIRP h	Aggregatec	75 DSL	0	0	0	0	0	0	0	0
Los Angele:	2025 T6 CAIRP h	Aggregatec	80 DSL	0	0	0	0	0	0	0	0
Los Angele:	2025 T6 CAIRP h	Aggregatec	85 DSL	0	0	0	0	0	0	0	0
Los Angele:	2025 T6 CAIRP h	Aggregatec	90 DSL	0	0	0	0	0	0	0	0
Los Angele:	2025 T6 CAIRP si	Aggregatec	5 DSL	49.97708	0.215613	0.245459	1.134915	8.443977	2127.096	0.005063	0.004844
Los Angele:	2025 T6 CAIRP si	Aggregatec	10 DSL	207.5197	0.174624	0.198796	0.919161	6.411389	1886.059	0.004554	0.004357
Los Angele:	2025 T6 CAIRP si	Aggregatec	15 DSL	497.6812	0.122983	0.140007	0.647344	3.845314	1582.388	0.003913	0.003744
Los Angele:	2025 T6 CAIRP si	Aggregatec	20 DSL	1121.571	0.088969	0.101284	0.468303	2.156918	1382.366	0.003491	0.00334
Los Angele:	2025 T6 CAIRP si	Aggregatec	25 DSL	2421.441	0.0652	0.074226	0.343193	1.171116	1275.834	0.003176	0.003039
Los Angele:	2025 T6 CAIRP si	Aggregatec	30 DSL	3221.373	0.048048	0.054699	0.252908	0.728331	1208.022	0.002924	0.002798
Los Angele:	2025 T6 CAIRP si	Aggregatec	35 DSL	2688.707	0.035408	0.040309	0.186375	0.492081	1154.328	0.002715	0.002597
Los Angele:	2025 T6 CAIRP si	Aggregatec	40 DSL	2952.853	0.026093	0.029705	0.137345	0.352165	1110.235	0.002535	0.002426
Los Angele:	2025 T6 CAIRP si	Aggregatec	45 DSL	2801.62	0.019229	0.02189	0.101214	0.262974	1073.051	0.002378	0.002275
Los Angele:	2025 T6 CAIRP si	Aggregatec	50 DSL	2514.785	0.01417	0.016132	0.074587	0.203102	1041.055	0.002239	0.002142
Los Angele:	2025 T6 CAIRP si	Aggregatec	55 DSL	2939.141	0.010442	0.011888	0.054965	0.161924	1013.08	0.002113	0.002022
Los Angele:	2025 T6 CAIRP si	Aggregatec	60 DSL	4010.245	0.008964	0.010205	0.047185	0.145732	1000.334	0.002055	0.001966
Los Angele:	2025 T6 CAIRP si	Aggregatec	65 DSL	2489.282	0.008964	0.010205	0.047185	0.146038	1000.334	0.002055	0.001966

Los Angeles:	2025 T6 instate c Aggregatec	85 DSL	0	0	0	0	0	0	0	0	0
Los Angeles:	2025 T6 instate c Aggregatec	90 DSL	0	0	0	0	0	0	0	0	0
Los Angeles:	2025 T6 instate f Aggregatec	5 DSL	1977.856	0.264909	0.301578	1.394392	9.889044	2169.451	0.006569	0.006285	
Los Angeles:	2025 T6 instate f Aggregatec	10 DSL	7765.929	0.214576	0.244279	1.129458	7.63547	1923.658	0.00591	0.005654	
Los Angeles:	2025 T6 instate f Aggregatec	15 DSL	19855.57	0.151099	0.172014	0.795333	4.797048	1613.892	0.005077	0.004858	
Los Angeles:	2025 T6 instate f Aggregatec	20 DSL	49167.9	0.109286	0.124414	0.575245	2.92888	1409.837	0.004529	0.004333	
Los Angeles:	2025 T6 instate f Aggregatec	25 DSL	103112.7	0.080094	0.091181	0.42159	1.781594	1301.202	0.00412	0.003942	
Los Angeles:	2025 T6 instate f Aggregatec	30 DSL	132014.9	0.059029	0.0672	0.310707	1.217926	1224.682	0.003794	0.00363	
Los Angeles:	2025 T6 instate f Aggregatec	35 DSL	100821.3	0.043509	0.049531	0.229015	0.895405	1163.238	0.003523	0.003371	
Los Angeles:	2025 T6 instate f Aggregatec	40 DSL	101953.6	0.032069	0.036509	0.168803	0.691522	1112.061	0.003291	0.003149	
Los Angeles:	2025 T6 instate f Aggregatec	45 DSL	104928.6	0.023628	0.026899	0.12437	0.553614	1068.225	0.003086	0.002953	
Los Angeles:	2025 T6 instate f Aggregatec	50 DSL	105009.8	0.017408	0.019818	0.091629	0.455933	1029.973	0.002904	0.002779	
Los Angeles:	2025 T6 instate f Aggregatec	55 DSL	110300.8	0.012831	0.014608	0.06754	0.385297	1002.335	0.002742	0.002624	
Los Angeles:	2025 T6 instate f Aggregatec	60 DSL	163447.4	0.011013	0.012537	0.057969	0.356508	989.6941	0.002666	0.002551	
Los Angeles:	2025 T6 instate f Aggregatec	65 DSL	100346.9	0.011013	0.012538	0.05797	0.357254	989.698	0.002666	0.002551	
Los Angeles:	2025 T6 instate f Aggregatec	70 DSL	525.0585	0.011213	0.012765	0.059019	0.387205	992.6027	0.002724	0.002606	
Los Angeles:	2025 T6 instate f Aggregatec	75 DSL	0	0	0	0	0	0	0	0	
Los Angeles:	2025 T6 instate f Aggregatec	80 DSL	0	0	0	0	0	0	0	0	
Los Angeles:	2025 T6 instate f Aggregatec	85 DSL	0	0	0	0	0	0	0	0	
Los Angeles:	2025 T6 instate f Aggregatec	90 DSL	0	0	0	0	0	0	0	0	
Los Angeles:	2025 T6 instate s Aggregatec	5 DSL	5000.359	0.234932	0.267452	1.236603	9.288471	2154.019	0.005676	0.00543	
Los Angeles:	2025 T6 instate s Aggregatec	10 DSL	19634.14	0.190282	0.216622	1.001584	7.074859	1909.955	0.005106	0.004885	
Los Angeles:	2025 T6 instate s Aggregatec	15 DSL	50198.09	0.134001	0.15255	0.70534	4.286941	1602.414	0.004387	0.004197	
Los Angeles:	2025 T6 instate s Aggregatec	20 DSL	124299.1	0.09693	0.110347	0.510206	2.452254	1399.833	0.003914	0.003744	
Los Angeles:	2025 T6 instate s Aggregatec	25 DSL	260677.9	0.071037	0.08087	0.373913	1.367884	1291.963	0.00356	0.003406	
Los Angeles:	2025 T6 instate s Aggregatec	30 DSL	333750.9	0.052351	0.059598	0.275558	0.871383	1223.304	0.003278	0.003137	
Los Angeles:	2025 T6 instate s Aggregatec	35 DSL	254900.4	0.038583	0.043924	0.203087	0.602127	1168.953	0.003044	0.002912	
Los Angeles:	2025 T6 instate s Aggregatec	40 DSL	257774.1	0.028436	0.032372	0.149676	0.44024	1124.323	0.002843	0.00272	
Los Angeles:	2025 T6 instate s Aggregatec	45 DSL	265284.6	0.020953	0.023853	0.110289	0.335981	1086.647	0.002667	0.002551	
Los Angeles:	2025 T6 instate s Aggregatec	50 DSL	265476.1	0.015439	0.017576	0.081265	0.265178	1054.22	0.00251	0.002401	
Los Angeles:	2025 T6 instate s Aggregatec	55 DSL	278866.7	0.011379	0.012954	0.059894	0.215454	1025.915	0.002369	0.002267	
Los Angeles:	2025 T6 instate s Aggregatec	60 DSL	413217.3	0.009767	0.011119	0.051411	0.195904	1012.989	0.002304	0.002204	
Los Angeles:	2025 T6 instate s Aggregatec	65 DSL	253692.1	0.009767	0.011119	0.051411	0.196302	1012.992	0.002304	0.002204	
Los Angeles:	2025 T6 instate s Aggregatec	70 DSL	1332.479	0.009856	0.01122	0.051877	0.20379	1014.756	0.002331	0.00223	
Los Angeles:	2025 T6 instate s Aggregatec	75 DSL	0	0	0	0	0	0	0	0	
Los Angeles:	2025 T6 instate s Aggregatec	80 DSL	0	0	0	0	0	0	0	0	
Los Angeles:	2025 T6 instate s Aggregatec	85 DSL	0	0	0	0	0	0	0	0	
Los Angeles:	2025 T6 instate s Aggregatec	90 DSL	0	0	0	0	0	0	0	0	
Los Angeles:	2025 T6 OOS he: Aggregatec	5 DSL	9.328107	0.234883	0.267396	1.236346	9.117567	2126.155	0.005659	0.005414	

Los Angeles:	2025 T6 OOS he: Aggregatec	10 DSL	38.73309	0.19023	0.216563	1.00131	6.965187	1885.225	0.00509	0.00487
Los Angeles:	2025 T6 OOS he: Aggregatec	15 DSL	92.89105	0.133975	0.15252	0.705199	4.247676	1581.689	0.004374	0.004185
Los Angeles:	2025 T6 OOS he: Aggregatec	20 DSL	209.3388	0.09692	0.110336	0.510156	2.459572	1381.755	0.003902	0.003734
Los Angeles:	2025 T6 OOS he: Aggregatec	25 DSL	451.9565	0.071027	0.080859	0.373865	1.39805	1275.27	0.00355	0.003396
Los Angeles:	2025 T6 OOS he: Aggregatec	30 DSL	601.2618	0.052342	0.059588	0.275512	0.905539	1200.58	0.003269	0.003127
Los Angeles:	2025 T6 OOS he: Aggregatec	35 DSL	501.8411	0.038572	0.043912	0.203032	0.635685	1140.615	0.003034	0.002903
Los Angeles:	2025 T6 OOS he: Aggregatec	40 DSL	551.1433	0.028425	0.03236	0.14962	0.471643	1090.697	0.002834	0.002711
Los Angeles:	2025 T6 OOS he: Aggregatec	45 DSL	522.916	0.020947	0.023847	0.110259	0.364369	1048.031	0.002658	0.002543
Los Angeles:	2025 T6 OOS he: Aggregatec	50 DSL	469.3789	0.015437	0.017573	0.081253	0.290585	1010.828	0.002502	0.002394
Los Angeles:	2025 T6 OOS he: Aggregatec	55 DSL	548.5839	0.011376	0.01295	0.059878	0.238797	983.6651	0.002362	0.00226
Los Angeles:	2025 T6 OOS he: Aggregatec	60 DSL	748.5031	0.009765	0.011117	0.051402	0.218061	971.2893	0.002297	0.002198
Los Angeles:	2025 T6 OOS he: Aggregatec	65 DSL	464.6188	0.009765	0.011117	0.051402	0.218519	971.2893	0.002297	0.002198
Los Angeles:	2025 T6 OOS he: Aggregatec	70 DSL	22.20326	0.009765	0.011117	0.051402	0.221256	971.2893	0.002297	0.002198
Los Angeles:	2025 T6 OOS he: Aggregatec	75 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025 T6 OOS he: Aggregatec	80 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025 T6 OOS he: Aggregatec	85 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025 T6 OOS he: Aggregatec	90 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025 T6 OOS sm Aggregatec	5 DSL	28.63499	0.215613	0.245459	1.134915	8.443977	2127.096	0.005063	0.004844
Los Angeles:	2025 T6 OOS sm Aggregatec	10 DSL	118.901	0.174624	0.198796	0.919161	6.411389	1886.059	0.004554	0.004357
Los Angeles:	2025 T6 OOS sm Aggregatec	15 DSL	285.1526	0.122983	0.140007	0.647344	3.845314	1582.388	0.003913	0.003744
Los Angeles:	2025 T6 OOS sm Aggregatec	20 DSL	642.6183	0.088969	0.101284	0.468303	2.156918	1382.366	0.003491	0.00334
Los Angeles:	2025 T6 OOS sm Aggregatec	25 DSL	1387.395	0.0652	0.074226	0.343193	1.171116	1275.834	0.003176	0.003039
Los Angeles:	2025 T6 OOS sm Aggregatec	30 DSL	1845.725	0.048048	0.054699	0.252908	0.728331	1208.022	0.002924	0.002798
Los Angeles:	2025 T6 OOS sm Aggregatec	35 DSL	1540.528	0.035408	0.040309	0.186375	0.492081	1154.328	0.002715	0.002597
Los Angeles:	2025 T6 OOS sm Aggregatec	40 DSL	1691.874	0.026093	0.029705	0.137345	0.352165	1110.235	0.002535	0.002426
Los Angeles:	2025 T6 OOS sm Aggregatec	45 DSL	1605.223	0.019229	0.02189	0.101214	0.262974	1073.051	0.002378	0.002275
Los Angeles:	2025 T6 OOS sm Aggregatec	50 DSL	1440.877	0.01417	0.016132	0.074587	0.203102	1041.055	0.002239	0.002142
Los Angeles:	2025 T6 OOS sm Aggregatec	55 DSL	1684.017	0.010442	0.011888	0.054965	0.161924	1013.08	0.002113	0.002022
Los Angeles:	2025 T6 OOS sm Aggregatec	60 DSL	2297.72	0.008964	0.010205	0.047185	0.145732	1000.334	0.002055	0.001966
Los Angeles:	2025 T6 OOS sm Aggregatec	65 DSL	1426.265	0.008964	0.010205	0.047185	0.146038	1000.334	0.002055	0.001966
Los Angeles:	2025 T6 OOS sm Aggregatec	70 DSL	68.15853	0.008964	0.010205	0.047185	0.147867	1000.334	0.002055	0.001966
Los Angeles:	2025 T6 OOS sm Aggregatec	75 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025 T6 OOS sm Aggregatec	80 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025 T6 OOS sm Aggregatec	85 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025 T6 OOS sm Aggregatec	90 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025 T6 Public Aggregatec	5 DSL	128.3695	0.308553	0.351264	0.981069	9.640223	2209.566	0.036886	0.03529
Los Angeles:	2025 T6 Public Aggregatec	10 DSL	503.8793	0.243651	0.277378	0.799756	7.699052	1968.759	0.031265	0.029912
Los Angeles:	2025 T6 Public Aggregatec	15 DSL	1288.749	0.153775	0.175061	0.563314	5.108612	1645.925	0.022365	0.021397
Los Angeles:	2025 T6 Public Aggregatec	20 DSL	3192.827	0.097958	0.111518	0.406666	3.534586	1422.05	0.016195	0.015494

Los Angeles:	2025	T6 Public	Aggregatec	25 DSL	6694.899	0.071546	0.08145	0.303644	2.789997	1304.369	0.013547	0.012961
Los Angeles:	2025	T6 Public	Aggregatec	30 DSL	8569.788	0.054236	0.061743	0.230303	2.431392	1231.513	0.011998	0.011479
Los Angeles:	2025	T6 Public	Aggregatec	35 DSL	6541.698	0.041318	0.047037	0.17562	2.211868	1173.371	0.010928	0.010456
Los Angeles:	2025	T6 Public	Aggregatec	40 DSL	6611.937	0.031821	0.036225	0.135058	2.066703	1126.01	0.01033	0.009883
Los Angeles:	2025	T6 Public	Aggregatec	45 DSL	6808.147	0.025037	0.028503	0.105294	1.974744	1087.113	0.010206	0.009764
Los Angeles:	2025	T6 Public	Aggregatec	50 DSL	6817.399	0.020397	0.023221	0.08376	1.921134	1055.135	0.010539	0.010083
Los Angeles:	2025	T6 Public	Aggregatec	55 DSL	7156.798	0.017477	0.019897	0.068591	1.898876	1029.024	0.011317	0.010828
Los Angeles:	2025	T6 Public	Aggregatec	60 DSL	10609.94	0.0166	0.018898	0.062989	1.900579	1017.945	0.011879	0.011365
Los Angeles:	2025	T6 Public	Aggregatec	65 DSL	6513.492	0.016599	0.018897	0.062987	1.904246	1017.943	0.011879	0.011365
Los Angeles:	2025	T6 Public	Aggregatec	70 DSL	32.62118	0.01569	0.017862	0.061693	1.828863	1016.642	0.011567	0.011066
Los Angeles:	2025	T6 Public	Aggregatec	75 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025	T6 Public	Aggregatec	80 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025	T6 Public	Aggregatec	85 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025	T6 Public	Aggregatec	90 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025	T6 utility	Aggregatec	5 DSL	30.59531	0.182007	0.207201	0.958025	6.029532	2165.768	0.003942	0.003771
Los Angeles:	2025	T6 utility	Aggregatec	10 DSL	120.052	0.147407	0.167811	0.7759	4.616829	1920.349	0.003546	0.003392
Los Angeles:	2025	T6 utility	Aggregatec	15 DSL	307.1724	0.103815	0.118185	0.546448	2.838583	1611.158	0.003047	0.002915
Los Angeles:	2025	T6 utility	Aggregatec	20 DSL	761.4157	0.075102	0.085498	0.395312	1.66834	1407.498	0.002718	0.002601
Los Angeles:	2025	T6 utility	Aggregatec	25 DSL	1596.324	0.055038	0.062657	0.289702	0.965965	1299.03	0.002473	0.002366
Los Angeles:	2025	T6 utility	Aggregatec	30 DSL	2042.925	0.040559	0.046173	0.21349	0.635137	1229.985	0.002277	0.002178
Los Angeles:	2025	T6 utility	Aggregatec	35 DSL	1558.615	0.029889	0.034027	0.157327	0.451577	1175.315	0.002114	0.002022
Los Angeles:	2025	T6 utility	Aggregatec	40 DSL	1574.49	0.022026	0.025075	0.115938	0.338811	1130.42	0.001974	0.001889
Los Angeles:	2025	T6 utility	Aggregatec	45 DSL	1622.087	0.016232	0.018479	0.085438	0.264864	1092.56	0.001852	0.001772
Los Angeles:	2025	T6 utility	Aggregatec	50 DSL	1625.354	0.011962	0.013617	0.062962	0.213719	1059.982	0.001743	0.001668
Los Angeles:	2025	T6 utility	Aggregatec	55 DSL	1705.177	0.008815	0.010035	0.046398	0.177085	1031.499	0.001645	0.001574
Los Angeles:	2025	T6 utility	Aggregatec	60 DSL	2529.189	0.007567	0.008615	0.03983	0.162578	1018.521	0.0016	0.001531
Los Angeles:	2025	T6 utility	Aggregatec	65 DSL	1552.582	0.007567	0.008615	0.03983	0.162902	1018.521	0.0016	0.001531
Los Angeles:	2025	T6 utility	Aggregatec	70 DSL	7.386353	0.007567	0.008615	0.03983	0.164902	1018.521	0.0016	0.001531
Los Angeles:	2025	T6 utility	Aggregatec	75 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025	T6 utility	Aggregatec	80 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025	T6 utility	Aggregatec	85 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025	T6 utility	Aggregatec	90 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025	T6TS	Aggregatec	5 GAS	1529.692	0.205386	0.299698	1.607868	0.433342	3740.294	0.006824	0.006274
Los Angeles:	2025	T6TS	Aggregatec	10 GAS	6256.749	0.129721	0.189289	1.429337	0.377011	3192.777	0.0043	0.003954
Los Angeles:	2025	T6TS	Aggregatec	15 GAS	15799.07	0.086575	0.126329	1.286786	0.333646	2200.923	0.002855	0.002625
Los Angeles:	2025	T6TS	Aggregatec	20 GAS	36363.61	0.06096	0.088953	1.16806	0.300223	1547.529	0.001999	0.001838
Los Angeles:	2025	T6TS	Aggregatec	25 GAS	72116.17	0.045246	0.066023	1.066418	0.274302	1351.299	0.001479	0.001359
Los Angeles:	2025	T6TS	Aggregatec	30 GAS	85422.49	0.035383	0.051631	0.978188	0.255179	1241.75	0.001154	0.001061
Los Angeles:	2025	T6TS	Aggregatec	35 GAS	63486.64	0.029177	0.042575	0.901833	0.240903	1146.364	0.00095	0.000873

Los Angele:	2025 T6TS	Aggregatec	40 GAS	62330.27	0.02544	0.037122	0.838007	0.229824	1066.465	0.000825	0.000759
Los Angele:	2025 T6TS	Aggregatec	45 GAS	63107.29	0.023393	0.034135	0.783329	0.223532	990.9782	0.000755	0.000694
Los Angele:	2025 T6TS	Aggregatec	50 GAS	60344.97	0.022664	0.033071	0.736413	0.221157	927.07	0.000728	0.00067
Los Angele:	2025 T6TS	Aggregatec	55 GAS	58875.62	0.02304	0.03362	0.694397	0.223469	901.4341	0.000743	0.000683
Los Angele:	2025 T6TS	Aggregatec	60 GAS	75591.51	0.024695	0.036036	0.661771	0.230246	907.0777	0.000798	0.000734
Los Angele:	2025 T6TS	Aggregatec	65 GAS	43606.58	0.027882	0.040686	0.639183	0.241127	923.8969	0.000905	0.000832
Los Angele:	2025 T6TS	Aggregatec	70 GAS	312.4156	0.028525	0.041624	0.588684	0.238845	948.4839	0.001036	0.000953
Los Angele:	2025 T7 Ag	Aggregatec	5 DSL	3.105168	0.676775	0.770456	3.996197	17.85343	3181.628	0.013239	0.012666
Los Angele:	2025 T7 Ag	Aggregatec	10 DSL	12.07456	0.548116	0.623988	3.236498	14.19483	2821.095	0.011909	0.011393
Los Angele:	2025 T7 Ag	Aggregatec	15 DSL	30.72171	0.386026	0.439461	2.279391	9.59002	2366.876	0.010233	0.00979
Los Angele:	2025 T7 Ag	Aggregatec	20 DSL	78.03954	0.279259	0.317915	1.648961	6.562551	2067.69	0.00913	0.008735
Los Angele:	2025 T7 Ag	Aggregatec	25 DSL	164.5005	0.204653	0.232982	1.208431	4.518059	1908.344	0.008305	0.007946
Los Angele:	2025 T7 Ag	Aggregatec	30 DSL	223.5319	0.150815	0.171691	0.890527	3.360442	1806.914	0.007647	0.007316
Los Angele:	2025 T7 Ag	Aggregatec	35 DSL	175.1295	0.11114	0.126524	0.656254	2.632421	1726.6	0.007099	0.006792
Los Angele:	2025 T7 Ag	Aggregatec	40 DSL	164.557	0.081902	0.093239	0.483612	2.134802	1660.647	0.00663	0.006343
Los Angele:	2025 T7 Ag	Aggregatec	45 DSL	164.1099	0.060356	0.068711	0.356387	1.780191	1605.029	0.006219	0.00595
Los Angele:	2025 T7 Ag	Aggregatec	50 DSL	168.2066	0.044478	0.050635	0.262632	1.51742	1557.17	0.005854	0.005601
Los Angele:	2025 T7 Ag	Aggregatec	55 DSL	205.5421	0.032777	0.037314	0.193541	1.318999	1515.327	0.005526	0.005287
Los Angele:	2025 T7 Ag	Aggregatec	60 DSL	369.5768	0.028137	0.032032	0.166144	1.237816	1496.262	0.005374	0.005141
Los Angele:	2025 T7 Ag	Aggregatec	65 DSL	252.5635	0.028137	0.032032	0.166144	1.239968	1496.262	0.005374	0.005141
Los Angele:	2025 T7 Ag	Aggregatec	70 DSL	1.589377	0.028137	0.032032	0.166144	1.255145	1496.262	0.005374	0.005141
Los Angele:	2025 T7 Ag	Aggregatec	75 DSL	0	0	0	0	0	0	0	0
Los Angele:	2025 T7 Ag	Aggregatec	80 DSL	0	0	0	0	0	0	0	0
Los Angele:	2025 T7 Ag	Aggregatec	85 DSL	0	0	0	0	0	0	0	0
Los Angele:	2025 T7 Ag	Aggregatec	90 DSL	0	0	0	0	0	0	0	0
Los Angele:	2025 T7 CAIRP	Aggregatec	5 DSL	1861.182	0.617636	0.703132	3.646998	20.65531	2844.087	0.012155	0.011629
Los Angele:	2025 T7 CAIRP	Aggregatec	10 DSL	7293.927	0.50022	0.569463	2.953684	15.81456	2521.803	0.010934	0.010461
Los Angele:	2025 T7 CAIRP	Aggregatec	15 DSL	18331.59	0.352294	0.401059	2.080211	9.718525	2115.773	0.009395	0.008989
Los Angele:	2025 T7 CAIRP	Aggregatec	20 DSL	45828.72	0.254857	0.290135	1.50487	5.70912	1848.327	0.008382	0.008019
Los Angele:	2025 T7 CAIRP	Aggregatec	25 DSL	96767.1	0.18677	0.212624	1.102835	3.302881	1705.886	0.007625	0.007295
Los Angele:	2025 T7 CAIRP	Aggregatec	30 DSL	132374.3	0.137636	0.156688	0.81271	2.171745	1605.835	0.007021	0.006717
Los Angele:	2025 T7 CAIRP	Aggregatec	35 DSL	105429.7	0.101428	0.115468	0.598909	1.543983	1525.494	0.006518	0.006236
Los Angele:	2025 T7 CAIRP	Aggregatec	40 DSL	101134.1	0.074745	0.085092	0.441353	1.157693	1458.6	0.006087	0.005824
Los Angele:	2025 T7 CAIRP	Aggregatec	45 DSL	100012.5	0.055082	0.062706	0.325245	0.90445	1401.416	0.00571	0.005463
Los Angele:	2025 T7 CAIRP	Aggregatec	50 DSL	99879.75	0.040591	0.04621	0.239682	0.729367	1351.543	0.005375	0.005143
Los Angele:	2025 T7 CAIRP	Aggregatec	55 DSL	123372.9	0.029913	0.034054	0.176629	0.604917	1315.225	0.005074	0.004854
Los Angele:	2025 T7 CAIRP	Aggregatec	60 DSL	218463.5	0.025679	0.029233	0.151626	0.555768	1298.678	0.004934	0.00472
Los Angele:	2025 T7 CAIRP	Aggregatec	65 DSL	149671.3	0.025679	0.029233	0.151626	0.556757	1298.678	0.004934	0.00472
Los Angele:	2025 T7 CAIRP	Aggregatec	70 DSL	2056.64	0.025679	0.029233	0.151626	0.563957	1298.678	0.004934	0.00472

Los Angele:	2025 T7 NNOOS	Aggregatec	90 DSL	0	0	0	0	0	0	0	0	0
Los Angele:	2025 T7 NOOS	Aggregatec	5 DSL	735.1664	0.620318	0.706185	3.662834	20.72168	2845.693	0.012217	0.011689	
Los Angele:	2025 T7 NOOS	Aggregatec	10 DSL	2881.099	0.502392	0.571935	2.96651	15.87037	2523.226	0.01099	0.010515	
Los Angele:	2025 T7 NOOS	Aggregatec	15 DSL	7240.974	0.353823	0.402801	2.089244	9.76106	2116.967	0.009444	0.009035	
Los Angele:	2025 T7 NOOS	Aggregatec	20 DSL	18102.33	0.255963	0.291395	1.511404	5.74293	1849.371	0.008425	0.008061	
Los Angele:	2025 T7 NOOS	Aggregatec	25 DSL	38222.98	0.187581	0.213547	1.107624	3.329301	1706.849	0.007665	0.007333	
Los Angele:	2025 T7 NOOS	Aggregatec	30 DSL	52287.82	0.138234	0.157369	0.816239	2.192826	1606.728	0.007057	0.006752	
Los Angele:	2025 T7 NOOS	Aggregatec	35 DSL	41644.71	0.101868	0.115969	0.601509	1.561291	1526.329	0.006551	0.006268	
Los Angele:	2025 T7 NOOS	Aggregatec	40 DSL	39947.96	0.07507	0.085461	0.443269	1.172211	1459.386	0.006118	0.005854	
Los Angele:	2025 T7 NOOS	Aggregatec	45 DSL	39504.89	0.055321	0.062979	0.326658	0.916861	1402.159	0.005739	0.005491	
Los Angele:	2025 T7 NOOS	Aggregatec	50 DSL	39452.47	0.040768	0.046411	0.240723	0.740148	1352.247	0.005403	0.005169	
Los Angele:	2025 T7 NOOS	Aggregatec	55 DSL	48732.26	0.030043	0.034201	0.177396	0.614434	1315.91	0.0051	0.004879	
Los Angele:	2025 T7 NOOS	Aggregatec	60 DSL	86293.02	0.02579	0.02936	0.152284	0.564756	1299.354	0.004959	0.004744	
Los Angele:	2025 T7 NOOS	Aggregatec	65 DSL	59120.1	0.02579	0.02936	0.152284	0.565761	1299.354	0.004959	0.004744	
Los Angele:	2025 T7 NOOS	Aggregatec	70 DSL	812.3724	0.02579	0.02936	0.152284	0.573078	1299.354	0.004959	0.004744	
Los Angele:	2025 T7 NOOS	Aggregatec	75 DSL	0	0	0	0	0	0	0	0	0
Los Angele:	2025 T7 NOOS	Aggregatec	80 DSL	0	0	0	0	0	0	0	0	0
Los Angele:	2025 T7 NOOS	Aggregatec	85 DSL	0	0	0	0	0	0	0	0	0
Los Angele:	2025 T7 NOOS	Aggregatec	90 DSL	0	0	0	0	0	0	0	0	0
Los Angele:	2025 T7 POLA	Aggregatec	5 DSL	44707.09	0.668813	0.761393	3.949184	22.01992	2944.549	0.013339	0.012762	
Los Angele:	2025 T7 POLA	Aggregatec	10 DSL	79924.36	0.541668	0.616648	3.198423	16.95849	2610.88	0.011999	0.01148	
Los Angele:	2025 T7 POLA	Aggregatec	15 DSL	93444.35	0.381484	0.434291	2.252576	10.58184	2190.508	0.010311	0.009865	
Los Angele:	2025 T7 POLA	Aggregatec	20 DSL	67866.6	0.275974	0.314175	1.629562	6.381653	1913.616	0.009199	0.008801	
Los Angele:	2025 T7 POLA	Aggregatec	25 DSL	75006.29	0.202246	0.230242	1.194215	3.821119	1766.143	0.008368	0.008006	
Los Angele:	2025 T7 POLA	Aggregatec	30 DSL	107784.5	0.149041	0.169671	0.88005	2.578667	1672.271	0.007705	0.007372	
Los Angele:	2025 T7 POLA	Aggregatec	35 DSL	100356.7	0.109832	0.125036	0.648534	1.875353	1597.942	0.007153	0.006843	
Los Angele:	2025 T7 POLA	Aggregatec	40 DSL	124106.2	0.080938	0.092142	0.477923	1.436775	1536.903	0.00668	0.006391	
Los Angele:	2025 T7 POLA	Aggregatec	45 DSL	149671.5	0.059646	0.067902	0.352195	1.143588	1485.43	0.006266	0.005995	
Los Angele:	2025 T7 POLA	Aggregatec	50 DSL	108878.5	0.043955	0.050039	0.259542	0.937069	1441.137	0.005899	0.005644	
Los Angele:	2025 T7 POLA	Aggregatec	55 DSL	331646.7	0.032391	0.036875	0.191264	0.785554	1402.412	0.005568	0.005327	
Los Angele:	2025 T7 POLA	Aggregatec	60 DSL	375037.8	0.027806	0.031655	0.16419	0.724373	1384.768	0.005414	0.00518	
Los Angele:	2025 T7 POLA	Aggregatec	65 DSL	0	0	0	0	0	0	0	0	0
Los Angele:	2025 T7 POLA	Aggregatec	70 DSL	0	0	0	0	0	0	0	0	0
Los Angele:	2025 T7 POLA	Aggregatec	75 DSL	0	0	0	0	0	0	0	0	0
Los Angele:	2025 T7 POLA	Aggregatec	80 DSL	0	0	0	0	0	0	0	0	0
Los Angele:	2025 T7 POLA	Aggregatec	85 DSL	0	0	0	0	0	0	0	0	0
Los Angele:	2025 T7 POLA	Aggregatec	90 DSL	0	0	0	0	0	0	0	0	0
Los Angele:	2025 T7 Public	Aggregatec	5 DSL	179.7918	0.697996	0.794616	2.131145	20.05911	3232.152	0.108475	0.103782	
Los Angele:	2025 T7 Public	Aggregatec	10 DSL	695.5606	0.551913	0.628311	1.767209	16.329	2891.524	0.092764	0.088752	

Los Angeles:	2025 T7 Public	Aggregatec	15 DSL	1784.004	0.339164	0.386113	1.279522	11.24793	2406.077	0.06723	0.064322
Los Angeles:	2025 T7 Public	Aggregatec	20 DSL	4578.162	0.203775	0.231982	0.948677	8.285202	2053.987	0.049234	0.047104
Los Angeles:	2025 T7 Public	Aggregatec	25 DSL	9640.024	0.14822	0.168737	0.728286	7.024239	1874.064	0.041626	0.039825
Los Angeles:	2025 T7 Public	Aggregatec	30 DSL	13043.84	0.11506	0.130987	0.568278	6.375432	1766.597	0.037048	0.035445
Los Angeles:	2025 T7 Public	Aggregatec	35 DSL	10111.17	0.09013	0.102606	0.446451	5.950434	1680.43	0.033647	0.032191
Los Angeles:	2025 T7 Public	Aggregatec	40 DSL	9370.49	0.071743	0.081674	0.354233	5.65807	1610.909	0.031395	0.030037
Los Angeles:	2025 T7 Public	Aggregatec	45 DSL	9398.355	0.058543	0.066647	0.285062	5.463319	1554.811	0.030203	0.028896
Los Angeles:	2025 T7 Public	Aggregatec	50 DSL	9798.499	0.049706	0.056586	0.23447	5.358339	1510.704	0.030112	0.02881
Los Angeles:	2025 T7 Public	Aggregatec	55 DSL	11890.07	0.044691	0.050877	0.199573	5.36934	1478.217	0.031287	0.029934
Los Angeles:	2025 T7 Public	Aggregatec	60 DSL	21591.09	0.043433	0.049445	0.1867	5.395452	1465.159	0.032215	0.030822
Los Angeles:	2025 T7 Public	Aggregatec	65 DSL	14731.35	0.04344	0.049453	0.186722	5.405995	1465.195	0.032223	0.030829
Los Angeles:	2025 T7 Public	Aggregatec	70 DSL	22.52087	0.057165	0.065078	0.229597	7.966027	1535.114	0.046311	0.044308
Los Angeles:	2025 T7 Public	Aggregatec	75 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025 T7 Public	Aggregatec	80 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025 T7 Public	Aggregatec	85 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025 T7 Public	Aggregatec	90 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025 T7 Single	Aggregatec	5 DSL	815.5611	0.481542	0.548199	2.843395	14.00471	2944.689	0.008744	0.008366
Los Angeles:	2025 T7 Single	Aggregatec	10 DSL	3179.195	0.390006	0.443993	2.302897	10.78519	2611.042	0.007866	0.007526
Los Angeles:	2025 T7 Single	Aggregatec	15 DSL	8057.515	0.274664	0.312684	1.621826	6.733044	2190.594	0.006759	0.006467
Los Angeles:	2025 T7 Single	Aggregatec	20 DSL	20365.53	0.198689	0.226193	1.173215	4.067161	1913.636	0.00603	0.005769
Los Angeles:	2025 T7 Single	Aggregatec	25 DSL	42951.51	0.145609	0.165765	0.859788	2.43951	1766.167	0.005486	0.005248
Los Angeles:	2025 T7 Single	Aggregatec	30 DSL	58487.09	0.107305	0.122159	0.633613	1.650895	1672.314	0.005051	0.004832
Los Angeles:	2025 T7 Single	Aggregatec	35 DSL	46060.95	0.07908	0.090026	0.466947	1.203243	1598.031	0.004689	0.004486
Los Angeles:	2025 T7 Single	Aggregatec	40 DSL	43567.15	0.058279	0.066346	0.344125	0.921986	1537.047	0.004379	0.00419
Los Angeles:	2025 T7 Single	Aggregatec	45 DSL	43331.37	0.042947	0.048891	0.25359	0.733707	1485.546	0.004108	0.00393
Los Angeles:	2025 T7 Single	Aggregatec	50 DSL	44048.48	0.031646	0.036027	0.186865	0.601142	1441.181	0.003867	0.0037
Los Angeles:	2025 T7 Single	Aggregatec	55 DSL	54009.11	0.023322	0.02655	0.13771	0.506037	1402.482	0.00365	0.003492
Los Angeles:	2025 T7 Single	Aggregatec	60 DSL	96644.54	0.02002	0.022791	0.118212	0.467818	1384.799	0.003549	0.003396
Los Angeles:	2025 T7 Single	Aggregatec	65 DSL	66097.69	0.02002	0.022791	0.118212	0.468682	1384.805	0.003549	0.003396
Los Angeles:	2025 T7 Single	Aggregatec	70 DSL	570.5142	0.020064	0.022842	0.118476	0.48982	1386.972	0.003557	0.003403
Los Angeles:	2025 T7 Single	Aggregatec	75 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025 T7 Single	Aggregatec	80 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025 T7 Single	Aggregatec	85 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025 T7 Single	Aggregatec	90 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025 T7 single cr	Aggregatec	5 DSL	386.0526	0.478292	0.544499	2.774026	13.96196	2920.335	0.009994	0.009562
Los Angeles:	2025 T7 single cr	Aggregatec	10 DSL	1495.819	0.386883	0.440437	2.247032	10.72899	2589.747	0.008888	0.008504
Los Angeles:	2025 T7 single cr	Aggregatec	15 DSL	3827.306	0.271097	0.308624	1.582396	6.656017	2172.5	0.007409	0.007088
Los Angeles:	2025 T7 single cr	Aggregatec	20 DSL	9791.924	0.195138	0.22215	1.144544	3.983903	1897.219	0.006422	0.006145
Los Angeles:	2025 T7 single cr	Aggregatec	25 DSL	20624.97	0.142983	0.162775	0.839192	2.376606	1750.685	0.005783	0.005533

Los Angeles:	2025	T7 single c	Aggregatec	30	DSL	27942.84	0.105452	0.120049	0.618948	1.609755	1657.502	0.005301	0.005072
Los Angeles:	2025	T7 single c	Aggregatec	35	DSL	21729.58	0.077785	0.088552	0.456601	1.178431	1583.704	0.004911	0.004699
Los Angeles:	2025	T7 single c	Aggregatec	40	DSL	20221.96	0.057399	0.065345	0.336946	0.909721	1523.121	0.004594	0.004395
Los Angeles:	2025	T7 single c	Aggregatec	45	DSL	20247.17	0.042392	0.048261	0.248781	0.732544	1472.078	0.004337	0.004149
Los Angeles:	2025	T7 single c	Aggregatec	50	DSL	21001.4	0.03136	0.035701	0.183852	0.610057	1428.219	0.004131	0.003953
Los Angeles:	2025	T7 single c	Aggregatec	55	DSL	25537.67	0.023267	0.026487	0.136078	0.523092	1389.955	0.003974	0.003802
Los Angeles:	2025	T7 single c	Aggregatec	60	DSL	46236.96	0.02008	0.02286	0.117161	0.489077	1372.545	0.003909	0.00374
Los Angeles:	2025	T7 single c	Aggregatec	65	DSL	31562.07	0.02008	0.02286	0.117161	0.489918	1372.545	0.003909	0.00374
Los Angeles:	2025	T7 single c	Aggregatec	70	DSL	93.13035	0.02008	0.02286	0.117161	0.494909	1372.545	0.003909	0.00374
Los Angeles:	2025	T7 single c	Aggregatec	75	DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025	T7 single c	Aggregatec	80	DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025	T7 single c	Aggregatec	85	DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025	T7 single c	Aggregatec	90	DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025	T7 SWCV	Aggregatec	5	DSL	10562.77	0.525234	12.0973	35.1537	10.10273	5718.441	0.012974	0.012413
Los Angeles:	2025	T7 SWCV	Aggregatec	10	DSL	25385.02	0.413419	9.716366	28.47009	8.360846	5101.614	0.011301	0.010812
Los Angeles:	2025	T7 SWCV	Aggregatec	15	DSL	11601.46	0.260529	6.635246	20.04572	5.947786	4254.969	0.00872	0.008343
Los Angeles:	2025	T7 SWCV	Aggregatec	20	DSL	10658.22	0.168314	4.663373	14.49825	4.614505	3656.336	0.006912	0.006613
Los Angeles:	2025	T7 SWCV	Aggregatec	25	DSL	15400.52	0.124383	3.424551	10.62748	4.154751	3345.89	0.00605	0.005789
Los Angeles:	2025	T7 SWCV	Aggregatec	30	DSL	17298.5	0.094854	2.545302	7.83526	3.887299	3156.911	0.005532	0.005293
Los Angeles:	2025	T7 SWCV	Aggregatec	35	DSL	42748.89	0.072705	1.894729	5.777588	3.687715	3005.863	0.005188	0.004963
Los Angeles:	2025	T7 SWCV	Aggregatec	40	DSL	30771.7	0.056187	1.413972	4.261333	3.543888	2883.48	0.005008	0.004791
Los Angeles:	2025	T7 SWCV	Aggregatec	45	DSL	25099.29	0.04401	1.059656	3.14417	3.449593	2784.254	0.004986	0.004771
Los Angeles:	2025	T7 SWCV	Aggregatec	50	DSL	8736.221	0.035223	0.799818	2.321218	3.401388	2704.675	0.005122	0.0049
Los Angeles:	2025	T7 SWCV	Aggregatec	55	DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025	T7 SWCV	Aggregatec	60	DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025	T7 SWCV	Aggregatec	65	DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025	T7 SWCV	Aggregatec	70	DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025	T7 SWCV	Aggregatec	75	DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025	T7 SWCV	Aggregatec	80	DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025	T7 SWCV	Aggregatec	85	DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025	T7 SWCV	Aggregatec	90	DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025	T7 tractor	Aggregatec	5	DSL	2533.313	0.635137	0.723056	3.750339	20.67806	2878.273	0.01253	0.011988
Los Angeles:	2025	T7 tractor	Aggregatec	10	DSL	9820.366	0.514394	0.585599	3.037379	15.9003	2552.115	0.011272	0.010784
Los Angeles:	2025	T7 tractor	Aggregatec	15	DSL	25108.36	0.362276	0.412424	2.139156	9.887811	2141.204	0.009686	0.009267
Los Angeles:	2025	T7 tractor	Aggregatec	20	DSL	64177.64	0.262078	0.298356	1.547512	5.932879	1870.544	0.008641	0.008267
Los Angeles:	2025	T7 tractor	Aggregatec	25	DSL	135192.4	0.192063	0.218649	1.134085	3.527733	1726.391	0.007861	0.007521
Los Angeles:	2025	T7 tractor	Aggregatec	30	DSL	183231.4	0.141536	0.161128	0.835739	2.370755	1624.967	0.007238	0.006925
Los Angeles:	2025	T7 tractor	Aggregatec	35	DSL	142629.4	0.104302	0.11874	0.615879	1.717097	1543.505	0.006719	0.006429
Los Angeles:	2025	T7 tractor	Aggregatec	40	DSL	132904.2	0.076863	0.087503	0.453859	1.308122	1475.664	0.006275	0.006004

Los Angeles:	2025 T7 tractor	Aggregatec	45 DSL	132999.4	0.056643	0.064483	0.334461	1.036766	1417.657	0.005887	0.005632
Los Angeles:	2025 T7 tractor	Aggregatec	50 DSL	137735.8	0.041742	0.04752	0.246474	0.847366	1367.056	0.005541	0.005302
Los Angeles:	2025 T7 tractor	Aggregatec	55 DSL	167595	0.03076	0.035018	0.181634	0.710775	1330.321	0.005231	0.005004
Los Angeles:	2025 T7 tractor	Aggregatec	60 DSL	303160	0.026406	0.030061	0.155922	0.656623	1313.584	0.005086	0.004866
Los Angeles:	2025 T7 tractor	Aggregatec	65 DSL	206972.5	0.026406	0.030061	0.155922	0.657754	1313.584	0.005086	0.004866
Los Angeles:	2025 T7 tractor	Aggregatec	70 DSL	701.9513	0.026406	0.030061	0.155922	0.664797	1313.584	0.005086	0.004866
Los Angeles:	2025 T7 tractor	Aggregatec	75 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025 T7 tractor	Aggregatec	80 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025 T7 tractor	Aggregatec	85 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025 T7 tractor	Aggregatec	90 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025 T7 tractor (	Aggregatec	5 DSL	287.8307	0.640294	0.728926	3.748061	20.80927	2925.631	0.013211	0.012639
Los Angeles:	2025 T7 tractor (	Aggregatec	10 DSL	1115.244	0.518271	0.590012	3.035554	16.00256	2594.314	0.011861	0.011348
Los Angeles:	2025 T7 tractor (	Aggregatec	15 DSL	2853.539	0.364204	0.414618	2.137471	9.950324	2176.481	0.010129	0.009691
Los Angeles:	2025 T7 tractor (	Aggregatec	20 DSL	7300.603	0.262928	0.299323	1.546018	5.971087	1901.015	0.00898	0.008591
Los Angeles:	2025 T7 tractor (	Aggregatec	25 DSL	15377.44	0.1927	0.219374	1.133259	3.558553	1754.328	0.008155	0.007802
Los Angeles:	2025 T7 tractor (	Aggregatec	30 DSL	20833.45	0.142081	0.161749	0.835496	2.400345	1660.998	0.007509	0.007184
Los Angeles:	2025 T7 tractor (	Aggregatec	35 DSL	16201.01	0.10477	0.119272	0.616058	1.746356	1587.089	0.006979	0.006678
Los Angeles:	2025 T7 tractor (	Aggregatec	40 DSL	15076.96	0.07727	0.087967	0.454351	1.337357	1526.406	0.006536	0.006253
Los Angeles:	2025 T7 tractor (	Aggregatec	45 DSL	15095.76	0.057008	0.064899	0.335203	1.066325	1475.255	0.00616	0.005893
Los Angeles:	2025 T7 tractor (	Aggregatec	50 DSL	15658.1	0.042084	0.047909	0.24743	0.877621	1431.273	0.005839	0.005586
Los Angeles:	2025 T7 tractor (	Aggregatec	55 DSL	19040.22	0.031098	0.035403	0.182794	0.742134	1392.862	0.005564	0.005323
Los Angeles:	2025 T7 tractor (	Aggregatec	60 DSL	34473.07	0.02675	0.030453	0.157183	0.688703	1375.377	0.005442	0.005207
Los Angeles:	2025 T7 tractor (	Aggregatec	65 DSL	23531.85	0.02675	0.030453	0.157183	0.689888	1375.377	0.005442	0.005207
Los Angeles:	2025 T7 tractor (	Aggregatec	70 DSL	69.43556	0.02675	0.030453	0.157183	0.696916	1375.377	0.005442	0.005207
Los Angeles:	2025 T7 tractor (	Aggregatec	75 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025 T7 tractor (	Aggregatec	80 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025 T7 tractor (	Aggregatec	85 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025 T7 tractor (	Aggregatec	90 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025 T7 utility	Aggregatec	5 DSL	13.50241	0.377034	0.429224	2.226297	9.433043	2986.019	0.006188	0.00592
Los Angeles:	2025 T7 utility	Aggregatec	10 DSL	52.24886	0.305358	0.347626	1.803066	7.288759	2647.651	0.005566	0.005325
Los Angeles:	2025 T7 utility	Aggregatec	15 DSL	133.9616	0.215056	0.244825	1.269857	4.59072	2221.358	0.004783	0.004576
Los Angeles:	2025 T7 utility	Aggregatec	20 DSL	343.6192	0.155576	0.177112	0.918642	2.816044	1940.567	0.004267	0.004083
Los Angeles:	2025 T7 utility	Aggregatec	25 DSL	723.5776	0.114013	0.129795	0.673222	1.721193	1791.017	0.003882	0.003714
Los Angeles:	2025 T7 utility	Aggregatec	30 DSL	979.2532	0.08402	0.09565	0.496116	1.181259	1695.823	0.003574	0.00342
Los Angeles:	2025 T7 utility	Aggregatec	35 DSL	759.4499	0.061916	0.070487	0.365602	0.870558	1620.447	0.003318	0.003175
Los Angeles:	2025 T7 utility	Aggregatec	40 DSL	704.2597	0.045628	0.051944	0.269422	0.67293	1558.548	0.003099	0.002965
Los Angeles:	2025 T7 utility	Aggregatec	45 DSL	706.1703	0.033624	0.038279	0.198545	0.540026	1506.35	0.002907	0.002781
Los Angeles:	2025 T7 utility	Aggregatec	50 DSL	735.6693	0.024779	0.028209	0.146313	0.446187	1461.434	0.002736	0.002618
Los Angeles:	2025 T7 utility	Aggregatec	55 DSL	892.9843	0.01826	0.020788	0.107822	0.377768	1422.163	0.002583	0.002471

Los Angeles:	2025 T7 utility	Aggregatec	60 DSL	1620.845	0.015675	0.017845	0.09256	0.350478	1404.27	0.002512	0.002403
Los Angeles:	2025 T7 utility	Aggregatec	65 DSL	1105.963	0.015675	0.017845	0.09256	0.351078	1404.27	0.002512	0.002403
Los Angeles:	2025 T7 utility	Aggregatec	70 DSL	1.926766	0.015675	0.017845	0.09256	0.353658	1404.27	0.002512	0.002403
Los Angeles:	2025 T7 utility	Aggregatec	75 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025 T7 utility	Aggregatec	80 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025 T7 utility	Aggregatec	85 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025 T7 utility	Aggregatec	90 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2025 T7IS	Aggregatec	5 GAS	188.9013	2.097453	3.060598	52.49527	4.977269	3915.037	0.006546	0.006019
Los Angeles:	2025 T7IS	Aggregatec	10 GAS	774.0114	1.321118	1.927772	47.7616	4.326418	3321.343	0.004118	0.003786
Los Angeles:	2025 T7IS	Aggregatec	15 GAS	1950.586	0.876841	1.279484	43.57567	3.816792	2395.619	0.002737	0.002516
Los Angeles:	2025 T7IS	Aggregatec	20 GAS	4480.571	0.614016	0.89597	39.87827	3.423323	1935.261	0.001919	0.001764
Los Angeles:	2025 T7IS	Aggregatec	25 GAS	8890.526	0.454123	0.662656	36.62312	3.12171	1820.698	0.001418	0.001304
Los Angeles:	2025 T7IS	Aggregatec	30 GAS	10541.71	0.354051	0.51663	33.70255	2.899447	1733.61	0.001105	0.001016
Los Angeles:	2025 T7IS	Aggregatec	35 GAS	7850.546	0.291344	0.425129	31.11289	2.734645	1662.883	0.000908	0.000835
Los Angeles:	2025 T7IS	Aggregatec	40 GAS	7720.973	0.253523	0.369941	28.87211	2.606555	1602.893	0.000787	0.000724
Los Angeles:	2025 T7IS	Aggregatec	45 GAS	7799.116	0.232054	0.338612	26.81375	2.527841	1567.411	0.000721	0.000663
Los Angeles:	2025 T7IS	Aggregatec	50 GAS	7443.174	0.223961	0.326803	24.96142	2.494857	1547.755	0.000697	0.000641
Los Angeles:	2025 T7IS	Aggregatec	55 GAS	7283.589	0.227744	0.332324	23.25895	2.522635	1518.898	0.000709	0.000652
Los Angeles:	2025 T7IS	Aggregatec	60 GAS	9337.232	0.243497	0.35531	21.68868	2.595631	1497.496	0.000762	0.000701
Los Angeles:	2025 T7IS	Aggregatec	65 GAS	5385.614	0.274666	0.400792	20.28949	2.718044	1493.399	0.000864	0.000795
Los Angeles:	2025 T7IS	Aggregatec	70 GAS	44.33762	0.311147	0.454025	19.97852	2.910338	1501.517	0.000887	0.000815
Los Angeles:	2025 UBUS	Aggregatec	5 GAS	2527.614	1.2861	1.876674	7.421582	1.274377	3760.701	0.008042	0.007394
Los Angeles:	2025 UBUS	Aggregatec	5 DSL	4402.762	3.238218	19.65027	41.24966	22.06572	3299.652	0.345624	0.330673
Los Angeles:	2025 UBUS	Aggregatec	10 GAS	8122.42	0.866925	1.265014	5.885836	1.143459	3210.371	0.005134	0.004721
Los Angeles:	2025 UBUS	Aggregatec	10 DSL	14146.28	2.477753	14.82267	32.69277	18.55805	2996.085	0.293054	0.280376
Los Angeles:	2025 UBUS	Aggregatec	15 GAS	14383.59	0.614569	0.896777	4.866082	1.04477	2212.916	0.003458	0.00318
Los Angeles:	2025 UBUS	Aggregatec	15 DSL	25055.25	1.310257	7.514539	19.40587	13.3677	2460.059	0.207089	0.19813
Los Angeles:	2025 UBUS	Aggregatec	20 GAS	131487.1	0.457504	0.667589	4.159557	0.971037	1555.865	0.002457	0.002259
Los Angeles:	2025 UBUS	Aggregatec	20 DSL	229041.6	0.611304	3.319355	11.20513	10.59493	2018.771	0.146565	0.140225
Los Angeles:	2025 UBUS	Aggregatec	25 GAS	2942.189	0.361348	0.527279	3.692872	0.915184	1358.621	0.001844	0.001696
Los Angeles:	2025 UBUS	Aggregatec	25 DSL	5146.287	0.441383	2.335316	8.572192	9.839641	1810.993	0.121883	0.11661
Los Angeles:	2025 UBUS	Aggregatec	30 GAS	3421.16	0.295046	0.430531	3.31205	0.877657	1248.508	0.001455	0.001338
Los Angeles:	2025 UBUS	Aggregatec	30 DSL	5971.345	0.363071	1.876242	7.184974	9.36835	1699.776	0.106322	0.101723
Los Angeles:	2025 UBUS	Aggregatec	35 GAS	2525.126	0.252232	0.368056	3.029698	0.849371	1152.658	0.001208	0.001111
Los Angeles:	2025 UBUS	Aggregatec	35 DSL	4388.885	0.300969	1.527456	6.116595	8.980162	1607.366	0.093964	0.0899
Los Angeles:	2025 UBUS	Aggregatec	40 GAS	2345.19	0.227645	0.332179	2.846397	0.82567	1072.362	0.001057	0.000972
Los Angeles:	2025 UBUS	Aggregatec	40 DSL	4059.045	0.255933	1.278593	5.309706	8.68871	1533.874	0.084991	0.081314
Los Angeles:	2025 UBUS	Aggregatec	45 GAS	2315.25	0.217084	0.316769	2.767151	0.82245	996.3965	0.000978	0.000899
Los Angeles:	2025 UBUS	Aggregatec	45 DSL	4018.835	0.230113	1.134029	4.771772	8.58326	1479.631	0.079772	0.076321

Los Angeles:	2035 LDA	Aggregatec	5 GAS	500755.5	0.030939	0.045146	0.610608	0.042958	633.7234	0.006877	0.006324
Los Angeles:	2035 LDA	Aggregatec	5 DSL	6795.936	0.08975	0.102174	2.665979	0.049861	488.999	0.00263	0.002516
Los Angeles:	2035 LDA	Aggregatec	10 GAS	1505338	0.019459	0.028395	0.553686	0.036953	469.7986	0.004319	0.003971
Los Angeles:	2035 LDA	Aggregatec	10 DSL	20432.72	0.066944	0.076211	1.990654	0.041436	407.204	0.002396	0.002292
Los Angeles:	2035 LDA	Aggregatec	15 GAS	3913499	0.012908	0.018836	0.503831	0.032457	361.4977	0.002862	0.002632
Los Angeles:	2035 LDA	Aggregatec	15 DSL	53126.82	0.032663	0.037185	0.970521	0.028005	334.8031	0.002055	0.001966
Los Angeles:	2035 LDA	Aggregatec	20 GAS	10462976	0.00905	0.013206	0.461177	0.029095	289.0003	0.002003	0.001842
Los Angeles:	2035 LDA	Aggregatec	20 DSL	142047.3	0.012753	0.014519	0.377507	0.018798	274.596	0.001738	0.001663
Los Angeles:	2035 LDA	Aggregatec	25 GAS	21973485	0.006703	0.009781	0.423872	0.026551	239.829	0.00148	0.001361
Los Angeles:	2035 LDA	Aggregatec	25 DSL	298312.5	0.007687	0.008751	0.226915	0.014598	230.1857	0.001485	0.001421
Los Angeles:	2035 LDA	Aggregatec	30 GAS	23914931	0.005234	0.007637	0.390816	0.024708	206.5852	0.001154	0.001061
Los Angeles:	2035 LDA	Aggregatec	30 DSL	324663.2	0.005818	0.006624	0.171575	0.012413	199.3941	0.001313	0.001257
Los Angeles:	2035 LDA	Aggregatec	35 GAS	13777198	0.004313	0.006294	0.361446	0.023398	184.6308	0.000951	0.000874
Los Angeles:	2035 LDA	Aggregatec	35 DSL	187016.9	0.004645	0.005288	0.136762	0.011012	180.2989	0.00119	0.001139
Los Angeles:	2035 LDA	Aggregatec	40 GAS	9866067	0.003757	0.005482	0.335569	0.02227	171.3807	0.000825	0.000759
Los Angeles:	2035 LDA	Aggregatec	40 DSL	133916.8	0.003842	0.004374	0.112977	0.010011	168.7507	0.001094	0.001047
Los Angeles:	2035 LDA	Aggregatec	45 GAS	8318487	0.003436	0.005013	0.311265	0.021481	164.9647	0.000754	0.000693
Los Angeles:	2035 LDA	Aggregatec	45 DSL	112920.8	0.003255	0.003706	0.095636	0.009199	162.96	0.001013	0.000969
Los Angeles:	2035 LDA	Aggregatec	50 GAS	6871940	0.003317	0.00484	0.290005	0.021176	164.8521	0.000728	0.000669
Los Angeles:	2035 LDA	Aggregatec	50 DSL	93284.79	0.002823	0.003213	0.082796	0.008617	163.3727	0.00095	0.000909
Los Angeles:	2035 LDA	Aggregatec	55 GAS	6773180	0.003364	0.004908	0.270443	0.021652	170.7352	0.000742	0.000682
Los Angeles:	2035 LDA	Aggregatec	55 DSL	91936.37	0.002497	0.002842	0.073033	0.00822	170.9969	0.000902	0.000863
Los Angeles:	2035 LDA	Aggregatec	60 GAS	8791978	0.003567	0.005205	0.251445	0.022691	183.221	0.000795	0.000731
Los Angeles:	2035 LDA	Aggregatec	60 DSL	119352.4	0.002357	0.002684	0.068885	0.008018	185.3221	0.00088	0.000842
Los Angeles:	2035 LDA	Aggregatec	65 GAS	3715748	0.004029	0.005879	0.236014	0.023815	204.509	0.000902	0.000829
Los Angeles:	2035 LDA	Aggregatec	65 DSL	50438.7	0.002374	0.002703	0.069258	0.008119	208.3755	0.00089	0.000852
Los Angeles:	2035 LDA	Aggregatec	70 GAS	25703.37	0.004713	0.006877	0.244933	0.027141	221.5724	0.001035	0.000952
Los Angeles:	2035 LDA	Aggregatec	70 DSL	347.5853	0.002616	0.002978	0.074603	0.010264	227.3835	0.00103	0.000986
Los Angeles:	2035 LDT1	Aggregatec	5 GAS	46481.9	0.049254	0.071871	0.848663	0.065603	714.3857	0.007926	0.007288
Los Angeles:	2035 LDT1	Aggregatec	5 DSL	26.78892	0.277137	0.315502	2.788033	0.217532	564.5691	0.027192	0.026016
Los Angeles:	2035 LDT1	Aggregatec	10 GAS	141972.1	0.031158	0.045465	0.764242	0.055855	529.637	0.004991	0.004589
Los Angeles:	2035 LDT1	Aggregatec	10 DSL	81.98139	0.206051	0.234576	2.080042	0.19865	475.6864	0.021212	0.020294
Los Angeles:	2035 LDT1	Aggregatec	15 GAS	373896.8	0.020789	0.030336	0.691801	0.048656	407.5894	0.003316	0.003049
Los Angeles:	2035 LDT1	Aggregatec	15 DSL	216.2402	0.105737	0.120374	1.058005	0.165266	394.721	0.01672	0.015997
Los Angeles:	2035 LDT1	Aggregatec	20 GAS	1006277	0.014663	0.021396	0.630861	0.043388	325.8568	0.002325	0.002138
Los Angeles:	2035 LDT1	Aggregatec	20 DSL	582.4287	0.046898	0.05339	0.45972	0.143613	324.4175	0.013432	0.012851
Los Angeles:	2035 LDT1	Aggregatec	25 GAS	2110737	0.010927	0.015945	0.578475	0.03949	270.4036	0.001721	0.001582
Los Angeles:	2035 LDT1	Aggregatec	25 DSL	1221.51	0.030468	0.034686	0.297719	0.135851	271.9934	0.011075	0.010596
Los Angeles:	2035 LDT1	Aggregatec	30 GAS	2292748	0.008573	0.01251	0.532543	0.036701	232.9118	0.001343	0.001235

Los Angele:	2035	LDT1	Aggregatec	30	DSL	1326.536	0.02375	0.027038	0.234135	0.133924	235.1708	0.009507	0.009096
Los Angele:	2035	LDT1	Aggregatec	35	GAS	1307657	0.0071	0.01036	0.492391	0.034799	208.1386	0.001107	0.001017
Los Angele:	2035	LDT1	Aggregatec	35	DSL	755.6803	0.019454	0.022147	0.194378	0.133693	212.127	0.008418	0.008054
Los Angele:	2035	LDT1	Aggregatec	40	GAS	930226	0.006198	0.009044	0.457234	0.033169	193.1913	0.000961	0.000883
Los Angele:	2035	LDT1	Aggregatec	40	DSL	537.1377	0.016619	0.018919	0.169077	0.134758	197.9051	0.007691	0.007358
Los Angele:	2035	LDT1	Aggregatec	45	GAS	791289.9	0.005651	0.008245	0.424006	0.032014	185.9667	0.000878	0.000807
Los Angele:	2035	LDT1	Aggregatec	45	DSL	457.3983	0.014783	0.016829	0.154031	0.137541	190.9133	0.007267	0.006953
Los Angele:	2035	LDT1	Aggregatec	50	GAS	653984.7	0.005438	0.007935	0.395464	0.031661	185.8406	0.000847	0.000778
Los Angele:	2035	LDT1	Aggregatec	50	DSL	378.0506	0.013589	0.01547	0.146226	0.140442	191.2355	0.00704	0.006735
Los Angele:	2035	LDT1	Aggregatec	55	GAS	639175.4	0.005498	0.008023	0.369698	0.032593	192.4596	0.000862	0.000792
Los Angele:	2035	LDT1	Aggregatec	55	DSL	369.1164	0.012905	0.014692	0.144984	0.143357	199.8535	0.006997	0.006694
Los Angele:	2035	LDT1	Aggregatec	60	GAS	839213.5	0.005781	0.008436	0.344412	0.034309	206.5766	0.000923	0.000849
Los Angele:	2035	LDT1	Aggregatec	60	DSL	485.2991	0.013164	0.014986	0.156032	0.148598	216.627	0.007314	0.006998
Los Angele:	2035	LDT1	Aggregatec	65	GAS	352495.5	0.006488	0.009468	0.324553	0.036367	230.5664	0.001045	0.00096
Los Angele:	2035	LDT1	Aggregatec	65	DSL	203.6906	0.014138	0.016095	0.178669	0.153091	243.2333	0.007919	0.007576
Los Angele:	2035	LDT1	Aggregatec	70	GAS	1521.085	0.008717	0.01272	0.367692	0.048068	250.7482	0.001208	0.001111
Los Angele:	2035	LDT1	Aggregatec	70	DSL	0.815467	0.01105	0.01258	0.142187	0.108766	252.4388	0.005915	0.00566
Los Angele:	2035	LDT2	Aggregatec	5	GAS	223623.5	0.040373	0.058911	0.786304	0.056552	791.6383	0.006981	0.006419
Los Angele:	2035	LDT2	Aggregatec	5	DSL	488.6901	0.262558	0.298905	2.637802	0.14816	602.1259	0.009187	0.00879
Los Angele:	2035	LDT2	Aggregatec	10	GAS	683409.6	0.025493	0.0372	0.714536	0.048654	587.1449	0.004396	0.004042
Los Angele:	2035	LDT2	Aggregatec	10	DSL	1493.698	0.196557	0.223767	1.975188	0.123064	506.9071	0.008612	0.008239
Los Angele:	2035	LDT2	Aggregatec	15	GAS	1800634	0.016973	0.024768	0.651428	0.042712	451.9908	0.00292	0.002685
Los Angele:	2035	LDT2	Aggregatec	15	DSL	3936.042	0.096008	0.109299	0.964882	0.082437	420.3478	0.007502	0.007177
Los Angele:	2035	LDT2	Aggregatec	20	GAS	4847195	0.011927	0.017404	0.59678	0.038269	361.4155	0.002046	0.001881
Los Angele:	2035	LDT2	Aggregatec	20	DSL	10596.23	0.037357	0.042528	0.375404	0.054361	345.3637	0.006398	0.006121
Los Angele:	2035	LDT2	Aggregatec	25	GAS	10166910	0.008839	0.012898	0.548247	0.034882	299.9034	0.001512	0.00139
Los Angele:	2035	LDT2	Aggregatec	25	DSL	22225.16	0.022436	0.025541	0.22544	0.041372	289.5726	0.005482	0.005245
Los Angele:	2035	LDT2	Aggregatec	30	GAS	11042871	0.006903	0.010073	0.505228	0.032432	258.3105	0.001179	0.001084
Los Angele:	2035	LDT2	Aggregatec	30	DSL	24139.6	0.016951	0.019297	0.170329	0.034521	250.395	0.004856	0.004646
Los Angele:	2035	LDT2	Aggregatec	35	GAS	6296054	0.005681	0.00829	0.46638	0.030667	230.7786	0.000969	0.000891
Los Angele:	2035	LDT2	Aggregatec	35	DSL	13761.83	0.013481	0.015347	0.135454	0.029938	225.9752	0.00439	0.0042
Los Angele:	2035	LDT2	Aggregatec	40	GAS	4477773	0.004943	0.007213	0.432497	0.029154	214.1719	0.000841	0.000773
Los Angele:	2035	LDT2	Aggregatec	40	DSL	9786.842	0.011115	0.012654	0.111691	0.026636	210.8974	0.004026	0.003852
Los Angele:	2035	LDT2	Aggregatec	45	GAS	3810164	0.004527	0.006605	0.40179	0.028179	206.2089	0.000769	0.000707
Los Angele:	2035	LDT2	Aggregatec	45	DSL	8328.373	0.009414	0.010717	0.094621	0.024141	203.3536	0.003735	0.003573
Los Angele:	2035	LDT2	Aggregatec	50	GAS	3149071	0.004369	0.006375	0.374424	0.027813	206.0724	0.000742	0.000683
Los Angele:	2035	LDT2	Aggregatec	50	DSL	6883.365	0.008139	0.009265	0.081825	0.022217	203.692	0.003494	0.003343
Los Angele:	2035	LDT2	Aggregatec	55	GAS	3076856	0.00442	0.006449	0.348692	0.028475	213.3646	0.000756	0.000695
Los Angele:	2035	LDT2	Aggregatec	55	DSL	6724.984	0.007152	0.008142	0.071931	0.020719	212.964	0.003291	0.003149

Los Angeles:	2035	LDT2	Aggregatec	60	GAS	4041404	0.004694	0.006849	0.324971	0.029955	229.0761	0.000812	0.000746
Los Angeles:	2035	LDT2	Aggregatec	60	DSL	8834.109	0.006741	0.007675	0.067854	0.020105	230.7021	0.003203	0.003065
Los Angeles:	2035	LDT2	Aggregatec	65	GAS	1697151	0.005289	0.007717	0.304782	0.031522	255.6379	0.000919	0.000845
Los Angeles:	2035	LDT2	Aggregatec	65	DSL	3709.59	0.006747	0.007681	0.067965	0.020154	259.1192	0.003206	0.003068
Los Angeles:	2035	LDT2	Aggregatec	70	GAS	7169.556	0.005841	0.008523	0.299106	0.03499	273.9374	0.000992	0.000912
Los Angeles:	2035	LDT2	Aggregatec	70	DSL	15.58078	0.006746	0.00768	0.067674	0.021006	278.3444	0.003191	0.003053
Los Angeles:	2035	LHD1	Aggregatec	5	GAS	3799.726	0.046293	0.067551	0.390011	0.147004	1304.838	0.007571	0.006962
Los Angeles:	2035	LHD1	Aggregatec	5	DSL	4558.472	0.755179	0.859722	3.448774	0.440587	1139.695	0.020064	0.019196
Los Angeles:	2035	LHD1	Aggregatec	10	GAS	12406.37	0.029344	0.042818	0.357559	0.128536	1283.538	0.004766	0.004383
Los Angeles:	2035	LHD1	Aggregatec	10	DSL	14594.8	0.563993	0.642068	2.577731	0.405155	958.2988	0.017632	0.016869
Los Angeles:	2035	LHD1	Aggregatec	15	GAS	32160.09	0.019429	0.028351	0.325778	0.113207	891.6275	0.003163	0.002909
Los Angeles:	2035	LHD1	Aggregatec	15	DSL	38503.71	0.280039	0.318806	1.281595	0.331252	625.8048	0.014761	0.014122
Los Angeles:	2035	LHD1	Aggregatec	20	GAS	72423.77	0.013476	0.019664	0.295745	0.100628	774.0318	0.002214	0.002035
Los Angeles:	2035	LHD1	Aggregatec	20	DSL	94273.02	0.113758	0.129506	0.522712	0.274815	533.2448	0.012224	0.011696
Los Angeles:	2035	LHD1	Aggregatec	25	GAS	138997	0.009976	0.014556	0.27202	0.092072	709.5506	0.001636	0.001504
Los Angeles:	2035	LHD1	Aggregatec	25	DSL	186617.9	0.070395	0.08014	0.325608	0.259869	472.9745	0.010376	0.009927
Los Angeles:	2035	LHD1	Aggregatec	30	GAS	154558	0.007772	0.011341	0.250328	0.085729	643.9693	0.001275	0.001172
Los Angeles:	2035	LHD1	Aggregatec	30	DSL	239081.2	0.05385	0.061305	0.250989	0.255726	429.5202	0.009111	0.008717
Los Angeles:	2035	LHD1	Aggregatec	35	GAS	113116.9	0.006428	0.009379	0.232295	0.081369	644.0238	0.001049	0.000964
Los Angeles:	2035	LHD1	Aggregatec	35	DSL	183200.2	0.043553	0.049583	0.20524	0.263013	429.6106	0.008237	0.007881
Los Angeles:	2035	LHD1	Aggregatec	40	GAS	103517.8	0.005611	0.008187	0.21628	0.07791	641.6413	0.00091	0.000836
Los Angeles:	2035	LHD1	Aggregatec	40	DSL	162120.4	0.036705	0.041786	0.175684	0.275897	417.9663	0.007605	0.007276
Los Angeles:	2035	LHD1	Aggregatec	45	GAS	103543.3	0.005111	0.007457	0.199913	0.075163	638.6497	0.000832	0.000765
Los Angeles:	2035	LHD1	Aggregatec	45	DSL	157397.5	0.03169	0.036077	0.154588	0.278069	407.6702	0.007078	0.006772
Los Angeles:	2035	LHD1	Aggregatec	50	GAS	94515.67	0.004914	0.007171	0.185396	0.073999	673.4692	0.000803	0.000738
Los Angeles:	2035	LHD1	Aggregatec	50	DSL	155584.6	0.027908	0.031772	0.139331	0.271258	427.2593	0.006643	0.006355
Los Angeles:	2035	LHD1	Aggregatec	55	GAS	113403.9	0.005012	0.007314	0.173186	0.075518	709.6317	0.000818	0.000752
Los Angeles:	2035	LHD1	Aggregatec	55	DSL	261443.7	0.025454	0.028978	0.131831	0.279687	446.484	0.006378	0.006102
Los Angeles:	2035	LHD1	Aggregatec	60	GAS	158072.1	0.005318	0.00776	0.160168	0.077705	720.0334	0.000879	0.000808
Los Angeles:	2035	LHD1	Aggregatec	60	DSL	510190	0.024687	0.028104	0.133189	0.280873	450.8035	0.006313	0.00604
Los Angeles:	2035	LHD1	Aggregatec	65	GAS	83029.18	0.005986	0.008735	0.149252	0.082112	729.8602	0.000996	0.000916
Los Angeles:	2035	LHD1	Aggregatec	65	DSL	323419.7	0.025592	0.029134	0.14556	0.290736	456.6764	0.0065	0.006218
Los Angeles:	2035	LHD1	Aggregatec	70	GAS	412.7674	0.009437	0.013771	0.203423	0.125957	727.3949	0.001118	0.001028
Los Angeles:	2035	LHD1	Aggregatec	70	DSL	1437.261	0.046065	0.052442	0.338337	1.027961	458.3665	0.010707	0.010244
Los Angeles:	2035	LHD2	Aggregatec	5	GAS	1586.456	0.024555	0.035831	0.230308	0.07138	1376.145	0.007578	0.006968
Los Angeles:	2035	LHD2	Aggregatec	5	DSL	2343.803	0.743986	0.846978	3.306201	0.302366	1193.224	0.017771	0.017002
Los Angeles:	2035	LHD2	Aggregatec	10	GAS	5173.996	0.01546	0.022559	0.209861	0.061992	1428.386	0.004768	0.004384
Los Angeles:	2035	LHD2	Aggregatec	10	DSL	7495.605	0.556696	0.633761	2.474455	0.258448	1060.515	0.016454	0.015742
Los Angeles:	2035	LHD2	Aggregatec	15	GAS	13417.53	0.010261	0.014973	0.191622	0.054725	1004.809	0.003165	0.00291

Los Angele:	2035	LHD2	Aggregatec	15	DSL	19782.15	0.272707	0.310459	1.212742	0.184418	705.9397	0.014228	0.013613
Los Angele:	2035	LHD2	Aggregatec	20	GAS	30261.78	0.007181	0.010478	0.175371	0.049093	879.374	0.002216	0.002038
Los Angele:	2035	LHD2	Aggregatec	20	DSL	48510.84	0.106969	0.121777	0.476377	0.132577	602.0684	0.01207	0.011548
Los Angele:	2035	LHD2	Aggregatec	25	GAS	58057.81	0.005304	0.00774	0.160984	0.044822	795.1796	0.001637	0.001505
Los Angele:	2035	LHD2	Aggregatec	25	DSL	95989.97	0.064611	0.073556	0.288321	0.110378	536.548	0.010326	0.00988
Los Angele:	2035	LHD2	Aggregatec	30	GAS	64548.49	0.004129	0.006025	0.148036	0.041699	718.7204	0.001276	0.001173
Los Angele:	2035	LHD2	Aggregatec	30	DSL	122963	0.048934	0.055708	0.218794	0.099457	483.8831	0.009133	0.008738
Los Angele:	2035	LHD2	Aggregatec	35	GAS	47193.11	0.003394	0.004953	0.136624	0.039336	718.7231	0.001049	0.000965
Los Angele:	2035	LHD2	Aggregatec	35	DSL	94118.53	0.039041	0.044445	0.175065	0.093645	483.9093	0.008258	0.007901
Los Angele:	2035	LHD2	Aggregatec	40	GAS	43157.49	0.002951	0.004306	0.126733	0.037497	702.3076	0.00091	0.000837
Los Angele:	2035	LHD2	Aggregatec	40	DSL	83166.6	0.032323	0.036798	0.145543	0.090586	466.2682	0.007585	0.007256
Los Angele:	2035	LHD2	Aggregatec	45	GAS	43204.85	0.002701	0.003942	0.11768	0.036354	685.7538	0.000833	0.000766
Los Angele:	2035	LHD2	Aggregatec	45	DSL	80767.78	0.027482	0.031286	0.124374	0.087361	448.1918	0.007039	0.006734
Los Angele:	2035	LHD2	Aggregatec	50	GAS	39462.12	0.002607	0.003804	0.109486	0.035929	714.9201	0.000804	0.000739
Los Angele:	2035	LHD2	Aggregatec	50	DSL	79963.62	0.023857	0.02716	0.108675	0.083828	464.6634	0.006587	0.006303
Los Angele:	2035	LHD2	Aggregatec	55	GAS	47302.52	0.002644	0.003857	0.10174	0.036462	747.4726	0.000818	0.000753
Los Angele:	2035	LHD2	Aggregatec	55	DSL	134349.7	0.021129	0.024054	0.097312	0.083209	480.9527	0.006227	0.005957
Los Angele:	2035	LHD2	Aggregatec	60	GAS	65999.2	0.002821	0.004117	0.094592	0.037736	755.292	0.000879	0.000808
Los Angele:	2035	LHD2	Aggregatec	60	DSL	262402.4	0.020045	0.02282	0.093518	0.082913	482.6083	0.006077	0.005814
Los Angele:	2035	LHD2	Aggregatec	65	GAS	34659.51	0.003171	0.004627	0.088038	0.039834	762.725	0.000997	0.000916
Los Angele:	2035	LHD2	Aggregatec	65	DSL	166334.6	0.020219	0.023017	0.095996	0.084847	483.8838	0.006115	0.00585
Los Angele:	2035	LHD2	Aggregatec	70	GAS	159.5982	0.003522	0.005139	0.08683	0.042902	747.6862	0.001082	0.000995
Los Angele:	2035	LHD2	Aggregatec	70	DSL	680.0983	0.023334	0.026565	0.127355	0.196654	480.054	0.006891	0.006593
Los Angele:	2035	MCY	Aggregatec	5	GAS	5805.172	12.4682	15.66972	41.96909	1.582379	567.3267	0.013702	0.012773
Los Angele:	2035	MCY	Aggregatec	10	GAS	17478.28	8.057954	10.12741	32.32011	1.414341	420.8623	0.008822	0.008224
Los Angele:	2035	MCY	Aggregatec	15	GAS	45497.32	5.495979	6.907571	26.13335	1.289756	324.0345	0.005989	0.005583
Los Angele:	2035	MCY	Aggregatec	20	GAS	121720.3	3.952176	4.967123	21.98607	1.198282	258.9246	0.004286	0.003995
Los Angele:	2035	MCY	Aggregatec	25	GAS	255596	2.994859	3.76361	19.12981	1.131334	214.7239	0.003231	0.003012
Los Angele:	2035	MCY	Aggregatec	30	GAS	278124.6	2.392695	3.006578	17.1805	1.086318	184.8173	0.002567	0.002393
Los Angele:	2035	MCY	Aggregatec	35	GAS	160065.7	2.013919	2.530174	15.87748	1.057734	165.0926	0.002148	0.002002
Los Angele:	2035	MCY	Aggregatec	40	GAS	114550.3	1.777131	2.232409	14.96022	1.035298	153.0673	0.001893	0.001764
Los Angele:	2035	MCY	Aggregatec	45	GAS	96666.65	1.650064	2.072894	14.51707	1.024985	147.3167	0.001757	0.001638
Los Angele:	2035	MCY	Aggregatec	50	GAS	79860.35	1.614064	2.0276	14.59304	1.028896	147.1448	0.001716	0.0016
Los Angele:	2035	MCY	Aggregatec	55	GAS	78647.1	1.674136	2.102748	15.50202	1.057798	152.5317	0.001764	0.001644
Los Angele:	2035	MCY	Aggregatec	60	GAS	102203.9	1.835256	2.305233	17.4384	1.106866	164.1372	0.001908	0.001779
Los Angele:	2035	MCY	Aggregatec	65	GAS	43167.94	2.099811	2.637274	20.34216	1.155588	183.2913	0.002171	0.002024
Los Angele:	2035	MCY	Aggregatec	70	GAS	287.4978	2.342503	2.928613	23.66767	1.229808	195.736	0.00233	0.002174
Los Angele:	2035	MDV	Aggregatec	5	GAS	120014.9	0.061616	0.08991	1.008752	0.089135	1063.055	0.007447	0.006848
Los Angele:	2035	MDV	Aggregatec	5	DSL	3310.546	0.105967	0.120637	3.066241	0.057725	750.4852	0.003195	0.003057

Los Angele:	2035 MDV	Aggregatec	10 GAS	366627.3	0.038983	0.056884	0.913659	0.075833	788.314	0.004694	0.004316
Los Angele:	2035 MDV	Aggregatec	10 DSL	10118.54	0.079409	0.090402	2.297368	0.04808	637.4971	0.002971	0.002843
Los Angele:	2035 MDV	Aggregatec	15 GAS	965672.5	0.026009	0.037952	0.830801	0.066016	606.7679	0.00312	0.002869
Los Angele:	2035 MDV	Aggregatec	15 DSL	26662.81	0.038849	0.044227	1.122858	0.032382	540.7439	0.00258	0.002468
Los Angele:	2035 MDV	Aggregatec	20 GAS	2599107	0.018325	0.02674	0.759816	0.058821	485.1399	0.002188	0.002012
Los Angele:	2035 MDV	Aggregatec	20 DSL	71778.27	0.015154	0.017252	0.437033	0.02152	449.1292	0.002196	0.002101
Los Angele:	2035 MDV	Aggregatec	25 GAS	5451746	0.013627	0.019884	0.697529	0.053475	402.574	0.001618	0.001488
Los Angele:	2035 MDV	Aggregatec	25 DSL	150552.3	0.009113	0.010375	0.262465	0.016501	379.7782	0.001879	0.001798
Los Angele:	2035 MDV	Aggregatec	30 GAS	5921741	0.010671	0.015571	0.642545	0.049659	346.7477	0.001262	0.00116
Los Angele:	2035 MDV	Aggregatec	30 DSL	163521.1	0.006888	0.007842	0.198301	0.013865	328.0008	0.001663	0.001591
Los Angele:	2035 MDV	Aggregatec	35 GAS	3377096	0.008809	0.012855	0.593477	0.047031	309.8232	0.001038	0.000954
Los Angele:	2035 MDV	Aggregatec	35 DSL	93223.78	0.005478	0.006236	0.157653	0.01211	297.5714	0.001501	0.001436
Los Angele:	2035 MDV	Aggregatec	40 GAS	2402199	0.007677	0.011202	0.550624	0.044808	287.5472	0.0009	0.000828
Los Angele:	2035 MDV	Aggregatec	40 DSL	66297.6	0.004518	0.005144	0.129976	0.010854	278.3096	0.001376	0.001316
Los Angele:	2035 MDV	Aggregatec	45 GAS	2043595	0.007015	0.010237	0.5112	0.043319	276.8288	0.000824	0.000757
Los Angele:	2035 MDV	Aggregatec	45 DSL	56416.91	0.003833	0.004363	0.11016	0.009906	267.868	0.001278	0.001223
Los Angele:	2035 MDV	Aggregatec	50 GAS	1688996	0.006759	0.009863	0.476534	0.042894	276.6431	0.000795	0.000731
Los Angele:	2035 MDV	Aggregatec	50 DSL	46628.31	0.003318	0.003777	0.095281	0.009183	269.2121	0.001197	0.001145
Los Angele:	2035 MDV	Aggregatec	55 GAS	1650610	0.006832	0.009969	0.444407	0.044192	286.4615	0.000808	0.000743
Los Angele:	2035 MDV	Aggregatec	55 DSL	45556.03	0.00292	0.003324	0.083757	0.00863	284.0773	0.001129	0.00108
Los Angele:	2035 MDV	Aggregatec	60 GAS	2167437	0.007217	0.01053	0.414135	0.046681	307.5216	0.000868	0.000798
Los Angele:	2035 MDV	Aggregatec	60 DSL	59842.48	0.002759	0.003141	0.079065	0.008409	307.6506	0.001103	0.001055
Los Angele:	2035 MDV	Aggregatec	65 GAS	910334.3	0.008109	0.011832	0.389088	0.049594	343.204	0.000982	0.000903
Los Angele:	2035 MDV	Aggregatec	65 DSL	25129.1	0.002766	0.003149	0.079207	0.008456	345.417	0.001107	0.001059
Los Angele:	2035 MDV	Aggregatec	70 GAS	3904.496	0.00983	0.014344	0.402772	0.062034	370.161	0.001057	0.000972
Los Angele:	2035 MDV	Aggregatec	70 DSL	105.6487	0.002676	0.003046	0.077292	0.009225	368.4386	0.00105	0.001005
Los Angele:	2035 MH	Aggregatec	5 GAS	501.4187	0.076942	0.112273	0.442884	0.215852	3686.907	0.007504	0.0069
Los Angele:	2035 MH	Aggregatec	5 DSL	106.5443	0.758073	0.863016	2.081261	10.53353	2002.554	0.055663	0.053255
Los Angele:	2035 MH	Aggregatec	10 GAS	1558.688	0.048831	0.071255	0.408271	0.189002	3147.824	0.004721	0.004341
Los Angele:	2035 MH	Aggregatec	10 DSL	314.6009	0.568967	0.647731	1.570703	8.767255	1818.499	0.050976	0.04877
Los Angele:	2035 MH	Aggregatec	15 GAS	4063.389	0.032362	0.047223	0.371973	0.166584	2169.741	0.003134	0.002881
Los Angele:	2035 MH	Aggregatec	15 DSL	832.8414	0.278856	0.317459	0.787633	5.895494	1493.138	0.041148	0.039368
Los Angele:	2035 MH	Aggregatec	20 GAS	9382.56	0.022374	0.032648	0.33444	0.147471	1525.178	0.002195	0.002018
Los Angele:	2035 MH	Aggregatec	20 DSL	2052.364	0.109918	0.125134	0.32601	3.919765	1225.102	0.032548	0.03114
Los Angele:	2035 MH	Aggregatec	25 GAS	18775.66	0.016576	0.024187	0.308278	0.134868	1331.863	0.001621	0.001491
Los Angele:	2035 MH	Aggregatec	25 DSL	4289.697	0.067765	0.077146	0.207112	3.031196	1098.903	0.027961	0.026751
Los Angele:	2035 MH	Aggregatec	30 GAS	22269.77	0.012931	0.018868	0.284208	0.125277	1223.95	0.001264	0.001162
Los Angele:	2035 MH	Aggregatec	30 DSL	5603.878	0.051877	0.059059	0.161722	2.559479	1031.498	0.025126	0.024039
Los Angele:	2035 MH	Aggregatec	35 GAS	16560.38	0.010724	0.015648	0.265569	0.118996	1130.164	0.001039	0.000955

Los Angeles:	2035 MH	Aggregatec	35 DSL	4274.637	0.041732	0.047509	0.133204	2.247796	975.6551	0.023537	0.022519
Los Angeles:	2035 MH	Aggregatec	40 GAS	16368.06	0.009353	0.013647	0.247482	0.113759	1051.51	0.000901	0.000828
Los Angeles:	2035 MH	Aggregatec	40 DSL	4403.51	0.034649	0.039446	0.113068	2.019174	931.2151	0.022599	0.021622
Los Angeles:	2035 MH	Aggregatec	45 GAS	16382.99	0.008498	0.012401	0.227389	0.109622	976.8908	0.000824	0.000758
Los Angeles:	2035 MH	Aggregatec	45 DSL	4387.598	0.029458	0.033536	0.097782	1.83997	898.1333	0.022063	0.021109
Los Angeles:	2035 MH	Aggregatec	50 GAS	15444.02	0.008169	0.011921	0.210328	0.107743	913.767	0.000796	0.000732
Los Angeles:	2035 MH	Aggregatec	50 DSL	4327.924	0.025716	0.029276	0.086742	1.701529	876.5212	0.02213	0.021173
Los Angeles:	2035 MH	Aggregatec	55 GAS	16112.88	0.00838	0.012228	0.198495	0.109704	888.7217	0.00081	0.000745
Los Angeles:	2035 MH	Aggregatec	55 DSL	4893.849	0.023274	0.026496	0.080305	1.60874	866.5299	0.023347	0.022337
Los Angeles:	2035 MH	Aggregatec	60 GAS	19796.63	0.008903	0.012991	0.183142	0.112153	894.1381	0.000871	0.000801
Los Angeles:	2035 MH	Aggregatec	60 DSL	7061.358	0.02242	0.025523	0.077701	1.564572	867.8554	0.024789	0.023717
Los Angeles:	2035 MH	Aggregatec	65 GAS	8806.433	0.010045	0.014658	0.17148	0.119169	910.7885	0.000987	0.000907
Los Angeles:	2035 MH	Aggregatec	65 DSL	3459.539	0.02317	0.026377	0.080331	1.582424	880.7654	0.027548	0.026356
Los Angeles:	2035 MH	Aggregatec	70 GAS	46.30624	0.017138	0.025008	0.299839	0.191427	948.28	0.001063	0.000977
Los Angeles:	2035 MH	Aggregatec	70 DSL	16.08247	0.040248	0.04582	0.158079	2.267625	911.5834	0.073527	0.070346
Los Angeles:	2035 Motor Coa	Aggregatec	5 DSL	295.7965	0.504859	0.574744	2.981075	17.03716	3018.73	0.009461	0.009052
Los Angeles:	2035 Motor Coa	Aggregatec	10 DSL	860.5882	0.408883	0.465482	2.414357	12.90747	2676.656	0.008511	0.008142
Los Angeles:	2035 Motor Coa	Aggregatec	15 DSL	2280.888	0.287967	0.327828	1.700376	7.713351	2245.693	0.007313	0.006997
Los Angeles:	2035 Motor Coa	Aggregatec	20 DSL	5698.223	0.208321	0.237158	1.230088	4.291946	1961.825	0.006525	0.006242
Los Angeles:	2035 Motor Coa	Aggregatec	25 DSL	12098.85	0.152667	0.1738	0.901463	2.298618	1810.637	0.005935	0.005679
Los Angeles:	2035 Motor Coa	Aggregatec	30 DSL	16689.51	0.112505	0.128078	0.664313	1.410939	1714.4	0.005465	0.005229
Los Angeles:	2035 Motor Coa	Aggregatec	35 DSL	12972.22	0.082908	0.094384	0.489551	0.94011	1638.198	0.005073	0.004854
Los Angeles:	2035 Motor Coa	Aggregatec	40 DSL	12464.87	0.061097	0.069554	0.360764	0.663157	1575.622	0.004738	0.004533
Los Angeles:	2035 Motor Coa	Aggregatec	45 DSL	12086.04	0.045024	0.051257	0.265857	0.489235	1522.852	0.004445	0.004252
Los Angeles:	2035 Motor Coa	Aggregatec	50 DSL	12054.02	0.03318	0.037772	0.195918	0.37384	1477.444	0.004184	0.004003
Los Angeles:	2035 Motor Coa	Aggregatec	55 DSL	16053.18	0.024451	0.027836	0.144377	0.29454	1437.742	0.003949	0.003778
Los Angeles:	2035 Motor Coa	Aggregatec	60 DSL	27645	0.02099	0.023895	0.12394	0.264047	1419.654	0.00384	0.003674
Los Angeles:	2035 Motor Coa	Aggregatec	65 DSL	16648	0.02099	0.023895	0.12394	0.26487	1419.654	0.00384	0.003674
Los Angeles:	2035 Motor Coa	Aggregatec	70 DSL	85.34221	0.02099	0.023895	0.12394	0.267954	1419.654	0.00384	0.003674
Los Angeles:	2035 Motor Coa	Aggregatec	75 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2035 Motor Coa	Aggregatec	80 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2035 Motor Coa	Aggregatec	85 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2035 Motor Coa	Aggregatec	90 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2035 OBUS	Aggregatec	5 GAS	850.2886	0.069909	0.102011	0.405692	0.172674	3666.943	0.007638	0.007023
Los Angeles:	2035 OBUS	Aggregatec	10 GAS	2663.492	0.044047	0.064274	0.37016	0.150183	3130.315	0.004807	0.00442
Los Angeles:	2035 OBUS	Aggregatec	15 GAS	6933.157	0.029233	0.042657	0.337931	0.132544	2157.735	0.003191	0.002934
Los Angeles:	2035 OBUS	Aggregatec	20 GAS	15821.71	0.020437	0.029821	0.308671	0.118551	1517.083	0.002234	0.002054
Los Angeles:	2035 OBUS	Aggregatec	25 GAS	31737.83	0.015106	0.022043	0.283599	0.108189	1324.733	0.00165	0.001517
Los Angeles:	2035 OBUS	Aggregatec	30 GAS	37681.05	0.011773	0.01718	0.261111	0.10041	1217.374	0.001286	0.001183

Los Angele:	2035	OBUS	Aggregatec	35	GAS	28237.86	0.009693	0.014143	0.241469	0.094733	1123.925	0.001058	0.000972
Los Angele:	2035	OBUS	Aggregatec	40	GAS	27994.02	0.008429	0.0123	0.224123	0.090326	1045.644	0.000917	0.000843
Los Angele:	2035	OBUS	Aggregatec	45	GAS	27834.2	0.007708	0.011247	0.207768	0.08755	971.5657	0.000839	0.000772
Los Angele:	2035	OBUS	Aggregatec	50	GAS	26132.26	0.007438	0.010854	0.193233	0.086356	908.8574	0.00081	0.000745
Los Angele:	2035	OBUS	Aggregatec	55	GAS	27498.23	0.007568	0.011044	0.180276	0.08727	883.8006	0.000825	0.000759
Los Angele:	2035	OBUS	Aggregatec	60	GAS	33571.23	0.008089	0.011803	0.167757	0.089717	889.2961	0.000886	0.000815
Los Angele:	2035	OBUS	Aggregatec	65	GAS	15000.75	0.009089	0.013262	0.156129	0.094953	905.7783	0.001005	0.000924
Los Angele:	2035	OBUS	Aggregatec	70	GAS	119.2304	0.010432	0.015223	0.163284	0.105044	933.9428	0.001098	0.001009
Los Angele:	2035	PTO	Aggregatec	20	DSL	112946.3	0.201517	0.229412	1.189911	4.123174	1848.216	0.006194	0.005926
Los Angele:	2035	SBUS	Aggregatec	5	GAS	791.5163	0.057424	0.083794	0.327151	0.154308	1749.708	0.006969	0.006408
Los Angele:	2035	SBUS	Aggregatec	5	DSL	1113.588	0.278536	0.317092	1.246448	9.161673	2140.886	0.009728	0.009307
Los Angele:	2035	SBUS	Aggregatec	10	GAS	2774.224	0.036198	0.05282	0.298467	0.133448	1493.661	0.004385	0.004032
Los Angele:	2035	SBUS	Aggregatec	10	DSL	3903.069	0.224606	0.255696	1.008814	7.050882	1899.633	0.008822	0.00844
Los Angele:	2035	SBUS	Aggregatec	15	GAS	5548.448	0.024027	0.035061	0.27255	0.117827	1029.583	0.002911	0.002676
Los Angele:	2035	SBUS	Aggregatec	15	DSL	7806.137	0.155725	0.177281	0.708159	4.390451	1594.035	0.007644	0.007314
Los Angele:	2035	SBUS	Aggregatec	20	GAS	7531.116	0.016829	0.024556	0.249604	0.105659	723.8834	0.002038	0.001874
Los Angele:	2035	SBUS	Aggregatec	20	DSL	10595.56	0.111097	0.126476	0.510909	2.637209	1391.792	0.006837	0.006541
Los Angele:	2035	SBUS	Aggregatec	25	GAS	11888.37	0.012428	0.018135	0.229094	0.096404	632.1039	0.001506	0.001384
Los Angele:	2035	SBUS	Aggregatec	25	DSL	16725.81	0.081573	0.092865	0.375235	1.623892	1282.903	0.006254	0.005983
Los Angele:	2035	SBUS	Aggregatec	30	GAS	14262.92	0.009683	0.014129	0.210844	0.08937	580.8777	0.001173	0.001079
Los Angele:	2035	SBUS	Aggregatec	30	DSL	20066.57	0.060437	0.068803	0.277754	1.15867	1213.292	0.005826	0.005574
Los Angele:	2035	SBUS	Aggregatec	35	GAS	14639.1	0.007947	0.011596	0.194293	0.084511	536.291	0.000965	0.000887
Los Angele:	2035	SBUS	Aggregatec	35	DSL	20595.81	0.04482	0.051025	0.205955	0.902005	1158.197	0.005506	0.005268
Los Angele:	2035	SBUS	Aggregatec	40	GAS	9882.163	0.006884	0.010046	0.179625	0.081082	498.9396	0.000837	0.000769
Los Angele:	2035	SBUS	Aggregatec	40	DSL	13903.26	0.033281	0.037888	0.153109	0.744399	1113.027	0.005274	0.005046
Los Angele:	2035	SBUS	Aggregatec	45	GAS	4741.224	0.006295	0.009186	0.166609	0.078926	463.5901	0.000766	0.000704
Los Angele:	2035	SBUS	Aggregatec	45	DSL	6670.45	0.024758	0.028185	0.114256	0.640558	1075.05	0.005119	0.004897
Los Angele:	2035	SBUS	Aggregatec	50	GAS	2374.549	0.00609	0.008887	0.155368	0.077517	433.6669	0.000739	0.00068
Los Angele:	2035	SBUS	Aggregatec	50	DSL	3340.764	0.018467	0.021023	0.08574	0.568082	1042.518	0.00503	0.004812
Los Angele:	2035	SBUS	Aggregatec	55	GAS	3534.364	0.006139	0.008958	0.14356	0.079811	421.7139	0.000753	0.000692
Los Angele:	2035	SBUS	Aggregatec	55	DSL	4972.514	0.013832	0.015746	0.064869	0.520552	1014.25	0.005003	0.004786
Los Angele:	2035	SBUS	Aggregatec	60	GAS	1967.04	0.006611	0.009647	0.134623	0.080909	424.3339	0.000809	0.000743
Los Angele:	2035	SBUS	Aggregatec	60	DSL	2767.437	0.011997	0.013658	0.056657	0.500064	1001.446	0.005011	0.004794
Los Angele:	2035	SBUS	Aggregatec	65	DSL	0	0	0	0	0	0	0	0
Los Angele:	2035	SBUS	Aggregatec	70	DSL	0	0	0	0	0	0	0	0
Los Angele:	2035	SBUS	Aggregatec	75	DSL	0	0	0	0	0	0	0	0
Los Angele:	2035	SBUS	Aggregatec	80	DSL	0	0	0	0	0	0	0	0
Los Angele:	2035	SBUS	Aggregatec	85	DSL	0	0	0	0	0	0	0	0
Los Angele:	2035	SBUS	Aggregatec	90	DSL	0	0	0	0	0	0	0	0

Los Angele:	2035 T6 Ag	Aggregatec	5 DSL	6.570363	0.29093	0.331202	1.531361	11.54373	2175.35	0.007427	0.007106
Los Angele:	2035 T6 Ag	Aggregatec	10 DSL	20.26516	0.235623	0.268239	1.240241	8.884905	1928.845	0.006681	0.006392
Los Angele:	2035 T6 Ag	Aggregatec	15 DSL	53.52075	0.165944	0.188914	0.873473	5.532658	1618.286	0.005741	0.005493
Los Angele:	2035 T6 Ag	Aggregatec	20 DSL	122.3815	0.120047	0.136665	0.631889	3.319601	1413.725	0.005122	0.0049
Los Angele:	2035 T6 Ag	Aggregatec	25 DSL	259.9397	0.087976	0.100154	0.463076	1.979503	1304.777	0.004659	0.004458
Los Angele:	2035 T6 Ag	Aggregatec	30 DSL	341.3386	0.064832	0.073806	0.341254	1.332238	1235.427	0.00429	0.004104
Los Angele:	2035 T6 Ag	Aggregatec	35 DSL	273.7653	0.047776	0.05439	0.25148	0.966991	1180.514	0.003983	0.00381
Los Angele:	2035 T6 Ag	Aggregatec	40 DSL	287.9998	0.035208	0.040081	0.185322	0.738649	1135.421	0.003719	0.003558
Los Angele:	2035 T6 Ag	Aggregatec	45 DSL	277.3545	0.025946	0.029537	0.136569	0.586058	1097.394	0.003489	0.003338
Los Angele:	2035 T6 Ag	Aggregatec	50 DSL	263.4429	0.01912	0.021767	0.100642	0.478969	1064.672	0.003284	0.003142
Los Angele:	2035 T6 Ag	Aggregatec	55 DSL	310.9899	0.01409	0.016041	0.074166	0.401638	1036.062	0.0031	0.002966
Los Angele:	2035 T6 Ag	Aggregatec	60 DSL	431.3701	0.012096	0.01377	0.063667	0.370601	1023.027	0.003015	0.002884
Los Angele:	2035 T6 Ag	Aggregatec	65 DSL	216.1652	0.012096	0.01377	0.063667	0.371979	1023.027	0.003015	0.002884
Los Angele:	2035 T6 Ag	Aggregatec	70 DSL	4.364593	0.012096	0.01377	0.063667	0.377065	1023.027	0.003015	0.002884
Los Angele:	2035 T6 Ag	Aggregatec	75 DSL	0	0	0	0	0	0	0	0
Los Angele:	2035 T6 Ag	Aggregatec	80 DSL	0	0	0	0	0	0	0	0
Los Angele:	2035 T6 Ag	Aggregatec	85 DSL	0	0	0	0	0	0	0	0
Los Angele:	2035 T6 Ag	Aggregatec	90 DSL	0	0	0	0	0	0	0	0
Los Angele:	2035 T6 CAIRP h	Aggregatec	5 DSL	23.41834	0.22741	0.258889	1.19701	9.259211	2092.519	0.00546	0.005224
Los Angele:	2035 T6 CAIRP h	Aggregatec	10 DSL	76.6504	0.184178	0.209672	0.969452	7.024156	1855.4	0.004912	0.004699
Los Angele:	2035 T6 CAIRP h	Aggregatec	15 DSL	201.8133	0.129712	0.147667	0.682763	4.20034	1556.666	0.004221	0.004038
Los Angele:	2035 T6 CAIRP h	Aggregatec	20 DSL	414.8016	0.093837	0.106826	0.493925	2.332651	1359.895	0.003766	0.003603
Los Angele:	2035 T6 CAIRP h	Aggregatec	25 DSL	902.9775	0.068768	0.078287	0.36197	1.251436	1255.095	0.003426	0.003277
Los Angele:	2035 T6 CAIRP h	Aggregatec	30 DSL	1194.923	0.050677	0.057692	0.266746	0.768925	1181.784	0.003154	0.003018
Los Angele:	2035 T6 CAIRP h	Aggregatec	35 DSL	1027.711	0.037345	0.042515	0.196573	0.513687	1122.947	0.002928	0.002801
Los Angele:	2035 T6 CAIRP h	Aggregatec	40 DSL	1110.6	0.027521	0.03133	0.14486	0.363367	1073.985	0.002734	0.002616
Los Angele:	2035 T6 CAIRP h	Aggregatec	45 DSL	1023.234	0.020281	0.023088	0.106751	0.268292	1032.151	0.002565	0.002454
Los Angele:	2035 T6 CAIRP h	Aggregatec	50 DSL	921.3231	0.014945	0.017014	0.078668	0.204973	995.6851	0.002415	0.00231
Los Angele:	2035 T6 CAIRP h	Aggregatec	55 DSL	1155.474	0.011014	0.012538	0.057973	0.161576	968.9294	0.002279	0.002181
Los Angele:	2035 T6 CAIRP h	Aggregatec	60 DSL	1516.593	0.009455	0.010763	0.049766	0.144657	956.739	0.002216	0.00212
Los Angele:	2035 T6 CAIRP h	Aggregatec	65 DSL	784.8997	0.009455	0.010763	0.049766	0.145179	956.739	0.002216	0.00212
Los Angele:	2035 T6 CAIRP h	Aggregatec	70 DSL	32.80563	0.009455	0.010763	0.049766	0.147042	956.739	0.002216	0.00212
Los Angele:	2035 T6 CAIRP h	Aggregatec	75 DSL	0	0	0	0	0	0	0	0
Los Angele:	2035 T6 CAIRP h	Aggregatec	80 DSL	0	0	0	0	0	0	0	0
Los Angele:	2035 T6 CAIRP h	Aggregatec	85 DSL	0	0	0	0	0	0	0	0
Los Angele:	2035 T6 CAIRP h	Aggregatec	90 DSL	0	0	0	0	0	0	0	0
Los Angele:	2035 T6 CAIRP si	Aggregatec	5 DSL	71.88851	0.215247	0.245042	1.132987	8.563796	2109.745	0.005063	0.004844
Los Angele:	2035 T6 CAIRP si	Aggregatec	10 DSL	235.2978	0.174327	0.198458	0.9176	6.493273	1870.675	0.004554	0.004357
Los Angele:	2035 T6 CAIRP si	Aggregatec	15 DSL	619.5169	0.122774	0.139769	0.646245	3.87734	1569.481	0.003913	0.003744

Los Angele:	2035	T6 CAIRP sı Aggregatec	20	DSL	1273.338	0.088818	0.101112	0.467507	2.147186	1371.09	0.003491	0.00334
Los Angele:	2035	T6 CAIRP sı Aggregatec	25	DSL	2771.918	0.06509	0.074099	0.34261	1.146942	1265.428	0.003176	0.003039
Los Angele:	2035	T6 CAIRP sı Aggregatec	30	DSL	3668.12	0.047966	0.054606	0.252479	0.701808	1198.169	0.002924	0.002798
Los Angele:	2035	T6 CAIRP sı Aggregatec	35	DSL	3154.819	0.035348	0.040241	0.186059	0.466898	1144.912	0.002715	0.002597
Los Angele:	2035	T6 CAIRP sı Aggregatec	40	DSL	3409.269	0.026049	0.029654	0.137112	0.32889	1101.179	0.002535	0.002426
Los Angele:	2035	T6 CAIRP sı Aggregatec	45	DSL	3141.076	0.019196	0.021853	0.101042	0.241818	1064.299	0.002378	0.002275
Los Angele:	2035	T6 CAIRP sı Aggregatec	50	DSL	2828.234	0.014146	0.016104	0.07446	0.183971	1032.563	0.002239	0.002142
Los Angele:	2035	T6 CAIRP sı Aggregatec	55	DSL	3547.021	0.010425	0.011868	0.054872	0.144412	1004.817	0.002113	0.002022
Los Angele:	2035	T6 CAIRP sı Aggregatec	60	DSL	4655.566	0.008949	0.010188	0.047105	0.129018	992.1749	0.002055	0.001966
Los Angele:	2035	T6 CAIRP sı Aggregatec	65	DSL	2409.448	0.008949	0.010188	0.047105	0.129484	992.1749	0.002055	0.001966
Los Angele:	2035	T6 CAIRP sı Aggregatec	70	DSL	100.7052	0.008949	0.010188	0.047105	0.131146	992.1749	0.002055	0.001966
Los Angele:	2035	T6 CAIRP sı Aggregatec	75	DSL	0	0	0	0	0	0	0	0
Los Angele:	2035	T6 CAIRP sı Aggregatec	80	DSL	0	0	0	0	0	0	0	0
Los Angele:	2035	T6 CAIRP sı Aggregatec	85	DSL	0	0	0	0	0	0	0	0
Los Angele:	2035	T6 CAIRP sı Aggregatec	90	DSL	0	0	0	0	0	0	0	0
Los Angele:	2035	T6 instate c Aggregatec	5	DSL	286.7683	0.259584	0.295517	1.365178	10.78886	2130.413	0.006518	0.006236
Los Angele:	2035	T6 instate c Aggregatec	10	DSL	844.2368	0.210225	0.239326	1.105653	8.207051	1889.009	0.005861	0.005608
Los Angele:	2035	T6 instate c Aggregatec	15	DSL	2235.315	0.148029	0.16852	0.778677	4.959648	1584.861	0.005033	0.004815
Los Angele:	2035	T6 instate c Aggregatec	20	DSL	5536.239	0.107069	0.12189	0.563304	2.820907	1384.514	0.004486	0.004292
Los Angele:	2035	T6 instate c Aggregatec	25	DSL	11559.32	0.078465	0.089326	0.412821	1.561345	1277.808	0.00408	0.003904
Los Angele:	2035	T6 instate c Aggregatec	30	DSL	15095.45	0.057825	0.06583	0.304229	0.987795	1209.887	0.003757	0.003594
Los Angele:	2035	T6 instate c Aggregatec	35	DSL	11475.69	0.042615	0.048514	0.224204	0.678121	1156.105	0.003488	0.003337
Los Angele:	2035	T6 instate c Aggregatec	40	DSL	11804.2	0.031406	0.035753	0.165232	0.492933	1111.94	0.003257	0.003117
Los Angele:	2035	T6 instate c Aggregatec	45	DSL	11789.6	0.023146	0.02635	0.121774	0.37439	1074.698	0.003057	0.002924
Los Angele:	2035	T6 instate c Aggregatec	50	DSL	11658.86	0.017059	0.019421	0.089749	0.294276	1042.652	0.002879	0.002754
Los Angele:	2035	T6 instate c Aggregatec	55	DSL	13145.14	0.012575	0.014315	0.06615	0.237961	1014.635	0.00272	0.002602
Los Angele:	2035	T6 instate c Aggregatec	60	DSL	19017.87	0.010797	0.012291	0.056793	0.216072	1001.871	0.002646	0.002531
Los Angele:	2035	T6 instate c Aggregatec	65	DSL	9303.248	0.010797	0.012291	0.056793	0.216881	1001.871	0.002646	0.002531
Los Angele:	2035	T6 instate c Aggregatec	70	DSL	33.43673	0.010797	0.012291	0.056793	0.219113	1001.871	0.002646	0.002531
Los Angele:	2035	T6 instate c Aggregatec	75	DSL	0	0	0	0	0	0	0	0
Los Angele:	2035	T6 instate c Aggregatec	80	DSL	0	0	0	0	0	0	0	0
Los Angele:	2035	T6 instate c Aggregatec	85	DSL	0	0	0	0	0	0	0	0
Los Angele:	2035	T6 instate c Aggregatec	90	DSL	0	0	0	0	0	0	0	0
Los Angele:	2035	T6 instate c Aggregatec	5	DSL	783.5698	0.237227	0.270065	1.247572	9.738546	2119.446	0.005799	0.005548
Los Angele:	2035	T6 instate c Aggregatec	10	DSL	2355.663	0.192118	0.218712	1.0104	7.388415	1879.286	0.005216	0.00499
Los Angele:	2035	T6 instate c Aggregatec	15	DSL	6229.964	0.135277	0.154002	0.711584	4.428932	1576.701	0.00448	0.004287
Los Angele:	2035	T6 instate c Aggregatec	20	DSL	14890.83	0.097844	0.111388	0.514765	2.477956	1377.384	0.003995	0.003823
Los Angele:	2035	T6 instate c Aggregatec	25	DSL	31325.02	0.071705	0.081631	0.37725	1.339923	1271.228	0.003634	0.003477
Los Angele:	2035	T6 instate c Aggregatec	30	DSL	41007.32	0.052844	0.060159	0.278018	0.829823	1203.656	0.003347	0.003202

Los Angeles:	2035	T6	instate c	Aggregatec	35	DSL	31930.49	0.038945	0.044336	0.20489	0.558243	1150.151	0.003107	0.002973	
Los Angeles:	2035	T6	instate c	Aggregatec	40	DSL	33183.48	0.028702	0.032675	0.151001	0.397893	1106.214	0.002903	0.002777	
Los Angeles:	2035	T6	instate c	Aggregatec	45	DSL	32597.32	0.021154	0.024082	0.111289	0.296418	1069.164	0.002725	0.002607	
Los Angeles:	2035	T6	instate c	Aggregatec	50	DSL	31661.77	0.015591	0.017749	0.082026	0.228672	1037.283	0.002567	0.002456	
Los Angeles:	2035	T6	instate c	Aggregatec	55	DSL	36437.78	0.011492	0.013083	0.060462	0.181725	1009.411	0.002426	0.002321	
Los Angeles:	2035	T6	instate c	Aggregatec	60	DSL	51733.59	0.009867	0.011233	0.051912	0.163568	996.7126	0.00236	0.002258	
Los Angeles:	2035	T6	instate c	Aggregatec	65	DSL	25579.88	0.009867	0.011233	0.051912	0.164179	996.7126	0.00236	0.002258	
Los Angeles:	2035	T6	instate c	Aggregatec	70	DSL	282.0065	0.009867	0.011233	0.051912	0.166387	996.7126	0.00236	0.002258	
Los Angeles:	2035	T6	instate c	Aggregatec	75	DSL	0	0	0	0	0	0	0	0	0
Los Angeles:	2035	T6	instate c	Aggregatec	80	DSL	0	0	0	0	0	0	0	0	0
Los Angeles:	2035	T6	instate c	Aggregatec	85	DSL	0	0	0	0	0	0	0	0	0
Los Angeles:	2035	T6	instate c	Aggregatec	90	DSL	0	0	0	0	0	0	0	0	0
Los Angeles:	2035	T6	instate f	Aggregatec	5	DSL	2953.899	0.253091	0.288125	1.33219	10.39195	2108.104	0.006274	0.006002	
Los Angeles:	2035	T6	instate f	Aggregatec	10	DSL	8727.618	0.205015	0.233394	1.079134	7.908911	1869.261	0.005645	0.005401	
Los Angeles:	2035	T6	instate f	Aggregatec	15	DSL	23103.78	0.144386	0.164373	0.760001	4.783274	1568.293	0.004851	0.004641	
Los Angeles:	2035	T6	instate f	Aggregatec	20	DSL	56874.74	0.104419	0.118873	0.549629	2.723079	1370.001	0.004326	0.004139	
Los Angeles:	2035	T6	instate f	Aggregatec	25	DSL	118901.3	0.076528	0.087121	0.402819	1.510057	1264.432	0.003936	0.003765	
Los Angeles:	2035	T6	instate f	Aggregatec	30	DSL	155338.7	0.056397	0.064204	0.296855	0.956709	1190.475	0.003624	0.003467	
Los Angeles:	2035	T6	instate f	Aggregatec	35	DSL	118576.5	0.041569	0.047323	0.218807	0.657984	1131.134	0.003365	0.003219	
Los Angeles:	2035	T6	instate f	Aggregatec	40	DSL	122188.9	0.030636	0.034877	0.16126	0.478933	1081.73	0.003143	0.003007	
Los Angeles:	2035	T6	instate f	Aggregatec	45	DSL	121687.1	0.022573	0.025698	0.118819	0.363805	1039.483	0.002948	0.00282	
Los Angeles:	2035	T6	instate f	Aggregatec	50	DSL	119968.4	0.016632	0.018935	0.087547	0.28586	1002.649	0.002774	0.002654	
Los Angeles:	2035	T6	instate f	Aggregatec	55	DSL	135737.9	0.012259	0.013956	0.064528	0.231376	975.7257	0.002619	0.002506	
Los Angeles:	2035	T6	instate f	Aggregatec	60	DSL	195747.8	0.010522	0.011979	0.055384	0.209901	963.432	0.002546	0.002436	
Los Angeles:	2035	T6	instate f	Aggregatec	65	DSL	95932.13	0.010523	0.01198	0.05539	0.210782	963.4421	0.002547	0.002437	
Los Angeles:	2035	T6	instate f	Aggregatec	70	DSL	467.0636	0.010665	0.012141	0.056136	0.227168	964.8848	0.002589	0.002477	
Los Angeles:	2035	T6	instate f	Aggregatec	75	DSL	0	0	0	0	0	0	0	0	0
Los Angeles:	2035	T6	instate f	Aggregatec	80	DSL	0	0	0	0	0	0	0	0	0
Los Angeles:	2035	T6	instate f	Aggregatec	85	DSL	0	0	0	0	0	0	0	0	0
Los Angeles:	2035	T6	instate f	Aggregatec	90	DSL	0	0	0	0	0	0	0	0	0
Los Angeles:	2035	T6	instate s	Aggregatec	5	DSL	7440.401	0.236673	0.269435	1.245771	9.711251	2119.96	0.005759	0.005509	
Los Angeles:	2035	T6	instate s	Aggregatec	10	DSL	21984.11	0.191696	0.218231	1.009023	7.366279	1879.75	0.005181	0.004957	
Los Angeles:	2035	T6	instate s	Aggregatec	15	DSL	58196.33	0.135006	0.153694	0.710629	4.415023	1577.094	0.004452	0.004259	
Los Angeles:	2035	T6	instate s	Aggregatec	20	DSL	143255.3	0.097653	0.111171	0.514016	2.470448	1377.719	0.003971	0.003799	
Los Angeles:	2035	T6	instate s	Aggregatec	25	DSL	299490.1	0.071567	0.081473	0.376704	1.335055	1271.549	0.003613	0.003456	
Los Angeles:	2035	T6	instate s	Aggregatec	30	DSL	391270.4	0.05274	0.06004	0.277606	0.826159	1203.967	0.003326	0.003182	
Los Angeles:	2035	T6	instate s	Aggregatec	35	DSL	298682.6	0.038869	0.04425	0.204594	0.555194	1150.465	0.003088	0.002955	
Los Angeles:	2035	T6	instate s	Aggregatec	40	DSL	307786.4	0.028645	0.03261	0.150777	0.395241	1106.525	0.002884	0.002759	
Los Angeles:	2035	T6	instate s	Aggregatec	45	DSL	306515.2	0.021108	0.02403	0.111105	0.294056	1069.457	0.002705	0.002588	

Los Angeles:	2035 T6 instate s	Aggregatec	50 DSL	302178.6	0.015554	0.017707	0.081871	0.22651	1037.56	0.002546	0.002436
Los Angeles:	2035 T6 instate s	Aggregatec	55 DSL	341908.8	0.011463	0.01305	0.060338	0.179672	1009.688	0.002404	0.0023
Los Angeles:	2035 T6 instate s	Aggregatec	60 DSL	493054.4	0.00984	0.011202	0.051793	0.161545	996.9764	0.002337	0.002236
Los Angeles:	2035 T6 instate s	Aggregatec	65 DSL	241639.8	0.00984	0.011202	0.051795	0.162169	996.9813	0.002337	0.002236
Los Angeles:	2035 T6 instate s	Aggregatec	70 DSL	1178.942	0.009896	0.011266	0.052091	0.166926	997.6825	0.002355	0.002253
Los Angeles:	2035 T6 instate s	Aggregatec	75 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2035 T6 instate s	Aggregatec	80 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2035 T6 instate s	Aggregatec	85 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2035 T6 instate s	Aggregatec	90 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2035 T6 OOS he	Aggregatec	5 DSL	13.41783	0.227588	0.259091	1.197946	9.265532	2092.613	0.005466	0.005229
Los Angeles:	2035 T6 OOS he	Aggregatec	10 DSL	43.9178	0.184322	0.209836	0.97021	7.029331	1855.484	0.004917	0.004704
Los Angeles:	2035 T6 OOS he	Aggregatec	15 DSL	115.6314	0.129814	0.147783	0.683297	4.204065	1556.736	0.004225	0.004042
Los Angeles:	2035 T6 OOS he	Aggregatec	20 DSL	237.6657	0.09391	0.106909	0.494311	2.335411	1359.956	0.003769	0.003606
Los Angeles:	2035 T6 OOS he	Aggregatec	25 DSL	517.3722	0.068821	0.078348	0.362253	1.253485	1255.152	0.003429	0.003281
Los Angeles:	2035 T6 OOS he	Aggregatec	30 DSL	684.6462	0.050716	0.057737	0.266955	0.770515	1181.836	0.003157	0.003021
Los Angeles:	2035 T6 OOS he	Aggregatec	35 DSL	588.8398	0.037374	0.042548	0.196726	0.514971	1122.996	0.002931	0.002804
Los Angeles:	2035 T6 OOS he	Aggregatec	40 DSL	636.3323	0.027542	0.031355	0.144973	0.364433	1074.03	0.002737	0.002619
Los Angeles:	2035 T6 OOS he	Aggregatec	45 DSL	586.2747	0.020297	0.023106	0.106835	0.269194	1032.194	0.002568	0.002457
Los Angeles:	2035 T6 OOS he	Aggregatec	50 DSL	527.8835	0.014957	0.017028	0.07873	0.205751	995.7251	0.002417	0.002313
Los Angeles:	2035 T6 OOS he	Aggregatec	55 DSL	662.0435	0.011022	0.012548	0.058018	0.162258	968.9684	0.002282	0.002183
Los Angeles:	2035 T6 OOS he	Aggregatec	60 DSL	868.9507	0.009462	0.010772	0.049805	0.145299	956.7775	0.002219	0.002123
Los Angeles:	2035 T6 OOS he	Aggregatec	65 DSL	449.718	0.009462	0.010772	0.049805	0.145823	956.7775	0.002219	0.002123
Los Angeles:	2035 T6 OOS he	Aggregatec	70 DSL	18.79639	0.009462	0.010772	0.049805	0.147695	956.7775	0.002219	0.002123
Los Angeles:	2035 T6 OOS he	Aggregatec	75 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2035 T6 OOS he	Aggregatec	80 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2035 T6 OOS he	Aggregatec	85 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2035 T6 OOS he	Aggregatec	90 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2035 T6 OOS sm	Aggregatec	5 DSL	41.18942	0.215247	0.245042	1.132987	8.563796	2109.745	0.005063	0.004844
Los Angeles:	2035 T6 OOS sm	Aggregatec	10 DSL	134.8168	0.174327	0.198458	0.9176	6.493273	1870.675	0.004554	0.004357
Los Angeles:	2035 T6 OOS sm	Aggregatec	15 DSL	354.9599	0.122774	0.139769	0.646245	3.87734	1569.481	0.003913	0.003744
Los Angeles:	2035 T6 OOS sm	Aggregatec	20 DSL	729.575	0.088818	0.101112	0.467507	2.147186	1371.09	0.003491	0.00334
Los Angeles:	2035 T6 OOS sm	Aggregatec	25 DSL	1588.205	0.06509	0.074099	0.34261	1.146942	1265.428	0.003176	0.003039
Los Angeles:	2035 T6 OOS sm	Aggregatec	30 DSL	2101.695	0.047966	0.054606	0.252479	0.701808	1198.169	0.002924	0.002798
Los Angeles:	2035 T6 OOS sm	Aggregatec	35 DSL	1807.593	0.035348	0.040241	0.186059	0.466898	1144.912	0.002715	0.002597
Los Angeles:	2035 T6 OOS sm	Aggregatec	40 DSL	1953.383	0.026049	0.029654	0.137112	0.32889	1101.179	0.002535	0.002426
Los Angeles:	2035 T6 OOS sm	Aggregatec	45 DSL	1799.719	0.019196	0.021853	0.101042	0.241818	1064.299	0.002378	0.002275
Los Angeles:	2035 T6 OOS sm	Aggregatec	50 DSL	1620.472	0.014146	0.016104	0.07446	0.183971	1032.563	0.002239	0.002142
Los Angeles:	2035 T6 OOS sm	Aggregatec	55 DSL	2032.31	0.010425	0.011868	0.054872	0.144412	1004.817	0.002113	0.002022
Los Angeles:	2035 T6 OOS sm	Aggregatec	60 DSL	2667.464	0.008949	0.010188	0.047105	0.129018	992.1749	0.002055	0.001966

Los Angele:	2035	T6 OOS sm	Aggregatec	65	DSL	1380.523	0.008949	0.010188	0.047105	0.129484	992.1749	0.002055	0.001966
Los Angele:	2035	T6 OOS sm	Aggregatec	70	DSL	57.70029	0.008949	0.010188	0.047105	0.131146	992.1749	0.002055	0.001966
Los Angele:	2035	T6 OOS sm	Aggregatec	75	DSL	0	0	0	0	0	0	0	0
Los Angele:	2035	T6 OOS sm	Aggregatec	80	DSL	0	0	0	0	0	0	0	0
Los Angele:	2035	T6 OOS sm	Aggregatec	85	DSL	0	0	0	0	0	0	0	0
Los Angele:	2035	T6 OOS sm	Aggregatec	90	DSL	0	0	0	0	0	0	0	0
Los Angele:	2035	T6 Public	Aggregatec	5	DSL	184.4805	0.214353	0.244024	0.998127	7.385376	2132.968	0.009822	0.009397
Los Angele:	2035	T6 Public	Aggregatec	10	DSL	545.0276	0.17222	0.19606	0.808867	5.671526	1893.023	0.008497	0.008129
Los Angele:	2035	T6 Public	Aggregatec	15	DSL	1442.805	0.117709	0.134003	0.568846	3.488896	1587.263	0.006523	0.006241
Los Angele:	2035	T6 Public	Aggregatec	20	DSL	3552.206	0.082698	0.094145	0.410792	2.074545	1383.875	0.005178	0.004954
Los Angele:	2035	T6 Public	Aggregatec	25	DSL	7425.986	0.060581	0.068966	0.301925	1.282199	1275.68	0.004506	0.004311
Los Angele:	2035	T6 Public	Aggregatec	30	DSL	9701.603	0.044886	0.051099	0.223676	0.923343	1207.126	0.004074	0.003898
Los Angele:	2035	T6 Public	Aggregatec	35	DSL	7405.008	0.033289	0.037897	0.165924	0.726981	1152.766	0.003762	0.003599
Los Angele:	2035	T6 Public	Aggregatec	40	DSL	7630.323	0.024752	0.028178	0.123355	0.608332	1108.203	0.00356	0.003406
Los Angele:	2035	T6 Public	Aggregatec	45	DSL	7599.432	0.018501	0.021062	0.092034	0.532985	1070.813	0.003461	0.003311
Los Angele:	2035	T6 Public	Aggregatec	50	DSL	7492.572	0.013963	0.015896	0.069053	0.483817	1038.908	0.003461	0.003311
Los Angele:	2035	T6 Public	Aggregatec	55	DSL	8476.838	0.010715	0.012198	0.052275	0.45202	1011.343	0.003556	0.003402
Los Angele:	2035	T6 Public	Aggregatec	60	DSL	12225.27	0.009479	0.010791	0.045705	0.441561	998.9313	0.003638	0.00348
Los Angele:	2035	T6 Public	Aggregatec	65	DSL	5991.139	0.009478	0.01079	0.045705	0.443114	998.9294	0.003638	0.003481
Los Angele:	2035	T6 Public	Aggregatec	70	DSL	29.01229	0.009377	0.010675	0.045638	0.433673	998.6488	0.003657	0.003499
Los Angele:	2035	T6 Public	Aggregatec	75	DSL	0	0	0	0	0	0	0	0
Los Angele:	2035	T6 Public	Aggregatec	80	DSL	0	0	0	0	0	0	0	0
Los Angele:	2035	T6 Public	Aggregatec	85	DSL	0	0	0	0	0	0	0	0
Los Angele:	2035	T6 Public	Aggregatec	90	DSL	0	0	0	0	0	0	0	0
Los Angele:	2035	T6 utility	Aggregatec	5	DSL	43.18597	0.177939	0.20257	0.936612	6.265173	2111.246	0.003831	0.003665
Los Angele:	2035	T6 utility	Aggregatec	10	DSL	127.4771	0.144112	0.16406	0.758557	4.746733	1872.006	0.003446	0.003297
Los Angele:	2035	T6 utility	Aggregatec	15	DSL	337.4756	0.101495	0.115544	0.534234	2.836585	1570.598	0.002961	0.002833
Los Angele:	2035	T6 utility	Aggregatec	20	DSL	832.0912	0.073423	0.083587	0.386477	1.578352	1372.066	0.002642	0.002528
Los Angele:	2035	T6 utility	Aggregatec	25	DSL	1738.977	0.053808	0.061256	0.283227	0.845402	1266.328	0.002403	0.002299
Los Angele:	2035	T6 utility	Aggregatec	30	DSL	2271.642	0.039653	0.045141	0.208718	0.518793	1199.021	0.002213	0.002117
Los Angele:	2035	T6 utility	Aggregatec	35	DSL	1732.17	0.029221	0.033266	0.15381	0.345676	1145.727	0.002054	0.001965
Los Angele:	2035	T6 utility	Aggregatec	40	DSL	1784.107	0.021534	0.024515	0.113347	0.244028	1101.962	0.001918	0.001835
Los Angele:	2035	T6 utility	Aggregatec	45	DSL	1778.118	0.015869	0.018066	0.083529	0.180095	1065.056	0.0018	0.001722
Los Angele:	2035	T6 utility	Aggregatec	50	DSL	1754.417	0.011694	0.013313	0.061555	0.137628	1033.298	0.001694	0.001621
Los Angele:	2035	T6 utility	Aggregatec	55	DSL	1983.203	0.008618	0.009811	0.045361	0.108266	1005.532	0.001599	0.00153
Los Angele:	2035	T6 utility	Aggregatec	60	DSL	2862.4	0.007398	0.008422	0.03894	0.096976	992.8806	0.001555	0.001488
Los Angele:	2035	T6 utility	Aggregatec	65	DSL	1402.133	0.007398	0.008422	0.03894	0.097339	992.8806	0.001555	0.001488
Los Angele:	2035	T6 utility	Aggregatec	70	DSL	6.358133	0.007398	0.008422	0.03894	0.098443	992.8806	0.001555	0.001488
Los Angele:	2035	T6 utility	Aggregatec	75	DSL	0	0	0	0	0	0	0	0

Los Angeles:	2035 T6 utility	Aggregatec	80 DSL	0	0	0	0	0	0	0	0	0
Los Angeles:	2035 T6 utility	Aggregatec	85 DSL	0	0	0	0	0	0	0	0	0
Los Angeles:	2035 T6 utility	Aggregatec	90 DSL	0	0	0	0	0	0	0	0	0
Los Angeles:	2035 T6TS	Aggregatec	5 GAS	2002.773	0.073798	0.107685	0.446816	0.183279	3665.439	0.007609	0.006996	
Los Angeles:	2035 T6TS	Aggregatec	10 GAS	6260.272	0.046408	0.067719	0.406617	0.159126	3129.003	0.004788	0.004402	
Los Angeles:	2035 T6TS	Aggregatec	15 GAS	16302.45	0.030812	0.044961	0.371409	0.14048	2156.834	0.003178	0.002922	
Los Angeles:	2035 T6TS	Aggregatec	20 GAS	37324.81	0.021604	0.031524	0.340609	0.126001	1516.471	0.002225	0.002046	
Los Angeles:	2035 T6TS	Aggregatec	25 GAS	74821.81	0.015959	0.023287	0.312678	0.114925	1324.195	0.001644	0.001511	
Los Angeles:	2035 T6TS	Aggregatec	30 GAS	88808.66	0.012435	0.018145	0.287788	0.106637	1216.878	0.001281	0.001178	
Los Angeles:	2035 T6TS	Aggregatec	35 GAS	66409.7	0.010217	0.014909	0.265439	0.100427	1123.456	0.001053	0.000969	
Los Angeles:	2035 T6TS	Aggregatec	40 GAS	65781.39	0.008879	0.012957	0.246128	0.095683	1045.204	0.000914	0.00084	
Los Angeles:	2035 T6TS	Aggregatec	45 GAS	65526.35	0.008133	0.011867	0.228686	0.092883	971.1652	0.000836	0.000769	
Los Angeles:	2035 T6TS	Aggregatec	50 GAS	61589.5	0.007856	0.011464	0.212981	0.091706	908.4871	0.000807	0.000742	
Los Angeles:	2035 T6TS	Aggregatec	55 GAS	64654.95	0.007977	0.011639	0.198116	0.092497	883.4316	0.000822	0.000756	
Los Angeles:	2035 T6TS	Aggregatec	60 GAS	79073.28	0.008539	0.01246	0.184763	0.095227	888.9314	0.000883	0.000812	
Los Angeles:	2035 T6TS	Aggregatec	65 GAS	35288.81	0.009583	0.013983	0.171676	0.100698	905.4021	0.001001	0.00092	
Los Angeles:	2035 T6TS	Aggregatec	70 GAS	254.1437	0.010109	0.014751	0.160107	0.103039	933.1149	0.001095	0.001007	
Los Angeles:	2035 T7 Ag	Aggregatec	5 DSL	4.024959	0.681669	0.776028	4.025097	20.68125	3010.316	0.013532	0.012947	
Los Angeles:	2035 T7 Ag	Aggregatec	10 DSL	11.73862	0.55208	0.628501	3.259904	16.10086	2669.195	0.012173	0.011646	
Los Angeles:	2035 T7 Ag	Aggregatec	15 DSL	31.1218	0.388817	0.442639	2.295875	10.34015	2239.434	0.01046	0.010008	
Los Angeles:	2035 T7 Ag	Aggregatec	20 DSL	77.36064	0.281279	0.320214	1.660886	6.544795	1956.357	0.009332	0.008928	
Los Angeles:	2035 T7 Ag	Aggregatec	25 DSL	164.369	0.206133	0.234667	1.21717	4.155146	1805.591	0.008489	0.008122	
Los Angeles:	2035 T7 Ag	Aggregatec	30 DSL	226.7855	0.151906	0.172933	0.896967	2.93018	1709.622	0.007817	0.007478	
Los Angeles:	2035 T7 Ag	Aggregatec	35 DSL	176.7815	0.111943	0.127439	0.661	2.206751	1633.632	0.007256	0.006943	
Los Angeles:	2035 T7 Ag	Aggregatec	40 DSL	170.2517	0.082494	0.093913	0.48711	1.736633	1571.23	0.006777	0.006484	
Los Angeles:	2035 T7 Ag	Aggregatec	45 DSL	164.8439	0.060792	0.069207	0.358965	1.414041	1518.608	0.006357	0.006082	
Los Angeles:	2035 T7 Ag	Aggregatec	50 DSL	163.9158	0.0448	0.051001	0.264531	1.18196	1473.326	0.005984	0.005725	
Los Angeles:	2035 T7 Ag	Aggregatec	55 DSL	218.6155	0.033014	0.037584	0.19494	1.011129	1433.735	0.005649	0.005404	
Los Angeles:	2035 T7 Ag	Aggregatec	60 DSL	375.7365	0.028341	0.032264	0.167346	0.942185	1415.697	0.005493	0.005255	
Los Angeles:	2035 T7 Ag	Aggregatec	65 DSL	226.3271	0.028341	0.032264	0.167346	0.945114	1415.697	0.005493	0.005255	
Los Angeles:	2035 T7 Ag	Aggregatec	70 DSL	1.375601	0.028341	0.032264	0.167346	0.956515	1415.697	0.005493	0.005255	
Los Angeles:	2035 T7 Ag	Aggregatec	75 DSL	0	0	0	0	0	0	0	0	0
Los Angeles:	2035 T7 Ag	Aggregatec	80 DSL	0	0	0	0	0	0	0	0	0
Los Angeles:	2035 T7 Ag	Aggregatec	85 DSL	0	0	0	0	0	0	0	0	0
Los Angeles:	2035 T7 Ag	Aggregatec	90 DSL	0	0	0	0	0	0	0	0	0
Los Angeles:	2035 T7 CAIRP	Aggregatec	5 DSL	2731.264	0.568434	0.647119	3.356473	20.07387	2767.943	0.011061	0.010582	
Los Angeles:	2035 T7 CAIRP	Aggregatec	10 DSL	8106.935	0.460372	0.524098	2.718389	15.219	2454.287	0.00995	0.009519	
Los Angeles:	2035 T7 CAIRP	Aggregatec	15 DSL	21542.7	0.324229	0.36911	1.914499	9.10772	2059.127	0.00855	0.00818	
Los Angeles:	2035 T7 CAIRP	Aggregatec	20 DSL	51620.17	0.234554	0.267022	1.384989	5.077227	1798.843	0.007628	0.007298	

Los Angele:	2035	T7 CAIRP	Aggregatec	25	DSL	110233.7	0.171892	0.195686	1.014981	2.72999	1660.215	0.006939	0.006639
Los Angele:	2035	T7 CAIRP	Aggregatec	30	DSL	152343.3	0.126672	0.144206	0.747968	1.681989	1563.222	0.006389	0.006113
Los Angele:	2035	T7 CAIRP	Aggregatec	35	DSL	121282.7	0.093348	0.10627	0.551199	1.125264	1485.377	0.005931	0.005675
Los Angele:	2035	T7 CAIRP	Aggregatec	40	DSL	118709.5	0.068791	0.078313	0.406194	0.797058	1420.595	0.005539	0.005299
Los Angele:	2035	T7 CAIRP	Aggregatec	45	DSL	113782.9	0.050694	0.057711	0.299336	0.590181	1365.244	0.005196	0.004971
Los Angele:	2035	T7 CAIRP	Aggregatec	50	DSL	110706.1	0.037358	0.042529	0.220589	0.452429	1316.993	0.004891	0.00468
Los Angele:	2035	T7 CAIRP	Aggregatec	55	DSL	149227.4	0.02753	0.031341	0.162558	0.357772	1281.603	0.004617	0.004417
Los Angele:	2035	T7 CAIRP	Aggregatec	60	DSL	252810	0.023633	0.026904	0.139547	0.321259	1265.479	0.00449	0.004295
Los Angele:	2035	T7 CAIRP	Aggregatec	65	DSL	152561	0.023633	0.026904	0.139547	0.322232	1265.479	0.00449	0.004295
Los Angele:	2035	T7 CAIRP	Aggregatec	70	DSL	1998.559	0.023633	0.026904	0.139547	0.326452	1265.479	0.00449	0.004295
Los Angele:	2035	T7 CAIRP	Aggregatec	75	DSL	0	0	0	0	0	0	0	0
Los Angele:	2035	T7 CAIRP	Aggregatec	80	DSL	0	0	0	0	0	0	0	0
Los Angele:	2035	T7 CAIRP	Aggregatec	85	DSL	0	0	0	0	0	0	0	0
Los Angele:	2035	T7 CAIRP	Aggregatec	90	DSL	0	0	0	0	0	0	0	0
Los Angele:	2035	T7 CAIRP c	Aggregatec	5	DSL	175.6295	0.58198	0.66254	3.434709	20.80924	2790.173	0.011432	0.010938
Los Angele:	2035	T7 CAIRP c	Aggregatec	10	DSL	508.8428	0.471326	0.536569	2.781746	15.76332	2474.01	0.010284	0.009839
Los Angele:	2035	T7 CAIRP c	Aggregatec	15	DSL	1347.882	0.331903	0.377846	1.959086	9.417806	2075.668	0.008836	0.008454
Los Angele:	2035	T7 CAIRP c	Aggregatec	20	DSL	3396.533	0.240079	0.273311	1.417225	5.239122	1813.273	0.007882	0.007541
Los Angele:	2035	T7 CAIRP c	Aggregatec	25	DSL	7203.381	0.175942	0.200297	1.038619	2.804571	1673.523	0.00717	0.00686
Los Angele:	2035	T7 CAIRP c	Aggregatec	30	DSL	9932.786	0.129661	0.147609	0.765408	1.720983	1584.569	0.006602	0.006317
Los Angele:	2035	T7 CAIRP c	Aggregatec	35	DSL	7682.321	0.095555	0.108782	0.564071	1.146385	1514.133	0.00613	0.005865
Los Angele:	2035	T7 CAIRP c	Aggregatec	40	DSL	7353.05	0.070421	0.080169	0.415701	0.80852	1456.292	0.005726	0.005478
Los Angele:	2035	T7 CAIRP c	Aggregatec	45	DSL	7147.086	0.051899	0.059083	0.306365	0.59651	1407.517	0.005374	0.005141
Los Angele:	2035	T7 CAIRP c	Aggregatec	50	DSL	7164.992	0.038249	0.043544	0.225793	0.455956	1365.547	0.005061	0.004842
Los Angele:	2035	T7 CAIRP c	Aggregatec	55	DSL	9518.329	0.028191	0.032093	0.16642	0.35939	1328.856	0.00478	0.004574
Los Angele:	2035	T7 CAIRP c	Aggregatec	60	DSL	16446.8	0.024203	0.027553	0.142879	0.322296	1312.139	0.00465	0.004449
Los Angele:	2035	T7 CAIRP c	Aggregatec	65	DSL	9900.165	0.024203	0.027553	0.142879	0.323306	1312.139	0.00465	0.004449
Los Angele:	2035	T7 CAIRP c	Aggregatec	70	DSL	34.60142	0.024203	0.027553	0.142879	0.326648	1312.139	0.00465	0.004449
Los Angele:	2035	T7 CAIRP c	Aggregatec	75	DSL	0	0	0	0	0	0	0	0
Los Angele:	2035	T7 CAIRP c	Aggregatec	80	DSL	0	0	0	0	0	0	0	0
Los Angele:	2035	T7 CAIRP c	Aggregatec	85	DSL	0	0	0	0	0	0	0	0
Los Angele:	2035	T7 CAIRP c	Aggregatec	90	DSL	0	0	0	0	0	0	0	0
Los Angele:	2035	T7 NNOOS	Aggregatec	5	DSL	3386.771	0.497132	0.565947	2.935452	16.7537	2760.5	0.009273	0.008872
Los Angele:	2035	T7 NNOOS	Aggregatec	10	DSL	10052.61	0.402625	0.458358	2.377406	12.68874	2447.688	0.008341	0.00798
Los Angele:	2035	T7 NNOOS	Aggregatec	15	DSL	26712.97	0.283559	0.322811	1.674352	7.571774	2053.591	0.007168	0.006858
Los Angele:	2035	T7 NNOOS	Aggregatec	20	DSL	64009.08	0.205133	0.233528	1.211263	4.19709	1794.006	0.006395	0.006118
Los Angele:	2035	T7 NNOOS	Aggregatec	25	DSL	136689.9	0.150331	0.17114	0.887667	2.237174	1655.751	0.005817	0.005566
Los Angele:	2035	T7 NNOOS	Aggregatec	30	DSL	188905.9	0.110783	0.126118	0.654147	1.366969	1559.057	0.005356	0.005125
Los Angele:	2035	T7 NNOOS	Aggregatec	35	DSL	150390.8	0.081639	0.09294	0.482059	0.906912	1481.457	0.004972	0.004757

Los Angele:	2035	T7 NNOOS	Aggregatec	40	DSL	147199.9	0.060162	0.06849	0.355243	0.637033	1416.882	0.004644	0.004443
Los Angele:	2035	T7 NNOOS	Aggregatec	45	DSL	141090.9	0.044335	0.050472	0.261788	0.467747	1361.711	0.004356	0.004168
Los Angele:	2035	T7 NNOOS	Aggregatec	50	DSL	137275.7	0.032672	0.037194	0.192919	0.355571	1313.619	0.004101	0.003923
Los Angele:	2035	T7 NNOOS	Aggregatec	55	DSL	185042.2	0.024077	0.02741	0.142168	0.278826	1278.32	0.003871	0.003703
Los Angele:	2035	T7 NNOOS	Aggregatec	60	DSL	313484.7	0.020669	0.02353	0.122043	0.249321	1262.237	0.003764	0.003601
Los Angele:	2035	T7 NNOOS	Aggregatec	65	DSL	189175.8	0.020669	0.02353	0.122043	0.250077	1262.237	0.003764	0.003601
Los Angele:	2035	T7 NNOOS	Aggregatec	70	DSL	2478.215	0.020669	0.02353	0.122043	0.253351	1262.237	0.003764	0.003601
Los Angele:	2035	T7 NNOOS	Aggregatec	75	DSL	0	0	0	0	0	0	0	0
Los Angele:	2035	T7 NNOOS	Aggregatec	80	DSL	0	0	0	0	0	0	0	0
Los Angele:	2035	T7 NNOOS	Aggregatec	85	DSL	0	0	0	0	0	0	0	0
Los Angele:	2035	T7 NNOOS	Aggregatec	90	DSL	0	0	0	0	0	0	0	0
Los Angele:	2035	T7 NOOS	Aggregatec	5	DSL	1078.849	0.568778	0.64751	3.3585	20.08097	2768.253	0.011069	0.01059
Los Angele:	2035	T7 NOOS	Aggregatec	10	DSL	3202.237	0.46065	0.524415	2.720031	15.22521	2454.562	0.009957	0.009526
Los Angele:	2035	T7 NOOS	Aggregatec	15	DSL	8509.358	0.324425	0.369333	1.915655	9.11281	2059.358	0.008556	0.008186
Los Angele:	2035	T7 NOOS	Aggregatec	20	DSL	20389.95	0.234696	0.267184	1.385826	5.081577	1799.044	0.007633	0.007303
Los Angele:	2035	T7 NOOS	Aggregatec	25	DSL	43542.28	0.171996	0.195804	1.015595	2.733568	1660.401	0.006944	0.006644
Los Angele:	2035	T7 NOOS	Aggregatec	30	DSL	60175.55	0.126748	0.144293	0.74842	1.684913	1563.395	0.006394	0.006117
Los Angele:	2035	T7 NOOS	Aggregatec	35	DSL	47906.65	0.093404	0.106334	0.551532	1.127702	1485.539	0.005935	0.005679
Los Angele:	2035	T7 NOOS	Aggregatec	40	DSL	46890.2	0.068832	0.07836	0.406439	0.799124	1420.748	0.005543	0.005303
Los Angele:	2035	T7 NOOS	Aggregatec	45	DSL	44944.2	0.050725	0.057746	0.299516	0.59196	1365.389	0.0052	0.004975
Los Angele:	2035	T7 NOOS	Aggregatec	50	DSL	43728.89	0.03738	0.042555	0.220722	0.453983	1317.131	0.004895	0.004683
Los Angele:	2035	T7 NOOS	Aggregatec	55	DSL	58944.78	0.027547	0.03136	0.162656	0.359149	1281.738	0.00462	0.00442
Los Angele:	2035	T7 NOOS	Aggregatec	60	DSL	99859.88	0.023647	0.026921	0.139632	0.322562	1265.612	0.004493	0.004298
Los Angele:	2035	T7 NOOS	Aggregatec	65	DSL	60261.53	0.023647	0.026921	0.139632	0.32354	1265.612	0.004493	0.004298
Los Angele:	2035	T7 NOOS	Aggregatec	70	DSL	789.43	0.023647	0.026921	0.139632	0.327776	1265.612	0.004493	0.004298
Los Angele:	2035	T7 NOOS	Aggregatec	75	DSL	0	0	0	0	0	0	0	0
Los Angele:	2035	T7 NOOS	Aggregatec	80	DSL	0	0	0	0	0	0	0	0
Los Angele:	2035	T7 NOOS	Aggregatec	85	DSL	0	0	0	0	0	0	0	0
Los Angele:	2035	T7 NOOS	Aggregatec	90	DSL	0	0	0	0	0	0	0	0
Los Angele:	2035	T7 POLA	Aggregatec	5	DSL	67279.11	0.62238	0.708533	3.675011	22.47992	2811.235	0.012399	0.011862
Los Angele:	2035	T7 POLA	Aggregatec	10	DSL	120277.1	0.504062	0.573837	2.976371	17.06933	2492.673	0.011153	0.010671
Los Angele:	2035	T7 POLA	Aggregatec	15	DSL	140623.2	0.355	0.40414	2.09619	10.25279	2091.333	0.009584	0.009169
Los Angele:	2035	T7 POLA	Aggregatec	20	DSL	102131.6	0.256814	0.292364	1.516429	5.762853	1826.977	0.00855	0.00818
Los Angele:	2035	T7 POLA	Aggregatec	25	DSL	112876	0.188205	0.214257	1.111306	3.132389	1686.181	0.007778	0.007442
Los Angele:	2035	T7 POLA	Aggregatec	30	DSL	162203.5	0.138693	0.157892	0.818953	1.947936	1596.559	0.007162	0.006852
Los Angele:	2035	T7 POLA	Aggregatec	35	DSL	151025.5	0.102207	0.116355	0.603509	1.315754	1525.595	0.006649	0.006361
Los Angele:	2035	T7 POLA	Aggregatec	40	DSL	186765.7	0.075319	0.085745	0.444743	0.942601	1467.32	0.006209	0.005941
Los Angele:	2035	T7 POLA	Aggregatec	45	DSL	225238.7	0.055505	0.063188	0.327743	0.705654	1418.177	0.005825	0.005573
Los Angele:	2035	T7 POLA	Aggregatec	50	DSL	163849.8	0.040903	0.046565	0.241523	0.546615	1375.89	0.005483	0.005246

Los Angeles:	2035	T7 POLA	Aggregatec	55 DSL	499090.7	0.030143	0.034315	0.177985	0.435114	1338.918	0.005176	0.004952
Los Angeles:	2035	T7 POLA	Aggregatec	60 DSL	564389.4	0.025876	0.029458	0.152791	0.39156	1322.072	0.005033	0.004815
Los Angeles:	2035	T7 POLA	Aggregatec	65 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2035	T7 POLA	Aggregatec	70 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2035	T7 POLA	Aggregatec	75 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2035	T7 POLA	Aggregatec	80 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2035	T7 POLA	Aggregatec	85 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2035	T7 POLA	Aggregatec	90 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2035	T7 Public	Aggregatec	5 DSL	257.1904	0.492028	0.560136	2.238582	13.82103	2934.673	0.030707	0.029378
Los Angeles:	2035	T7 Public	Aggregatec	10 DSL	740.6292	0.392399	0.446717	1.817904	10.76192	2609.502	0.025886	0.024766
Los Angeles:	2035	T7 Public	Aggregatec	15 DSL	1960.277	0.258396	0.294164	1.278637	6.81396	2183.878	0.018311	0.017519
Los Angeles:	2035	T7 Public	Aggregatec	20 DSL	5001.831	0.173973	0.198055	0.922077	4.354522	1893.825	0.013086	0.01252
Los Angeles:	2035	T7 Public	Aggregatec	25 DSL	10590.25	0.127135	0.144733	0.680575	3.101403	1741.389	0.010871	0.010401
Los Angeles:	2035	T7 Public	Aggregatec	30 DSL	14595.01	0.094646	0.107748	0.507703	2.520288	1646.154	0.009552	0.009139
Los Angeles:	2035	T7 Public	Aggregatec	35 DSL	11207.68	0.070651	0.080431	0.379815	2.194435	1570.643	0.008655	0.00828
Los Angeles:	2035	T7 Public	Aggregatec	40 DSL	10666.13	0.05302	0.060359	0.285359	1.991227	1508.98	0.008137	0.007785
Los Angeles:	2035	T7 Public	Aggregatec	45 DSL	10404.69	0.040209	0.045775	0.215814	1.857848	1457.653	0.007972	0.007627
Los Angeles:	2035	T7 Public	Aggregatec	50 DSL	10509.11	0.031143	0.035454	0.165037	1.773797	1414.698	0.008175	0.007822
Los Angeles:	2035	T7 Public	Aggregatec	55 DSL	13910.48	0.025039	0.028505	0.128652	1.741214	1379.017	0.008806	0.008425
Los Angeles:	2035	T7 Public	Aggregatec	60 DSL	24153.54	0.022901	0.026071	0.114515	1.730314	1363.116	0.009221	0.008822
Los Angeles:	2035	T7 Public	Aggregatec	65 DSL	14530.34	0.022904	0.026074	0.114523	1.736261	1363.131	0.009223	0.008824
Los Angeles:	2035	T7 Public	Aggregatec	70 DSL	16.63143	0.031687	0.036073	0.140346	3.43143	1411.494	0.017383	0.016631
Los Angeles:	2035	T7 Public	Aggregatec	75 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2035	T7 Public	Aggregatec	80 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2035	T7 Public	Aggregatec	85 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2035	T7 Public	Aggregatec	90 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2035	T7 Single	Aggregatec	5 DSL	1136.767	0.488371	0.555973	2.883715	15.41364	2843.917	0.008982	0.008593
Los Angeles:	2035	T7 Single	Aggregatec	10 DSL	3336.004	0.395511	0.450259	2.3354	11.75099	2521.64	0.008079	0.00773
Los Angeles:	2035	T7 Single	Aggregatec	15 DSL	8851.733	0.278548	0.317105	1.644759	7.144578	2115.635	0.006942	0.006642
Los Angeles:	2035	T7 Single	Aggregatec	20 DSL	21720.88	0.201526	0.229422	1.189966	4.109228	1848.224	0.006195	0.005927
Los Angeles:	2035	T7 Single	Aggregatec	25 DSL	46231.88	0.147685	0.168129	0.872048	2.311027	1705.789	0.005635	0.005391
Los Angeles:	2035	T7 Single	Aggregatec	30 DSL	63824.29	0.108833	0.123898	0.642634	1.482972	1615.124	0.005188	0.004964
Los Angeles:	2035	T7 Single	Aggregatec	35 DSL	50121.68	0.080198	0.091299	0.473549	1.03141	1543.327	0.004816	0.004608
Los Angeles:	2035	T7 Single	Aggregatec	40 DSL	48549.21	0.059098	0.067278	0.348957	0.758267	1484.368	0.004498	0.004303
Los Angeles:	2035	T7 Single	Aggregatec	45 DSL	46838.03	0.043552	0.04958	0.257163	0.581946	1434.658	0.004219	0.004037
Los Angeles:	2035	T7 Single	Aggregatec	50 DSL	46217.98	0.032096	0.036539	0.189521	0.461787	1391.887	0.003972	0.0038
Los Angeles:	2035	T7 Single	Aggregatec	55 DSL	61872.01	0.023652	0.026926	0.13966	0.377408	1354.481	0.003749	0.003587
Los Angeles:	2035	T7 Single	Aggregatec	60 DSL	105803.4	0.020305	0.023115	0.119895	0.344351	1337.445	0.003646	0.003488
Los Angeles:	2035	T7 Single	Aggregatec	65 DSL	63772.17	0.020305	0.023115	0.119894	0.345415	1337.444	0.003646	0.003488

Los Angele:	2035	T7 SWCV	Aggregatec	85	DSL	0	0	0	0	0	0	0	0	0
Los Angele:	2035	T7 SWCV	Aggregatec	90	DSL	0	0	0	0	0	0	0	0	0
Los Angele:	2035	T7 tractor	Aggregatec	5	DSL	3772.359	0.589677	0.671302	3.481905	20.66908	2786.935	0.011563	0.011062	
Los Angele:	2035	T7 tractor	Aggregatec	10	DSL	10925.17	0.477576	0.543684	2.819976	15.70178	2471.127	0.010401	0.009951	
Los Angele:	2035	T7 tractor	Aggregatec	15	DSL	28938.35	0.336346	0.382904	1.986044	9.455561	2073.256	0.008938	0.008551	
Los Angele:	2035	T7 tractor	Aggregatec	20	DSL	72981.04	0.24332	0.277001	1.436747	5.342364	1811.185	0.007974	0.007629	
Los Angele:	2035	T7 tractor	Aggregatec	25	DSL	154761.7	0.178316	0.202999	1.052912	2.926918	1671.606	0.007254	0.00694	
Los Angele:	2035	T7 tractor	Aggregatec	30	DSL	213394.3	0.131406	0.149595	0.77592	1.83501	1573.856	0.006679	0.00639	
Los Angele:	2035	T7 tractor	Aggregatec	35	DSL	164968.9	0.096837	0.110241	0.571797	1.248298	1495.393	0.0062	0.005932	
Los Angele:	2035	T7 tractor	Aggregatec	40	DSL	157839.9	0.071362	0.08124	0.421374	0.898661	1430.089	0.00579	0.00554	
Los Angele:	2035	T7 tractor	Aggregatec	45	DSL	153454.3	0.052588	0.059868	0.310522	0.676424	1374.285	0.005432	0.005197	
Los Angele:	2035	T7 tractor	Aggregatec	50	DSL	153913.4	0.038754	0.044118	0.228832	0.527206	1325.634	0.005113	0.004892	
Los Angele:	2035	T7 tractor	Aggregatec	55	DSL	204418.2	0.028559	0.032512	0.168633	0.423455	1290.012	0.004826	0.004618	
Los Angele:	2035	T7 tractor	Aggregatec	60	DSL	353327.9	0.024516	0.02791	0.144762	0.383251	1273.782	0.004693	0.00449	
Los Angele:	2035	T7 tractor	Aggregatec	65	DSL	212677.5	0.024516	0.02791	0.144762	0.384453	1273.782	0.004693	0.00449	
Los Angele:	2035	T7 tractor	Aggregatec	70	DSL	710.7811	0.024516	0.02791	0.144762	0.388353	1273.782	0.004693	0.00449	
Los Angele:	2035	T7 tractor	Aggregatec	75	DSL	0	0	0	0	0	0	0	0	0
Los Angele:	2035	T7 tractor	Aggregatec	80	DSL	0	0	0	0	0	0	0	0	0
Los Angele:	2035	T7 tractor	Aggregatec	85	DSL	0	0	0	0	0	0	0	0	0
Los Angele:	2035	T7 tractor	Aggregatec	90	DSL	0	0	0	0	0	0	0	0	0
Los Angele:	2035	T7 tractor (	Aggregatec	5	DSL	338.7368	0.606782	0.690775	3.579906	21.5278	2815.743	0.012042	0.011521	
Los Angele:	2035	T7 tractor (	Aggregatec	10	DSL	981.4059	0.491404	0.559426	2.899345	16.34994	2496.689	0.01083	0.010362	
Los Angele:	2035	T7 tractor (	Aggregatec	15	DSL	2599.662	0.346017	0.393913	2.041903	9.838527	2094.692	0.009301	0.008899	
Los Angele:	2035	T7 tractor (	Aggregatec	20	DSL	6550.898	0.25027	0.284914	1.47713	5.550732	1829.883	0.008294	0.007935	
Los Angele:	2035	T7 tractor (	Aggregatec	25	DSL	13893.17	0.183411	0.208799	1.082528	3.035352	1688.846	0.007544	0.007218	
Los Angele:	2035	T7 tractor (	Aggregatec	30	DSL	19157.38	0.135167	0.153877	0.797776	1.900144	1599.074	0.006946	0.006646	
Los Angele:	2035	T7 tractor (	Aggregatec	35	DSL	14816.9	0.099614	0.113403	0.587933	1.290966	1527.99	0.006449	0.00617	
Los Angele:	2035	T7 tractor (	Aggregatec	40	DSL	14181.84	0.073413	0.083575	0.433295	0.928413	1469.618	0.006025	0.005764	
Los Angele:	2035	T7 tractor (	Aggregatec	45	DSL	13784.6	0.054106	0.061595	0.319339	0.698258	1420.395	0.005654	0.005409	
Los Angele:	2035	T7 tractor (	Aggregatec	50	DSL	13819.13	0.039878	0.045398	0.235365	0.543933	1378.042	0.005326	0.005095	
Los Angele:	2035	T7 tractor (	Aggregatec	55	DSL	18358.02	0.029394	0.033463	0.173486	0.436803	1341.015	0.005032	0.004814	
Los Angele:	2035	T7 tractor (	Aggregatec	60	DSL	31720.98	0.025238	0.028731	0.14895	0.395342	1324.147	0.004896	0.004684	
Los Angele:	2035	T7 tractor (	Aggregatec	65	DSL	19094.46	0.025238	0.028731	0.14895	0.396582	1324.147	0.004896	0.004684	
Los Angele:	2035	T7 tractor (	Aggregatec	70	DSL	66.73581	0.025238	0.028731	0.14895	0.40068	1324.147	0.004896	0.004684	
Los Angele:	2035	T7 tractor (	Aggregatec	75	DSL	0	0	0	0	0	0	0	0	0
Los Angele:	2035	T7 tractor (	Aggregatec	80	DSL	0	0	0	0	0	0	0	0	0
Los Angele:	2035	T7 tractor (	Aggregatec	85	DSL	0	0	0	0	0	0	0	0	0
Los Angele:	2035	T7 tractor (	Aggregatec	90	DSL	0	0	0	0	0	0	0	0	0
Los Angele:	2035	T7 utility	Aggregatec	5	DSL	19.22182	0.368044	0.41899	2.173216	10.19315	2809.629	0.005999	0.005739	

Los Angeles:	2035 T7 utility	Aggregatec	10 DSL	55.4453	0.298077	0.339338	1.760076	7.737688	2491.249	0.005396	0.005163
Los Angeles:	2035 T7 utility	Aggregatec	15 DSL	146.7837	0.209929	0.238988	1.239581	4.650599	2090.139	0.004637	0.004436
Los Angeles:	2035 T7 utility	Aggregatec	20 DSL	373.2533	0.151867	0.172889	0.896739	2.618254	1825.934	0.004137	0.003958
Los Angeles:	2035 T7 utility	Aggregatec	25 DSL	790.6388	0.111295	0.126701	0.65717	1.426591	1685.218	0.003763	0.0036
Los Angeles:	2035 T7 utility	Aggregatec	30 DSL	1089.785	0.082016	0.093369	0.484287	0.889902	1595.647	0.003465	0.003315
Los Angeles:	2035 T7 utility	Aggregatec	35 DSL	838.5006	0.06044	0.068806	0.356885	0.602388	1524.724	0.003217	0.003078
Los Angeles:	2035 T7 utility	Aggregatec	40 DSL	799.2405	0.04454	0.050705	0.262998	0.431587	1466.482	0.003004	0.002874
Los Angeles:	2035 T7 utility	Aggregatec	45 DSL	778.8794	0.032823	0.037366	0.193811	0.323386	1417.367	0.002818	0.002696
Los Angeles:	2035 T7 utility	Aggregatec	50 DSL	785.0842	0.024188	0.027536	0.142825	0.250969	1375.104	0.002653	0.002538
Los Angeles:	2035 T7 utility	Aggregatec	55 DSL	1040.212	0.017825	0.020292	0.105252	0.200727	1338.153	0.002504	0.002396
Los Angeles:	2035 T7 utility	Aggregatec	60 DSL	1803.77	0.015302	0.01742	0.090353	0.181303	1321.317	0.002435	0.002329
Los Angeles:	2035 T7 utility	Aggregatec	65 DSL	1085.297	0.015302	0.01742	0.090353	0.181875	1321.317	0.002435	0.002329
Los Angeles:	2035 T7 utility	Aggregatec	70 DSL	1.939152	0.015302	0.01742	0.090353	0.183014	1321.317	0.002435	0.002329
Los Angeles:	2035 T7 utility	Aggregatec	75 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2035 T7 utility	Aggregatec	80 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2035 T7 utility	Aggregatec	85 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2035 T7 utility	Aggregatec	90 DSL	0	0	0	0	0	0	0	0
Los Angeles:	2035 T7IS	Aggregatec	5 GAS	267.1565	2.08329	3.039933	54.50681	5.314619	3797.472	0.007677	0.007059
Los Angeles:	2035 T7IS	Aggregatec	10 GAS	835.2737	1.31084	1.912775	49.63994	4.616687	3221.271	0.00483	0.004441
Los Angeles:	2035 T7IS	Aggregatec	15 GAS	2175.047	0.870208	1.269805	45.33495	4.075328	2323.727	0.003206	0.002948
Los Angeles:	2035 T7IS	Aggregatec	20 GAS	4978.025	0.609619	0.889555	41.52816	3.652244	1877.4	0.002245	0.002065
Los Angeles:	2035 T7IS	Aggregatec	25 GAS	9979.756	0.450408	0.657234	38.13185	3.331755	1766.207	0.001659	0.001525
Los Angeles:	2035 T7IS	Aggregatec	30 GAS	11845.68	0.350978	0.512146	35.09979	3.091683	1681.619	0.001293	0.001189
Los Angeles:	2035 T7IS	Aggregatec	35 GAS	8860.103	0.288554	0.421057	32.39833	2.913217	1612.819	0.001063	0.000977
Los Angeles:	2035 T7IS	Aggregatec	40 GAS	8777.082	0.250823	0.366001	30.04984	2.776212	1554.469	0.000922	0.000848
Los Angeles:	2035 T7IS	Aggregatec	45 GAS	8741.282	0.22962	0.33506	27.90226	2.693733	1520.272	0.000843	0.000776
Los Angeles:	2035 T7IS	Aggregatec	50 GAS	8215.078	0.221742	0.323566	25.9759	2.658837	1501.386	0.000814	0.000749
Los Angeles:	2035 T7IS	Aggregatec	55 GAS	8626.217	0.225284	0.328734	24.18308	2.683339	1473.129	0.000829	0.000762
Los Angeles:	2035 T7IS	Aggregatec	60 GAS	10547.85	0.241053	0.351744	22.53909	2.761332	1452.504	0.000891	0.000819
Los Angeles:	2035 T7IS	Aggregatec	65 GAS	4707.936	0.270611	0.394876	20.95221	2.920796	1448.548	0.00101	0.000928
Los Angeles:	2035 T7IS	Aggregatec	70 GAS	34.2924	0.293526	0.428312	20.26737	3.067123	1445.103	0.001094	0.001006
Los Angeles:	2035 UBUS	Aggregatec	5 GAS	2781.529	0.169086	0.246729	1.263254	0.683312	3684.539	0.007458	0.006857
Los Angeles:	2035 UBUS	Aggregatec	5 DSL	3234.038	1.24606	13.53461	41.31957	7.35499	2979.547	0.093125	0.089097
Los Angeles:	2035 UBUS	Aggregatec	10 GAS	8871.558	0.106351	0.155187	1.150061	0.593635	3145.355	0.004692	0.004314
Los Angeles:	2035 UBUS	Aggregatec	10 DSL	10314.21	0.938399	10.16003	31.51672	6.012003	2705.447	0.075654	0.072381
Los Angeles:	2035 UBUS	Aggregatec	15 GAS	15724.73	0.070598	0.103016	1.050263	0.524097	2168.099	0.003115	0.002864
Los Angeles:	2035 UBUS	Aggregatec	15 DSL	18281.9	0.474507	5.048763	16.49107	4.042675	2221.406	0.047478	0.045425
Los Angeles:	2035 UBUS	Aggregatec	20 GAS	143740.6	0.049451	0.072159	0.961941	0.470401	1524.356	0.002181	0.002005
Los Angeles:	2035 UBUS	Aggregatec	20 DSL	167125.9	0.211381	2.113423	7.566829	3.024789	1822.924	0.028326	0.027101

Los Angeles:	2035	UBUS	Aggregatec	25	GAS	3268.722	0.036853	0.053776	0.890671	0.427443	1331.091	0.001612	0.001482
Los Angeles:	2035	UBUS	Aggregatec	25	DSL	3804.801	0.150521	1.40501	5.126856	2.811894	1635.035	0.020826	0.019925
Los Angeles:	2035	UBUS	Aggregatec	30	GAS	3760.048	0.028661	0.041821	0.818282	0.397041	1223.217	0.001256	0.001155
Los Angeles:	2035	UBUS	Aggregatec	30	DSL	4375.749	0.120215	1.102077	4.107439	2.712061	1534.737	0.016527	0.015812
Los Angeles:	2035	UBUS	Aggregatec	35	GAS	2802.496	0.023315	0.034021	0.747632	0.372559	1129.32	0.001032	0.000949
Los Angeles:	2035	UBUS	Aggregatec	35	DSL	3255.842	0.096287	0.882578	3.390935	2.624533	1451.567	0.013475	0.012892
Los Angeles:	2035	UBUS	Aggregatec	40	GAS	2597.717	0.02013	0.029374	0.688925	0.35351	1050.662	0.000895	0.000823
Los Angeles:	2035	UBUS	Aggregatec	40	DSL	3014.269	0.079818	0.73124	2.885703	2.566593	1385.435	0.011609	0.011107
Los Angeles:	2035	UBUS	Aggregatec	45	GAS	2567.172	0.018581	0.027113	0.644797	0.344022	976.2272	0.000819	0.000753
Los Angeles:	2035	UBUS	Aggregatec	45	DSL	2982.689	0.071279	0.640353	2.550845	2.56194	1336.266	0.010846	0.010376
Los Angeles:	2035	UBUS	Aggregatec	50	GAS	2368.969	0.018067	0.026363	0.604269	0.340797	913.2183	0.000791	0.000727
Los Angeles:	2035	UBUS	Aggregatec	50	DSL	2755.61	0.069115	0.592723	2.325087	2.577866	1304.171	0.011261	0.010774
Los Angeles:	2035	UBUS	Aggregatec	55	GAS	2929.44	0.018157	0.026494	0.556693	0.343682	888.0434	0.000805	0.00074
Los Angeles:	2035	UBUS	Aggregatec	55	DSL	3402.648	0.072269	0.577217	2.16904	2.582029	1289.241	0.012975	0.012413
Los Angeles:	2035	UBUS	Aggregatec	60	GAS	4264.234	0.019582	0.028574	0.522832	0.355926	893.5651	0.000865	0.000796
Los Angeles:	2035	UBUS	Aggregatec	60	DSL	4960.728	0.08346	0.62074	2.173201	2.649229	1291.263	0.015733	0.015052
Los Angeles:	2035	UBUS	Aggregatec	65	GAS	2331.771	0.021983	0.032077	0.48601	0.374495	910.1289	0.000981	0.000902
Los Angeles:	2035	UBUS	Aggregatec	65	DSL	2711.876	0.100339	0.702252	2.271295	2.716575	1310.42	0.019776	0.018921
Los Angeles:	2035	UBUS	Aggregatec	70	GAS	18.00166	0.012639	0.018443	0.256699	0.309326	938.4518	0.001046	0.000962
Los Angeles:	2035	UBUS	Aggregatec	70	DSL	19.30173	0.058377	0.34598	1.43987	1.625806	1349.995	0.031384	0.030026

Attachment 3

CALINE4 Input Files

1Carbon Monoxide

108.0 28.0 0.0 0.0 40 36 1.0 1 1 0.0

380587.4 3748819.9 1.8

380562.4 3748821.0 1.8

380537.4 3748821.4 1.8

380512.4 3748822.0 1.8

380487.4 3748822.3 1.8

380462.4 3748823.3 1.8

380587.4 3748844.9 1.8

380585.4 3748869.9 1.8

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EBA

EBT

EBL

EBD

EBD MAIN

EBD MAIN

EBD RAMP

WBA

WBT

WBL

WBD1

WBD2

NBA

NBT

NBL

NBD1

NBD2

SBA

SBT

SBL

SBD1

SBD2

NB HOV RAMP

NB HOV RAMP
NB HOV RAMP
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1 380770.7 3748743.8 380759.7 3748705.0 6.0 12.0 0.0 0.0 0
1 380759.7 3748705.0 380757.1 3748680.5 6.0 12.0 0.0 0.0 0
1 380757.1 3748680.5 380764.3 3748637.2 6.0 12.0 0.0 0.0 0
1 380764.3 3748637.2 380802.4 3748511.1 6.0 12.0 0.0 0.0 0
31111
1870.0 1770.0 100.0 2270.0
1895.0 1895.0 375.0 3110.0
2520.0 590.0 2550.0 2550.0
900.0 710.0 190.0 750.0
750.0 1360.0 930.0 430.0
1670.0 1670.0 75.0 75.0
75.0 75.0 75.0 75.0
75.0 93.0 93.0 93.0
93.0 93.0 93.0 93.0
0.65 1.31 1.43 1.05
0.65 0.65 0.65 0.65
1.29 1.43 0.86 0.65
0.7 1.32 1.43 1.01
0.7 0.7 1.36 1.41
1.43 0.7 0.7 0.7
0.7 0.7 0.7 0.7

Vermont Ave & W Artesia
1Carbon Monoxide
108.0 28.0 0.0 0.0 40 36 1.0 1 1 0.0

380587.4 3748819.9 1.8
380562.4 3748821.0 1.8
380537.4 3748821.4 1.8
380512.4 3748822.0 1.8
380487.4 3748822.3 1.8
380462.4 3748823.3 1.8
380587.4 3748844.9 1.8
380585.4 3748869.9 1.8
380584.0 3748894.9 1.8
380583.6 3748919.9 1.8
380582.3 3748944.9 1.8
380617.9 3748818.6 1.8
380642.9 3748818.6 1.8
380667.9 3748818.6 1.8
380692.9 3748818.6 1.8
380717.9 3748818.6 1.8
380742.9 3748818.6 1.8
380615.5 3748843.6 1.8
380613.7 3748868.6 1.8
380612.4 3748893.6 1.8
380611.0 3748918.6 1.8
380609.5 3748943.6 1.8
380621.0 3748777.5 1.8

380646.0 3748777.5 1.8
380671.0 3748777.5 1.8
380696.0 3748775.9 1.8
380621.7 3748752.5 1.8
380622.7 3748727.5 1.8
380624.0 3748702.5 1.8
380625.3 3748677.5 1.8
380593.4 3748776.5 1.8
380568.4 3748776.5 1.8
380543.4 3748776.5 1.8
380518.4 3748776.5 1.8
380493.4 3748776.5 1.8
380468.4 3748776.5 1.8
380593.9 3748751.5 1.8
380595.6 3748726.5 1.8
380596.5 3748701.5 1.8
380597.5 3748676.5 1.8

EBA

EBT

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EBD MAIN

EBD MAIN

EBD RAMP

WBA

WBT

WBL

WBD1

WBD2

NBA

NBT

NBL

NBD1

NBD2

SBA

SBT

SBL

SBD1

SBD2

NB HOV RAMP

NB HOV RAMP

NB HOV RAMP

NB HOV RAMP

NB HOV RAMP

NB HOV RAMP

NB HOV RAMP

SB HOV RAMP

SB HOV RAMP

SB HOV RAMP

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1 380451.5 3748788.6 380262.7 3748793.4 0.0 18.0 0.0 0.0 0 1

1 380605.2 3748788.3 380451.0 3748788.3 0.0 21.0 0.0 0.0 0 1

1 380604.9 3748800.9 380451.5 3748795.5 0.0 9.0 0.0 0.0 0 1

1 380604.7 3748788.4 380689.0 3748786.2 0.0 18.0 0.0 0.0 0 1

1 380689.6 3748786.5 380758.9 3748781.9 0.0 15.0 0.0 0.0 0 2

1 380758.9 3748781.9 380903.0 3748757.3 0.0 15.0 0.0 0.0 0

1 380688.8 3748787.3 380895.2 3748713.1 0.0 12.0 0.0 0.0 0 1

1 380759.8 3748808.9 380913.3 3748810.5 0.0 18.0 0.0 0.0 0 1

1 380604.6 3748808.1 380760.2 3748808.9 0.0 18.0 0.0 0.0 0 1

1 380604.2 3748801.3 380761.4 3748799.3 0.0 12.0 0.0 0.0 0 1

1 380602.3 3748809.7 380451.3 3748813.3 0.0 18.0 0.0 0.0 0 1

1 380451.3 3748813.0 380264.6 3748818.5 0.0 18.0 0.0 0.0 0 1

1 380618.4 3748655.4 380624.2 3748509.3 0.0 12.0 0.0 0.0 0 1

Vermont Ave & W Artesia
1Carbon Monoxide
108.0 28.0 0.0 0.0 40 36 1.0 1 1 0.0

380587.4 3748819.9 1.8
380562.4 3748821.0 1.8
380537.4 3748821.4 1.8
380512.4 3748822.0 1.8
380487.4 3748822.3 1.8
380462.4 3748823.3 1.8
380587.4 3748844.9 1.8
380585.4 3748869.9 1.8
380584.0 3748894.9 1.8
380583.6 3748919.9 1.8
380582.3 3748944.9 1.8
380617.9 3748818.6 1.8
380642.9 3748818.6 1.8
380667.9 3748818.6 1.8
380692.9 3748818.6 1.8
380717.9 3748818.6 1.8
380742.9 3748818.6 1.8
380615.5 3748843.6 1.8
380613.7 3748868.6 1.8
380612.4 3748893.6 1.8
380611.0 3748918.6 1.8
380609.5 3748943.6 1.8
380621.0 3748777.5 1.8

380646.0 3748777.5 1.8
380671.0 3748777.5 1.8
380696.0 3748775.9 1.8
380621.7 3748752.5 1.8
380622.7 3748727.5 1.8
380624.0 3748702.5 1.8
380625.3 3748677.5 1.8
380593.4 3748776.5 1.8
380568.4 3748776.5 1.8
380543.4 3748776.5 1.8
380518.4 3748776.5 1.8
380493.4 3748776.5 1.8
380468.4 3748776.5 1.8
380593.9 3748751.5 1.8
380595.6 3748726.5 1.8
380596.5 3748701.5 1.8
380597.5 3748676.5 1.8

EBA

EBT

EBL

EBD

EBD MAIN

EBD MAIN

EBD RAMP

WBA

WBT

WBL

WBD1

WBD2

NBA

NBT

NBL

NBD1

NBD2

SBA

SBT

SBL

SBD1

SBD2

NB HOV RAMP

NB HOV RAMP

NB HOV RAMP

NB HOV RAMP

NB HOV RAMP

NB HOV RAMP

NB HOV RAMP

SB HOV RAMP

SB HOV RAMP

SB HOV RAMP

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1 380451.5 3748788.6 380262.7 3748793.4 0.0 18.0 0.0 0.0 0 1

1 380605.2 3748788.3 380451.0 3748788.3 0.0 21.0 0.0 0.0 0 1

1 380604.9 3748800.9 380451.5 3748795.5 0.0 9.0 0.0 0.0 0 1

1 380604.7 3748788.4 380689.0 3748786.2 0.0 18.0 0.0 0.0 0 1

1 380689.6 3748786.5 380758.9 3748781.9 0.0 15.0 0.0 0.0 0 2

1 380758.9 3748781.9 380903.0 3748757.3 0.0 15.0 0.0 0.0 0

1 380688.8 3748787.3 380895.2 3748713.1 0.0 12.0 0.0 0.0 0 1

1 380759.8 3748808.9 380913.3 3748810.5 0.0 18.0 0.0 0.0 0 1

1 380604.6 3748808.1 380760.2 3748808.9 0.0 18.0 0.0 0.0 0 1

1 380604.2 3748801.3 380761.4 3748799.3 0.0 12.0 0.0 0.0 0 1

1 380602.3 3748809.7 380451.3 3748813.3 0.0 18.0 0.0 0.0 0 1

1 380451.3 3748813.0 380264.6 3748818.5 0.0 18.0 0.0 0.0 0 1

1 380618.4 3748655.4 380624.2 3748509.3 0.0 12.0 0.0 0.0 0 1

Vermont Ave & W Artesia
1Carbon Monoxide
108.0 28.0 0.0 0.0 40 36 1.0 1 1 0.0

380587.4 3748819.9 1.8
380562.4 3748821.0 1.8
380537.4 3748821.4 1.8
380512.4 3748822.0 1.8
380487.4 3748822.3 1.8
380462.4 3748823.3 1.8
380587.4 3748844.9 1.8
380585.4 3748869.9 1.8
380584.0 3748894.9 1.8
380583.6 3748919.9 1.8
380582.3 3748944.9 1.8
380617.9 3748818.6 1.8
380642.9 3748818.6 1.8
380667.9 3748818.6 1.8
380692.9 3748818.6 1.8
380717.9 3748818.6 1.8
380742.9 3748818.6 1.8
380615.5 3748843.6 1.8
380613.7 3748868.6 1.8
380612.4 3748893.6 1.8
380611.0 3748918.6 1.8
380609.5 3748943.6 1.8
380621.0 3748777.5 1.8

380646.0 3748777.5 1.8
380671.0 3748777.5 1.8
380696.0 3748775.9 1.8
380621.7 3748752.5 1.8
380622.7 3748727.5 1.8
380624.0 3748702.5 1.8
380625.3 3748677.5 1.8
380593.4 3748776.5 1.8
380568.4 3748776.5 1.8
380543.4 3748776.5 1.8
380518.4 3748776.5 1.8
380493.4 3748776.5 1.8
380468.4 3748776.5 1.8
380593.9 3748751.5 1.8
380595.6 3748726.5 1.8
380596.5 3748701.5 1.8
380597.5 3748676.5 1.8

EBA

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EBD MAIN

EBD MAIN

EBD RAMP

WBA

WBT

WBL

WBD1

WBD2

NBA

NBT

NBL

NBD1

NBD2

SBA

SBT

SBL

SBD1

SBD2

NB HOV RAMP

NB HOV RAMP

NB HOV RAMP

NB HOV RAMP

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SB HOV RAMP

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1 380451.5 3748788.6 380262.7 3748793.4 0.0 18.0 0.0 0.0 0 1

1 380605.2 3748788.3 380451.0 3748788.3 0.0 21.0 0.0 0.0 0 1

1 380604.9 3748800.9 380451.5 3748795.5 0.0 9.0 0.0 0.0 0 1

1 380604.7 3748788.4 380689.0 3748786.2 0.0 18.0 0.0 0.0 0 1

1 380689.6 3748786.5 380758.9 3748781.9 0.0 15.0 0.0 0.0 0 2

1 380758.9 3748781.9 380903.0 3748757.3 0.0 15.0 0.0 0.0 0

1 380688.8 3748787.3 380895.2 3748713.1 0.0 12.0 0.0 0.0 0 1

1 380759.8 3748808.9 380913.3 3748810.5 0.0 18.0 0.0 0.0 0 1

1 380604.6 3748808.1 380760.2 3748808.9 0.0 18.0 0.0 0.0 0 1

1 380604.2 3748801.3 380761.4 3748799.3 0.0 12.0 0.0 0.0 0 1

1 380602.3 3748809.7 380451.3 3748813.3 0.0 18.0 0.0 0.0 0 1

1 380451.3 3748813.0 380264.6 3748818.5 0.0 18.0 0.0 0.0 0 1

1 380618.4 3748655.4 380624.2 3748509.3 0.0 12.0 0.0 0.0 0 1

Vermont Ave & W Artesia
1Carbon Monoxide
108.0 28.0 0.0 0.0 40 36 1.0 1 1 0.0

380587.4 3748819.9 1.8
380562.4 3748821.0 1.8
380537.4 3748821.4 1.8
380512.4 3748822.0 1.8
380487.4 3748822.3 1.8
380462.4 3748823.3 1.8
380587.4 3748844.9 1.8
380585.4 3748869.9 1.8
380584.0 3748894.9 1.8
380583.6 3748919.9 1.8
380582.3 3748944.9 1.8
380617.9 3748818.6 1.8
380642.9 3748818.6 1.8
380667.9 3748818.6 1.8
380692.9 3748818.6 1.8
380717.9 3748818.6 1.8
380742.9 3748818.6 1.8
380615.5 3748843.6 1.8
380613.7 3748868.6 1.8
380612.4 3748893.6 1.8
380611.0 3748918.6 1.8
380609.5 3748943.6 1.8
380621.0 3748777.5 1.8

380646.0 3748777.5 1.8
380671.0 3748777.5 1.8
380696.0 3748775.9 1.8
380621.7 3748752.5 1.8
380622.7 3748727.5 1.8
380624.0 3748702.5 1.8
380625.3 3748677.5 1.8
380593.4 3748776.5 1.8
380568.4 3748776.5 1.8
380543.4 3748776.5 1.8
380518.4 3748776.5 1.8
380493.4 3748776.5 1.8
380468.4 3748776.5 1.8
380593.9 3748751.5 1.8
380595.6 3748726.5 1.8
380596.5 3748701.5 1.8
380597.5 3748676.5 1.8

EBA

EBT

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EBD

EBD MAIN

EBD MAIN

EBD RAMP

WBA

WBT

WBL

WBD1

WBD2

NBA

NBT

NBL

NBD1

NBD2

SBA

SBT

SBL

SBD1

SBD2

NB HOV RAMP

NB HOV RAMP

NB HOV RAMP

NB HOV RAMP

NB HOV RAMP

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NB HOV RAMP

SB HOV RAMP

SB HOV RAMP

SB HOV RAMP

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1 380451.5 3748788.6 380262.7 3748793.4 0.0 18.0 0.0 0.0 0 1

1 380605.2 3748788.3 380451.0 3748788.3 0.0 21.0 0.0 0.0 0 1

1 380604.9 3748800.9 380451.5 3748795.5 0.0 9.0 0.0 0.0 0 1

1 380604.7 3748788.4 380689.0 3748786.2 0.0 18.0 0.0 0.0 0 1

1 380689.6 3748786.5 380758.9 3748781.9 0.0 15.0 0.0 0.0 0 2

1 380758.9 3748781.9 380903.0 3748757.3 0.0 15.0 0.0 0.0 0

1 380688.8 3748787.3 380895.2 3748713.1 0.0 12.0 0.0 0.0 0 1

1 380759.8 3748808.9 380913.3 3748810.5 0.0 18.0 0.0 0.0 0 1

1 380604.6 3748808.1 380760.2 3748808.9 0.0 18.0 0.0 0.0 0 1

1 380604.2 3748801.3 380761.4 3748799.3 0.0 12.0 0.0 0.0 0 1

1 380602.3 3748809.7 380451.3 3748813.3 0.0 18.0 0.0 0.0 0 1

1 380451.3 3748813.0 380264.6 3748818.5 0.0 18.0 0.0 0.0 0 1

1 380618.4 3748655.4 380624.2 3748509.3 0.0 12.0 0.0 0.0 0 1

1 380611.1 3748799.7 380617.8 3748655.4 0.0 15.0 0.0 0.0 0 1
1 380603.5 3748798.1 380614.7 3748660.0 0.0 12.0 0.0 0.0 0 1
1 380611.1 3748800.3 380602.6 3748950.9 0.0 12.0 0.0 0.0 0 1
1 380602.6 3748950.6 380595.9 3749099.7 0.0 12.0 0.0 0.0 0 1
1 380590.4 3748949.7 380587.1 3749100.3 0.0 12.0 0.0 0.0 0 1
1 380596.8 3748798.2 380590.8 3748949.7 0.0 15.0 0.0 0.0 0 1
1 380603.2 3748798.4 380593.2 3748950.3 0.0 12.0 0.0 0.0 0 1
1 380599.3 3748800.3 380605.0 3748654.8 0.0 12.0 0.0 0.0 0 1
1 380604.7 3748654.8 380613.8 3748509.6 0.0 12.0 0.0 0.0 0 1
1 380813.4 3748515.6 380775.2 3748637.8 6.0 12.0 0.0 0.0 0 7
1 380775.2 3748637.8 380766.8 3748677.2 6.0 12.0 0.0 0.0 0
1 380766.8 3748677.2 380774.6 3748723.8 6.0 12.0 0.0 0.0 0
1 380774.6 3748723.8 380780.4 3748743.8 6.0 12.0 0.0 0.0 0
1 380780.4 3748743.8 380810.8 3748785.2 6.0 12.0 0.0 0.0 0
1 380810.8 3748785.2 380839.9 3748809.7 6.0 12.0 0.0 0.0 0
1 380839.9 3748809.7 380920.0 3748842.0 6.0 12.0 0.0 0.0 0
1 380918.1 3748853.0 380845.7 3748822.7 6.0 12.0 0.0 0.0 0 7
1 380845.7 3748822.7 380803.0 3748791.0 6.0 12.0 0.0 0.0 0
1 380803.0 3748791.0 380770.7 3748743.8 6.0 12.0 0.0 0.0 0
1 380770.7 3748743.8 380759.7 3748705.0 6.0 12.0 0.0 0.0 0
1 380759.7 3748705.0 380757.1 3748680.5 6.0 12.0 0.0 0.0 0
1 380757.1 3748680.5 380764.3 3748637.2 6.0 12.0 0.0 0.0 0
1 380764.3 3748637.2 380802.4 3748511.1 6.0 12.0 0.0 0.0 0

311112035 NP AM
1910.0 1810.0 100.0 2310.0
1929.0 1929.0 381.0 3170.0
2570.0 600.0 2590.0 2590.0
910.0 720.0 190.0 770.0
770.0 1390.0 950.0 440.0
1710.0 1710.0 76.0 76.0
76.0 76.0 76.0 76.0
76.0 95.0 95.0 95.0
95.0 95.0 95.0 95.0
0.44 0.9 0.98 0.71
0.44 0.44 0.44 0.44
0.89 0.93 0.58 0.44
0.47 0.9 0.98 0.68
0.47 0.47 0.93 0.97
0.98 0.47 0.47 0.47
0.47 0.47 0.47 0.47
0.47 0.47 0.47 0.47
0.47 0.47 0.47 0.47
0.0 1.0 4 1000.0 5.0 0.0 9.9

** BREEZE
** PROJECTN 0 104 7 -177 0 0.9996 500000 0
** MAPLAYER \\ENNYCCIFS01\DISCIPLINES\P&EVANV\PROJECTS\CALIFORNIA\CSUDH\CALINE4\ARTESIA_VERMONT_BASEMAP.JPG BASEMAP 3
UNKNOWN UNKNOWN 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 380092.77 381237.25 3748457.01 3749141.37
** OUTFILE \\ennyccifs01\disciplines\P&EVANV\Projects\California\CSUDH\CALINE4\Artesia_Vermont_2035_NP_AM.lst
** RAWFILE

Vermont Ave & W Artesia
1Carbon Monoxide
108.0 28.0 0.0 0.0 40 36 1.0 1 1 0.0

380587.4 3748819.9 1.8
380562.4 3748821.0 1.8
380537.4 3748821.4 1.8
380512.4 3748822.0 1.8
380487.4 3748822.3 1.8
380462.4 3748823.3 1.8
380587.4 3748844.9 1.8
380585.4 3748869.9 1.8
380584.0 3748894.9 1.8
380583.6 3748919.9 1.8
380582.3 3748944.9 1.8
380617.9 3748818.6 1.8
380642.9 3748818.6 1.8
380667.9 3748818.6 1.8
380692.9 3748818.6 1.8
380717.9 3748818.6 1.8
380742.9 3748818.6 1.8
380615.5 3748843.6 1.8
380613.7 3748868.6 1.8
380612.4 3748893.6 1.8
380611.0 3748918.6 1.8
380609.5 3748943.6 1.8
380621.0 3748777.5 1.8

380646.0 3748777.5 1.8
380671.0 3748777.5 1.8
380696.0 3748775.9 1.8
380621.7 3748752.5 1.8
380622.7 3748727.5 1.8
380624.0 3748702.5 1.8
380625.3 3748677.5 1.8
380593.4 3748776.5 1.8
380568.4 3748776.5 1.8
380543.4 3748776.5 1.8
380518.4 3748776.5 1.8
380493.4 3748776.5 1.8
380468.4 3748776.5 1.8
380593.9 3748751.5 1.8
380595.6 3748726.5 1.8
380596.5 3748701.5 1.8
380597.5 3748676.5 1.8

EBA

EBT

EBL

EBD

EBD MAIN

EBD MAIN

EBD RAMP

WBA

WBT

WBL

WBD1

WBD2

NBA

NBT

NBL

NBD1

NBD2

SBA

SBT

SBL

SBD1

SBD2

NB HOV RAMP

NB HOV RAMP

NB HOV RAMP

NB HOV RAMP

NB HOV RAMP

NB HOV RAMP

NB HOV RAMP

SB HOV RAMP

SB HOV RAMP

SB HOV RAMP

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1 380451.5 3748788.6 380262.7 3748793.4 0.0 18.0 0.0 0.0 0 1

1 380605.2 3748788.3 380451.0 3748788.3 0.0 21.0 0.0 0.0 0 1

1 380604.9 3748800.9 380451.5 3748795.5 0.0 9.0 0.0 0.0 0 1

1 380604.7 3748788.4 380689.0 3748786.2 0.0 18.0 0.0 0.0 0 1

1 380689.6 3748786.5 380758.9 3748781.9 0.0 15.0 0.0 0.0 0 2

1 380758.9 3748781.9 380903.0 3748757.3 0.0 15.0 0.0 0.0 0

1 380688.8 3748787.3 380895.2 3748713.1 0.0 12.0 0.0 0.0 0 1

1 380759.8 3748808.9 380913.3 3748810.5 0.0 18.0 0.0 0.0 0 1

1 380604.6 3748808.1 380760.2 3748808.9 0.0 18.0 0.0 0.0 0 1

1 380604.2 3748801.3 380761.4 3748799.3 0.0 12.0 0.0 0.0 0 1

1 380602.3 3748809.7 380451.3 3748813.3 0.0 18.0 0.0 0.0 0 1

1 380451.3 3748813.0 380264.6 3748818.5 0.0 18.0 0.0 0.0 0 1

1 380618.4 3748655.4 380624.2 3748509.3 0.0 12.0 0.0 0.0 0 1

1 380611.1 3748799.7 380617.8 3748655.4 0.0 15.0 0.0 0.0 0 1
1 380603.5 3748798.1 380614.7 3748660.0 0.0 12.0 0.0 0.0 0 1
1 380611.1 3748800.3 380602.6 3748950.9 0.0 12.0 0.0 0.0 0 1
1 380602.6 3748950.6 380595.9 3749099.7 0.0 12.0 0.0 0.0 0 1
1 380590.4 3748949.7 380587.1 3749100.3 0.0 12.0 0.0 0.0 0 1
1 380596.8 3748798.2 380590.8 3748949.7 0.0 15.0 0.0 0.0 0 1
1 380603.2 3748798.4 380593.2 3748950.3 0.0 12.0 0.0 0.0 0 1
1 380599.3 3748800.3 380605.0 3748654.8 0.0 12.0 0.0 0.0 0 1
1 380604.7 3748654.8 380613.8 3748509.6 0.0 12.0 0.0 0.0 0 1
1 380813.4 3748515.6 380775.2 3748637.8 6.0 12.0 0.0 0.0 0 7
1 380775.2 3748637.8 380766.8 3748677.2 6.0 12.0 0.0 0.0 0
1 380766.8 3748677.2 380774.6 3748723.8 6.0 12.0 0.0 0.0 0
1 380774.6 3748723.8 380780.4 3748743.8 6.0 12.0 0.0 0.0 0
1 380780.4 3748743.8 380810.8 3748785.2 6.0 12.0 0.0 0.0 0
1 380810.8 3748785.2 380839.9 3748809.7 6.0 12.0 0.0 0.0 0
1 380839.9 3748809.7 380920.0 3748842.0 6.0 12.0 0.0 0.0 0
1 380918.1 3748853.0 380845.7 3748822.7 6.0 12.0 0.0 0.0 0 7
1 380845.7 3748822.7 380803.0 3748791.0 6.0 12.0 0.0 0.0 0
1 380803.0 3748791.0 380770.7 3748743.8 6.0 12.0 0.0 0.0 0
1 380770.7 3748743.8 380759.7 3748705.0 6.0 12.0 0.0 0.0 0
1 380759.7 3748705.0 380757.1 3748680.5 6.0 12.0 0.0 0.0 0
1 380757.1 3748680.5 380764.3 3748637.2 6.0 12.0 0.0 0.0 0
1 380764.3 3748637.2 380802.4 3748511.1 6.0 12.0 0.0 0.0 0

311112035 NP PM

2810.0 2660.0 150.0 3380.0

2823.0 2823.0 557.0 2990.0

2590.0 400.0 2560.0 2560.0

1570.0 1290.0 280.0 1220.0

1220.0 1170.0 760.0 410.0

1380.0 1380.0 108.0 108.0

108.0 108.0 108.0 108.0

108.0 136.0 136.0 136.0

136.0 136.0 136.0 136.0

0.44 0.86 0.98 0.73

0.44 0.44 0.44 0.44

0.89 0.97 0.58 0.44

0.47 0.98 0.97 0.97

0.47 0.47 0.93 0.97

0.98 0.47 0.47 0.47

0.47 0.47 0.47 0.47

0.47 0.47 0.47 0.47

0.47 0.47 0.47 0.47

0.0 1.0 4 1000.0 5.0 0.0 9.9

** BREEZE

** PROJECTN 0 104 7 -177 0 0.9996 500000 0

** MAPLAYER \\ENNYCCIFS01\DISCIPLINES\P&EVAN\PROJECTS\CALIFORNIA\CSUDH\CALINE4\ARTESIA_VERMONT_BASEMAP.JPG BASEMAP 3

UNKNOWN UNKNOWN 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 380092.77 381237.25 3748457.01 3749141.37

** OUTFILE \\ennyccifs01\disciplines\P&EVAN\Projects\California\CSUDH\CALINE4\Artesia_Vermont_2035_NP_PM.lst

** RAWFILE

Vermont Ave & W Artesia
1Carbon Monoxide
108.0 28.0 0.0 0.0 40 36 1.0 1 1 0.0

380587.4 3748819.9 1.8
380562.4 3748821.0 1.8
380537.4 3748821.4 1.8
380512.4 3748822.0 1.8
380487.4 3748822.3 1.8
380462.4 3748823.3 1.8
380587.4 3748844.9 1.8
380585.4 3748869.9 1.8
380584.0 3748894.9 1.8
380583.6 3748919.9 1.8
380582.3 3748944.9 1.8
380617.9 3748818.6 1.8
380642.9 3748818.6 1.8
380667.9 3748818.6 1.8
380692.9 3748818.6 1.8
380717.9 3748818.6 1.8
380742.9 3748818.6 1.8
380615.5 3748843.6 1.8
380613.7 3748868.6 1.8
380612.4 3748893.6 1.8
380611.0 3748918.6 1.8
380609.5 3748943.6 1.8
380621.0 3748777.5 1.8

380646.0 3748777.5 1.8
380671.0 3748777.5 1.8
380696.0 3748775.9 1.8
380621.7 3748752.5 1.8
380622.7 3748727.5 1.8
380624.0 3748702.5 1.8
380625.3 3748677.5 1.8
380593.4 3748776.5 1.8
380568.4 3748776.5 1.8
380543.4 3748776.5 1.8
380518.4 3748776.5 1.8
380493.4 3748776.5 1.8
380468.4 3748776.5 1.8
380593.9 3748751.5 1.8
380595.6 3748726.5 1.8
380596.5 3748701.5 1.8
380597.5 3748676.5 1.8

EBA

EBT

EBL

EBD

EBD MAIN

EBD MAIN

EBD RAMP

WBA

WBT

WBL

WBD1

WBD2

NBA

NBT

NBL

NBD1

NBD2

SBA

SBT

SBL

SBD1

SBD2

NB HOV RAMP

NB HOV RAMP

NB HOV RAMP

NB HOV RAMP

NB HOV RAMP

NB HOV RAMP

NB HOV RAMP

SB HOV RAMP

SB HOV RAMP

SB HOV RAMP

SB HOV RAMP

SB HOV RAMP

SB HOV RAMP

SB HOV RAMP

SB HOV RAMP

1 380451.5 3748788.6 380262.7 3748793.4 0.0 18.0 0.0 0.0 0 1

1 380605.2 3748788.3 380451.0 3748788.3 0.0 21.0 0.0 0.0 0 1

1 380604.9 3748800.9 380451.5 3748795.5 0.0 9.0 0.0 0.0 0 1

1 380604.7 3748788.4 380689.0 3748786.2 0.0 18.0 0.0 0.0 0 1

1 380689.6 3748786.5 380758.9 3748781.9 0.0 15.0 0.0 0.0 0 2

1 380758.9 3748781.9 380903.0 3748757.3 0.0 15.0 0.0 0.0 0

1 380688.8 3748787.3 380895.2 3748713.1 0.0 12.0 0.0 0.0 0 1

1 380759.8 3748808.9 380913.3 3748810.5 0.0 18.0 0.0 0.0 0 1

1 380604.6 3748808.1 380760.2 3748808.9 0.0 18.0 0.0 0.0 0 1

1 380604.2 3748801.3 380761.4 3748799.3 0.0 12.0 0.0 0.0 0 1

1 380602.3 3748809.7 380451.3 3748813.3 0.0 18.0 0.0 0.0 0 1

1 380451.3 3748813.0 380264.6 3748818.5 0.0 18.0 0.0 0.0 0 1

1 380618.4 3748655.4 380624.2 3748509.3 0.0 12.0 0.0 0.0 0 1

Vermont Ave & W Artesia
1Carbon Monoxide
108.0 28.0 0.0 0.0 40 36 1.0 1 1 0.0

380587.4 3748819.9 1.8
380562.4 3748821.0 1.8
380537.4 3748821.4 1.8
380512.4 3748822.0 1.8
380487.4 3748822.3 1.8
380462.4 3748823.3 1.8
380587.4 3748844.9 1.8
380585.4 3748869.9 1.8
380584.0 3748894.9 1.8
380583.6 3748919.9 1.8
380582.3 3748944.9 1.8
380617.9 3748818.6 1.8
380642.9 3748818.6 1.8
380667.9 3748818.6 1.8
380692.9 3748818.6 1.8
380717.9 3748818.6 1.8
380742.9 3748818.6 1.8
380615.5 3748843.6 1.8
380613.7 3748868.6 1.8
380612.4 3748893.6 1.8
380611.0 3748918.6 1.8
380609.5 3748943.6 1.8
380621.0 3748777.5 1.8

380646.0 3748777.5 1.8
380671.0 3748777.5 1.8
380696.0 3748775.9 1.8
380621.7 3748752.5 1.8
380622.7 3748727.5 1.8
380624.0 3748702.5 1.8
380625.3 3748677.5 1.8
380593.4 3748776.5 1.8
380568.4 3748776.5 1.8
380543.4 3748776.5 1.8
380518.4 3748776.5 1.8
380493.4 3748776.5 1.8
380468.4 3748776.5 1.8
380593.9 3748751.5 1.8
380595.6 3748726.5 1.8
380596.5 3748701.5 1.8
380597.5 3748676.5 1.8

EBA

EBT

EBL

EBD

EBD MAIN

EBD MAIN

EBD RAMP

WBA

WBT

WBL

WBD1

WBD2

NBA

NBT

NBL

NBD1

NBD2

SBA

SBT

SBL

SBD1

SBD2

NB HOV RAMP

NB HOV RAMP

NB HOV RAMP

NB HOV RAMP

NB HOV RAMP

NB HOV RAMP

NB HOV RAMP

SB HOV RAMP

SB HOV RAMP

SB HOV RAMP

SB HOV RAMP

SB HOV RAMP

SB HOV RAMP

SB HOV RAMP

SB HOV RAMP

1 380451.5 3748788.6 380262.7 3748793.4 0.0 18.0 0.0 0.0 0 1

1 380605.2 3748788.3 380451.0 3748788.3 0.0 21.0 0.0 0.0 0 1

1 380604.9 3748800.9 380451.5 3748795.5 0.0 9.0 0.0 0.0 0 1

1 380604.7 3748788.4 380689.0 3748786.2 0.0 18.0 0.0 0.0 0 1

1 380689.6 3748786.5 380758.9 3748781.9 0.0 15.0 0.0 0.0 0 2

1 380758.9 3748781.9 380903.0 3748757.3 0.0 15.0 0.0 0.0 0

1 380688.8 3748787.3 380895.2 3748713.1 0.0 12.0 0.0 0.0 0 1

1 380759.8 3748808.9 380913.3 3748810.5 0.0 18.0 0.0 0.0 0 1

1 380604.6 3748808.1 380760.2 3748808.9 0.0 18.0 0.0 0.0 0 1

1 380604.2 3748801.3 380761.4 3748799.3 0.0 12.0 0.0 0.0 0 1

1 380602.3 3748809.7 380451.3 3748813.3 0.0 18.0 0.0 0.0 0 1

1 380451.3 3748813.0 380264.6 3748818.5 0.0 18.0 0.0 0.0 0 1

1 380618.4 3748655.4 380624.2 3748509.3 0.0 12.0 0.0 0.0 0 1

1 380611.1 3748799.7 380617.8 3748655.4 0.0 15.0 0.0 0.0 0 1
1 380603.5 3748798.1 380614.7 3748660.0 0.0 12.0 0.0 0.0 0 1
1 380611.1 3748800.3 380602.6 3748950.9 0.0 12.0 0.0 0.0 0 1
1 380602.6 3748950.6 380595.9 3749099.7 0.0 12.0 0.0 0.0 0 1
1 380590.4 3748949.7 380587.1 3749100.3 0.0 12.0 0.0 0.0 0 1
1 380596.8 3748798.2 380590.8 3748949.7 0.0 15.0 0.0 0.0 0 1
1 380603.2 3748798.4 380593.2 3748950.3 0.0 12.0 0.0 0.0 0 1
1 380599.3 3748800.3 380605.0 3748654.8 0.0 12.0 0.0 0.0 0 1
1 380604.7 3748654.8 380613.8 3748509.6 0.0 12.0 0.0 0.0 0 1
1 380813.4 3748515.6 380775.2 3748637.8 6.0 12.0 0.0 0.0 0 7
1 380775.2 3748637.8 380766.8 3748677.2 6.0 12.0 0.0 0.0 0
1 380766.8 3748677.2 380774.6 3748723.8 6.0 12.0 0.0 0.0 0
1 380774.6 3748723.8 380780.4 3748743.8 6.0 12.0 0.0 0.0 0
1 380780.4 3748743.8 380810.8 3748785.2 6.0 12.0 0.0 0.0 0
1 380810.8 3748785.2 380839.9 3748809.7 6.0 12.0 0.0 0.0 0
1 380839.9 3748809.7 380920.0 3748842.0 6.0 12.0 0.0 0.0 0
1 380918.1 3748853.0 380845.7 3748822.7 6.0 12.0 0.0 0.0 0 7
1 380845.7 3748822.7 380803.0 3748791.0 6.0 12.0 0.0 0.0 0
1 380803.0 3748791.0 380770.7 3748743.8 6.0 12.0 0.0 0.0 0
1 380770.7 3748743.8 380759.7 3748705.0 6.0 12.0 0.0 0.0 0
1 380759.7 3748705.0 380757.1 3748680.5 6.0 12.0 0.0 0.0 0
1 380757.1 3748680.5 380764.3 3748637.2 6.0 12.0 0.0 0.0 0
1 380764.3 3748637.2 380802.4 3748511.1 6.0 12.0 0.0 0.0 0

311112035 PP PM

2820.0 2670.0 150.0 3390.0

2831.0 2831.0 559.0 3010.0

2610.0 400.0 2580.0 2580.0

1570.0 1290.0 280.0 1220.0

1220.0 1170.0 760.0 410.0

1380.0 1380.0 108.0 108.0

108.0 108.0 108.0 108.0

108.0 136.0 136.0 136.0

136.0 136.0 136.0 136.0

0.44 0.86 0.98 0.73

0.44 0.44 0.44 0.44

0.96 0.97 0.58 0.44

0.47 0.98 0.97 0.97

0.47 0.47 0.93 0.97

0.98 0.47 0.47 0.47

0.47 0.47 0.47 0.47

0.47 0.47 0.47 0.47

0.47 0.47 0.47 0.47

0.0 1.0 4 1000.0 5.0 0.0 9.9

** BREEZE

** PROJECTN 0 104 7 -177 0 0.9996 500000 0

** MAPLAYER \\ENNYCCIFS01\DISCIPLINES\PE\ANV\PROJECTS\CALIFORNIA\CSUDH\CALINE4\ARTESIA_VERMONT_BASEMAP.JPG BASEMAP 3

UNKNOWN UNKNOWN 1 0 0 0 0 0 0 0 0 0 0 0 0 0 1 380092.77 381237.25 3748457.01 3749141.37

** OUTFILE \\ennyccifs01\disciplines\PE\ANV\Projects\California\CSUDH\CALINE4\Artesia_Vermont_2035_PP_PM.lst

** RAWFILE

Avalon and Victoria
1Carbon Monoxide
108.0 28.0 0.0 0.0 44 20 1.0 1 1 0.0

382861.0 3748140.4 1.8
382836.0 3748138.8 1.8
382811.0 3748137.5 1.8
382786.0 3748136.2 1.8
382761.0 3748135.5 1.8
382736.0 3748135.0 1.8
382861.8 3748165.4 1.8
382861.8 3748190.4 1.8
382862.2 3748215.4 1.8
382862.2 3748240.4 1.8
382862.9 3748265.4 1.8
382905.2 3748142.8 1.8
382930.2 3748142.8 1.8
382955.2 3748143.9 1.8
382980.2 3748144.2 2.8
383005.2 3748144.8 3.8
383030.2 3748144.8 4.8
382903.8 3748167.8 1.8
382903.8 3748192.8 1.8

382903.6 3748217.8 2.8
382903.3 3748242.8 3.8
382902.9 3748267.8 4.8
382906.9 3748114.2 1.8
382931.9 3748115.8 1.8
382956.9 3748116.4 1.8
382981.9 3748117.5 2.8
383006.9 3748118.2 3.8
383031.9 3748118.5 4.8
382906.9 3748089.2 1.8
382906.9 3748064.2 1.8
382906.9 3748039.2 2.8
382906.9 3748014.2 3.8
382906.9 3747989.2 4.8
382861.8 3748111.4 1.8
382836.8 3748110.2 1.8
382811.8 3748109.0 1.8
382786.8 3748108.2 2.8
382761.8 3748106.8 3.8
382736.8 3748107.7 4.8
382711.8 3748107.0 5.8
382862.4 3748086.4 1.8
382862.4 3748061.4 1.8
382862.6 3748036.4 2.8
382862.6 3748011.4 3.8

EBA

EBT

EBL

EBD1

EBD2

WBA

WBT

WBL

WBD1

WBD2

NBA

NBT

NBL

NBD1

NBD2

SBA

SBT

SBL

SBD1

SBD2

1 382758.2 3748114.8 382585.5 3748110.2 0.0 12.0 0.0 0.0 0 1
1 382884.5 3748120.5 382758.2 3748114.8 0.0 15.0 0.0 0.0 0 1
1 382884.6 3748130.1 382758.2 3748118.6 0.0 9.0 0.0 0.0 0 1
1 382884.9 3748120.3 383033.4 3748125.5 0.0 12.0 0.0 0.0 0 1
1 383032.4 3748125.5 383199.9 3748131.3 0.0 12.0 0.0 0.0 0 1
1 383032.2 3748137.0 383198.8 3748143.1 0.0 12.0 0.0 0.0 0 1
1 382886.1 3748134.1 383032.2 3748137.0 0.0 15.0 0.0 0.0 0 1
1 382886.1 3748129.4 383032.2 3748138.6 0.0 9.0 0.0 0.0 0 1
1 382886.0 3748134.1 382757.8 3748128.6 0.0 12.0 0.0 0.0 0 1
1 382757.8 3748129.3 382598.6 3748123.7 0.0 12.0 0.0 0.0 0 1
1 382896.3 3747989.1 382898.1 3747839.1 0.0 15.0 0.0 0.0 0 1
1 382897.0 3748128.6 382896.7 3747988.7 0.0 18.0 0.0 0.0 0 1
1 382885.6 3748129.6 382891.6 3747988.7 0.0 9.0 0.0 0.0 0 1
1 382896.7 3748128.9 382895.3 3748274.7 0.0 15.0 0.0 0.0 0 1
1 382894.9 3748274.7 382895.0 3748425.0 0.0 15.0 0.0 0.0 0 1
1 382871.8 3748275.0 382871.8 3748425.0 0.0 15.0 0.0 0.0 0 1
1 382869.7 3748127.2 382871.5 3748275.0 0.0 15.0 0.0 0.0 0 1
1 382885.3 3748129.6 382874.9 3748275.0 0.0 12.0 0.0 0.0 0 1
1 382870.4 3748127.2 382870.8 3747990.1 0.0 15.0 0.0 0.0 0 1
1 382871.1 3747990.1 382870.8 3747840.9 0.0 15.0 0.0 0.0 0 1

311112025 NP AM

Avalon and Victoria
1Carbon Monoxide
108.0 28.0 0.0 0.0 44 20 1.0 1 1 0.0

382861.0 3748140.4 1.8
382836.0 3748138.8 1.8
382811.0 3748137.5 1.8
382786.0 3748136.2 1.8
382761.0 3748135.5 1.8
382736.0 3748135.0 1.8
382861.8 3748165.4 1.8
382861.8 3748190.4 1.8
382862.2 3748215.4 1.8
382862.2 3748240.4 1.8
382862.9 3748265.4 1.8
382905.2 3748142.8 1.8
382930.2 3748142.8 1.8
382955.2 3748143.9 1.8
382980.2 3748144.2 2.8
383005.2 3748144.8 3.8
383030.2 3748144.8 4.8
382903.8 3748167.8 1.8
382903.8 3748192.8 1.8

382903.6 3748217.8 2.8
382903.3 3748242.8 3.8
382902.9 3748267.8 4.8
382906.9 3748114.2 1.8
382931.9 3748115.8 1.8
382956.9 3748116.4 1.8
382981.9 3748117.5 2.8
383006.9 3748118.2 3.8
383031.9 3748118.5 4.8
382906.9 3748089.2 1.8
382906.9 3748064.2 1.8
382906.9 3748039.2 2.8
382906.9 3748014.2 3.8
382906.9 3747989.2 4.8
382861.8 3748111.4 1.8
382836.8 3748110.2 1.8
382811.8 3748109.0 1.8
382786.8 3748108.2 2.8
382761.8 3748106.8 3.8
382736.8 3748107.7 4.8
382711.8 3748107.0 5.8
382862.4 3748086.4 1.8
382862.4 3748061.4 1.8
382862.6 3748036.4 2.8
382862.6 3748011.4 3.8

EBA
EBT
EBL
EBD1
EBD2
WBA
WBT
WBL
WBD1
WBD2
NBA
NBT
NBL
NBD1
NBD2
SBA
SBT
SBL
SBD1
SBD2

1 382758.2 3748114.8 382585.5 3748110.2 0.0 12.0 0.0 0.0 0 1
1 382884.5 3748120.5 382758.2 3748114.8 0.0 15.0 0.0 0.0 0 1
1 382884.6 3748130.1 382758.2 3748118.6 0.0 9.0 0.0 0.0 0 1
1 382884.9 3748120.3 383033.4 3748125.5 0.0 12.0 0.0 0.0 0 1
1 383032.4 3748125.5 383199.9 3748131.3 0.0 12.0 0.0 0.0 0 1
1 383032.2 3748137.0 383198.8 3748143.1 0.0 12.0 0.0 0.0 0 1
1 382886.1 3748134.1 383032.2 3748137.0 0.0 15.0 0.0 0.0 0 1
1 382886.1 3748129.4 383032.2 3748138.6 0.0 9.0 0.0 0.0 0 1
1 382886.0 3748134.1 382757.8 3748128.6 0.0 12.0 0.0 0.0 0 1
1 382757.8 3748129.3 382598.6 3748123.7 0.0 12.0 0.0 0.0 0 1
1 382896.3 3747989.1 382898.1 3747839.1 0.0 15.0 0.0 0.0 0 1
1 382897.0 3748128.6 382896.7 3747988.7 0.0 18.0 0.0 0.0 0 1
1 382885.6 3748129.6 382891.6 3747988.7 0.0 9.0 0.0 0.0 0 1
1 382896.7 3748128.9 382895.3 3748274.7 0.0 15.0 0.0 0.0 0 1
1 382894.9 3748274.7 382895.0 3748425.0 0.0 15.0 0.0 0.0 0 1
1 382871.8 3748275.0 382871.8 3748425.0 0.0 15.0 0.0 0.0 0 1
1 382869.7 3748127.2 382871.5 3748275.0 0.0 15.0 0.0 0.0 0 1
1 382885.3 3748129.6 382874.9 3748275.0 0.0 12.0 0.0 0.0 0 1
1 382870.4 3748127.2 382870.8 3747990.1 0.0 15.0 0.0 0.0 0 1
1 382871.1 3747990.1 382870.8 3747840.9 0.0 15.0 0.0 0.0 0 1

311112025 NP PM

Avalon and Victoria
1Carbon Monoxide
108.0 28.0 0.0 0.0 44 20 1.0 1 1 0.0

382861.0 3748140.4 1.8
382836.0 3748138.8 1.8
382811.0 3748137.5 1.8
382786.0 3748136.2 1.8
382761.0 3748135.5 1.8
382736.0 3748135.0 1.8
382861.8 3748165.4 1.8
382861.8 3748190.4 1.8
382862.2 3748215.4 1.8
382862.2 3748240.4 1.8
382862.9 3748265.4 1.8
382905.2 3748142.8 1.8
382930.2 3748142.8 1.8
382955.2 3748143.9 1.8
382980.2 3748144.2 2.8
383005.2 3748144.8 3.8
383030.2 3748144.8 4.8
382903.8 3748167.8 1.8
382903.8 3748192.8 1.8

382903.6 3748217.8 2.8
382903.3 3748242.8 3.8
382902.9 3748267.8 4.8
382906.9 3748114.2 1.8
382931.9 3748115.8 1.8
382956.9 3748116.4 1.8
382981.9 3748117.5 2.8
383006.9 3748118.2 3.8
383031.9 3748118.5 4.8
382906.9 3748089.2 1.8
382906.9 3748064.2 1.8
382906.9 3748039.2 2.8
382906.9 3748014.2 3.8
382906.9 3747989.2 4.8
382861.8 3748111.4 1.8
382836.8 3748110.2 1.8
382811.8 3748109.0 1.8
382786.8 3748108.2 2.8
382761.8 3748106.8 3.8
382736.8 3748107.7 4.8
382711.8 3748107.0 5.8
382862.4 3748086.4 1.8
382862.4 3748061.4 1.8
382862.6 3748036.4 2.8
382862.6 3748011.4 3.8

EBA

EBT

EBL

EBD1

EBD2

WBA

WBT

WBL

WBD1

WBD2

NBA

NBT

NBL

NBD1

NBD2

SBA

SBT

SBL

SBD1

SBD2

1 382758.2 3748114.8 382585.5 3748110.2 0.0 12.0 0.0 0.0 0 1
1 382884.5 3748120.5 382758.2 3748114.8 0.0 15.0 0.0 0.0 0 1
1 382884.6 3748130.1 382758.2 3748118.6 0.0 9.0 0.0 0.0 0 1
1 382884.9 3748120.3 383033.4 3748125.5 0.0 12.0 0.0 0.0 0 1
1 383032.4 3748125.5 383199.9 3748131.3 0.0 12.0 0.0 0.0 0 1
1 383032.2 3748137.0 383198.8 3748143.1 0.0 12.0 0.0 0.0 0 1
1 382886.1 3748134.1 383032.2 3748137.0 0.0 15.0 0.0 0.0 0 1
1 382886.1 3748129.4 383032.2 3748138.6 0.0 9.0 0.0 0.0 0 1
1 382886.0 3748134.1 382757.8 3748128.6 0.0 12.0 0.0 0.0 0 1
1 382757.8 3748129.3 382598.6 3748123.7 0.0 12.0 0.0 0.0 0 1
1 382896.3 3747989.1 382898.1 3747839.1 0.0 15.0 0.0 0.0 0 1
1 382897.0 3748128.6 382896.7 3747988.7 0.0 18.0 0.0 0.0 0 1
1 382885.6 3748129.6 382891.6 3747988.7 0.0 9.0 0.0 0.0 0 1
1 382896.7 3748128.9 382895.3 3748274.7 0.0 15.0 0.0 0.0 0 1
1 382894.9 3748274.7 382895.0 3748425.0 0.0 15.0 0.0 0.0 0 1
1 382871.8 3748275.0 382871.8 3748425.0 0.0 15.0 0.0 0.0 0 1
1 382869.7 3748127.2 382871.5 3748275.0 0.0 15.0 0.0 0.0 0 1
1 382885.3 3748129.6 382874.9 3748275.0 0.0 12.0 0.0 0.0 0 1
1 382870.4 3748127.2 382870.8 3747990.1 0.0 15.0 0.0 0.0 0 1
1 382871.1 3747990.1 382870.8 3747840.9 0.0 15.0 0.0 0.0 0 1

311112025 PP AM

Avalon and Victoria
1Carbon Monoxide
108.0 28.0 0.0 0.0 44 20 1.0 1 1 0.0

382861.0 3748140.4 1.8
382836.0 3748138.8 1.8
382811.0 3748137.5 1.8
382786.0 3748136.2 1.8
382761.0 3748135.5 1.8
382736.0 3748135.0 1.8
382861.8 3748165.4 1.8
382861.8 3748190.4 1.8
382862.2 3748215.4 1.8
382862.2 3748240.4 1.8
382862.9 3748265.4 1.8
382905.2 3748142.8 1.8
382930.2 3748142.8 1.8
382955.2 3748143.9 1.8
382980.2 3748144.2 2.8
383005.2 3748144.8 3.8
383030.2 3748144.8 4.8
382903.8 3748167.8 1.8
382903.8 3748192.8 1.8

382903.6 3748217.8 2.8
382903.3 3748242.8 3.8
382902.9 3748267.8 4.8
382906.9 3748114.2 1.8
382931.9 3748115.8 1.8
382956.9 3748116.4 1.8
382981.9 3748117.5 2.8
383006.9 3748118.2 3.8
383031.9 3748118.5 4.8
382906.9 3748089.2 1.8
382906.9 3748064.2 1.8
382906.9 3748039.2 2.8
382906.9 3748014.2 3.8
382906.9 3747989.2 4.8
382861.8 3748111.4 1.8
382836.8 3748110.2 1.8
382811.8 3748109.0 1.8
382786.8 3748108.2 2.8
382761.8 3748106.8 3.8
382736.8 3748107.7 4.8
382711.8 3748107.0 5.8
382862.4 3748086.4 1.8
382862.4 3748061.4 1.8
382862.6 3748036.4 2.8
382862.6 3748011.4 3.8

EBA

EBT

EBL

EBD1

EBD2

WBA

WBT

WBL

WBD1

WBD2

NBA

NBT

NBL

NBD1

NBD2

SBA

SBT

SBL

SBD1

SBD2

1 382758.2 3748114.8 382585.5 3748110.2 0.0 12.0 0.0 0.0 0 1
1 382884.5 3748120.5 382758.2 3748114.8 0.0 15.0 0.0 0.0 0 1
1 382884.6 3748130.1 382758.2 3748118.6 0.0 9.0 0.0 0.0 0 1
1 382884.9 3748120.3 383033.4 3748125.5 0.0 12.0 0.0 0.0 0 1
1 383032.4 3748125.5 383199.9 3748131.3 0.0 12.0 0.0 0.0 0 1
1 383032.2 3748137.0 383198.8 3748143.1 0.0 12.0 0.0 0.0 0 1
1 382886.1 3748134.1 383032.2 3748137.0 0.0 15.0 0.0 0.0 0 1
1 382886.1 3748129.4 383032.2 3748138.6 0.0 9.0 0.0 0.0 0 1
1 382886.0 3748134.1 382757.8 3748128.6 0.0 12.0 0.0 0.0 0 1
1 382757.8 3748129.3 382598.6 3748123.7 0.0 12.0 0.0 0.0 0 1
1 382896.3 3747989.1 382898.1 3747839.1 0.0 15.0 0.0 0.0 0 1
1 382897.0 3748128.6 382896.7 3747988.7 0.0 18.0 0.0 0.0 0 1
1 382885.6 3748129.6 382891.6 3747988.7 0.0 9.0 0.0 0.0 0 1
1 382896.7 3748128.9 382895.3 3748274.7 0.0 15.0 0.0 0.0 0 1
1 382894.9 3748274.7 382895.0 3748425.0 0.0 15.0 0.0 0.0 0 1
1 382871.8 3748275.0 382871.8 3748425.0 0.0 15.0 0.0 0.0 0 1
1 382869.7 3748127.2 382871.5 3748275.0 0.0 15.0 0.0 0.0 0 1
1 382885.3 3748129.6 382874.9 3748275.0 0.0 12.0 0.0 0.0 0 1
1 382870.4 3748127.2 382870.8 3747990.1 0.0 15.0 0.0 0.0 0 1
1 382871.1 3747990.1 382870.8 3747840.9 0.0 15.0 0.0 0.0 0 1

311112025 PP PM

1700.0 1570.0 130.0 1920.0
1920.0 1890.0 1710.0 180.0
1700.0 1700.0 1300.0 1060.0
240.0 1330.0 1330.0 1550.0
1190.0 360.0 1490.0 1490.0
0.7 1.38 1.43 1.43
0.7 0.7 1.43 1.41
1.43 0.7 0.7 1.27
1.41 0.87 0.7 0.7
1.31 1.41 0.92 0.7
0.0 1.0 4 1000.0 5.0 0.0 9.9
** BREEZE
** PROJECTN 0 104 7 -177 0 0.9996 500000 0
** MAPLAYER \\\ENNYCCIFS01\DISCIPLINES\P&EVAN\PROJECTS\CALIFORNIA\CSUDH\CALINE4\AVALON_VICTORIA_BASEMAP.JPG BASEMAP 3
UNKNOWN UNKNOWN 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 382627.18 383202.7 3747949.7 3748294.67
** OUTFILE \\\ennyccifs01\disciplines\P&EVAN\Projects\California\CSUDH\CALINE4\Avalon_Victoria_2025_PP_PM.lst
** RAWFILE

Avalon and Victoria
1Carbon Monoxide
108.0 28.0 0.0 0.0 44 20 1.0 1 1 0.0

382861.0 3748140.4 1.8
382836.0 3748138.8 1.8
382811.0 3748137.5 1.8
382786.0 3748136.2 1.8
382761.0 3748135.5 1.8
382736.0 3748135.0 1.8
382861.8 3748165.4 1.8
382861.8 3748190.4 1.8
382862.2 3748215.4 1.8
382862.2 3748240.4 1.8
382862.9 3748265.4 1.8
382905.2 3748142.8 1.8
382930.2 3748142.8 1.8
382955.2 3748143.9 1.8
382980.2 3748144.2 2.8
383005.2 3748144.8 3.8
383030.2 3748144.8 4.8
382903.8 3748167.8 1.8
382903.8 3748192.8 1.8

382903.6 3748217.8 2.8
382903.3 3748242.8 3.8
382902.9 3748267.8 4.8
382906.9 3748114.2 1.8
382931.9 3748115.8 1.8
382956.9 3748116.4 1.8
382981.9 3748117.5 2.8
383006.9 3748118.2 3.8
383031.9 3748118.5 4.8
382906.9 3748089.2 1.8
382906.9 3748064.2 1.8
382906.9 3748039.2 2.8
382906.9 3748014.2 3.8
382906.9 3747989.2 4.8
382861.8 3748111.4 1.8
382836.8 3748110.2 1.8
382811.8 3748109.0 1.8
382786.8 3748108.2 2.8
382761.8 3748106.8 3.8
382736.8 3748107.7 4.8
382711.8 3748107.0 5.8
382862.4 3748086.4 1.8
382862.4 3748061.4 1.8
382862.6 3748036.4 2.8
382862.6 3748011.4 3.8

EBA
EBT
EBL
EBD1
EBD2
WBA
WBT
WBL
WBD1
WBD2
NBA
NBT
NBL
NBD1
NBD2
SBA
SBT
SBL
SBD1
SBD2

1 382758.2 3748114.8 382585.5 3748110.2 0.0 12.0 0.0 0.0 0 1
1 382884.5 3748120.5 382758.2 3748114.8 0.0 15.0 0.0 0.0 0 1
1 382884.6 3748130.1 382758.2 3748118.6 0.0 9.0 0.0 0.0 0 1
1 382884.9 3748120.3 383033.4 3748125.5 0.0 12.0 0.0 0.0 0 1
1 383032.4 3748125.5 383199.9 3748131.3 0.0 12.0 0.0 0.0 0 1
1 383032.2 3748137.0 383198.8 3748143.1 0.0 12.0 0.0 0.0 0 1
1 382886.1 3748134.1 383032.2 3748137.0 0.0 15.0 0.0 0.0 0 1
1 382886.1 3748129.4 383032.2 3748138.6 0.0 9.0 0.0 0.0 0 1
1 382886.0 3748134.1 382757.8 3748128.6 0.0 12.0 0.0 0.0 0 1
1 382757.8 3748129.3 382598.6 3748123.7 0.0 12.0 0.0 0.0 0 1
1 382896.3 3747989.1 382898.1 3747839.1 0.0 15.0 0.0 0.0 0 1
1 382897.0 3748128.6 382896.7 3747988.7 0.0 18.0 0.0 0.0 0 1
1 382885.6 3748129.6 382891.6 3747988.7 0.0 9.0 0.0 0.0 0 1
1 382896.7 3748128.9 382895.3 3748274.7 0.0 15.0 0.0 0.0 0 1
1 382894.9 3748274.7 382895.0 3748425.0 0.0 15.0 0.0 0.0 0 1
1 382871.8 3748275.0 382871.8 3748425.0 0.0 15.0 0.0 0.0 0 1
1 382869.7 3748127.2 382871.5 3748275.0 0.0 15.0 0.0 0.0 0 1
1 382885.3 3748129.6 382874.9 3748275.0 0.0 12.0 0.0 0.0 0 1
1 382870.4 3748127.2 382870.8 3747990.1 0.0 15.0 0.0 0.0 0 1
1 382871.1 3747990.1 382870.8 3747840.9 0.0 15.0 0.0 0.0 0 1

311112035 NP AM

Avalon and Victoria
1Carbon Monoxide
108.0 28.0 0.0 0.0 44 20 1.0 1 1 0.0

382861.0 3748140.4 1.8
382836.0 3748138.8 1.8
382811.0 3748137.5 1.8
382786.0 3748136.2 1.8
382761.0 3748135.5 1.8
382736.0 3748135.0 1.8
382861.8 3748165.4 1.8
382861.8 3748190.4 1.8
382862.2 3748215.4 1.8
382862.2 3748240.4 1.8
382862.9 3748265.4 1.8
382905.2 3748142.8 1.8
382930.2 3748142.8 1.8
382955.2 3748143.9 1.8
382980.2 3748144.2 2.8
383005.2 3748144.8 3.8
383030.2 3748144.8 4.8
382903.8 3748167.8 1.8
382903.8 3748192.8 1.8

382903.6 3748217.8 2.8
382903.3 3748242.8 3.8
382902.9 3748267.8 4.8
382906.9 3748114.2 1.8
382931.9 3748115.8 1.8
382956.9 3748116.4 1.8
382981.9 3748117.5 2.8
383006.9 3748118.2 3.8
383031.9 3748118.5 4.8
382906.9 3748089.2 1.8
382906.9 3748064.2 1.8
382906.9 3748039.2 2.8
382906.9 3748014.2 3.8
382906.9 3747989.2 4.8
382861.8 3748111.4 1.8
382836.8 3748110.2 1.8
382811.8 3748109.0 1.8
382786.8 3748108.2 2.8
382761.8 3748106.8 3.8
382736.8 3748107.7 4.8
382711.8 3748107.0 5.8
382862.4 3748086.4 1.8
382862.4 3748061.4 1.8
382862.6 3748036.4 2.8
382862.6 3748011.4 3.8

EBA
EBT
EBL
EBD1
EBD2
WBA
WBT
WBL
WBD1
WBD2
NBA
NBT
NBL
NBD1
NBD2
SBA
SBT
SBL
SBD1
SBD2

1 382758.2 3748114.8 382585.5 3748110.2 0.0 12.0 0.0 0.0 0 1
1 382884.5 3748120.5 382758.2 3748114.8 0.0 15.0 0.0 0.0 0 1
1 382884.6 3748130.1 382758.2 3748118.6 0.0 9.0 0.0 0.0 0 1
1 382884.9 3748120.3 383033.4 3748125.5 0.0 12.0 0.0 0.0 0 1
1 383032.4 3748125.5 383199.9 3748131.3 0.0 12.0 0.0 0.0 0 1
1 383032.2 3748137.0 383198.8 3748143.1 0.0 12.0 0.0 0.0 0 1
1 382886.1 3748134.1 383032.2 3748137.0 0.0 15.0 0.0 0.0 0 1
1 382886.1 3748129.4 383032.2 3748138.6 0.0 9.0 0.0 0.0 0 1
1 382886.0 3748134.1 382757.8 3748128.6 0.0 12.0 0.0 0.0 0 1
1 382757.8 3748129.3 382598.6 3748123.7 0.0 12.0 0.0 0.0 0 1
1 382896.3 3747989.1 382898.1 3747839.1 0.0 15.0 0.0 0.0 0 1
1 382897.0 3748128.6 382896.7 3747988.7 0.0 18.0 0.0 0.0 0 1
1 382885.6 3748129.6 382891.6 3747988.7 0.0 9.0 0.0 0.0 0 1
1 382896.7 3748128.9 382895.3 3748274.7 0.0 15.0 0.0 0.0 0 1
1 382894.9 3748274.7 382895.0 3748425.0 0.0 15.0 0.0 0.0 0 1
1 382871.8 3748275.0 382871.8 3748425.0 0.0 15.0 0.0 0.0 0 1
1 382869.7 3748127.2 382871.5 3748275.0 0.0 15.0 0.0 0.0 0 1
1 382885.3 3748129.6 382874.9 3748275.0 0.0 12.0 0.0 0.0 0 1
1 382870.4 3748127.2 382870.8 3747990.1 0.0 15.0 0.0 0.0 0 1
1 382871.1 3747990.1 382870.8 3747840.9 0.0 15.0 0.0 0.0 0 1

311112035 NP PM

1350.0 1220.0 130.0 1550.0
1550.0 1470.0 1300.0 170.0
1270.0 1270.0 1260.0 1050.0
210.0 1300.0 1300.0 1520.0
1180.0 340.0 1480.0 1480.0
0.47 1.31 1.43 1.37
0.47 0.47 0.9 0.97
0.71 0.47 0.47 0.87
0.97 0.59 0.47 0.47
1.31 0.97 0.62 0.47
0.0 1.0 4 1000.0 5.0 0.0 9.9
** BREEZE
** PROJECTN 0 104 7 -177 0 0.9996 500000 0
** MAPLAYER \\\ENNYCCIFS01\DISCIPLINES\P&EVAN\PROJECTS\CALIFORNIA\CSUDH\CALINE4\AVALON_VICTORIA_BASEMAP.JPG BASEMAP 3
UNKNOWN UNKNOWN 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 382627.18 383202.7 3747949.7 3748294.67
** OUTFILE \\\ennyccifs01\disciplines\P&EVAN\Projects\California\CSUDH\CALINE4\Avalon_Victoria_2035_NP_PM.lst
** RAWFILE

Avalon and Victoria
1Carbon Monoxide
108.0 28.0 0.0 0.0 44 20 1.0 1 1 0.0

382861.0 3748140.4 1.8
382836.0 3748138.8 1.8
382811.0 3748137.5 1.8
382786.0 3748136.2 1.8
382761.0 3748135.5 1.8
382736.0 3748135.0 1.8
382861.8 3748165.4 1.8
382861.8 3748190.4 1.8
382862.2 3748215.4 1.8
382862.2 3748240.4 1.8
382862.9 3748265.4 1.8
382905.2 3748142.8 1.8
382930.2 3748142.8 1.8
382955.2 3748143.9 1.8
382980.2 3748144.2 2.8
383005.2 3748144.8 3.8
383030.2 3748144.8 4.8
382903.8 3748167.8 1.8
382903.8 3748192.8 1.8

382903.6 3748217.8 2.8
382903.3 3748242.8 3.8
382902.9 3748267.8 4.8
382906.9 3748114.2 1.8
382931.9 3748115.8 1.8
382956.9 3748116.4 1.8
382981.9 3748117.5 2.8
383006.9 3748118.2 3.8
383031.9 3748118.5 4.8
382906.9 3748089.2 1.8
382906.9 3748064.2 1.8
382906.9 3748039.2 2.8
382906.9 3748014.2 3.8
382906.9 3747989.2 4.8
382861.8 3748111.4 1.8
382836.8 3748110.2 1.8
382811.8 3748109.0 1.8
382786.8 3748108.2 2.8
382761.8 3748106.8 3.8
382736.8 3748107.7 4.8
382711.8 3748107.0 5.8
382862.4 3748086.4 1.8
382862.4 3748061.4 1.8
382862.6 3748036.4 2.8
382862.6 3748011.4 3.8

EBA

EBT

EBL

EBD1

EBD2

WBA

WBT

WBL

WBD1

WBD2

NBA

NBT

NBL

NBD1

NBD2

SBA

SBT

SBL

SBD1

SBD2

1 382758.2 3748114.8 382585.5 3748110.2 0.0 12.0 0.0 0.0 0 1
1 382884.5 3748120.5 382758.2 3748114.8 0.0 15.0 0.0 0.0 0 1
1 382884.6 3748130.1 382758.2 3748118.6 0.0 9.0 0.0 0.0 0 1
1 382884.9 3748120.3 383033.4 3748125.5 0.0 12.0 0.0 0.0 0 1
1 383032.4 3748125.5 383199.9 3748131.3 0.0 12.0 0.0 0.0 0 1
1 383032.2 3748137.0 383198.8 3748143.1 0.0 12.0 0.0 0.0 0 1
1 382886.1 3748134.1 383032.2 3748137.0 0.0 15.0 0.0 0.0 0 1
1 382886.1 3748129.4 383032.2 3748138.6 0.0 9.0 0.0 0.0 0 1
1 382886.0 3748134.1 382757.8 3748128.6 0.0 12.0 0.0 0.0 0 1
1 382757.8 3748129.3 382598.6 3748123.7 0.0 12.0 0.0 0.0 0 1
1 382896.3 3747989.1 382898.1 3747839.1 0.0 15.0 0.0 0.0 0 1
1 382897.0 3748128.6 382896.7 3747988.7 0.0 18.0 0.0 0.0 0 1
1 382885.6 3748129.6 382891.6 3747988.7 0.0 9.0 0.0 0.0 0 1
1 382896.7 3748128.9 382895.3 3748274.7 0.0 15.0 0.0 0.0 0 1
1 382894.9 3748274.7 382895.0 3748425.0 0.0 15.0 0.0 0.0 0 1
1 382871.8 3748275.0 382871.8 3748425.0 0.0 15.0 0.0 0.0 0 1
1 382869.7 3748127.2 382871.5 3748275.0 0.0 15.0 0.0 0.0 0 1
1 382885.3 3748129.6 382874.9 3748275.0 0.0 12.0 0.0 0.0 0 1
1 382870.4 3748127.2 382870.8 3747990.1 0.0 15.0 0.0 0.0 0 1
1 382871.1 3747990.1 382870.8 3747840.9 0.0 15.0 0.0 0.0 0 1

311112035 PP AM

1640.0 1560.0 80.0 2160.0
2160.0 1350.0 1270.0 80.0
1440.0 1440.0 1100.0 830.0
270.0 1090.0 1090.0 1520.0
870.0 650.0 950.0 950.0
0.47 0.94 0.98 0.98
0.47 0.47 0.9 0.98
0.84 0.47 0.47 0.85
0.98 0.59 0.47 0.47
0.87 0.98 0.57 0.47
0.0 1.0 4 1000.0 5.0 0.0 9.9

** BREEZE

** PROJECTN 0 104 7 -177 0 0.9996 500000 0

** MAPLAYER \\ennyccifs01\disciplines\P&EVANV\Projects\California\CSUDH\CALINE4\Avalon_Victoria_zoomout.jpg BASEMAP 3 Unknown

Unknown 1 0 0 0 0 0 0 0 0 0 16777215 0 0 1 1 382213.13 383722.03 3747690 3748589.33

** OUTFILE \\ennyccifs01\disciplines\P&EVANV\Projects\California\CSUDH\CALINE4\Avalon_Victoria_2035_PP_AM.lst

** RAWFILE

Avalon and Victoria
1Carbon Monoxide
108.0 28.0 0.0 0.0 44 20 1.0 1 1 0.0

382861.0 3748140.4 1.8
382836.0 3748138.8 1.8
382811.0 3748137.5 1.8
382786.0 3748136.2 1.8
382761.0 3748135.5 1.8
382736.0 3748135.0 1.8
382861.8 3748165.4 1.8
382861.8 3748190.4 1.8
382862.2 3748215.4 1.8
382862.2 3748240.4 1.8
382862.9 3748265.4 1.8
382905.2 3748142.8 1.8
382930.2 3748142.8 1.8
382955.2 3748143.9 1.8
382980.2 3748144.2 2.8
383005.2 3748144.8 3.8
383030.2 3748144.8 4.8
382903.8 3748167.8 1.8
382903.8 3748192.8 1.8

382903.6 3748217.8 2.8
382903.3 3748242.8 3.8
382902.9 3748267.8 4.8
382906.9 3748114.2 1.8
382931.9 3748115.8 1.8
382956.9 3748116.4 1.8
382981.9 3748117.5 2.8
383006.9 3748118.2 3.8
383031.9 3748118.5 4.8
382906.9 3748089.2 1.8
382906.9 3748064.2 1.8
382906.9 3748039.2 2.8
382906.9 3748014.2 3.8
382906.9 3747989.2 4.8
382861.8 3748111.4 1.8
382836.8 3748110.2 1.8
382811.8 3748109.0 1.8
382786.8 3748108.2 2.8
382761.8 3748106.8 3.8
382736.8 3748107.7 4.8
382711.8 3748107.0 5.8
382862.4 3748086.4 1.8
382862.4 3748061.4 1.8
382862.6 3748036.4 2.8
382862.6 3748011.4 3.8

EBA

EBT

EBL

EBD1

EBD2

WBA

WBT

WBL

WBD1

WBD2

NBA

NBT

NBL

NBD1

NBD2

SBA

SBT

SBL

SBD1

SBD2

1 382758.2 3748114.8 382585.5 3748110.2 0.0 12.0 0.0 0.0 0 1
1 382884.5 3748120.5 382758.2 3748114.8 0.0 15.0 0.0 0.0 0 1
1 382884.6 3748130.1 382758.2 3748118.6 0.0 9.0 0.0 0.0 0 1
1 382884.9 3748120.3 383033.4 3748125.5 0.0 12.0 0.0 0.0 0 1
1 383032.4 3748125.5 383199.9 3748131.3 0.0 12.0 0.0 0.0 0 1
1 383032.2 3748137.0 383198.8 3748143.1 0.0 12.0 0.0 0.0 0 1
1 382886.1 3748134.1 383032.2 3748137.0 0.0 15.0 0.0 0.0 0 1
1 382886.1 3748129.4 383032.2 3748138.6 0.0 9.0 0.0 0.0 0 1
1 382886.0 3748134.1 382757.8 3748128.6 0.0 12.0 0.0 0.0 0 1
1 382757.8 3748129.3 382598.6 3748123.7 0.0 12.0 0.0 0.0 0 1
1 382896.3 3747989.1 382898.1 3747839.1 0.0 15.0 0.0 0.0 0 1
1 382897.0 3748128.6 382896.7 3747988.7 0.0 18.0 0.0 0.0 0 1
1 382885.6 3748129.6 382891.6 3747988.7 0.0 9.0 0.0 0.0 0 1
1 382896.7 3748128.9 382895.3 3748274.7 0.0 15.0 0.0 0.0 0 1
1 382894.9 3748274.7 382895.0 3748425.0 0.0 15.0 0.0 0.0 0 1
1 382871.8 3748275.0 382871.8 3748425.0 0.0 15.0 0.0 0.0 0 1
1 382869.7 3748127.2 382871.5 3748275.0 0.0 15.0 0.0 0.0 0 1
1 382885.3 3748129.6 382874.9 3748275.0 0.0 12.0 0.0 0.0 0 1
1 382870.4 3748127.2 382870.8 3747990.1 0.0 15.0 0.0 0.0 0 1
1 382871.1 3747990.1 382870.8 3747840.9 0.0 15.0 0.0 0.0 0 1

311112035 PP PM

Attachment 4
CALINE4 Output Files

3.0.3 PC (32 BIT) VERSION
(C) COPYRIGHT 2009, TRINITY CONSULTANTS

Run Began on 4/02/2018 at 15:31:50

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB:
RUN: (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 1.0 M/S Z0= 108. CM ALT= 0. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 4 (D) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 5. DEGREES TEMP= 9.9 DEGREE (C)

II. LINK VARIABLES

LINK	*	LINK COORDINATES (M)	*	EF	H	W
DESCRIPTION	*	X1	Y1	X2	Y2	* TYPE VPH (G/MI) (M) (M)
1. EBA	*	380451	3748788	380262	3748793	* AG 1870 0.65 0.0 18.0
2. EBT	*	380605	3748788	380451	3748788	* AG 1770 1.31 0.0 21.0
3. EBL	*	380604	3748801	380451	3748795	* AG 100 1.43 0.0 9.0
4. EBD	*	380604	3748788	380689	3748786	* AG 2270 1.05 0.0 18.0
5. EBD MAIN	*	380689	3748786	380758	3748782	* AG 1895 0.65 0.0 15.0
6. EBD MAIN	*	380758	3748782	380903	3748757	* AG 1895 0.65 0.0 15.0
7. EBD RAMP	*	380688	3748787	380895	3748713	* AG 375 0.65 0.0 12.0
8. WBA	*	380759	3748809	380913	3748810	* AG 3110 0.65 0.0 18.0
9. WBT	*	380604	3748808	380760	3748809	* AG 2520 1.29 0.0 18.0
10. WBL	*	380604	3748801	380761	3748799	* AG 590 1.43 0.0 12.0
11. WBD1	*	380602	3748809	380451	3748813	* AG 2550 0.86 0.0 18.0
12. WBD2	*	380451	3748813	380264	3748818	* AG 2550 0.65 0.0 18.0
13. NBA	*	380618	3748655	380624	3748509	* AG 900 0.70 0.0 12.0
14. NBT	*	380611	3748799	380617	3748655	* AG 710 1.32 0.0 15.0
15. NBL	*	380603	3748798	380614	3748660	* AG 190 1.43 0.0 12.0
16. NBD1	*	380611	3748800	380602	3748951	* AG 750 1.01 0.0 12.0
17. NBD2	*	380602	3748950	380595	3749099	* AG 750 0.70 0.0 12.0
18. SBA	*	380590	3748949	380587	3749100	* AG 1360 0.70 0.0 12.0
19. SBT	*	380596	3748798	380590	3748949	* AG 930 1.36 0.0 15.0
20. SBL	*	380603	3748798	380593	3748950	* AG 430 1.41 0.0 12.0
21. SBD1	*	380599	3748800	380605	3748654	* AG 1670 1.43 0.0 12.0
22. SBD2	*	380604	3748654	380613	3748509	* AG 1670 0.70 0.0 12.0
23. NB HOV RAMP	*	380813	3748515	380775	3748637	* AG 75 0.70 6.0 12.0
24. NB HOV RAMP	*	380775	3748637	380766	3748677	* AG 75 0.70 6.0 12.0
25. NB HOV RAMP	*	380766	3748677	380774	3748723	* AG 75 0.70 6.0 12.0
26. NB HOV RAMP	*	380774	3748723	380780	3748743	* AG 75 0.70 6.0 12.0
27. NB HOV RAMP	*	380780	3748743	380810	3748785	* AG 75 0.70 6.0 12.0
28. NB HOV RAMP	*	380810	3748785	380839	3748809	* AG 75 0.70 6.0 12.0
29. NB HOV RAMP	*	380839	3748809	380920	3748842	* AG 75 0.70 6.0 12.0
30. SB HOV RAMP	*	380918	3748853	380845	3748822	* AG 93 0.70 6.0 12.0
31. SB HOV RAMP	*	380845	3748822	380803	3748791	* AG 93 0.70 6.0 12.0
32. SB HOV RAMP	*	380803	3748791	380770	3748743	* AG 93 0.70 6.0 12.0
33. SB HOV RAMP	*	380770	3748743	380759	3748705	* AG 93 0.70 6.0 12.0
34. SB HOV RAMP	*	380759	3748705	380757	3748680	* AG 93 0.70 6.0 12.0

10.	*	171.	*	0.25	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
11.	*	171.	*	0.24	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
12.	*	188.	*	0.34	*	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
13.	*	257.	*	0.31	*	0.00	0.06	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14.	*	256.	*	0.34	*	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15.	*	259.	*	0.36	*	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16.	*	260.	*	0.38	*	0.00	0.05	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
17.	*	262.	*	0.39	*	0.01	0.05	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
18.	*	186.	*	0.28	*	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
19.	*	184.	*	0.26	*	0.00	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
20.	*	183.	*	0.24	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
21.	*	183.	*	0.23	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
22.	*	183.	*	0.22	*	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23.	*	280.	*	0.32	*	0.00	0.15	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
24.	*	280.	*	0.30	*	0.00	0.09	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00
25.	*	278.	*	0.32	*	0.00	0.07	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00
26.	*	279.	*	0.28	*	0.00	0.05	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00
27.	*	349.	*	0.24	*	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
28.	*	350.	*	0.23	*	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
29.	*	349.	*	0.22	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
30.	*	349.	*	0.22	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
31.	*	75.	*	0.38	*	0.00	0.03	0.00	0.13	0.00	0.00	0.00	0.00	0.01	0.01
32.	*	78.	*	0.33	*	0.00	0.09	0.00	0.08	0.00	0.00	0.00	0.00	0.01	0.01
33.	*	80.	*	0.32	*	0.00	0.12	0.00	0.05	0.00	0.00	0.00	0.00	0.01	0.01
34.	*	81.	*	0.31	*	0.00	0.14	0.00	0.04	0.00	0.00	0.00	0.00	0.01	0.01
35.	*	81.	*	0.31	*	0.00	0.16	0.00	0.02	0.00	0.00	0.00	0.00	0.01	0.01
36.	*	82.	*	0.31	*	0.00	0.17	0.00	0.02	0.00	0.00	0.00	0.00	0.01	0.01
37.	*	11.	*	0.30	*	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38.	*	5.	*	0.34	*	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
39.	*	5.	*	0.34	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
40.	*	4.	*	0.34	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00

RECEPTOR	CONC/LINK (PPM)							
	9	10	11	12	13	14	15	16
1.	*	0.17	0.03	0.04	0.00	0.00	0.00	0.02
2.	*	0.11	0.03	0.09	0.00	0.00	0.00	0.01
3.	*	0.07	0.03	0.13	0.00	0.00	0.00	0.01
4.	*	0.05	0.02	0.15	0.00	0.00	0.00	0.00
5.	*	0.04	0.02	0.17	0.00	0.00	0.00	0.00
6.	*	0.03	0.01	0.17	0.00	0.00	0.00	0.00
7.	*	0.00	0.00	0.03	0.00	0.01	0.02	0.01
8.	*	0.00	0.00	0.02	0.00	0.01	0.02	0.01
9.	*	0.00	0.00	0.01	0.00	0.01	0.02	0.01
10.	*	0.01	0.00	0.01	0.00	0.00	0.02	0.01
11.	*	0.01	0.00	0.01	0.00	0.00	0.02	0.01
12.	*	0.11	0.02	0.00	0.00	0.00	0.06	0.01
13.	*	0.15	0.00	0.05	0.00	0.00	0.00	0.01
14.	*	0.21	0.01	0.01	0.00	0.00	0.00	0.01
15.	*	0.24	0.02	0.01	0.00	0.00	0.00	0.00
16.	*	0.26	0.02	0.01	0.00	0.00	0.00	0.00
17.	*	0.27	0.02	0.01	0.00	0.00	0.00	0.00
18.	*	0.05	0.01	0.00	0.00	0.00	0.04	0.01
19.	*	0.03	0.01	0.00	0.00	0.00	0.03	0.01
20.	*	0.02	0.00	0.00	0.00	0.00	0.02	0.01
21.	*	0.01	0.00	0.00	0.00	0.00	0.01	0.01
22.	*	0.01	0.00	0.01	0.00	0.00	0.01	0.00
23.	*	0.00	0.00	0.02	0.03	0.00	0.03	0.01
24.	*	0.00	0.00	0.03	0.02	0.00	0.02	0.00
25.	*	0.00	0.00	0.02	0.02	0.00	0.01	0.00
26.	*	0.00	0.00	0.03	0.02	0.00	0.01	0.00
27.	*	0.03	0.01	0.00	0.00	0.00	0.06	0.03
28.	*	0.02	0.01	0.00	0.00	0.00	0.07	0.02

3.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
32.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
33.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
34.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
35.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
36.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
37.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
39.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

*CONC/LINK
*(PPM)

RECEPTOR	*	33	34	35	36
1.	*	0.00	0.00	0.00	0.00
2.	*	0.00	0.00	0.00	0.00
3.	*	0.00	0.00	0.00	0.00
4.	*	0.00	0.00	0.00	0.00
5.	*	0.00	0.00	0.00	0.00
6.	*	0.00	0.00	0.00	0.00
7.	*	0.00	0.00	0.00	0.00
8.	*	0.00	0.00	0.00	0.00
9.	*	0.00	0.00	0.00	0.00
10.	*	0.00	0.00	0.00	0.00
11.	*	0.00	0.00	0.00	0.00
12.	*	0.00	0.00	0.00	0.00
13.	*	0.00	0.00	0.00	0.00
14.	*	0.00	0.00	0.00	0.00
15.	*	0.00	0.00	0.00	0.00
16.	*	0.00	0.00	0.00	0.00
17.	*	0.00	0.00	0.00	0.00
18.	*	0.00	0.00	0.00	0.00
19.	*	0.00	0.00	0.00	0.00
20.	*	0.00	0.00	0.00	0.00
21.	*	0.00	0.00	0.00	0.00
22.	*	0.00	0.00	0.00	0.00

23.	*	0.00	0.00	0.00	0.00
24.	*	0.00	0.00	0.00	0.00
25.	*	0.00	0.00	0.00	0.00
26.	*	0.00	0.00	0.00	0.00
27.	*	0.00	0.00	0.00	0.00
28.	*	0.00	0.00	0.00	0.00
29.	*	0.00	0.00	0.00	0.00
30.	*	0.00	0.00	0.00	0.00
31.	*	0.00	0.00	0.00	0.00
32.	*	0.00	0.00	0.00	0.00
33.	*	0.00	0.00	0.00	0.00
34.	*	0.00	0.00	0.00	0.00
35.	*	0.00	0.00	0.00	0.00
36.	*	0.00	0.00	0.00	0.00
37.	*	0.00	0.00	0.00	0.00
38.	*	0.00	0.00	0.00	0.00
39.	*	0.00	0.00	0.00	0.00
40.	*	0.00	0.00	0.00	0.00

1

Run Ended on 4/02/2018 at 15:31:54

3.0.3 PC (32 BIT) VERSION
(C) COPYRIGHT 2009, TRINITY CONSULTANTS

Run Began on 4/03/2018 at 10:30:00

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Vermont Ave & W Artesia
RUN: 2025 NP PM (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 1.0 M/S Z0= 108. CM ALT= 0. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 4 (D) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 5. DEGREES TEMP= 9.9 DEGREE (C)

II. LINK VARIABLES

LINK	*	LINK COORDINATES (M)	*	EF	H	W
DESCRIPTION	*	X1	Y1	X2	Y2	* TYPE VPH (G/MI) (M) (M)
1. EBA	*	380451	3748788	380262	3748793	* AG 2760 0.65 0.0 18.0
2. EBT	*	380605	3748788	380451	3748788	* AG 2610 1.25 0.0 21.0
3. EBL	*	380604	3748801	380451	3748795	* AG 150 1.43 0.0 9.0
4. EBD	*	380604	3748788	380689	3748786	* AG 3310 1.08 0.0 18.0
5. EBD MAIN	*	380689	3748786	380758	3748782	* AG 2764 0.65 0.0 15.0
6. EBD MAIN	*	380758	3748782	380903	3748757	* AG 2764 0.65 0.0 15.0
7. EBD RAMP	*	380688	3748787	380895	3748713	* AG 546 0.65 0.0 12.0
8. WBA	*	380759	3748809	380913	3748810	* AG 2930 0.65 0.0 18.0
9. WBT	*	380604	3748808	380760	3748809	* AG 2540 1.31 0.0 18.0
10. WBL	*	380604	3748801	380761	3748799	* AG 390 1.41 0.0 12.0
11. WBD1	*	380602	3748809	380451	3748813	* AG 2510 0.86 0.0 18.0
12. WBD2	*	380451	3748813	380264	3748818	* AG 2510 0.65 0.0 18.0
13. NBA	*	380618	3748655	380624	3748509	* AG 1520 0.70 0.0 12.0
14. NBT	*	380611	3748799	380617	3748655	* AG 1250 1.43 0.0 15.0
15. NBL	*	380603	3748798	380614	3748660	* AG 270 1.41 0.0 12.0
16. NBD1	*	380611	3748800	380602	3748951	* AG 1190 1.43 0.0 12.0
17. NBD2	*	380602	3748950	380595	3749099	* AG 1190 0.70 0.0 12.0
18. SBA	*	380590	3748949	380587	3749100	* AG 1150 0.70 0.0 12.0
19. SBT	*	380596	3748798	380590	3748949	* AG 750 1.36 0.0 15.0
20. SBL	*	380603	3748798	380593	3748950	* AG 400 1.41 0.0 12.0
21. SBD1	*	380599	3748800	380605	3748654	* AG 1350 1.43 0.0 12.0
22. SBD2	*	380604	3748654	380613	3748509	* AG 1350 0.70 0.0 12.0
23. NB HOV RAMP	*	380813	3748515	380775	3748637	* AG 106 0.70 6.0 12.0
24. NB HOV RAMP	*	380775	3748637	380766	3748677	* AG 106 0.70 6.0 12.0
25. NB HOV RAMP	*	380766	3748677	380774	3748723	* AG 106 0.70 6.0 12.0
26. NB HOV RAMP	*	380774	3748723	380780	3748743	* AG 106 0.70 6.0 12.0
27. NB HOV RAMP	*	380780	3748743	380810	3748785	* AG 106 0.70 6.0 12.0
28. NB HOV RAMP	*	380810	3748785	380839	3748809	* AG 106 0.70 6.0 12.0
29. NB HOV RAMP	*	380839	3748809	380920	3748842	* AG 106 0.70 6.0 12.0
30. SB HOV RAMP	*	380918	3748853	380845	3748822	* AG 133 0.70 6.0 12.0
31. SB HOV RAMP	*	380845	3748822	380803	3748791	* AG 133 0.70 6.0 12.0
32. SB HOV RAMP	*	380803	3748791	380770	3748743	* AG 133 0.70 6.0 12.0
33. SB HOV RAMP	*	380770	3748743	380759	3748705	* AG 133 0.70 6.0 12.0
34. SB HOV RAMP	*	380759	3748705	380757	3748680	* AG 133 0.70 6.0 12.0

35. SB HOV RAMP * 380757 3748680 380764 3748637 * AG 133 0.70 6.0 12.0
 36. SB HOV RAMP * 380764 3748637 380802 3748511 * AG 133 0.70 6.0 12.0

III. RECEPTOR LOCATIONS

RECEPTOR	* X	Y	Z
1.	* 380587	3748820	1.8
2.	* 380562	3748821	1.8
3.	* 380537	3748821	1.8
4.	* 380512	3748822	1.8
5.	* 380487	3748822	1.8
6.	* 380462	3748823	1.8
7.	* 380587	3748845	1.8
8.	* 380585	3748870	1.8
9.	* 380584	3748895	1.8
10.	* 380583	3748920	1.8
11.	* 380582	3748945	1.8
12.	* 380617	3748818	1.8
13.	* 380642	3748818	1.8
14.	* 380667	3748818	1.8
15.	* 380692	3748818	1.8
16.	* 380717	3748818	1.8
17.	* 380742	3748818	1.8
18.	* 380615	3748843	1.8
19.	* 380613	3748868	1.8
20.	* 380612	3748893	1.8
21.	* 380611	3748918	1.8
22.	* 380609	3748943	1.8
23.	* 380621	3748777	1.8
24.	* 380646	3748777	1.8
25.	* 380671	3748777	1.8
26.	* 380696	3748776	1.8
27.	* 380621	3748752	1.8
28.	* 380622	3748727	1.8
29.	* 380624	3748702	1.8
30.	* 380625	3748677	1.8
31.	* 380593	3748776	1.8
32.	* 380568	3748776	1.8
33.	* 380543	3748776	1.8
34.	* 380518	3748776	1.8
35.	* 380493	3748776	1.8
36.	* 380468	3748776	1.8
37.	* 380593	3748751	1.8
38.	* 380595	3748726	1.8
39.	* 380596	3748701	1.8
40.	* 380597	3748676	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	* BRG	* PRED	* CONC	CONC/LINK (PPM)							
	(DEG)	(PPM)	(PPM)	1	2	3	4	5	6	7	8
1.	* 103.	* 0.39	* 0.00	0.00	0.00	0.00	0.01	0.02	0.02	0.00	0.00
2.	* 103.	* 0.34	* 0.00	0.00	0.00	0.00	0.03	0.02	0.02	0.01	0.00
3.	* 101.	* 0.32	* 0.00	0.00	0.00	0.00	0.03	0.02	0.02	0.00	0.00
4.	* 101.	* 0.32	* 0.00	0.00	0.00	0.00	0.04	0.01	0.01	0.01	0.00
5.	* 100.	* 0.32	* 0.00	0.01	0.00	0.00	0.04	0.01	0.01	0.00	0.00
6.	* 99.	* 0.31	* 0.00	0.01	0.00	0.00	0.03	0.01	0.01	0.00	0.00
7.	* 170.	* 0.31	* 0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8.	* 170.	* 0.27	* 0.00	0.03	0.00	0.01	0.00	0.00	0.00	0.00	0.00
9.	* 170.	* 0.25	* 0.00	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.00

10.	*	171.	*	0.26	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
11.	*	171.	*	0.25	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
12.	*	187.	*	0.42	*	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00
13.	*	257.	*	0.34	*	0.00	0.08	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14.	*	257.	*	0.37	*	0.00	0.09	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15.	*	259.	*	0.39	*	0.00	0.08	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16.	*	260.	*	0.40	*	0.00	0.07	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
17.	*	262.	*	0.42	*	0.01	0.06	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
18.	*	185.	*	0.37	*	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
19.	*	183.	*	0.36	*	0.00	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
20.	*	183.	*	0.34	*	0.00	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
21.	*	183.	*	0.33	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
22.	*	182.	*	0.33	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
23.	*	280.	*	0.41	*	0.00	0.20	0.01	0.04	0.00	0.00	0.00	0.00	0.00	0.00
24.	*	280.	*	0.40	*	0.00	0.12	0.01	0.16	0.00	0.00	0.00	0.00	0.00	0.00
25.	*	278.	*	0.42	*	0.00	0.10	0.01	0.22	0.00	0.00	0.00	0.00	0.00	0.00
26.	*	279.	*	0.37	*	0.00	0.06	0.01	0.21	0.00	0.00	0.00	0.00	0.00	0.00
27.	*	350.	*	0.33	*	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00
28.	*	351.	*	0.31	*	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
29.	*	350.	*	0.30	*	0.00	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
30.	*	350.	*	0.30	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
31.	*	76.	*	0.44	*	0.00	0.03	0.00	0.18	0.00	0.00	0.00	0.00	0.01	0.01
32.	*	78.	*	0.39	*	0.00	0.12	0.00	0.11	0.00	0.00	0.00	0.00	0.01	0.01
33.	*	80.	*	0.38	*	0.00	0.17	0.00	0.08	0.00	0.00	0.00	0.00	0.01	0.01
34.	*	81.	*	0.38	*	0.00	0.20	0.00	0.05	0.00	0.00	0.00	0.00	0.01	0.01
35.	*	81.	*	0.38	*	0.00	0.22	0.00	0.03	0.00	0.00	0.00	0.00	0.01	0.01
36.	*	82.	*	0.37	*	0.00	0.23	0.00	0.02	0.00	0.00	0.00	0.00	0.01	0.01
37.	*	13.	*	0.32	*	0.00	0.04	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
38.	*	6.	*	0.34	*	0.00	0.03	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
39.	*	5.	*	0.34	*	0.00	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
40.	*	5.	*	0.34	*	0.00	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00

RECEPTOR	CONC/LINK (PPM)															
	*	9	10	11	12	13	14	15	16							
1.	*	0.17	0.02	0.04	0.00	0.00	0.00	0.00	0.03							
2.	*	0.10	0.02	0.10	0.00	0.00	0.00	0.00	0.02							
3.	*	0.07	0.02	0.13	0.00	0.00	0.00	0.00	0.01							
4.	*	0.04	0.01	0.15	0.00	0.00	0.00	0.00	0.01							
5.	*	0.03	0.01	0.17	0.00	0.00	0.01	0.00	0.01							
6.	*	0.03	0.01	0.17	0.00	0.00	0.01	0.00	0.00							
7.	*	0.00	0.00	0.03	0.00	0.01	0.05	0.02	0.00							
8.	*	0.00	0.00	0.02	0.00	0.01	0.05	0.02	0.00							
9.	*	0.00	0.00	0.01	0.00	0.01	0.05	0.01	0.00							
10.	*	0.01	0.00	0.01	0.00	0.01	0.04	0.01	0.01							
11.	*	0.01	0.00	0.01	0.00	0.01	0.04	0.01	0.02							
12.	*	0.11	0.01	0.00	0.00	0.00	0.11	0.02	0.03							
13.	*	0.15	0.00	0.05	0.00	0.00	0.00	0.00	0.03							
14.	*	0.21	0.01	0.02	0.00	0.00	0.00	0.00	0.02							
15.	*	0.24	0.01	0.01	0.00	0.00	0.00	0.00	0.01							
16.	*	0.26	0.02	0.01	0.00	0.00	0.01	0.00	0.01							
17.	*	0.28	0.02	0.01	0.00	0.00	0.01	0.00	0.00							
18.	*	0.05	0.01	0.00	0.00	0.00	0.07	0.02	0.11							
19.	*	0.03	0.01	0.00	0.00	0.00	0.06	0.02	0.15							
20.	*	0.02	0.00	0.00	0.00	0.00	0.04	0.01	0.16							
21.	*	0.01	0.00	0.00	0.00	0.00	0.03	0.01	0.17							
22.	*	0.01	0.00	0.00	0.00	0.00	0.02	0.01	0.18							
23.	*	0.00	0.00	0.02	0.03	0.00	0.06	0.01	0.00							
24.	*	0.00	0.00	0.03	0.02	0.00	0.03	0.01	0.00							
25.	*	0.00	0.00	0.02	0.02	0.00	0.02	0.00	0.00							
26.	*	0.00	0.00	0.03	0.02	0.00	0.02	0.00	0.00							
27.	*	0.04	0.01	0.00	0.00	0.00	0.10	0.00	0.08							
28.	*	0.02	0.00	0.00	0.00	0.00	0.13	0.00	0.05							

3.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
32.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
33.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
34.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
35.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
36.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
37.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
39.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

*CONC/LINK
*(PPM)

RECEPTOR	*	33	34	35	36
1.	*	0.00	0.00	0.00	0.00
2.	*	0.00	0.00	0.00	0.00
3.	*	0.00	0.00	0.00	0.00
4.	*	0.00	0.00	0.00	0.00
5.	*	0.00	0.00	0.00	0.00
6.	*	0.00	0.00	0.00	0.00
7.	*	0.00	0.00	0.00	0.00
8.	*	0.00	0.00	0.00	0.00
9.	*	0.00	0.00	0.00	0.00
10.	*	0.00	0.00	0.00	0.00
11.	*	0.00	0.00	0.00	0.00
12.	*	0.00	0.00	0.00	0.00
13.	*	0.00	0.00	0.00	0.00
14.	*	0.00	0.00	0.00	0.00
15.	*	0.00	0.00	0.00	0.00
16.	*	0.00	0.00	0.00	0.00
17.	*	0.00	0.00	0.00	0.00
18.	*	0.00	0.00	0.00	0.00
19.	*	0.00	0.00	0.00	0.00
20.	*	0.00	0.00	0.00	0.00
21.	*	0.00	0.00	0.00	0.00
22.	*	0.00	0.00	0.00	0.00

23.	*	0.00	0.00	0.00	0.00
24.	*	0.00	0.00	0.00	0.00
25.	*	0.00	0.00	0.00	0.00
26.	*	0.00	0.00	0.00	0.00
27.	*	0.00	0.00	0.00	0.00
28.	*	0.00	0.00	0.00	0.00
29.	*	0.00	0.00	0.00	0.00
30.	*	0.00	0.00	0.00	0.00
31.	*	0.00	0.00	0.00	0.00
32.	*	0.00	0.00	0.00	0.00
33.	*	0.00	0.00	0.00	0.00
34.	*	0.00	0.00	0.00	0.00
35.	*	0.00	0.00	0.00	0.00
36.	*	0.00	0.00	0.00	0.00
37.	*	0.00	0.00	0.00	0.00
38.	*	0.00	0.00	0.00	0.00
39.	*	0.00	0.00	0.00	0.00
40.	*	0.00	0.00	0.00	0.00

1

Run Ended on 4/03/2018 at 10:30:04

3.0.3 PC (32 BIT) VERSION
(C) COPYRIGHT 2009, TRINITY CONSULTANTS

Run Began on 4/03/2018 at 10:34:41

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Vermont Ave & W Artesia
RUN: 2025 PP AM (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 1.0 M/S Z0= 108. CM ALT= 0. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 4 (D) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 5. DEGREES TEMP= 9.9 DEGREE (C)

II. LINK VARIABLES

LINK	*	LINK COORDINATES (M)	*	EF	H	W
DESCRIPTION	*	X1	Y1	X2	Y2	* TYPE VPH (G/MI) (M) (M)
1. EBA	*	380451	3748788	380262	3748793	* AG 1900 0.65 0.0 18.0
2. EBT	*	380605	3748788	380451	3748788	* AG 1790 1.31 0.0 21.0
3. EBL	*	380604	3748801	380451	3748795	* AG 110 1.43 0.0 9.0
4. EBD	*	380604	3748788	380689	3748786	* AG 2280 1.05 0.0 18.0
5. EBD MAIN	*	380689	3748786	380758	3748782	* AG 1904 0.65 0.0 15.0
6. EBD MAIN	*	380758	3748782	380903	3748757	* AG 1904 0.65 0.0 15.0
7. EBD RAMP	*	380688	3748787	380895	3748713	* AG 376 0.65 0.0 12.0
8. WBA	*	380759	3748809	380913	3748810	* AG 3140 0.65 0.0 18.0
9. WBT	*	380604	3748808	380760	3748809	* AG 2540 1.31 0.0 18.0
10. WBL	*	380604	3748801	380761	3748799	* AG 600 1.36 0.0 12.0
11. WBD1	*	380602	3748809	380451	3748813	* AG 2560 0.86 0.0 18.0
12. WBD2	*	380451	3748813	380264	3748818	* AG 2560 0.65 0.0 18.0
13. NBA	*	380618	3748655	380624	3748509	* AG 900 0.70 0.0 12.0
14. NBT	*	380611	3748799	380617	3748655	* AG 710 1.32 0.0 15.0
15. NBL	*	380603	3748798	380614	3748660	* AG 190 1.43 0.0 12.0
16. NBD1	*	380611	3748800	380602	3748951	* AG 770 1.01 0.0 12.0
17. NBD2	*	380602	3748950	380595	3749099	* AG 770 0.70 0.0 12.0
18. SBA	*	380590	3748949	380587	3749100	* AG 1360 0.70 0.0 12.0
19. SBT	*	380596	3748798	380590	3748949	* AG 930 1.36 0.0 15.0
20. SBL	*	380603	3748798	380593	3748950	* AG 430 1.41 0.0 12.0
21. SBD1	*	380599	3748800	380605	3748654	* AG 1690 1.43 0.0 12.0
22. SBD2	*	380604	3748654	380613	3748509	* AG 1690 0.70 0.0 12.0
23. NB HOV RAMP	*	380813	3748515	380775	3748637	* AG 75 0.70 6.0 12.0
24. NB HOV RAMP	*	380775	3748637	380766	3748677	* AG 75 0.70 6.0 12.0
25. NB HOV RAMP	*	380766	3748677	380774	3748723	* AG 75 0.70 6.0 12.0
26. NB HOV RAMP	*	380774	3748723	380780	3748743	* AG 75 0.70 6.0 12.0
27. NB HOV RAMP	*	380780	3748743	380810	3748785	* AG 75 0.70 6.0 12.0
28. NB HOV RAMP	*	380810	3748785	380839	3748809	* AG 75 0.70 6.0 12.0
29. NB HOV RAMP	*	380839	3748809	380920	3748842	* AG 75 0.70 6.0 12.0
30. SB HOV RAMP	*	380918	3748853	380845	3748822	* AG 93 0.70 6.0 12.0
31. SB HOV RAMP	*	380845	3748822	380803	3748791	* AG 93 0.70 6.0 12.0
32. SB HOV RAMP	*	380803	3748791	380770	3748743	* AG 93 0.70 6.0 12.0
33. SB HOV RAMP	*	380770	3748743	380759	3748705	* AG 93 0.70 6.0 12.0
34. SB HOV RAMP	*	380759	3748705	380757	3748680	* AG 93 0.70 6.0 12.0

35. SB HOV RAMP * 380757 3748680 380764 3748637 * AG 93 0.70 6.0 12.0
 36. SB HOV RAMP * 380764 3748637 380802 3748511 * AG 93 0.70 6.0 12.0

III. RECEPTOR LOCATIONS

* COORDINATES (M)			
RECEPTOR	X	Y	Z
1.	* 380587	3748820	1.8
2.	* 380562	3748821	1.8
3.	* 380537	3748821	1.8
4.	* 380512	3748822	1.8
5.	* 380487	3748822	1.8
6.	* 380462	3748823	1.8
7.	* 380587	3748845	1.8
8.	* 380585	3748870	1.8
9.	* 380584	3748895	1.8
10.	* 380583	3748920	1.8
11.	* 380582	3748945	1.8
12.	* 380617	3748818	1.8
13.	* 380642	3748818	1.8
14.	* 380667	3748818	1.8
15.	* 380692	3748818	1.8
16.	* 380717	3748818	1.8
17.	* 380742	3748818	1.8
18.	* 380615	3748843	1.8
19.	* 380613	3748868	1.8
20.	* 380612	3748893	1.8
21.	* 380611	3748918	1.8
22.	* 380609	3748943	1.8
23.	* 380621	3748777	1.8
24.	* 380646	3748777	1.8
25.	* 380671	3748777	1.8
26.	* 380696	3748776	1.8
27.	* 380621	3748752	1.8
28.	* 380622	3748727	1.8
29.	* 380624	3748702	1.8
30.	* 380625	3748677	1.8
31.	* 380593	3748776	1.8
32.	* 380568	3748776	1.8
33.	* 380543	3748776	1.8
34.	* 380518	3748776	1.8
35.	* 380493	3748776	1.8
36.	* 380468	3748776	1.8
37.	* 380593	3748751	1.8
38.	* 380595	3748726	1.8
39.	* 380596	3748701	1.8
40.	* 380597	3748676	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	* BRG	* PRED	* CONC	* (DEG)	* (PPM)	CONC/LINK (PPM)								
						1	2	3	4	5	6	7	8	
1.	* 103.	* 0.38	* 0.00	0.00	0.00	0.01	0.02	0.02	0.00	0.00				
2.	* 101.	* 0.33	* 0.00	0.00	0.00	0.01	0.01	0.02	0.00	0.00				
3.	* 101.	* 0.31	* 0.00	0.00	0.00	0.02	0.01	0.01	0.00	0.00				
4.	* 100.	* 0.30	* 0.00	0.00	0.00	0.02	0.01	0.01	0.00	0.00				
5.	* 99.	* 0.31	* 0.00	0.00	0.00	0.02	0.01	0.01	0.00	0.00				
6.	* 99.	* 0.29	* 0.00	0.01	0.00	0.03	0.01	0.01	0.00	0.00				
7.	* 171.	* 0.31	* 0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00				
8.	* 171.	* 0.26	* 0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00				
9.	* 171.	* 0.24	* 0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00				

10.	*	171.	*	0.25	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
11.	*	171.	*	0.24	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
12.	*	188.	*	0.34	*	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
13.	*	257.	*	0.31	*	0.00	0.06	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14.	*	256.	*	0.34	*	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15.	*	259.	*	0.37	*	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16.	*	260.	*	0.39	*	0.00	0.05	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
17.	*	262.	*	0.40	*	0.01	0.05	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
18.	*	186.	*	0.28	*	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
19.	*	184.	*	0.26	*	0.00	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
20.	*	183.	*	0.24	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
21.	*	183.	*	0.23	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
22.	*	183.	*	0.22	*	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23.	*	280.	*	0.32	*	0.00	0.15	0.01	0.03	0.00	0.00	0.00	0.00	0.00	0.00
24.	*	280.	*	0.30	*	0.00	0.09	0.01	0.11	0.00	0.00	0.00	0.00	0.00	0.00
25.	*	278.	*	0.32	*	0.00	0.07	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00
26.	*	279.	*	0.28	*	0.00	0.05	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00
27.	*	349.	*	0.24	*	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
28.	*	350.	*	0.23	*	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
29.	*	349.	*	0.22	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
30.	*	349.	*	0.22	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
31.	*	75.	*	0.38	*	0.00	0.03	0.00	0.13	0.00	0.00	0.00	0.00	0.01	0.01
32.	*	78.	*	0.33	*	0.00	0.09	0.00	0.08	0.00	0.00	0.00	0.00	0.01	0.01
33.	*	80.	*	0.32	*	0.00	0.12	0.00	0.06	0.00	0.00	0.00	0.00	0.01	0.01
34.	*	80.	*	0.32	*	0.00	0.15	0.00	0.03	0.00	0.00	0.00	0.00	0.01	0.01
35.	*	81.	*	0.31	*	0.00	0.16	0.00	0.02	0.00	0.00	0.00	0.00	0.01	0.01
36.	*	82.	*	0.31	*	0.00	0.17	0.00	0.02	0.00	0.00	0.00	0.00	0.01	0.01
37.	*	11.	*	0.31	*	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38.	*	5.	*	0.34	*	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
39.	*	5.	*	0.34	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
40.	*	4.	*	0.34	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00

RECEPTOR	CONC/LINK (PPM)															
	*	9	10	11	12	13	14	15	16							
1.	*	0.17	0.03	0.04	0.00	0.00	0.00	0.00	0.02							
2.	*	0.12	0.03	0.09	0.00	0.00	0.00	0.00	0.01							
3.	*	0.07	0.03	0.13	0.00	0.00	0.00	0.00	0.01							
4.	*	0.05	0.02	0.15	0.00	0.00	0.00	0.00	0.00							
5.	*	0.04	0.02	0.17	0.00	0.00	0.00	0.00	0.00							
6.	*	0.03	0.01	0.17	0.00	0.00	0.00	0.00	0.00							
7.	*	0.00	0.00	0.03	0.00	0.01	0.02	0.01	0.00							
8.	*	0.00	0.00	0.02	0.00	0.01	0.02	0.01	0.00							
9.	*	0.00	0.00	0.01	0.00	0.01	0.02	0.01	0.00							
10.	*	0.01	0.00	0.01	0.00	0.00	0.02	0.01	0.00							
11.	*	0.01	0.00	0.01	0.00	0.00	0.02	0.01	0.01							
12.	*	0.11	0.02	0.00	0.00	0.00	0.06	0.01	0.02							
13.	*	0.15	0.00	0.05	0.00	0.00	0.00	0.00	0.01							
14.	*	0.21	0.01	0.01	0.00	0.00	0.00	0.00	0.01							
15.	*	0.24	0.02	0.01	0.00	0.00	0.00	0.00	0.00							
16.	*	0.26	0.02	0.01	0.00	0.00	0.00	0.00	0.00							
17.	*	0.28	0.02	0.01	0.00	0.00	0.00	0.00	0.00							
18.	*	0.05	0.01	0.00	0.00	0.00	0.04	0.01	0.05							
19.	*	0.03	0.01	0.00	0.00	0.00	0.03	0.01	0.07							
20.	*	0.02	0.00	0.00	0.00	0.00	0.02	0.01	0.08							
21.	*	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.08							
22.	*	0.01	0.00	0.01	0.00	0.00	0.01	0.00	0.09							
23.	*	0.00	0.00	0.02	0.03	0.00	0.03	0.01	0.00							
24.	*	0.00	0.00	0.03	0.02	0.00	0.02	0.00	0.00							
25.	*	0.00	0.00	0.02	0.02	0.00	0.01	0.00	0.00							
26.	*	0.00	0.00	0.03	0.02	0.00	0.01	0.00	0.00							
27.	*	0.04	0.01	0.00	0.00	0.00	0.06	0.00	0.03							
28.	*	0.02	0.01	0.00	0.00	0.00	0.07	0.00	0.02							

3.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
32.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
33.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
34.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
35.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
36.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
37.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
39.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

*CONC/LINK
*(PPM)

RECEPTOR	*	33	34	35	36
1.	*	0.00	0.00	0.00	0.00
2.	*	0.00	0.00	0.00	0.00
3.	*	0.00	0.00	0.00	0.00
4.	*	0.00	0.00	0.00	0.00
5.	*	0.00	0.00	0.00	0.00
6.	*	0.00	0.00	0.00	0.00
7.	*	0.00	0.00	0.00	0.00
8.	*	0.00	0.00	0.00	0.00
9.	*	0.00	0.00	0.00	0.00
10.	*	0.00	0.00	0.00	0.00
11.	*	0.00	0.00	0.00	0.00
12.	*	0.00	0.00	0.00	0.00
13.	*	0.00	0.00	0.00	0.00
14.	*	0.00	0.00	0.00	0.00
15.	*	0.00	0.00	0.00	0.00
16.	*	0.00	0.00	0.00	0.00
17.	*	0.00	0.00	0.00	0.00
18.	*	0.00	0.00	0.00	0.00
19.	*	0.00	0.00	0.00	0.00
20.	*	0.00	0.00	0.00	0.00
21.	*	0.00	0.00	0.00	0.00
22.	*	0.00	0.00	0.00	0.00

23.	*	0.00	0.00	0.00	0.00
24.	*	0.00	0.00	0.00	0.00
25.	*	0.00	0.00	0.00	0.00
26.	*	0.00	0.00	0.00	0.00
27.	*	0.00	0.00	0.00	0.00
28.	*	0.00	0.00	0.00	0.00
29.	*	0.00	0.00	0.00	0.00
30.	*	0.00	0.00	0.00	0.00
31.	*	0.00	0.00	0.00	0.00
32.	*	0.00	0.00	0.00	0.00
33.	*	0.00	0.00	0.00	0.00
34.	*	0.00	0.00	0.00	0.00
35.	*	0.00	0.00	0.00	0.00
36.	*	0.00	0.00	0.00	0.00
37.	*	0.00	0.00	0.00	0.00
38.	*	0.00	0.00	0.00	0.00
39.	*	0.00	0.00	0.00	0.00
40.	*	0.00	0.00	0.00	0.00

1

Run Ended on 4/03/2018 at 10:34:45

3.0.3 PC (32 BIT) VERSION
(C) COPYRIGHT 2009, TRINITY CONSULTANTS

Run Began on 4/03/2018 at 10:36:32

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Vermont Ave & W Artesia
RUN: 2025 PP PM (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 1.0 M/S Z0= 108. CM ALT= 0. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 4 (D) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 5. DEGREES TEMP= 9.9 DEGREE (C)

II. LINK VARIABLES

LINK	*	LINK COORDINATES (M)	*	EF	H	W
DESCRIPTION	*	X1	Y1	X2	Y2	* TYPE VPH (G/MI) (M) (M)
1. EBA	*	380451	3748788	380262	3748793	* AG 2770 0.65 0.0 18.0
2. EBT	*	380605	3748788	380451	3748788	* AG 2620 1.25 0.0 21.0
3. EBL	*	380604	3748801	380451	3748795	* AG 150 1.43 0.0 9.0
4. EBD	*	380604	3748788	380689	3748786	* AG 3320 1.08 0.0 18.0
5. EBD MAIN	*	380689	3748786	380758	3748782	* AG 2772 0.65 0.0 15.0
6. EBD MAIN	*	380758	3748782	380903	3748757	* AG 2772 0.65 0.0 15.0
7. EBD RAMP	*	380688	3748787	380895	3748713	* AG 548 0.65 0.0 12.0
8. WBA	*	380759	3748809	380913	3748810	* AG 2940 0.65 0.0 18.0
9. WBT	*	380604	3748808	380760	3748809	* AG 2550 1.31 0.0 18.0
10. WBL	*	380604	3748801	380761	3748799	* AG 390 1.41 0.0 12.0
11. WBD1	*	380602	3748809	380451	3748813	* AG 2530 0.86 0.0 18.0
12. WBD2	*	380451	3748813	380264	3748818	* AG 2530 0.65 0.0 18.0
13. NBA	*	380618	3748655	380624	3748509	* AG 1550 0.70 0.0 12.0
14. NBT	*	380611	3748799	380617	3748655	* AG 1270 1.43 0.0 15.0
15. NBL	*	380603	3748798	380614	3748660	* AG 280 1.41 0.0 12.0
16. NBD1	*	380611	3748800	380602	3748951	* AG 1200 1.43 0.0 12.0
17. NBD2	*	380602	3748950	380595	3749099	* AG 1200 0.70 0.0 12.0
18. SBA	*	380590	3748949	380587	3749100	* AG 1150 0.70 0.0 12.0
19. SBT	*	380596	3748798	380590	3748949	* AG 750 1.36 0.0 15.0
20. SBL	*	380603	3748798	380593	3748950	* AG 400 1.41 0.0 12.0
21. SBD1	*	380599	3748800	380605	3748654	* AG 1360 1.43 0.0 12.0
22. SBD2	*	380604	3748654	380613	3748509	* AG 1360 0.70 0.0 12.0
23. NB HOV RAMP	*	380813	3748515	380775	3748637	* AG 106 0.70 6.0 12.0
24. NB HOV RAMP	*	380775	3748637	380766	3748677	* AG 106 0.70 6.0 12.0
25. NB HOV RAMP	*	380766	3748677	380774	3748723	* AG 106 0.70 6.0 12.0
26. NB HOV RAMP	*	380774	3748723	380780	3748743	* AG 106 0.70 6.0 12.0
27. NB HOV RAMP	*	380780	3748743	380810	3748785	* AG 106 0.70 6.0 12.0
28. NB HOV RAMP	*	380810	3748785	380839	3748809	* AG 106 0.70 6.0 12.0
29. NB HOV RAMP	*	380839	3748809	380920	3748842	* AG 106 0.70 6.0 12.0
30. SB HOV RAMP	*	380918	3748853	380845	3748822	* AG 133 0.70 6.0 12.0
31. SB HOV RAMP	*	380845	3748822	380803	3748791	* AG 133 0.70 6.0 12.0
32. SB HOV RAMP	*	380803	3748791	380770	3748743	* AG 133 0.70 6.0 12.0
33. SB HOV RAMP	*	380770	3748743	380759	3748705	* AG 133 0.70 6.0 12.0
34. SB HOV RAMP	*	380759	3748705	380757	3748680	* AG 133 0.70 6.0 12.0

35. SB HOV RAMP * 380757 3748680 380764 3748637 * AG 133 0.70 6.0 12.0
 36. SB HOV RAMP * 380764 3748637 380802 3748511 * AG 133 0.70 6.0 12.0

III. RECEPTOR LOCATIONS

RECEPTOR	* X	Y	Z
1.	* 380587	3748820	1.8
2.	* 380562	3748821	1.8
3.	* 380537	3748821	1.8
4.	* 380512	3748822	1.8
5.	* 380487	3748822	1.8
6.	* 380462	3748823	1.8
7.	* 380587	3748845	1.8
8.	* 380585	3748870	1.8
9.	* 380584	3748895	1.8
10.	* 380583	3748920	1.8
11.	* 380582	3748945	1.8
12.	* 380617	3748818	1.8
13.	* 380642	3748818	1.8
14.	* 380667	3748818	1.8
15.	* 380692	3748818	1.8
16.	* 380717	3748818	1.8
17.	* 380742	3748818	1.8
18.	* 380615	3748843	1.8
19.	* 380613	3748868	1.8
20.	* 380612	3748893	1.8
21.	* 380611	3748918	1.8
22.	* 380609	3748943	1.8
23.	* 380621	3748777	1.8
24.	* 380646	3748777	1.8
25.	* 380671	3748777	1.8
26.	* 380696	3748776	1.8
27.	* 380621	3748752	1.8
28.	* 380622	3748727	1.8
29.	* 380624	3748702	1.8
30.	* 380625	3748677	1.8
31.	* 380593	3748776	1.8
32.	* 380568	3748776	1.8
33.	* 380543	3748776	1.8
34.	* 380518	3748776	1.8
35.	* 380493	3748776	1.8
36.	* 380468	3748776	1.8
37.	* 380593	3748751	1.8
38.	* 380595	3748726	1.8
39.	* 380596	3748701	1.8
40.	* 380597	3748676	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	* BRG	* PRED	* CONC	* (PPM)	CONC/LINK	1	2	3	4	5	6	7	8
1.	* 103.	* 0.39	* 0.00	0.00	0.00	0.01	0.02	0.02	0.00	0.00			
2.	* 103.	* 0.34	* 0.00	0.00	0.00	0.03	0.02	0.02	0.01	0.00			
3.	* 101.	* 0.32	* 0.00	0.00	0.00	0.03	0.02	0.02	0.00	0.00			
4.	* 101.	* 0.32	* 0.00	0.00	0.00	0.04	0.01	0.01	0.01	0.00			
5.	* 100.	* 0.32	* 0.00	0.01	0.00	0.04	0.01	0.01	0.00	0.00			
6.	* 99.	* 0.31	* 0.00	0.01	0.00	0.03	0.01	0.01	0.00	0.00			
7.	* 170.	* 0.32	* 0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00			
8.	* 170.	* 0.27	* 0.00	0.03	0.00	0.01	0.00	0.00	0.00	0.00			
9.	* 170.	* 0.25	* 0.00	0.02	0.00	0.01	0.00	0.00	0.00	0.00			

10.	*	171.	*	0.26	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
11.	*	171.	*	0.25	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
12.	*	187.	*	0.42	*	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00
13.	*	257.	*	0.34	*	0.00	0.08	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14.	*	257.	*	0.37	*	0.00	0.09	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15.	*	259.	*	0.39	*	0.00	0.08	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16.	*	260.	*	0.41	*	0.00	0.07	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
17.	*	262.	*	0.42	*	0.01	0.06	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
18.	*	185.	*	0.37	*	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
19.	*	183.	*	0.36	*	0.00	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
20.	*	183.	*	0.34	*	0.00	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
21.	*	183.	*	0.33	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
22.	*	182.	*	0.33	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
23.	*	280.	*	0.41	*	0.00	0.20	0.01	0.04	0.00	0.00	0.00	0.00	0.00	0.00
24.	*	280.	*	0.40	*	0.00	0.12	0.01	0.16	0.00	0.00	0.00	0.00	0.00	0.00
25.	*	278.	*	0.42	*	0.00	0.10	0.01	0.22	0.00	0.00	0.00	0.00	0.00	0.00
26.	*	279.	*	0.37	*	0.00	0.06	0.01	0.21	0.00	0.00	0.00	0.00	0.00	0.00
27.	*	350.	*	0.34	*	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00
28.	*	351.	*	0.32	*	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
29.	*	350.	*	0.31	*	0.00	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
30.	*	350.	*	0.30	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
31.	*	76.	*	0.44	*	0.00	0.03	0.00	0.18	0.00	0.00	0.00	0.00	0.01	0.01
32.	*	78.	*	0.40	*	0.00	0.12	0.00	0.11	0.00	0.00	0.00	0.00	0.01	0.01
33.	*	80.	*	0.38	*	0.00	0.17	0.00	0.08	0.00	0.00	0.00	0.00	0.01	0.01
34.	*	81.	*	0.38	*	0.00	0.20	0.00	0.05	0.00	0.00	0.00	0.00	0.01	0.01
35.	*	81.	*	0.38	*	0.00	0.22	0.00	0.03	0.00	0.00	0.00	0.00	0.01	0.01
36.	*	82.	*	0.37	*	0.00	0.24	0.00	0.02	0.00	0.00	0.00	0.00	0.01	0.01
37.	*	13.	*	0.32	*	0.00	0.04	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
38.	*	6.	*	0.34	*	0.00	0.03	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
39.	*	5.	*	0.34	*	0.00	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
40.	*	5.	*	0.34	*	0.00	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00

		* CONC/LINK																		
		* (PPM)																		
RECEPTOR	*	9	10	11	12	13	14	15	16											
-----*																				
1.	*	0.17	0.02	0.04	0.00	0.00	0.00	0.00	0.03											
2.	*	0.10	0.02	0.10	0.00	0.00	0.00	0.00	0.02											
3.	*	0.07	0.02	0.13	0.00	0.00	0.00	0.00	0.01											
4.	*	0.04	0.01	0.15	0.00	0.00	0.00	0.00	0.01											
5.	*	0.03	0.01	0.17	0.00	0.00	0.01	0.00	0.01											
6.	*	0.03	0.01	0.17	0.00	0.00	0.01	0.00	0.00											
7.	*	0.00	0.00	0.03	0.00	0.01	0.05	0.02	0.00											
8.	*	0.00	0.00	0.02	0.00	0.01	0.05	0.02	0.00											
9.	*	0.00	0.00	0.01	0.00	0.01	0.05	0.01	0.00											
10.	*	0.01	0.00	0.01	0.00	0.01	0.04	0.01	0.01											
11.	*	0.01	0.00	0.01	0.00	0.01	0.04	0.01	0.02											
12.	*	0.11	0.01	0.00	0.00	0.00	0.12	0.02	0.03											
13.	*	0.15	0.00	0.05	0.00	0.00	0.00	0.00	0.03											
14.	*	0.21	0.01	0.02	0.00	0.00	0.00	0.00	0.02											
15.	*	0.24	0.01	0.01	0.00	0.00	0.00	0.00	0.01											
16.	*	0.26	0.02	0.01	0.00	0.00	0.01	0.00	0.01											
17.	*	0.28	0.02	0.01	0.00	0.00	0.01	0.00	0.00											
18.	*	0.05	0.01	0.00	0.00	0.00	0.07	0.02	0.11											
19.	*	0.03	0.01	0.00	0.00	0.00	0.06	0.02	0.15											
20.	*	0.02	0.00	0.00	0.00	0.00	0.04	0.01	0.16											
21.	*	0.01	0.00	0.00	0.00	0.00	0.03	0.01	0.18											
22.	*	0.01	0.00	0.00	0.00	0.00	0.02	0.01	0.18											
23.	*	0.00	0.00	0.02	0.03	0.00	0.06	0.01	0.00											
24.	*	0.00	0.00	0.03	0.02	0.00	0.03	0.01	0.00											
25.	*	0.00	0.00	0.02	0.02	0.00	0.02	0.00	0.00											
26.	*	0.00	0.00	0.03	0.02	0.00	0.02	0.00	0.00											
27.	*	0.04	0.01	0.00	0.00	0.00	0.10	0.00	0.08											
28.	*	0.02	0.00	0.00	0.00	0.00	0.13	0.00	0.06											

3.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
32.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
33.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
34.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
35.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
36.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
37.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
39.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

*CONC/LINK
*(PPM)

RECEPTOR	*	33	34	35	36
1.	*	0.00	0.00	0.00	0.00
2.	*	0.00	0.00	0.00	0.00
3.	*	0.00	0.00	0.00	0.00
4.	*	0.00	0.00	0.00	0.00
5.	*	0.00	0.00	0.00	0.00
6.	*	0.00	0.00	0.00	0.00
7.	*	0.00	0.00	0.00	0.00
8.	*	0.00	0.00	0.00	0.00
9.	*	0.00	0.00	0.00	0.00
10.	*	0.00	0.00	0.00	0.00
11.	*	0.00	0.00	0.00	0.00
12.	*	0.00	0.00	0.00	0.00
13.	*	0.00	0.00	0.00	0.00
14.	*	0.00	0.00	0.00	0.00
15.	*	0.00	0.00	0.00	0.00
16.	*	0.00	0.00	0.00	0.00
17.	*	0.00	0.00	0.00	0.00
18.	*	0.00	0.00	0.00	0.00
19.	*	0.00	0.00	0.00	0.00
20.	*	0.00	0.00	0.00	0.00
21.	*	0.00	0.00	0.00	0.00
22.	*	0.00	0.00	0.00	0.00

23.	*	0.00	0.00	0.00	0.00
24.	*	0.00	0.00	0.00	0.00
25.	*	0.00	0.00	0.00	0.00
26.	*	0.00	0.00	0.00	0.00
27.	*	0.00	0.00	0.00	0.00
28.	*	0.00	0.00	0.00	0.00
29.	*	0.00	0.00	0.00	0.00
30.	*	0.00	0.00	0.00	0.00
31.	*	0.00	0.00	0.00	0.00
32.	*	0.00	0.00	0.00	0.00
33.	*	0.00	0.00	0.00	0.00
34.	*	0.00	0.00	0.00	0.00
35.	*	0.00	0.00	0.00	0.00
36.	*	0.00	0.00	0.00	0.00
37.	*	0.00	0.00	0.00	0.00
38.	*	0.00	0.00	0.00	0.00
39.	*	0.00	0.00	0.00	0.00
40.	*	0.00	0.00	0.00	0.00

1

Run Ended on 4/03/2018 at 10:36:36

3.0.3 PC (32 BIT) VERSION
(C) COPYRIGHT 2009, TRINITY CONSULTANTS

Run Began on 4/03/2018 at 10:50:44

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Vermont Ave & W Artesia
RUN: 2035 NP AM (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 1.0 M/S Z0= 108. CM ALT= 0. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 4 (D) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 5. DEGREES TEMP= 9.9 DEGREE (C)

II. LINK VARIABLES

LINK	*	LINK COORDINATES (M)	*	EF	H	W
DESCRIPTION	*	X1 Y1 X2 Y2	* TYPE	VPH (G/MI)	(M)	(M)
1. EBA	*	380451 3748788 380262 3748793	* AG	1910	0.44	0.0 18.0
2. EBT	*	380605 3748788 380451 3748788	* AG	1810	0.90	0.0 21.0
3. EBL	*	380604 3748801 380451 3748795	* AG	100	0.98	0.0 9.0
4. EBD	*	380604 3748788 380689 3748786	* AG	2310	0.71	0.0 18.0
5. EBD MAIN	*	380689 3748786 380758 3748782	* AG	1929	0.44	0.0 15.0
6. EBD MAIN	*	380758 3748782 380903 3748757	* AG	1929	0.44	0.0 15.0
7. EBD RAMP	*	380688 3748787 380895 3748713	* AG	381	0.44	0.0 12.0
8. WBA	*	380759 3748809 380913 3748810	* AG	3170	0.44	0.0 18.0
9. WBT	*	380604 3748808 380760 3748809	* AG	2570	0.89	0.0 18.0
10. WBL	*	380604 3748801 380761 3748799	* AG	600	0.93	0.0 12.0
11. WBD1	*	380602 3748809 380451 3748813	* AG	2590	0.58	0.0 18.0
12. WBD2	*	380451 3748813 380264 3748818	* AG	2590	0.44	0.0 18.0
13. NBA	*	380618 3748655 380624 3748509	* AG	910	0.47	0.0 12.0
14. NBT	*	380611 3748799 380617 3748655	* AG	720	0.90	0.0 15.0
15. NBL	*	380603 3748798 380614 3748660	* AG	190	0.98	0.0 12.0
16. NBD1	*	380611 3748800 380602 3748951	* AG	770	0.68	0.0 12.0
17. NBD2	*	380602 3748950 380595 3749099	* AG	770	0.47	0.0 12.0
18. SBA	*	380590 3748949 380587 3749100	* AG	1390	0.47	0.0 12.0
19. SBT	*	380596 3748798 380590 3748949	* AG	950	0.93	0.0 15.0
20. SBL	*	380603 3748798 380593 3748950	* AG	440	0.97	0.0 12.0
21. SBD1	*	380599 3748800 380605 3748654	* AG	1710	0.98	0.0 12.0
22. SBD2	*	380604 3748654 380613 3748509	* AG	1710	0.47	0.0 12.0
23. NB HOV RAMP	*	380813 3748515 380775 3748637	* AG	76	0.47	6.0 12.0
24. NB HOV RAMP	*	380775 3748637 380766 3748677	* AG	76	0.47	6.0 12.0
25. NB HOV RAMP	*	380766 3748677 380774 3748723	* AG	76	0.47	6.0 12.0
26. NB HOV RAMP	*	380774 3748723 380780 3748743	* AG	76	0.47	6.0 12.0
27. NB HOV RAMP	*	380780 3748743 380810 3748785	* AG	76	0.47	6.0 12.0
28. NB HOV RAMP	*	380810 3748785 380839 3748809	* AG	76	0.47	6.0 12.0
29. NB HOV RAMP	*	380839 3748809 380920 3748842	* AG	76	0.47	6.0 12.0
30. SB HOV RAMP	*	380918 3748853 380845 3748822	* AG	95	0.47	6.0 12.0
31. SB HOV RAMP	*	380845 3748822 380803 3748791	* AG	95	0.47	6.0 12.0
32. SB HOV RAMP	*	380803 3748791 380770 3748743	* AG	95	0.47	6.0 12.0
33. SB HOV RAMP	*	380770 3748743 380759 3748705	* AG	95	0.47	6.0 12.0
34. SB HOV RAMP	*	380759 3748705 380757 3748680	* AG	95	0.47	6.0 12.0

10.	*	171.	*	0.17	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
11.	*	171.	*	0.17	*	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
12.	*	188.	*	0.24	*	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
13.	*	257.	*	0.21	*	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14.	*	256.	*	0.24	*	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15.	*	259.	*	0.25	*	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16.	*	260.	*	0.27	*	0.00	0.04	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
17.	*	262.	*	0.28	*	0.00	0.03	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
18.	*	186.	*	0.19	*	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
19.	*	184.	*	0.18	*	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
20.	*	183.	*	0.16	*	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
21.	*	183.	*	0.16	*	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22.	*	183.	*	0.15	*	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23.	*	280.	*	0.22	*	0.00	0.10	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
24.	*	280.	*	0.21	*	0.00	0.06	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00
25.	*	278.	*	0.22	*	0.00	0.05	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00
26.	*	279.	*	0.19	*	0.00	0.03	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00
27.	*	349.	*	0.17	*	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
28.	*	349.	*	0.16	*	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
29.	*	349.	*	0.15	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
30.	*	349.	*	0.15	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
31.	*	75.	*	0.26	*	0.00	0.02	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00
32.	*	78.	*	0.23	*	0.00	0.06	0.00	0.06	0.00	0.00	0.00	0.00	0.01	0.01
33.	*	80.	*	0.22	*	0.00	0.08	0.00	0.04	0.00	0.00	0.00	0.00	0.01	0.01
34.	*	80.	*	0.22	*	0.00	0.10	0.00	0.02	0.00	0.00	0.00	0.00	0.01	0.01
35.	*	81.	*	0.22	*	0.00	0.11	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.01
36.	*	82.	*	0.21	*	0.00	0.12	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.01
37.	*	11.	*	0.21	*	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38.	*	5.	*	0.24	*	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
39.	*	5.	*	0.24	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
40.	*	4.	*	0.24	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00

RECEPTOR	CONC/LINK (PPM)							
	9	10	11	12	13	14	15	16
1.	*	0.12	0.02	0.03	0.00	0.00	0.00	0.01
2.	*	0.08	0.02	0.06	0.00	0.00	0.00	0.01
3.	*	0.05	0.02	0.09	0.00	0.00	0.00	0.00
4.	*	0.04	0.02	0.10	0.00	0.00	0.00	0.00
5.	*	0.03	0.01	0.12	0.00	0.00	0.00	0.00
6.	*	0.02	0.01	0.12	0.00	0.00	0.00	0.00
7.	*	0.00	0.00	0.02	0.00	0.01	0.01	0.01
8.	*	0.00	0.00	0.01	0.00	0.00	0.02	0.01
9.	*	0.00	0.00	0.01	0.00	0.00	0.02	0.01
10.	*	0.01	0.00	0.01	0.00	0.00	0.02	0.01
11.	*	0.01	0.00	0.00	0.00	0.00	0.01	0.00
12.	*	0.08	0.01	0.00	0.00	0.00	0.04	0.01
13.	*	0.10	0.00	0.03	0.00	0.00	0.00	0.01
14.	*	0.15	0.01	0.01	0.00	0.00	0.00	0.00
15.	*	0.17	0.01	0.01	0.00	0.00	0.00	0.00
16.	*	0.18	0.02	0.01	0.00	0.00	0.00	0.00
17.	*	0.19	0.01	0.01	0.00	0.00	0.00	0.00
18.	*	0.04	0.01	0.00	0.00	0.00	0.02	0.01
19.	*	0.02	0.00	0.00	0.00	0.00	0.02	0.01
20.	*	0.01	0.00	0.00	0.00	0.00	0.01	0.01
21.	*	0.01	0.00	0.00	0.00	0.00	0.01	0.00
22.	*	0.01	0.00	0.00	0.00	0.00	0.01	0.00
23.	*	0.00	0.00	0.01	0.02	0.00	0.02	0.00
24.	*	0.00	0.00	0.02	0.01	0.00	0.01	0.00
25.	*	0.00	0.00	0.02	0.02	0.00	0.01	0.00
26.	*	0.00	0.00	0.02	0.01	0.00	0.01	0.00
27.	*	0.02	0.01	0.00	0.00	0.00	0.04	0.00
28.	*	0.01	0.00	0.00	0.00	0.00	0.05	0.00

3.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
32.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
33.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
34.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
35.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
36.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
37.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
39.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

*CONC/LINK
*(PPM)

RECEPTOR	*	33	34	35	36
1.	*	0.00	0.00	0.00	0.00
2.	*	0.00	0.00	0.00	0.00
3.	*	0.00	0.00	0.00	0.00
4.	*	0.00	0.00	0.00	0.00
5.	*	0.00	0.00	0.00	0.00
6.	*	0.00	0.00	0.00	0.00
7.	*	0.00	0.00	0.00	0.00
8.	*	0.00	0.00	0.00	0.00
9.	*	0.00	0.00	0.00	0.00
10.	*	0.00	0.00	0.00	0.00
11.	*	0.00	0.00	0.00	0.00
12.	*	0.00	0.00	0.00	0.00
13.	*	0.00	0.00	0.00	0.00
14.	*	0.00	0.00	0.00	0.00
15.	*	0.00	0.00	0.00	0.00
16.	*	0.00	0.00	0.00	0.00
17.	*	0.00	0.00	0.00	0.00
18.	*	0.00	0.00	0.00	0.00
19.	*	0.00	0.00	0.00	0.00
20.	*	0.00	0.00	0.00	0.00
21.	*	0.00	0.00	0.00	0.00
22.	*	0.00	0.00	0.00	0.00

23.	*	0.00	0.00	0.00	0.00
24.	*	0.00	0.00	0.00	0.00
25.	*	0.00	0.00	0.00	0.00
26.	*	0.00	0.00	0.00	0.00
27.	*	0.00	0.00	0.00	0.00
28.	*	0.00	0.00	0.00	0.00
29.	*	0.00	0.00	0.00	0.00
30.	*	0.00	0.00	0.00	0.00
31.	*	0.00	0.00	0.00	0.00
32.	*	0.00	0.00	0.00	0.00
33.	*	0.00	0.00	0.00	0.00
34.	*	0.00	0.00	0.00	0.00
35.	*	0.00	0.00	0.00	0.00
36.	*	0.00	0.00	0.00	0.00
37.	*	0.00	0.00	0.00	0.00
38.	*	0.00	0.00	0.00	0.00
39.	*	0.00	0.00	0.00	0.00
40.	*	0.00	0.00	0.00	0.00

1

Run Ended on 4/03/2018 at 10:50:48

3.0.3 PC (32 BIT) VERSION
(C) COPYRIGHT 2009, TRINITY CONSULTANTS

Run Began on 4/03/2018 at 10:55:05

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Vermont Ave & W Artesia
RUN: 2035 NP PM (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 1.0 M/S Z0= 108. CM ALT= 0. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 4 (D) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 5. DEGREES TEMP= 9.9 DEGREE (C)

II. LINK VARIABLES

LINK	*	LINK COORDINATES (M)	*	EF	H	W
DESCRIPTION	*	X1	Y1	X2	Y2	* TYPE VPH (G/MI) (M) (M)
1. EBA	*	380451	3748788	380262	3748793	* AG 2810 0.44 0.0 18.0
2. EBT	*	380605	3748788	380451	3748788	* AG 2660 0.86 0.0 21.0
3. EBL	*	380604	3748801	380451	3748795	* AG 150 0.98 0.0 9.0
4. EBD	*	380604	3748788	380689	3748786	* AG 3380 0.73 0.0 18.0
5. EBD MAIN	*	380689	3748786	380758	3748782	* AG 2823 0.44 0.0 15.0
6. EBD MAIN	*	380758	3748782	380903	3748757	* AG 2823 0.44 0.0 15.0
7. EBD RAMP	*	380688	3748787	380895	3748713	* AG 557 0.44 0.0 12.0
8. WBA	*	380759	3748809	380913	3748810	* AG 2990 0.44 0.0 18.0
9. WBT	*	380604	3748808	380760	3748809	* AG 2590 0.89 0.0 18.0
10. WBL	*	380604	3748801	380761	3748799	* AG 400 0.97 0.0 12.0
11. WBD1	*	380602	3748809	380451	3748813	* AG 2560 0.58 0.0 18.0
12. WBD2	*	380451	3748813	380264	3748818	* AG 2560 0.44 0.0 18.0
13. NBA	*	380618	3748655	380624	3748509	* AG 1570 0.47 0.0 12.0
14. NBT	*	380611	3748799	380617	3748655	* AG 1290 0.98 0.0 15.0
15. NBL	*	380603	3748798	380614	3748660	* AG 280 0.97 0.0 12.0
16. NBD1	*	380611	3748800	380602	3748951	* AG 1220 0.97 0.0 12.0
17. NBD2	*	380602	3748950	380595	3749099	* AG 1220 0.47 0.0 12.0
18. SBA	*	380590	3748949	380587	3749100	* AG 1170 0.47 0.0 12.0
19. SBT	*	380596	3748798	380590	3748949	* AG 760 0.93 0.0 15.0
20. SBL	*	380603	3748798	380593	3748950	* AG 410 0.97 0.0 12.0
21. SBD1	*	380599	3748800	380605	3748654	* AG 1380 0.98 0.0 12.0
22. SBD2	*	380604	3748654	380613	3748509	* AG 1380 0.47 0.0 12.0
23. NB HOV RAMP	*	380813	3748515	380775	3748637	* AG 108 0.47 6.0 12.0
24. NB HOV RAMP	*	380775	3748637	380766	3748677	* AG 108 0.47 6.0 12.0
25. NB HOV RAMP	*	380766	3748677	380774	3748723	* AG 108 0.47 6.0 12.0
26. NB HOV RAMP	*	380774	3748723	380780	3748743	* AG 108 0.47 6.0 12.0
27. NB HOV RAMP	*	380780	3748743	380810	3748785	* AG 108 0.47 6.0 12.0
28. NB HOV RAMP	*	380810	3748785	380839	3748809	* AG 108 0.47 6.0 12.0
29. NB HOV RAMP	*	380839	3748809	380920	3748842	* AG 108 0.47 6.0 12.0
30. SB HOV RAMP	*	380918	3748853	380845	3748822	* AG 136 0.47 6.0 12.0
31. SB HOV RAMP	*	380845	3748822	380803	3748791	* AG 136 0.47 6.0 12.0
32. SB HOV RAMP	*	380803	3748791	380770	3748743	* AG 136 0.47 6.0 12.0
33. SB HOV RAMP	*	380770	3748743	380759	3748705	* AG 136 0.47 6.0 12.0
34. SB HOV RAMP	*	380759	3748705	380757	3748680	* AG 136 0.47 6.0 12.0

35. SB HOV RAMP * 380757 3748680 380764 3748637 * AG 136 0.47 6.0 12.0
 36. SB HOV RAMP * 380764 3748637 380802 3748511 * AG 136 0.47 6.0 12.0

III. RECEPTOR LOCATIONS

* COORDINATES (M)			
RECEPTOR	X	Y	Z
1.	* 380587	3748820	1.8
2.	* 380562	3748821	1.8
3.	* 380537	3748821	1.8
4.	* 380512	3748822	1.8
5.	* 380487	3748822	1.8
6.	* 380462	3748823	1.8
7.	* 380587	3748845	1.8
8.	* 380585	3748870	1.8
9.	* 380584	3748895	1.8
10.	* 380583	3748920	1.8
11.	* 380582	3748945	1.8
12.	* 380617	3748818	1.8
13.	* 380642	3748818	1.8
14.	* 380667	3748818	1.8
15.	* 380692	3748818	1.8
16.	* 380717	3748818	1.8
17.	* 380742	3748818	1.8
18.	* 380615	3748843	1.8
19.	* 380613	3748868	1.8
20.	* 380612	3748893	1.8
21.	* 380611	3748918	1.8
22.	* 380609	3748943	1.8
23.	* 380621	3748777	1.8
24.	* 380646	3748777	1.8
25.	* 380671	3748777	1.8
26.	* 380696	3748776	1.8
27.	* 380621	3748752	1.8
28.	* 380622	3748727	1.8
29.	* 380624	3748702	1.8
30.	* 380625	3748677	1.8
31.	* 380593	3748776	1.8
32.	* 380568	3748776	1.8
33.	* 380543	3748776	1.8
34.	* 380518	3748776	1.8
35.	* 380493	3748776	1.8
36.	* 380468	3748776	1.8
37.	* 380593	3748751	1.8
38.	* 380595	3748726	1.8
39.	* 380596	3748701	1.8
40.	* 380597	3748676	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	* BRG	* PRED * * CONC *	CONC/LINK (PPM)								
			(DEG)	*(PPM)*	1	2	3	4	5	6	7	8
1.	* 103.	* 0.27	* 0.00	0.00	0.00	0.00	0.01	0.02	0.02	0.00	0.00
2.	* 103.	* 0.23	* 0.00	0.00	0.00	0.00	0.02	0.01	0.01	0.00	0.00
3.	* 101.	* 0.22	* 0.00	0.00	0.00	0.00	0.02	0.01	0.01	0.00	0.00
4.	* 101.	* 0.22	* 0.00	0.00	0.00	0.00	0.03	0.01	0.01	0.00	0.00
5.	* 100.	* 0.22	* 0.00	0.01	0.00	0.00	0.03	0.01	0.01	0.00	0.00
6.	* 99.	* 0.21	* 0.00	0.01	0.00	0.00	0.02	0.01	0.01	0.00	0.00
7.	* 170.	* 0.22	* 0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8.	* 170.	* 0.19	* 0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.	* 170.	* 0.17	* 0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00

10.	*	171.	*	0.18	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
11.	*	171.	*	0.17	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
12.	*	187.	*	0.29	*	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
13.	*	256.	*	0.24	*	0.00	0.06	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14.	*	257.	*	0.26	*	0.00	0.06	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15.	*	259.	*	0.27	*	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16.	*	260.	*	0.28	*	0.00	0.05	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
17.	*	262.	*	0.29	*	0.01	0.04	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
18.	*	185.	*	0.26	*	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
19.	*	183.	*	0.25	*	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
20.	*	183.	*	0.24	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
21.	*	183.	*	0.23	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
22.	*	182.	*	0.23	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
23.	*	280.	*	0.29	*	0.00	0.14	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
24.	*	280.	*	0.27	*	0.00	0.09	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00
25.	*	278.	*	0.29	*	0.00	0.07	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00
26.	*	279.	*	0.25	*	0.00	0.04	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00
27.	*	350.	*	0.23	*	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
28.	*	351.	*	0.22	*	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
29.	*	350.	*	0.21	*	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
30.	*	350.	*	0.21	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
31.	*	76.	*	0.31	*	0.00	0.02	0.00	0.13	0.00	0.00	0.00	0.00	0.01	0.01
32.	*	78.	*	0.27	*	0.00	0.09	0.00	0.08	0.00	0.00	0.00	0.00	0.01	0.01
33.	*	80.	*	0.26	*	0.00	0.12	0.00	0.05	0.00	0.00	0.00	0.00	0.01	0.01
34.	*	81.	*	0.26	*	0.00	0.14	0.00	0.03	0.00	0.00	0.00	0.00	0.01	0.01
35.	*	81.	*	0.26	*	0.00	0.16	0.00	0.02	0.00	0.00	0.00	0.00	0.01	0.01
36.	*	82.	*	0.26	*	0.00	0.16	0.00	0.02	0.00	0.00	0.00	0.00	0.01	0.01
37.	*	13.	*	0.22	*	0.00	0.03	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
38.	*	6.	*	0.24	*	0.00	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
39.	*	5.	*	0.24	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
40.	*	5.	*	0.24	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00

RECEPTOR	CONC/LINK (PPM)															
	*	9	10	11	12	13	14	15	16							
1.	*	0.12	0.02	0.03	0.00	0.00	0.00	0.00	0.02							
2.	*	0.07	0.02	0.07	0.00	0.00	0.00	0.00	0.01							
3.	*	0.05	0.01	0.09	0.00	0.00	0.00	0.00	0.01							
4.	*	0.03	0.01	0.10	0.00	0.00	0.00	0.00	0.01							
5.	*	0.02	0.01	0.12	0.00	0.00	0.00	0.00	0.00							
6.	*	0.02	0.01	0.11	0.00	0.00	0.00	0.00	0.00							
7.	*	0.00	0.00	0.02	0.00	0.01	0.03	0.01	0.00							
8.	*	0.00	0.00	0.01	0.00	0.01	0.03	0.01	0.00							
9.	*	0.00	0.00	0.01	0.00	0.00	0.03	0.01	0.00							
10.	*	0.01	0.00	0.01	0.00	0.00	0.03	0.01	0.01							
11.	*	0.01	0.00	0.00	0.00	0.00	0.03	0.01	0.01							
12.	*	0.08	0.01	0.00	0.00	0.00	0.08	0.01	0.02							
13.	*	0.11	0.00	0.03	0.00	0.00	0.00	0.00	0.02							
14.	*	0.15	0.01	0.01	0.00	0.00	0.00	0.00	0.01							
15.	*	0.17	0.01	0.01	0.00	0.00	0.00	0.00	0.01							
16.	*	0.18	0.01	0.01	0.00	0.00	0.00	0.00	0.00							
17.	*	0.19	0.01	0.01	0.00	0.00	0.00	0.00	0.00							
18.	*	0.04	0.01	0.00	0.00	0.00	0.05	0.01	0.08							
19.	*	0.02	0.00	0.00	0.00	0.00	0.04	0.01	0.10							
20.	*	0.01	0.00	0.00	0.00	0.00	0.03	0.01	0.11							
21.	*	0.01	0.00	0.00	0.00	0.00	0.02	0.01	0.12							
22.	*	0.01	0.00	0.00	0.00	0.00	0.02	0.01	0.13							
23.	*	0.00	0.00	0.01	0.02	0.00	0.04	0.01	0.00							
24.	*	0.00	0.00	0.02	0.01	0.00	0.02	0.00	0.00							
25.	*	0.00	0.00	0.02	0.02	0.00	0.01	0.00	0.00							
26.	*	0.00	0.00	0.02	0.01	0.00	0.01	0.00	0.00							
27.	*	0.03	0.00	0.00	0.00	0.00	0.07	0.00	0.05							
28.	*	0.02	0.00	0.00	0.00	0.00	0.09	0.00	0.04							

3.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
32.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
33.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
34.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
35.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
36.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
37.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
39.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

*CONC/LINK
*(PPM)

RECEPTOR	*	33	34	35	36
1.	*	0.00	0.00	0.00	0.00
2.	*	0.00	0.00	0.00	0.00
3.	*	0.00	0.00	0.00	0.00
4.	*	0.00	0.00	0.00	0.00
5.	*	0.00	0.00	0.00	0.00
6.	*	0.00	0.00	0.00	0.00
7.	*	0.00	0.00	0.00	0.00
8.	*	0.00	0.00	0.00	0.00
9.	*	0.00	0.00	0.00	0.00
10.	*	0.00	0.00	0.00	0.00
11.	*	0.00	0.00	0.00	0.00
12.	*	0.00	0.00	0.00	0.00
13.	*	0.00	0.00	0.00	0.00
14.	*	0.00	0.00	0.00	0.00
15.	*	0.00	0.00	0.00	0.00
16.	*	0.00	0.00	0.00	0.00
17.	*	0.00	0.00	0.00	0.00
18.	*	0.00	0.00	0.00	0.00
19.	*	0.00	0.00	0.00	0.00
20.	*	0.00	0.00	0.00	0.00
21.	*	0.00	0.00	0.00	0.00
22.	*	0.00	0.00	0.00	0.00

23.	*	0.00	0.00	0.00	0.00
24.	*	0.00	0.00	0.00	0.00
25.	*	0.00	0.00	0.00	0.00
26.	*	0.00	0.00	0.00	0.00
27.	*	0.00	0.00	0.00	0.00
28.	*	0.00	0.00	0.00	0.00
29.	*	0.00	0.00	0.00	0.00
30.	*	0.00	0.00	0.00	0.00
31.	*	0.00	0.00	0.00	0.00
32.	*	0.00	0.00	0.00	0.00
33.	*	0.00	0.00	0.00	0.00
34.	*	0.00	0.00	0.00	0.00
35.	*	0.00	0.00	0.00	0.00
36.	*	0.00	0.00	0.00	0.00
37.	*	0.00	0.00	0.00	0.00
38.	*	0.00	0.00	0.00	0.00
39.	*	0.00	0.00	0.00	0.00
40.	*	0.00	0.00	0.00	0.00

1

Run Ended on 4/03/2018 at 10:55:08

3.0.3 PC (32 BIT) VERSION
(C) COPYRIGHT 2009, TRINITY CONSULTANTS

Run Began on 4/03/2018 at 10:54:02

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Vermont Ave & W Artesia
RUN: 2035 PP AM (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 1.0 M/S Z0= 108. CM ALT= 0. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 4 (D) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 5. DEGREES TEMP= 9.9 DEGREE (C)

II. LINK VARIABLES

LINK	*	LINK COORDINATES (M)				*	EF	H	W
DESCRIPTION	*	X1	Y1	X2	Y2	* TYPE	VPH (G/MI)	(M)	(M)
1. EBA	*	380451	3748788	380262	3748793	* AG	1940	0.44	0.0 18.0
2. EBT	*	380605	3748788	380451	3748788	* AG	1830	0.90	0.0 21.0
3. EBL	*	380604	3748801	380451	3748795	* AG	110	0.98	0.0 9.0
4. EBD	*	380604	3748788	380689	3748786	* AG	2340	0.71	0.0 18.0
5. EBD MAIN	*	380689	3748786	380758	3748782	* AG	1954	0.44	0.0 15.0
6. EBD MAIN	*	380758	3748782	380903	3748757	* AG	1954	0.44	0.0 15.0
7. EBD RAMP	*	380688	3748787	380895	3748713	* AG	386	0.44	0.0 12.0
8. WBA	*	380759	3748809	380913	3748810	* AG	3190	0.44	0.0 18.0
9. WBT	*	380604	3748808	380760	3748809	* AG	2580	0.89	0.0 18.0
10. WBL	*	380604	3748801	380761	3748799	* AG	610	0.93	0.0 12.0
11. WBD1	*	380602	3748809	380451	3748813	* AG	2600	0.64	0.0 18.0
12. WBD2	*	380451	3748813	380264	3748818	* AG	2600	0.44	0.0 18.0
13. NBA	*	380618	3748655	380624	3748509	* AG	920	0.47	0.0 12.0
14. NBT	*	380611	3748799	380617	3748655	* AG	730	0.90	0.0 15.0
15. NBL	*	380603	3748798	380614	3748660	* AG	190	0.98	0.0 12.0
16. NBD1	*	380611	3748800	380602	3748951	* AG	780	0.68	0.0 12.0
17. NBD2	*	380602	3748950	380595	3749099	* AG	780	0.47	0.0 12.0
18. SBA	*	380590	3748949	380587	3749100	* AG	1390	0.47	0.0 12.0
19. SBT	*	380596	3748798	380590	3748949	* AG	950	0.93	0.0 15.0
20. SBL	*	380603	3748798	380593	3748950	* AG	440	0.97	0.0 12.0
21. SBD1	*	380599	3748800	380605	3748654	* AG	1720	0.98	0.0 12.0
22. SBD2	*	380604	3748654	380613	3748509	* AG	1720	0.47	0.0 12.0
23. NB HOV RAMP	*	380813	3748515	380775	3748637	* AG	76	0.47	6.0 12.0
24. NB HOV RAMP	*	380775	3748637	380766	3748677	* AG	76	0.47	6.0 12.0
25. NB HOV RAMP	*	380766	3748677	380774	3748723	* AG	76	0.47	6.0 12.0
26. NB HOV RAMP	*	380774	3748723	380780	3748743	* AG	76	0.47	6.0 12.0
27. NB HOV RAMP	*	380780	3748743	380810	3748785	* AG	76	0.47	6.0 12.0
28. NB HOV RAMP	*	380810	3748785	380839	3748809	* AG	76	0.47	6.0 12.0
29. NB HOV RAMP	*	380839	3748809	380920	3748842	* AG	76	0.47	6.0 12.0
30. SB HOV RAMP	*	380918	3748853	380845	3748822	* AG	95	0.47	6.0 12.0
31. SB HOV RAMP	*	380845	3748822	380803	3748791	* AG	95	0.47	6.0 12.0
32. SB HOV RAMP	*	380803	3748791	380770	3748743	* AG	95	0.47	6.0 12.0
33. SB HOV RAMP	*	380770	3748743	380759	3748705	* AG	95	0.47	6.0 12.0
34. SB HOV RAMP	*	380759	3748705	380757	3748680	* AG	95	0.47	6.0 12.0

35. SB HOV RAMP * 380757 3748680 380764 3748637 * AG 95 0.47 6.0 12.0
 36. SB HOV RAMP * 380764 3748637 380802 3748511 * AG 95 0.47 6.0 12.0

III. RECEPTOR LOCATIONS

* COORDINATES (M)			
RECEPTOR	X	Y	Z
1.	* 380587	3748820	1.8
2.	* 380562	3748821	1.8
3.	* 380537	3748821	1.8
4.	* 380512	3748822	1.8
5.	* 380487	3748822	1.8
6.	* 380462	3748823	1.8
7.	* 380587	3748845	1.8
8.	* 380585	3748870	1.8
9.	* 380584	3748895	1.8
10.	* 380583	3748920	1.8
11.	* 380582	3748945	1.8
12.	* 380617	3748818	1.8
13.	* 380642	3748818	1.8
14.	* 380667	3748818	1.8
15.	* 380692	3748818	1.8
16.	* 380717	3748818	1.8
17.	* 380742	3748818	1.8
18.	* 380615	3748843	1.8
19.	* 380613	3748868	1.8
20.	* 380612	3748893	1.8
21.	* 380611	3748918	1.8
22.	* 380609	3748943	1.8
23.	* 380621	3748777	1.8
24.	* 380646	3748777	1.8
25.	* 380671	3748777	1.8
26.	* 380696	3748776	1.8
27.	* 380621	3748752	1.8
28.	* 380622	3748727	1.8
29.	* 380624	3748702	1.8
30.	* 380625	3748677	1.8
31.	* 380593	3748776	1.8
32.	* 380568	3748776	1.8
33.	* 380543	3748776	1.8
34.	* 380518	3748776	1.8
35.	* 380493	3748776	1.8
36.	* 380468	3748776	1.8
37.	* 380593	3748751	1.8
38.	* 380595	3748726	1.8
39.	* 380596	3748701	1.8
40.	* 380597	3748676	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	* BRG	* PRED * * CONC *	CONC/LINK (PPM)							
			* (DEG)	* (PPM)	* 1	2	3	4	5	6	7	8
1.	* 103.	* 0.26	* 0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00
2.	* 102.	* 0.23	* 0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00
3.	* 101.	* 0.22	* 0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00
4.	* 100.	* 0.22	* 0.00	0.00	0.00	0.02	0.01	0.01	0.00	0.00
5.	* 99.	* 0.22	* 0.00	0.00	0.00	0.02	0.01	0.01	0.00	0.00
6.	* 99.	* 0.21	* 0.00	0.01	0.00	0.02	0.01	0.01	0.00	0.00
7.	* 171.	* 0.22	* 0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
8.	* 171.	* 0.19	* 0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
9.	* 171.	* 0.17	* 0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00

10.	*	171.	*	0.18	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
11.	*	171.	*	0.17	*	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
12.	*	188.	*	0.24	*	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
13.	*	259.	*	0.22	*	0.01	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14.	*	256.	*	0.24	*	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15.	*	259.	*	0.26	*	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16.	*	260.	*	0.27	*	0.00	0.04	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
17.	*	262.	*	0.28	*	0.00	0.03	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
18.	*	186.	*	0.19	*	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
19.	*	184.	*	0.18	*	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
20.	*	183.	*	0.17	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
21.	*	183.	*	0.16	*	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22.	*	183.	*	0.16	*	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23.	*	280.	*	0.22	*	0.00	0.10	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
24.	*	280.	*	0.21	*	0.00	0.06	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00
25.	*	278.	*	0.22	*	0.00	0.05	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00
26.	*	280.	*	0.20	*	0.00	0.03	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00
27.	*	349.	*	0.17	*	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
28.	*	349.	*	0.16	*	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
29.	*	349.	*	0.15	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
30.	*	349.	*	0.15	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
31.	*	75.	*	0.26	*	0.00	0.02	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00
32.	*	78.	*	0.23	*	0.00	0.06	0.00	0.06	0.00	0.00	0.00	0.00	0.01	0.01
33.	*	80.	*	0.22	*	0.00	0.09	0.00	0.04	0.00	0.00	0.00	0.00	0.01	0.01
34.	*	80.	*	0.22	*	0.00	0.10	0.00	0.02	0.00	0.00	0.00	0.00	0.01	0.01
35.	*	81.	*	0.22	*	0.00	0.12	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.01
36.	*	82.	*	0.21	*	0.00	0.12	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.01
37.	*	11.	*	0.21	*	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38.	*	5.	*	0.24	*	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
39.	*	5.	*	0.24	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
40.	*	4.	*	0.24	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00

RECEPTOR	CONC/LINK (PPM)							
	* 9	10	11	12	13	14	15	16
1.	*	0.12	0.02	0.03	0.00	0.00	0.00	0.01
2.	*	0.08	0.02	0.07	0.00	0.00	0.00	0.01
3.	*	0.05	0.02	0.10	0.00	0.00	0.00	0.00
4.	*	0.04	0.02	0.11	0.00	0.00	0.00	0.00
5.	*	0.03	0.01	0.13	0.00	0.00	0.00	0.00
6.	*	0.02	0.01	0.13	0.00	0.00	0.00	0.00
7.	*	0.00	0.00	0.03	0.00	0.01	0.02	0.01
8.	*	0.00	0.00	0.02	0.00	0.01	0.02	0.01
9.	*	0.00	0.00	0.01	0.00	0.00	0.02	0.01
10.	*	0.01	0.00	0.01	0.00	0.00	0.02	0.01
11.	*	0.01	0.00	0.00	0.00	0.00	0.01	0.00
12.	*	0.08	0.01	0.00	0.00	0.00	0.04	0.01
13.	*	0.10	0.00	0.05	0.00	0.00	0.00	0.01
14.	*	0.15	0.01	0.01	0.00	0.00	0.00	0.00
15.	*	0.17	0.01	0.01	0.00	0.00	0.00	0.00
16.	*	0.18	0.02	0.01	0.00	0.00	0.00	0.00
17.	*	0.19	0.02	0.01	0.00	0.00	0.00	0.00
18.	*	0.04	0.01	0.00	0.00	0.00	0.02	0.01
19.	*	0.02	0.00	0.00	0.00	0.00	0.02	0.01
20.	*	0.01	0.00	0.00	0.00	0.00	0.02	0.01
21.	*	0.01	0.00	0.00	0.00	0.00	0.01	0.00
22.	*	0.01	0.00	0.00	0.00	0.00	0.01	0.00
23.	*	0.00	0.00	0.01	0.02	0.00	0.02	0.00
24.	*	0.00	0.00	0.02	0.01	0.00	0.01	0.00
25.	*	0.00	0.00	0.02	0.02	0.00	0.01	0.00
26.	*	0.00	0.00	0.03	0.01	0.00	0.01	0.00
27.	*	0.02	0.01	0.00	0.00	0.00	0.04	0.00
28.	*	0.01	0.00	0.00	0.00	0.00	0.05	0.00

3.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
32.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
33.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
34.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
35.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
36.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
37.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
39.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

*CONC/LINK
*(PPM)

RECEPTOR	*	33	34	35	36
1.	*	0.00	0.00	0.00	0.00
2.	*	0.00	0.00	0.00	0.00
3.	*	0.00	0.00	0.00	0.00
4.	*	0.00	0.00	0.00	0.00
5.	*	0.00	0.00	0.00	0.00
6.	*	0.00	0.00	0.00	0.00
7.	*	0.00	0.00	0.00	0.00
8.	*	0.00	0.00	0.00	0.00
9.	*	0.00	0.00	0.00	0.00
10.	*	0.00	0.00	0.00	0.00
11.	*	0.00	0.00	0.00	0.00
12.	*	0.00	0.00	0.00	0.00
13.	*	0.00	0.00	0.00	0.00
14.	*	0.00	0.00	0.00	0.00
15.	*	0.00	0.00	0.00	0.00
16.	*	0.00	0.00	0.00	0.00
17.	*	0.00	0.00	0.00	0.00
18.	*	0.00	0.00	0.00	0.00
19.	*	0.00	0.00	0.00	0.00
20.	*	0.00	0.00	0.00	0.00
21.	*	0.00	0.00	0.00	0.00
22.	*	0.00	0.00	0.00	0.00

23.	*	0.00	0.00	0.00	0.00
24.	*	0.00	0.00	0.00	0.00
25.	*	0.00	0.00	0.00	0.00
26.	*	0.00	0.00	0.00	0.00
27.	*	0.00	0.00	0.00	0.00
28.	*	0.00	0.00	0.00	0.00
29.	*	0.00	0.00	0.00	0.00
30.	*	0.00	0.00	0.00	0.00
31.	*	0.00	0.00	0.00	0.00
32.	*	0.00	0.00	0.00	0.00
33.	*	0.00	0.00	0.00	0.00
34.	*	0.00	0.00	0.00	0.00
35.	*	0.00	0.00	0.00	0.00
36.	*	0.00	0.00	0.00	0.00
37.	*	0.00	0.00	0.00	0.00
38.	*	0.00	0.00	0.00	0.00
39.	*	0.00	0.00	0.00	0.00
40.	*	0.00	0.00	0.00	0.00

1

Run Ended on 4/03/2018 at 10:54:06

3.0.3 PC (32 BIT) VERSION
(C) COPYRIGHT 2009, TRINITY CONSULTANTS

Run Began on 4/03/2018 at 10:56:42

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Vermont Ave & W Artesia
RUN: 2035 PP PM (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 1.0 M/S Z0= 108. CM ALT= 0. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 4 (D) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 5. DEGREES TEMP= 9.9 DEGREE (C)

II. LINK VARIABLES

LINK	*	LINK COORDINATES (M)	*	EF	H	W
DESCRIPTION	*	X1	Y1	X2	Y2	* TYPE VPH (G/MI) (M) (M)
1. EBA	*	380451	3748788	380262	3748793	* AG 2820 0.44 0.0 18.0
2. EBT	*	380605	3748788	380451	3748788	* AG 2670 0.86 0.0 21.0
3. EBL	*	380604	3748801	380451	3748795	* AG 150 0.98 0.0 9.0
4. EBD	*	380604	3748788	380689	3748786	* AG 3390 0.73 0.0 18.0
5. EBD MAIN	*	380689	3748786	380758	3748782	* AG 2831 0.44 0.0 15.0
6. EBD MAIN	*	380758	3748782	380903	3748757	* AG 2831 0.44 0.0 15.0
7. EBD RAMP	*	380688	3748787	380895	3748713	* AG 559 0.44 0.0 12.0
8. WBA	*	380759	3748809	380913	3748810	* AG 3010 0.44 0.0 18.0
9. WBT	*	380604	3748808	380760	3748809	* AG 2610 0.96 0.0 18.0
10. WBL	*	380604	3748801	380761	3748799	* AG 400 0.97 0.0 12.0
11. WBD1	*	380602	3748809	380451	3748813	* AG 2580 0.58 0.0 18.0
12. WBD2	*	380451	3748813	380264	3748818	* AG 2580 0.44 0.0 18.0
13. NBA	*	380618	3748655	380624	3748509	* AG 1570 0.47 0.0 12.0
14. NBT	*	380611	3748799	380617	3748655	* AG 1290 0.98 0.0 15.0
15. NBL	*	380603	3748798	380614	3748660	* AG 280 0.97 0.0 12.0
16. NBD1	*	380611	3748800	380602	3748951	* AG 1220 0.97 0.0 12.0
17. NBD2	*	380602	3748950	380595	3749099	* AG 1220 0.47 0.0 12.0
18. SBA	*	380590	3748949	380587	3749100	* AG 1170 0.47 0.0 12.0
19. SBT	*	380596	3748798	380590	3748949	* AG 760 0.93 0.0 15.0
20. SBL	*	380603	3748798	380593	3748950	* AG 410 0.97 0.0 12.0
21. SBD1	*	380599	3748800	380605	3748654	* AG 1380 0.98 0.0 12.0
22. SBD2	*	380604	3748654	380613	3748509	* AG 1380 0.47 0.0 12.0
23. NB HOV RAMP	*	380813	3748515	380775	3748637	* AG 108 0.47 6.0 12.0
24. NB HOV RAMP	*	380775	3748637	380766	3748677	* AG 108 0.47 6.0 12.0
25. NB HOV RAMP	*	380766	3748677	380774	3748723	* AG 108 0.47 6.0 12.0
26. NB HOV RAMP	*	380774	3748723	380780	3748743	* AG 108 0.47 6.0 12.0
27. NB HOV RAMP	*	380780	3748743	380810	3748785	* AG 108 0.47 6.0 12.0
28. NB HOV RAMP	*	380810	3748785	380839	3748809	* AG 108 0.47 6.0 12.0
29. NB HOV RAMP	*	380839	3748809	380920	3748842	* AG 108 0.47 6.0 12.0
30. SB HOV RAMP	*	380918	3748853	380845	3748822	* AG 136 0.47 6.0 12.0
31. SB HOV RAMP	*	380845	3748822	380803	3748791	* AG 136 0.47 6.0 12.0
32. SB HOV RAMP	*	380803	3748791	380770	3748743	* AG 136 0.47 6.0 12.0
33. SB HOV RAMP	*	380770	3748743	380759	3748705	* AG 136 0.47 6.0 12.0
34. SB HOV RAMP	*	380759	3748705	380757	3748680	* AG 136 0.47 6.0 12.0

35. SB HOV RAMP * 380757 3748680 380764 3748637 * AG 136 0.47 6.0 12.0
 36. SB HOV RAMP * 380764 3748637 380802 3748511 * AG 136 0.47 6.0 12.0

III. RECEPTOR LOCATIONS

* COORDINATES (M)			
RECEPTOR	* X	Y	Z
1.	* 380587	3748820	1.8
2.	* 380562	3748821	1.8
3.	* 380537	3748821	1.8
4.	* 380512	3748822	1.8
5.	* 380487	3748822	1.8
6.	* 380462	3748823	1.8
7.	* 380587	3748845	1.8
8.	* 380585	3748870	1.8
9.	* 380584	3748895	1.8
10.	* 380583	3748920	1.8
11.	* 380582	3748945	1.8
12.	* 380617	3748818	1.8
13.	* 380642	3748818	1.8
14.	* 380667	3748818	1.8
15.	* 380692	3748818	1.8
16.	* 380717	3748818	1.8
17.	* 380742	3748818	1.8
18.	* 380615	3748843	1.8
19.	* 380613	3748868	1.8
20.	* 380612	3748893	1.8
21.	* 380611	3748918	1.8
22.	* 380609	3748943	1.8
23.	* 380621	3748777	1.8
24.	* 380646	3748777	1.8
25.	* 380671	3748777	1.8
26.	* 380696	3748776	1.8
27.	* 380621	3748752	1.8
28.	* 380622	3748727	1.8
29.	* 380624	3748702	1.8
30.	* 380625	3748677	1.8
31.	* 380593	3748776	1.8
32.	* 380568	3748776	1.8
33.	* 380543	3748776	1.8
34.	* 380518	3748776	1.8
35.	* 380493	3748776	1.8
36.	* 380468	3748776	1.8
37.	* 380593	3748751	1.8
38.	* 380595	3748726	1.8
39.	* 380596	3748701	1.8
40.	* 380597	3748676	1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	* BRG	* PRED	* CONC	CONC/LINK (PPM)							
	(DEG)	(PPM)	(PPM)	* 1	2	3	4	5	6	7	8
1.	* 103.	* 0.28	* 0.00	0.00	0.00	0.00	0.01	0.02	0.02	0.00	0.00
2.	* 102.	* 0.24	* 0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00
3.	* 101.	* 0.23	* 0.00	0.00	0.00	0.00	0.02	0.01	0.01	0.00	0.00
4.	* 101.	* 0.22	* 0.00	0.00	0.00	0.00	0.03	0.01	0.01	0.00	0.00
5.	* 99.	* 0.22	* 0.00	0.00	0.00	0.00	0.02	0.01	0.01	0.00	0.00
6.	* 99.	* 0.21	* 0.00	0.01	0.00	0.02	0.01	0.01	0.01	0.00	0.00
7.	* 170.	* 0.22	* 0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8.	* 170.	* 0.19	* 0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.	* 170.	* 0.17	* 0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00

10.	*	171.	*	0.18	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
11.	*	171.	*	0.17	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
12.	*	187.	*	0.30	*	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
13.	*	256.	*	0.25	*	0.00	0.06	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14.	*	257.	*	0.27	*	0.00	0.06	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15.	*	259.	*	0.28	*	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16.	*	260.	*	0.30	*	0.00	0.05	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
17.	*	262.	*	0.31	*	0.01	0.04	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
18.	*	185.	*	0.26	*	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
19.	*	183.	*	0.25	*	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
20.	*	183.	*	0.24	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
21.	*	183.	*	0.23	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
22.	*	182.	*	0.23	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
23.	*	280.	*	0.29	*	0.00	0.14	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
24.	*	280.	*	0.28	*	0.00	0.09	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00
25.	*	278.	*	0.29	*	0.00	0.07	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00
26.	*	279.	*	0.25	*	0.00	0.04	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00
27.	*	350.	*	0.23	*	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
28.	*	351.	*	0.22	*	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
29.	*	350.	*	0.21	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
30.	*	350.	*	0.21	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
31.	*	75.	*	0.31	*	0.00	0.03	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00
32.	*	78.	*	0.28	*	0.00	0.09	0.00	0.08	0.00	0.00	0.00	0.00	0.01	0.01
33.	*	80.	*	0.27	*	0.00	0.12	0.00	0.05	0.00	0.00	0.00	0.00	0.01	0.01
34.	*	81.	*	0.27	*	0.00	0.14	0.00	0.03	0.00	0.00	0.00	0.00	0.01	0.01
35.	*	81.	*	0.27	*	0.00	0.16	0.00	0.02	0.00	0.00	0.00	0.00	0.01	0.01
36.	*	82.	*	0.26	*	0.00	0.16	0.00	0.02	0.00	0.00	0.00	0.00	0.01	0.01
37.	*	13.	*	0.22	*	0.00	0.03	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
38.	*	6.	*	0.24	*	0.00	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
39.	*	5.	*	0.24	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
40.	*	5.	*	0.24	*	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00

		CONC/LINK (PPM)																
RECEPTOR	*	9	10	11	12	13	14	15	16									
1.	*	0.13	0.02	0.03	0.00	0.00	0.00	0.00	0.02									
2.	*	0.08	0.02	0.06	0.00	0.00	0.00	0.00	0.01									
3.	*	0.05	0.01	0.09	0.00	0.00	0.00	0.00	0.01									
4.	*	0.03	0.01	0.10	0.00	0.00	0.00	0.00	0.01									
5.	*	0.03	0.01	0.12	0.00	0.00	0.00	0.00	0.00									
6.	*	0.02	0.01	0.11	0.00	0.00	0.00	0.00	0.00									
7.	*	0.00	0.00	0.02	0.00	0.01	0.03	0.01	0.00									
8.	*	0.00	0.00	0.01	0.00	0.01	0.03	0.01	0.00									
9.	*	0.00	0.00	0.01	0.00	0.00	0.03	0.01	0.00									
10.	*	0.01	0.00	0.01	0.00	0.00	0.03	0.01	0.01									
11.	*	0.01	0.00	0.00	0.00	0.00	0.03	0.01	0.01									
12.	*	0.09	0.01	0.00	0.00	0.00	0.08	0.01	0.02									
13.	*	0.12	0.00	0.03	0.00	0.00	0.00	0.00	0.02									
14.	*	0.16	0.01	0.01	0.00	0.00	0.00	0.00	0.01									
15.	*	0.18	0.01	0.01	0.00	0.00	0.00	0.00	0.01									
16.	*	0.20	0.01	0.01	0.00	0.00	0.00	0.00	0.00									
17.	*	0.21	0.01	0.01	0.00	0.00	0.00	0.00	0.00									
18.	*	0.04	0.01	0.00	0.00	0.00	0.05	0.01	0.08									
19.	*	0.02	0.00	0.00	0.00	0.00	0.04	0.01	0.10									
20.	*	0.02	0.00	0.00	0.00	0.00	0.03	0.01	0.11									
21.	*	0.01	0.00	0.00	0.00	0.00	0.02	0.01	0.12									
22.	*	0.01	0.00	0.00	0.00	0.00	0.02	0.01	0.13									
23.	*	0.00	0.00	0.01	0.02	0.00	0.04	0.01	0.00									
24.	*	0.00	0.00	0.02	0.01	0.00	0.02	0.00	0.00									
25.	*	0.00	0.00	0.02	0.02	0.00	0.01	0.00	0.00									
26.	*	0.00	0.00	0.02	0.01	0.00	0.01	0.00	0.00									
27.	*	0.03	0.00	0.00	0.00	0.00	0.07	0.00	0.05									
28.	*	0.02	0.00	0.00	0.00	0.00	0.09	0.00	0.04									

3.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
32.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
33.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
34.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
35.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
36.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
37.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
39.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

*CONC/LINK
*(PPM)

RECEPTOR	*	33	34	35	36
1.	*	0.00	0.00	0.00	0.00
2.	*	0.00	0.00	0.00	0.00
3.	*	0.00	0.00	0.00	0.00
4.	*	0.00	0.00	0.00	0.00
5.	*	0.00	0.00	0.00	0.00
6.	*	0.00	0.00	0.00	0.00
7.	*	0.00	0.00	0.00	0.00
8.	*	0.00	0.00	0.00	0.00
9.	*	0.00	0.00	0.00	0.00
10.	*	0.00	0.00	0.00	0.00
11.	*	0.00	0.00	0.00	0.00
12.	*	0.00	0.00	0.00	0.00
13.	*	0.00	0.00	0.00	0.00
14.	*	0.00	0.00	0.00	0.00
15.	*	0.00	0.00	0.00	0.00
16.	*	0.00	0.00	0.00	0.00
17.	*	0.00	0.00	0.00	0.00
18.	*	0.00	0.00	0.00	0.00
19.	*	0.00	0.00	0.00	0.00
20.	*	0.00	0.00	0.00	0.00
21.	*	0.00	0.00	0.00	0.00
22.	*	0.00	0.00	0.00	0.00

23.	*	0.00	0.00	0.00	0.00
24.	*	0.00	0.00	0.00	0.00
25.	*	0.00	0.00	0.00	0.00
26.	*	0.00	0.00	0.00	0.00
27.	*	0.00	0.00	0.00	0.00
28.	*	0.00	0.00	0.00	0.00
29.	*	0.00	0.00	0.00	0.00
30.	*	0.00	0.00	0.00	0.00
31.	*	0.00	0.00	0.00	0.00
32.	*	0.00	0.00	0.00	0.00
33.	*	0.00	0.00	0.00	0.00
34.	*	0.00	0.00	0.00	0.00
35.	*	0.00	0.00	0.00	0.00
36.	*	0.00	0.00	0.00	0.00
37.	*	0.00	0.00	0.00	0.00
38.	*	0.00	0.00	0.00	0.00
39.	*	0.00	0.00	0.00	0.00
40.	*	0.00	0.00	0.00	0.00

1

Run Ended on 4/03/2018 at 10:56:46

3.0.3 PC (32 BIT) VERSION
(C) COPYRIGHT 2009, TRINITY CONSULTANTS

Run Began on 4/02/2018 at 11:38:48

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Avalon and Victoria
RUN: 2025 NP AM (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 1.0 M/S Z0= 108. CM ALT= 0. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 4 (D) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 5. DEGREES TEMP= 9.9 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	* X1	Y1	X2	Y2	* TYPE	EF VPH (G/MI)	H (M)	W (M)
1. EBA	* 382758	3748114	382585	3748110	* AG	920	0.70	0.0 12.0
2. EBT	* 382884	3748120	382758	3748114	* AG	820	1.36	0.0 15.0
3. EBL	* 382884	3748130	382758	3748118	* AG	100	1.41	0.0 9.0
4. EBD1	* 382884	3748120	383033	3748125	* AG	1340	1.43	0.0 12.0
5. EBD2	* 383032	3748125	383199	3748131	* AG	1340	0.70	0.0 12.0
6. WBA	* 383032	3748137	383198	3748143	* AG	810	0.70	0.0 12.0
7. WBT	* 382886	3748134	383032	3748137	* AG	720	1.32	0.0 15.0
8. WBL	* 382886	3748129	383032	3748138	* AG	90	1.43	0.0 9.0
9. WBD1	* 382886	3748134	382757	3748128	* AG	770	1.01	0.0 12.0
10. WBD2	* 382757	3748129	382598	3748123	* AG	770	0.70	0.0 12.0
11. NBA	* 382896	3747989	382898	3747839	* AG	1020	0.70	0.0 15.0
12. NBT	* 382897	3748128	382896	3747988	* AG	870	1.25	0.0 18.0
13. NBL	* 382885	3748129	382891	3747988	* AG	150	1.41	0.0 9.0
14. NBD1	* 382896	3748129	382895	3748274	* AG	1020	0.85	0.0 15.0
15. NBD2	* 382894	3748274	382895	3748425	* AG	1020	0.70	0.0 15.0
16. SBA	* 382871	3748275	382871	3748425	* AG	1200	0.70	0.0 15.0
17. SBT	* 382869	3748127	382871	3748275	* AG	720	1.25	0.0 15.0
18. SBL	* 382885	3748129	382874	3748275	* AG	480	1.41	0.0 12.0
19. SBD1	* 382870	3748127	382870	3747990	* AG	820	0.85	0.0 15.0
20. SBD2	* 382871	3747990	382870	3747841	* AG	820	0.70	0.0 15.0

III. RECEPTOR LOCATIONS

RECEPTOR	* X	Y	Z
1.	* 382861	3748140	1.8
2.	* 382836	3748138	1.8
3.	* 382811	3748137	1.8
4.	* 382786	3748136	1.8
5.	* 382761	3748135	1.8
6.	* 382736	3748135	1.8
7.	* 382861	3748165	1.8

8. * 382861 3748190 1.8
9. * 382862 3748215 1.8
10. * 382862 3748240 1.8
11. * 382862 3748265 1.8
12. * 382905 3748142 1.8
13. * 382930 3748142 1.8
14. * 382955 3748144 1.8
15. * 382980 3748144 2.8
16. * 383005 3748144 3.8
17. * 383030 3748144 4.8
18. * 382903 3748167 1.8
19. * 382903 3748192 1.8
20. * 382903 3748217 2.8
21. * 382903 3748242 3.8
22. * 382902 3748267 4.8
23. * 382906 3748114 1.8
24. * 382931 3748115 1.8
25. * 382956 3748116 1.8
26. * 382981 3748117 2.8
27. * 383006 3748118 3.8
28. * 383031 3748118 4.8
29. * 382906 3748089 1.8
30. * 382906 3748064 1.8
31. * 382906 3748039 2.8
32. * 382906 3748014 3.8
33. * 382906 3747989 4.8
34. * 382861 3748111 1.8
35. * 382836 3748110 1.8
36. * 382811 3748109 1.8
37. * 382786 3748108 2.8
38. * 382761 3748106 3.8
39. * 382736 3748107 4.8
40. * 382711 3748107 5.8
41. * 382862 3748086 1.8
42. * 382862 3748061 1.8
43. * 382862 3748036 2.8
44. * 382862 3748011 3.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	* PRED *		CONC/LINK							
	* BRG *	* CONC *	(PPM)							
	(DEG)	(PPM)	1	2	3	4	5	6	7	8
1.	* 97.	* 0.21	* 0.00	0.00	0.00	0.05	0.01	0.00	0.06	0.01
2.	* 96.	* 0.20	* 0.00	0.00	0.00	0.06	0.01	0.00	0.04	0.01
3.	* 95.	* 0.19	* 0.00	0.00	0.00	0.05	0.01	0.00	0.03	0.00
4.	* 94.	* 0.19	* 0.00	0.01	0.00	0.05	0.01	0.00	0.02	0.00
5.	* 94.	* 0.18	* 0.00	0.01	0.00	0.04	0.01	0.00	0.01	0.00
6.	* 93.	* 0.17	* 0.00	0.01	0.00	0.04	0.01	0.00	0.01	0.00
7.	* 169.	* 0.14	* 0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
8.	* 169.	* 0.13	* 0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
9.	* 167.	* 0.14	* 0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
10.	* 168.	* 0.15	* 0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
11.	* 170.	* 0.16	* 0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
12.	* 258.	* 0.19	* 0.01	0.03	0.01	0.00	0.00	0.00	0.03	0.00
13.	* 260.	* 0.18	* 0.01	0.03	0.01	0.00	0.00	0.00	0.06	0.00
14.	* 260.	* 0.16	* 0.01	0.03	0.01	0.00	0.00	0.00	0.07	0.00
15.	* 261.	* 0.16	* 0.01	0.03	0.00	0.01	0.00	0.00	0.07	0.01
16.	* 261.	* 0.15	* 0.00	0.03	0.00	0.02	0.00	0.00	0.07	0.01
17.	* 262.	* 0.16	* 0.00	0.02	0.00	0.03	0.00	0.00	0.07	0.01
18.	* 186.	* 0.17	* 0.00	0.00	0.00	0.02	0.00	0.00	0.02	0.00
19.	* 186.	* 0.16	* 0.00	0.00	0.00	0.02	0.00	0.00	0.01	0.00
20.	* 185.	* 0.14	* 0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00
21.	* 185.	* 0.13	* 0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00

22.	*	184.	*	0.12	*	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00
23.	*	80.	*	0.23	*	0.00	0.00	0.00	0.19	0.00	0.01	0.02	0.00
24.	*	81.	*	0.25	*	0.00	0.00	0.00	0.21	0.01	0.02	0.01	0.00
25.	*	275.	*	0.26	*	0.00	0.03	0.01	0.18	0.00	0.00	0.00	0.00
26.	*	274.	*	0.25	*	0.00	0.02	0.00	0.17	0.00	0.00	0.00	0.00
27.	*	273.	*	0.23	*	0.00	0.02	0.00	0.16	0.00	0.00	0.01	0.00
28.	*	274.	*	0.20	*	0.00	0.01	0.00	0.14	0.00	0.00	0.01	0.00
29.	*	348.	*	0.17	*	0.00	0.00	0.00	0.03	0.00	0.00	0.01	0.00
30.	*	350.	*	0.17	*	0.00	0.00	0.00	0.02	0.00	0.00	0.01	0.00
31.	*	351.	*	0.16	*	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00
32.	*	352.	*	0.14	*	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
33.	*	353.	*	0.13	*	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
34.	*	81.	*	0.26	*	0.00	0.04	0.00	0.13	0.00	0.01	0.02	0.00
35.	*	82.	*	0.22	*	0.00	0.06	0.00	0.09	0.01	0.01	0.02	0.00
36.	*	82.	*	0.20	*	0.00	0.08	0.00	0.06	0.00	0.01	0.02	0.00
37.	*	83.	*	0.19	*	0.00	0.08	0.00	0.05	0.01	0.01	0.02	0.00
38.	*	83.	*	0.17	*	0.00	0.08	0.00	0.04	0.00	0.01	0.02	0.00
39.	*	84.	*	0.16	*	0.01	0.07	0.00	0.03	0.01	0.01	0.02	0.00
40.	*	84.	*	0.15	*	0.02	0.05	0.01	0.02	0.00	0.01	0.02	0.00
41.	*	7.	*	0.16	*	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
42.	*	7.	*	0.14	*	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
43.	*	6.	*	0.13	*	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
44.	*	5.	*	0.12	*	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00

	*	CONC/LINK (PPM)											
RECEPTOR	*	9	10	11	12	13	14	15	16				
1.	*	0.02	0.00	0.00	0.00	0.00	0.01	0.00	0.00				
2.	*	0.06	0.00	0.00	0.00	0.00	0.01	0.00	0.00				
3.	*	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
4.	*	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
5.	*	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
6.	*	0.06	0.02	0.00	0.00	0.00	0.00	0.00	0.00				
7.	*	0.01	0.00	0.01	0.02	0.01	0.00	0.00	0.00				
8.	*	0.01	0.00	0.01	0.02	0.01	0.00	0.00	0.00				
9.	*	0.01	0.00	0.00	0.03	0.01	0.00	0.00	0.00				
10.	*	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00				
11.	*	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00				
12.	*	0.05	0.00	0.00	0.00	0.00	0.03	0.00	0.00				
13.	*	0.03	0.00	0.00	0.00	0.00	0.01	0.00	0.00				
14.	*	0.02	0.00	0.00	0.00	0.00	0.01	0.00	0.00				
15.	*	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
16.	*	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
17.	*	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
18.	*	0.00	0.00	0.00	0.06	0.01	0.05	0.00	0.00				
19.	*	0.00	0.00	0.00	0.04	0.01	0.07	0.00	0.00				
20.	*	0.00	0.00	0.00	0.03	0.01	0.07	0.00	0.00				
21.	*	0.00	0.00	0.00	0.02	0.01	0.06	0.00	0.00				
22.	*	0.00	0.00	0.00	0.02	0.01	0.06	0.00	0.00				
23.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
24.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
25.	*	0.02	0.01	0.00	0.01	0.00	0.00	0.00	0.00				
26.	*	0.02	0.01	0.00	0.01	0.00	0.00	0.00	0.00				
27.	*	0.02	0.01	0.00	0.01	0.00	0.00	0.00	0.00				
28.	*	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
29.	*	0.00	0.00	0.00	0.05	0.00	0.03	0.00	0.01				
30.	*	0.00	0.00	0.00	0.07	0.00	0.02	0.00	0.01				
31.	*	0.00	0.00	0.00	0.07	0.00	0.01	0.00	0.01				
32.	*	0.00	0.00	0.00	0.07	0.00	0.01	0.00	0.01				
33.	*	0.00	0.00	0.00	0.07	0.00	0.01	0.00	0.01				
34.	*	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00				
35.	*	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00				
36.	*	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00				

37.	*	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
38.	*	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
39.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40.	*	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
41.	*	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00
42.	*	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.00
43.	*	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.00
44.	*	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00

*CONC/LINK
*(PPM)

RECEPTOR	*	17	18	19	20
1.	*	0.03	0.01	0.00	0.00
2.	*	0.01	0.01	0.00	0.00
3.	*	0.01	0.00	0.00	0.00
4.	*	0.01	0.00	0.00	0.00
5.	*	0.00	0.00	0.00	0.00
6.	*	0.00	0.00	0.00	0.00
7.	*	0.05	0.00	0.03	0.00
8.	*	0.07	0.00	0.01	0.00
9.	*	0.07	0.01	0.00	0.00
10.	*	0.07	0.02	0.00	0.00
11.	*	0.08	0.03	0.00	0.00
12.	*	0.01	0.01	0.00	0.00
13.	*	0.01	0.01	0.00	0.00
14.	*	0.01	0.00	0.00	0.00
15.	*	0.00	0.00	0.00	0.00
16.	*	0.00	0.00	0.00	0.00
17.	*	0.00	0.00	0.00	0.00
18.	*	0.00	0.00	0.00	0.01
19.	*	0.00	0.00	0.00	0.01
20.	*	0.00	0.00	0.00	0.01
21.	*	0.00	0.00	0.01	0.01
22.	*	0.00	0.00	0.00	0.01
23.	*	0.00	0.00	0.00	0.00
24.	*	0.00	0.00	0.00	0.00
25.	*	0.00	0.00	0.00	0.00
26.	*	0.00	0.00	0.00	0.00
27.	*	0.00	0.00	0.00	0.00
28.	*	0.00	0.00	0.00	0.00
29.	*	0.01	0.02	0.00	0.00
30.	*	0.01	0.02	0.00	0.00
31.	*	0.01	0.02	0.00	0.00
32.	*	0.01	0.02	0.00	0.00
33.	*	0.01	0.02	0.00	0.00
34.	*	0.00	0.00	0.02	0.00
35.	*	0.00	0.00	0.01	0.00
36.	*	0.00	0.00	0.01	0.00
37.	*	0.00	0.00	0.01	0.00
38.	*	0.00	0.00	0.00	0.00
39.	*	0.00	0.00	0.00	0.00
40.	*	0.00	0.00	0.00	0.00
41.	*	0.05	0.02	0.04	0.00
42.	*	0.03	0.02	0.05	0.00
43.	*	0.02	0.02	0.05	0.00
44.	*	0.02	0.02	0.05	0.00

3.0.3 PC (32 BIT) VERSION
(C) COPYRIGHT 2009, TRINITY CONSULTANTS

Run Began on 4/02/2018 at 11:39:59

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Avalon and Victoria
RUN: 2025 NP PM (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 1.0 M/S Z0= 108. CM ALT= 0. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 4 (D) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 5. DEGREES TEMP= 9.9 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	* X1	Y1	X2	Y2	* TYPE	EF VPH (G/MI)	H (M)	W (M)
1. EBA	* 382758	3748114	382585	3748110	* AG	1340	0.70	0.0 12.0
2. EBT	* 382884	3748120	382758	3748114	* AG	1210	1.31	0.0 15.0
3. EBL	* 382884	3748130	382758	3748118	* AG	130	1.43	0.0 9.0
4. EBD1	* 382884	3748120	383033	3748125	* AG	1520	1.37	0.0 12.0
5. EBD2	* 383032	3748125	383199	3748131	* AG	1520	0.70	0.0 12.0
6. WBA	* 383032	3748137	383198	3748143	* AG	1460	0.70	0.0 12.0
7. WBT	* 382886	3748134	383032	3748137	* AG	1290	1.31	0.0 15.0
8. WBL	* 382886	3748129	383032	3748138	* AG	170	1.41	0.0 9.0
9. WBD1	* 382886	3748134	382757	3748128	* AG	1270	1.05	0.0 12.0
10. WBD2	* 382757	3748129	382598	3748123	* AG	1270	0.70	0.0 12.0
11. NBA	* 382896	3747989	382898	3747839	* AG	1240	0.70	0.0 15.0
12. NBT	* 382897	3748128	382896	3747988	* AG	1030	1.27	0.0 18.0
13. NBL	* 382885	3748129	382891	3747988	* AG	210	1.41	0.0 9.0
14. NBD1	* 382896	3748129	382895	3748274	* AG	1280	0.87	0.0 15.0
15. NBD2	* 382894	3748274	382895	3748425	* AG	1280	0.70	0.0 15.0
16. SBA	* 382871	3748275	382871	3748425	* AG	1490	0.70	0.0 15.0
17. SBT	* 382869	3748127	382871	3748275	* AG	1160	1.31	0.0 15.0
18. SBL	* 382885	3748129	382874	3748275	* AG	330	1.41	0.0 12.0
19. SBD1	* 382870	3748127	382870	3747990	* AG	1460	0.92	0.0 15.0
20. SBD2	* 382871	3747990	382870	3747841	* AG	1460	0.70	0.0 15.0

III. RECEPTOR LOCATIONS

RECEPTOR	* X	Y	Z
1.	* 382861	3748140	1.8
2.	* 382836	3748138	1.8
3.	* 382811	3748137	1.8
4.	* 382786	3748136	1.8
5.	* 382761	3748135	1.8
6.	* 382736	3748135	1.8
7.	* 382861	3748165	1.8

8. * 382861 3748190 1.8
9. * 382862 3748215 1.8
10. * 382862 3748240 1.8
11. * 382862 3748265 1.8
12. * 382905 3748142 1.8
13. * 382930 3748142 1.8
14. * 382955 3748144 1.8
15. * 382980 3748144 2.8
16. * 383005 3748144 3.8
17. * 383030 3748144 4.8
18. * 382903 3748167 1.8
19. * 382903 3748192 1.8
20. * 382903 3748217 2.8
21. * 382903 3748242 3.8
22. * 382902 3748267 4.8
23. * 382906 3748114 1.8
24. * 382931 3748115 1.8
25. * 382956 3748116 1.8
26. * 382981 3748117 2.8
27. * 383006 3748118 3.8
28. * 383031 3748118 4.8
29. * 382906 3748089 1.8
30. * 382906 3748064 1.8
31. * 382906 3748039 2.8
32. * 382906 3748014 3.8
33. * 382906 3747989 4.8
34. * 382861 3748111 1.8
35. * 382836 3748110 1.8
36. * 382811 3748109 1.8
37. * 382786 3748108 2.8
38. * 382761 3748106 3.8
39. * 382736 3748107 4.8
40. * 382711 3748107 5.8
41. * 382862 3748086 1.8
42. * 382862 3748061 1.8
43. * 382862 3748036 2.8
44. * 382862 3748011 3.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	* PRED *	* BRG *	* CONC *	* (DEG) *	* (PPM) *	CONC/LINK (PPM)								
						1	2	3	4	5	6	7	8	
1.	* 96. *	* 0.30 *	* 0.00	0.00	0.00	0.05	0.01	0.00	0.11	0.01				
2.	* 95. *	* 0.28 *	* 0.00	0.00	0.00	0.05	0.01	0.00	0.07	0.01				
3.	* 94. *	* 0.27 *	* 0.00	0.00	0.00	0.05	0.01	0.00	0.05	0.01				
4.	* 94. *	* 0.27 *	* 0.00	0.01	0.01	0.05	0.01	0.00	0.03	0.01				
5.	* 94. *	* 0.25 *	* 0.00	0.02	0.01	0.05	0.01	0.00	0.02	0.00				
6.	* 93. *	* 0.24 *	* 0.00	0.02	0.01	0.04	0.01	0.00	0.02	0.00				
7.	* 171. *	* 0.22 *	* 0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00				
8.	* 170. *	* 0.21 *	* 0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00				
9.	* 171. *	* 0.21 *	* 0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00				
10.	* 171. *	* 0.21 *	* 0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00				
11.	* 171. *	* 0.22 *	* 0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00				
12.	* 258. *	* 0.28 *	* 0.01	0.04	0.01	0.00	0.00	0.00	0.05	0.00				
13.	* 260. *	* 0.27 *	* 0.01	0.04	0.01	0.00	0.00	0.00	0.11	0.00				
14.	* 260. *	* 0.25 *	* 0.01	0.04	0.01	0.00	0.00	0.00	0.12	0.01				
15.	* 261. *	* 0.25 *	* 0.01	0.04	0.01	0.01	0.00	0.00	0.13	0.01				
16.	* 262. *	* 0.24 *	* 0.01	0.03	0.00	0.01	0.00	0.00	0.12	0.01				
17.	* 262. *	* 0.23 *	* 0.01	0.03	0.00	0.03	0.00	0.00	0.12	0.02				
18.	* 186. *	* 0.22 *	* 0.00	0.00	0.00	0.02	0.00	0.00	0.03	0.00				
19.	* 186. *	* 0.20 *	* 0.00	0.00	0.00	0.02	0.00	0.00	0.02	0.00				
20.	* 186. *	* 0.18 *	* 0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00				
21.	* 185. *	* 0.17 *	* 0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00				

22.	*	185.	*	0.16	*	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00
23.	*	276.	*	0.30	*	0.00	0.10	0.01	0.08	0.00	0.00	0.00	0.00
24.	*	274.	*	0.32	*	0.01	0.07	0.01	0.16	0.00	0.00	0.00	0.00
25.	*	274.	*	0.32	*	0.00	0.04	0.01	0.19	0.00	0.00	0.00	0.00
26.	*	274.	*	0.30	*	0.00	0.03	0.01	0.19	0.00	0.00	0.01	0.00
27.	*	274.	*	0.27	*	0.00	0.02	0.00	0.17	0.00	0.00	0.02	0.00
28.	*	274.	*	0.24	*	0.00	0.01	0.00	0.15	0.00	0.00	0.02	0.00
29.	*	349.	*	0.21	*	0.00	0.00	0.00	0.03	0.00	0.00	0.02	0.00
30.	*	350.	*	0.20	*	0.00	0.00	0.00	0.02	0.00	0.00	0.02	0.00
31.	*	351.	*	0.18	*	0.00	0.00	0.00	0.02	0.00	0.00	0.01	0.00
32.	*	352.	*	0.17	*	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00
33.	*	353.	*	0.16	*	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00
34.	*	80.	*	0.33	*	0.00	0.06	0.00	0.13	0.00	0.01	0.04	0.01
35.	*	81.	*	0.29	*	0.00	0.09	0.00	0.09	0.00	0.01	0.04	0.01
36.	*	81.	*	0.27	*	0.00	0.12	0.00	0.06	0.00	0.01	0.04	0.01
37.	*	82.	*	0.25	*	0.00	0.12	0.00	0.04	0.00	0.01	0.04	0.01
38.	*	82.	*	0.23	*	0.00	0.11	0.00	0.03	0.00	0.01	0.04	0.01
39.	*	84.	*	0.22	*	0.01	0.10	0.00	0.03	0.01	0.01	0.03	0.01
40.	*	84.	*	0.20	*	0.02	0.07	0.01	0.03	0.00	0.01	0.03	0.00
41.	*	7.	*	0.23	*	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
42.	*	6.	*	0.21	*	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
43.	*	6.	*	0.20	*	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
44.	*	5.	*	0.18	*	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00

	*	CONC/LINK (PPM)											
RECEPTOR	*	9	10	11	12	13	14	15	16				
1.	*	0.04	0.00	0.00	0.00	0.00	0.02	0.00	0.00				
2.	*	0.09	0.00	0.00	0.00	0.00	0.01	0.00	0.00				
3.	*	0.11	0.00	0.00	0.00	0.00	0.01	0.00	0.00				
4.	*	0.13	0.00	0.00	0.01	0.00	0.00	0.00	0.00				
5.	*	0.13	0.00	0.00	0.01	0.00	0.00	0.00	0.00				
6.	*	0.09	0.03	0.00	0.00	0.00	0.00	0.00	0.00				
7.	*	0.02	0.00	0.01	0.01	0.01	0.00	0.00	0.00				
8.	*	0.01	0.00	0.01	0.02	0.01	0.00	0.00	0.00				
9.	*	0.01	0.00	0.01	0.02	0.01	0.00	0.00	0.00				
10.	*	0.01	0.00	0.01	0.02	0.01	0.00	0.00	0.00				
11.	*	0.00	0.00	0.00	0.03	0.01	0.00	0.00	0.00				
12.	*	0.09	0.00	0.00	0.00	0.00	0.04	0.00	0.00				
13.	*	0.05	0.00	0.00	0.00	0.00	0.02	0.00	0.00				
14.	*	0.03	0.00	0.00	0.00	0.00	0.01	0.00	0.00				
15.	*	0.02	0.00	0.00	0.00	0.00	0.01	0.00	0.00				
16.	*	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
17.	*	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00				
18.	*	0.00	0.00	0.01	0.07	0.01	0.07	0.00	0.00				
19.	*	0.00	0.00	0.00	0.05	0.01	0.08	0.00	0.00				
20.	*	0.00	0.00	0.00	0.03	0.01	0.09	0.00	0.00				
21.	*	0.00	0.00	0.00	0.03	0.01	0.08	0.00	0.00				
22.	*	0.00	0.00	0.00	0.02	0.01	0.08	0.00	0.00				
23.	*	0.03	0.01	0.00	0.05	0.01	0.00	0.00	0.00				
24.	*	0.03	0.01	0.00	0.02	0.00	0.00	0.00	0.00				
25.	*	0.03	0.01	0.00	0.01	0.00	0.00	0.00	0.00				
26.	*	0.03	0.01	0.00	0.01	0.00	0.00	0.00	0.00				
27.	*	0.03	0.01	0.00	0.01	0.00	0.00	0.00	0.00				
28.	*	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00				
29.	*	0.00	0.00	0.00	0.06	0.00	0.04	0.00	0.01				
30.	*	0.00	0.00	0.00	0.08	0.00	0.03	0.00	0.01				
31.	*	0.00	0.00	0.00	0.09	0.00	0.02	0.00	0.01				
32.	*	0.00	0.00	0.00	0.08	0.00	0.01	0.00	0.01				
33.	*	0.00	0.00	0.00	0.08	0.01	0.01	0.00	0.01				
34.	*	0.00	0.00	0.00	0.02	0.01	0.00	0.00	0.00				
35.	*	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00				
36.	*	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00				

37.	*	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
38.	*	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00
39.	*	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00
40.	*	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
41.	*	0.02	0.00	0.00	0.00	0.00	0.01	0.01	0.00
42.	*	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01
43.	*	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.00
44.	*	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01

*CONC/LINK
*(PPM)

RECEPTOR	*	17	18	19	20
1.	*	0.05	0.01	0.00	0.00
2.	*	0.02	0.01	0.00	0.00
3.	*	0.02	0.00	0.00	0.00
4.	*	0.01	0.00	0.00	0.00
5.	*	0.01	0.00	0.00	0.00
6.	*	0.01	0.00	0.00	0.00
7.	*	0.08	0.00	0.06	0.00
8.	*	0.11	0.00	0.03	0.00
9.	*	0.13	0.00	0.02	0.00
10.	*	0.13	0.01	0.01	0.00
11.	*	0.14	0.02	0.00	0.00
12.	*	0.02	0.01	0.00	0.00
13.	*	0.01	0.01	0.00	0.00
14.	*	0.01	0.00	0.00	0.00
15.	*	0.01	0.00	0.01	0.00
16.	*	0.00	0.00	0.00	0.00
17.	*	0.00	0.00	0.01	0.00
18.	*	0.00	0.00	0.00	0.01
19.	*	0.00	0.00	0.01	0.01
20.	*	0.00	0.00	0.01	0.01
21.	*	0.00	0.00	0.01	0.01
22.	*	0.00	0.00	0.01	0.01
23.	*	0.00	0.00	0.02	0.00
24.	*	0.00	0.00	0.01	0.00
25.	*	0.00	0.00	0.01	0.00
26.	*	0.00	0.00	0.01	0.00
27.	*	0.00	0.00	0.00	0.00
28.	*	0.01	0.00	0.00	0.00
29.	*	0.02	0.02	0.00	0.00
30.	*	0.02	0.02	0.00	0.00
31.	*	0.02	0.02	0.00	0.00
32.	*	0.02	0.01	0.00	0.00
33.	*	0.02	0.01	0.00	0.00
34.	*	0.00	0.00	0.05	0.00
35.	*	0.00	0.00	0.02	0.00
36.	*	0.00	0.00	0.01	0.00
37.	*	0.00	0.00	0.01	0.00
38.	*	0.00	0.00	0.01	0.00
39.	*	0.00	0.00	0.01	0.00
40.	*	0.00	0.00	0.00	0.00
41.	*	0.08	0.01	0.07	0.00
42.	*	0.06	0.01	0.09	0.00
43.	*	0.04	0.01	0.10	0.00
44.	*	0.03	0.01	0.09	0.00

3.0.3 PC (32 BIT) VERSION
(C) COPYRIGHT 2009, TRINITY CONSULTANTS

Run Began on 4/02/2018 at 11:43:04

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Avalon and Victoria
RUN: 2025 PP AM (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 1.0 M/S Z0= 108. CM ALT= 0. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 4 (D) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 5. DEGREES TEMP= 9.9 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	* X1	Y1	X2	Y2	* TYPE	EF VPH (G/MI)	H (M)	W (M)
1. EBA	* 382758	3748114	382585	3748110	* AG	1290	0.70	0.0 12.0
2. EBT	* 382884	3748120	382758	3748114	* AG	1190	1.31	0.0 15.0
3. EBL	* 382884	3748130	382758	3748118	* AG	100	1.43	0.0 9.0
4. EBD1	* 382884	3748120	383033	3748125	* AG	1760	1.43	0.0 12.0
5. EBD2	* 383032	3748125	383199	3748131	* AG	1760	0.70	0.0 12.0
6. WBA	* 383032	3748137	383198	3748143	* AG	1160	0.70	0.0 12.0
7. WBT	* 382886	3748134	383032	3748137	* AG	1060	1.31	0.0 15.0
8. WBL	* 382886	3748129	383032	3748138	* AG	100	1.43	0.0 9.0
9. WBD1	* 382886	3748134	382757	3748128	* AG	1120	1.05	0.0 12.0
10. WBD2	* 382757	3748129	382598	3748123	* AG	1120	0.70	0.0 12.0
11. NBA	* 382896	3747989	382898	3747839	* AG	1050	0.70	0.0 15.0
12. NBT	* 382897	3748128	382896	3747988	* AG	890	1.25	0.0 18.0
13. NBL	* 382885	3748129	382891	3747988	* AG	160	1.41	0.0 9.0
14. NBD1	* 382896	3748129	382895	3748274	* AG	1050	0.87	0.0 15.0
15. NBD2	* 382894	3748274	382895	3748425	* AG	1050	0.70	0.0 15.0
16. SBA	* 382871	3748275	382871	3748425	* AG	1280	0.70	0.0 15.0
17. SBT	* 382869	3748127	382871	3748275	* AG	760	1.27	0.0 15.0
18. SBL	* 382885	3748129	382874	3748275	* AG	520	1.43	0.0 12.0
19. SBD1	* 382870	3748127	382870	3747990	* AG	860	0.85	0.0 15.0
20. SBD2	* 382871	3747990	382870	3747841	* AG	860	0.70	0.0 15.0

III. RECEPTOR LOCATIONS

RECEPTOR	* X	Y	Z
1.	* 382861	3748140	1.8
2.	* 382836	3748138	1.8
3.	* 382811	3748137	1.8
4.	* 382786	3748136	1.8
5.	* 382761	3748135	1.8
6.	* 382736	3748135	1.8
7.	* 382861	3748165	1.8

8. * 382861 3748190 1.8
 9. * 382862 3748215 1.8
 10. * 382862 3748240 1.8
 11. * 382862 3748265 1.8
 12. * 382905 3748142 1.8
 13. * 382930 3748142 1.8
 14. * 382955 3748144 1.8
 15. * 382980 3748144 2.8
 16. * 383005 3748144 3.8
 17. * 383030 3748144 4.8
 18. * 382903 3748167 1.8
 19. * 382903 3748192 1.8
 20. * 382903 3748217 2.8
 21. * 382903 3748242 3.8
 22. * 382902 3748267 4.8
 23. * 382906 3748114 1.8
 24. * 382931 3748115 1.8
 25. * 382956 3748116 1.8
 26. * 382981 3748117 2.8
 27. * 383006 3748118 3.8
 28. * 383031 3748118 4.8
 29. * 382906 3748089 1.8
 30. * 382906 3748064 1.8
 31. * 382906 3748039 2.8
 32. * 382906 3748014 3.8
 33. * 382906 3747989 4.8
 34. * 382861 3748111 1.8
 35. * 382836 3748110 1.8
 36. * 382811 3748109 1.8
 37. * 382786 3748108 2.8
 38. * 382761 3748106 3.8
 39. * 382736 3748107 4.8
 40. * 382711 3748107 5.8
 41. * 382862 3748086 1.8
 42. * 382862 3748061 1.8
 43. * 382862 3748036 2.8
 44. * 382862 3748011 3.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	* BRG *	* PRED * * (DEG) *	* CONC * * (PPM) *	CONC/LINK (PPM)							
				1	2	3	4	5	6	7	8
1.	* 97.	* 0.27	* 0.00	0.00	0.00	0.00	0.06	0.01	0.00	0.08	0.01
2.	* 96.	* 0.26	* 0.00	0.00	0.00	0.00	0.07	0.01	0.00	0.05	0.01
3.	* 95.	* 0.25	* 0.00	0.00	0.00	0.00	0.07	0.01	0.00	0.03	0.00
4.	* 94.	* 0.25	* 0.00	0.01	0.00	0.00	0.06	0.01	0.00	0.03	0.00
5.	* 94.	* 0.24	* 0.00	0.02	0.00	0.00	0.05	0.01	0.00	0.02	0.00
6.	* 93.	* 0.22	* 0.00	0.02	0.00	0.00	0.04	0.01	0.00	0.02	0.00
7.	* 169.	* 0.15	* 0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8.	* 169.	* 0.15	* 0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.	* 167.	* 0.15	* 0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00
10.	* 168.	* 0.16	* 0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
11.	* 169.	* 0.17	* 0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00
12.	* 258.	* 0.24	* 0.01	0.04	0.01	0.00	0.00	0.00	0.00	0.04	0.00
13.	* 260.	* 0.24	* 0.01	0.04	0.01	0.00	0.00	0.00	0.00	0.09	0.00
14.	* 260.	* 0.22	* 0.01	0.04	0.01	0.00	0.00	0.00	0.00	0.10	0.00
15.	* 261.	* 0.21	* 0.01	0.04	0.00	0.01	0.00	0.00	0.00	0.11	0.01
16.	* 261.	* 0.20	* 0.01	0.03	0.00	0.02	0.00	0.00	0.00	0.10	0.01
17.	* 262.	* 0.20	* 0.01	0.03	0.00	0.03	0.00	0.00	0.00	0.10	0.01
18.	* 186.	* 0.19	* 0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.02	0.00
19.	* 186.	* 0.17	* 0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.02	0.00
20.	* 185.	* 0.16	* 0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.01	0.00
21.	* 185.	* 0.14	* 0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00

22.	*	184.	*	0.13	*	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00
23.	*	80.	*	0.30	*	0.00	0.00	0.00	0.24	0.01	0.02	0.03	0.00
24.	*	81.	*	0.32	*	0.00	0.00	0.00	0.26	0.01	0.02	0.02	0.00
25.	*	275.	*	0.34	*	0.00	0.04	0.01	0.23	0.00	0.00	0.00	0.00
26.	*	274.	*	0.32	*	0.00	0.03	0.00	0.22	0.00	0.00	0.01	0.00
27.	*	273.	*	0.29	*	0.00	0.02	0.00	0.20	0.00	0.00	0.01	0.00
28.	*	274.	*	0.26	*	0.00	0.01	0.00	0.18	0.00	0.00	0.02	0.00
29.	*	348.	*	0.19	*	0.00	0.00	0.00	0.04	0.00	0.00	0.02	0.00
30.	*	350.	*	0.18	*	0.00	0.00	0.00	0.02	0.00	0.00	0.01	0.00
31.	*	351.	*	0.17	*	0.00	0.00	0.00	0.02	0.00	0.00	0.01	0.00
32.	*	352.	*	0.15	*	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00
33.	*	353.	*	0.14	*	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00
34.	*	81.	*	0.32	*	0.00	0.05	0.00	0.16	0.01	0.01	0.03	0.00
35.	*	82.	*	0.28	*	0.00	0.08	0.00	0.11	0.01	0.01	0.03	0.00
36.	*	82.	*	0.26	*	0.00	0.11	0.00	0.08	0.01	0.01	0.03	0.00
37.	*	83.	*	0.24	*	0.00	0.12	0.00	0.06	0.01	0.01	0.03	0.00
38.	*	83.	*	0.22	*	0.00	0.11	0.00	0.05	0.01	0.01	0.03	0.00
39.	*	84.	*	0.21	*	0.01	0.10	0.00	0.04	0.01	0.01	0.03	0.00
40.	*	84.	*	0.19	*	0.02	0.07	0.01	0.03	0.01	0.01	0.02	0.00
41.	*	7.	*	0.18	*	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
42.	*	7.	*	0.16	*	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
43.	*	6.	*	0.14	*	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
44.	*	5.	*	0.13	*	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00

RECEPTOR	* CONC/LINK (PPM)												
	* 9	10	11	12	13	14	15	16					
1.	*	0.04	0.00	0.00	0.00	0.00	0.01	0.00	0.00				
2.	*	0.08	0.00	0.00	0.00	0.00	0.01	0.00	0.00				
3.	*	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
4.	*	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
5.	*	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
6.	*	0.08	0.03	0.00	0.00	0.00	0.00	0.00	0.00				
7.	*	0.02	0.00	0.01	0.02	0.01	0.00	0.00	0.00				
8.	*	0.01	0.00	0.01	0.02	0.01	0.00	0.00	0.00				
9.	*	0.01	0.00	0.00	0.03	0.01	0.00	0.00	0.00				
10.	*	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00				
11.	*	0.00	0.00	0.00	0.02	0.00	0.01	0.00	0.00				
12.	*	0.08	0.00	0.00	0.00	0.00	0.03	0.00	0.00				
13.	*	0.05	0.00	0.00	0.00	0.00	0.01	0.00	0.00				
14.	*	0.03	0.00	0.00	0.00	0.00	0.01	0.00	0.00				
15.	*	0.02	0.00	0.00	0.00	0.00	0.01	0.00	0.00				
16.	*	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
17.	*	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
18.	*	0.00	0.00	0.01	0.06	0.01	0.05	0.00	0.00				
19.	*	0.00	0.00	0.00	0.04	0.01	0.07	0.00	0.00				
20.	*	0.00	0.00	0.00	0.03	0.01	0.07	0.00	0.00				
21.	*	0.00	0.00	0.00	0.02	0.01	0.07	0.00	0.00				
22.	*	0.00	0.00	0.00	0.02	0.01	0.06	0.00	0.00				
23.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
24.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
25.	*	0.03	0.01	0.00	0.01	0.00	0.00	0.00	0.00				
26.	*	0.03	0.01	0.00	0.01	0.00	0.00	0.00	0.00				
27.	*	0.02	0.01	0.00	0.01	0.00	0.00	0.00	0.00				
28.	*	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00				
29.	*	0.00	0.00	0.00	0.05	0.00	0.03	0.00	0.01				
30.	*	0.00	0.00	0.00	0.07	0.00	0.02	0.00	0.01				
31.	*	0.00	0.00	0.00	0.07	0.00	0.02	0.00	0.01				
32.	*	0.00	0.00	0.00	0.07	0.00	0.01	0.00	0.01				
33.	*	0.00	0.00	0.00	0.07	0.00	0.01	0.00	0.01				
34.	*	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00				
35.	*	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00				
36.	*	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00				

37.	*	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
38.	*	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
39.	*	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40.	*	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
41.	*	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.00
42.	*	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.00
43.	*	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.00
44.	*	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.00

*CONC/LINK
*(PPM)

RECEPTOR	*	17	18	19	20
1.	*	0.03	0.01	0.00	0.00
2.	*	0.02	0.01	0.00	0.00
3.	*	0.01	0.00	0.00	0.00
4.	*	0.01	0.00	0.00	0.00
5.	*	0.00	0.00	0.00	0.00
6.	*	0.00	0.00	0.00	0.00
7.	*	0.05	0.00	0.03	0.00
8.	*	0.07	0.00	0.01	0.00
9.	*	0.08	0.01	0.00	0.00
10.	*	0.08	0.02	0.00	0.00
11.	*	0.09	0.03	0.00	0.00
12.	*	0.02	0.02	0.00	0.00
13.	*	0.01	0.01	0.00	0.00
14.	*	0.01	0.00	0.00	0.00
15.	*	0.00	0.00	0.00	0.00
16.	*	0.00	0.00	0.00	0.00
17.	*	0.00	0.00	0.00	0.00
18.	*	0.00	0.00	0.00	0.01
19.	*	0.00	0.00	0.00	0.01
20.	*	0.00	0.00	0.00	0.01
21.	*	0.00	0.00	0.01	0.01
22.	*	0.00	0.00	0.00	0.01
23.	*	0.00	0.00	0.00	0.00
24.	*	0.00	0.00	0.00	0.00
25.	*	0.00	0.00	0.00	0.00
26.	*	0.00	0.00	0.00	0.00
27.	*	0.00	0.00	0.00	0.00
28.	*	0.00	0.00	0.00	0.00
29.	*	0.02	0.03	0.00	0.00
30.	*	0.01	0.03	0.00	0.00
31.	*	0.01	0.02	0.00	0.00
32.	*	0.01	0.02	0.00	0.00
33.	*	0.01	0.02	0.00	0.00
34.	*	0.00	0.00	0.03	0.00
35.	*	0.00	0.00	0.01	0.00
36.	*	0.00	0.00	0.01	0.00
37.	*	0.00	0.00	0.01	0.00
38.	*	0.00	0.00	0.00	0.00
39.	*	0.00	0.00	0.00	0.00
40.	*	0.00	0.00	0.00	0.00
41.	*	0.05	0.02	0.04	0.00
42.	*	0.03	0.02	0.05	0.00
43.	*	0.03	0.02	0.05	0.00
44.	*	0.02	0.02	0.05	0.00

3.0.3 PC (32 BIT) VERSION
(C) COPYRIGHT 2009, TRINITY CONSULTANTS

Run Began on 4/02/2018 at 11:44:42

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Avalon and Victoria
RUN: 2025 PP PM (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 1.0 M/S Z0= 108. CM ALT= 0. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 4 (D) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 5. DEGREES TEMP= 9.9 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	* X1	Y1	X2	Y2	* TYPE	EF VPH (G/MI)	H (M)	W (M)
1. EBA	* 382758	3748114	382585	3748110	* AG	1700	0.70	0.0 12.0
2. EBT	* 382884	3748120	382758	3748114	* AG	1570	1.38	0.0 15.0
3. EBL	* 382884	3748130	382758	3748118	* AG	130	1.43	0.0 9.0
4. EBD1	* 382884	3748120	383033	3748125	* AG	1920	1.43	0.0 12.0
5. EBD2	* 383032	3748125	383199	3748131	* AG	1920	0.70	0.0 12.0
6. WBA	* 383032	3748137	383198	3748143	* AG	1890	0.70	0.0 12.0
7. WBT	* 382886	3748134	383032	3748137	* AG	1710	1.43	0.0 15.0
8. WBL	* 382886	3748129	383032	3748138	* AG	180	1.41	0.0 9.0
9. WBD1	* 382886	3748134	382757	3748128	* AG	1700	1.43	0.0 12.0
10. WBD2	* 382757	3748129	382598	3748123	* AG	1700	0.70	0.0 12.0
11. NBA	* 382896	3747989	382898	3747839	* AG	1300	0.70	0.0 15.0
12. NBT	* 382897	3748128	382896	3747988	* AG	1060	1.27	0.0 18.0
13. NBL	* 382885	3748129	382891	3747988	* AG	240	1.41	0.0 9.0
14. NBD1	* 382896	3748129	382895	3748274	* AG	1330	0.87	0.0 15.0
15. NBD2	* 382894	3748274	382895	3748425	* AG	1330	0.70	0.0 15.0
16. SBA	* 382871	3748275	382871	3748425	* AG	1550	0.70	0.0 15.0
17. SBT	* 382869	3748127	382871	3748275	* AG	1190	1.31	0.0 15.0
18. SBL	* 382885	3748129	382874	3748275	* AG	360	1.41	0.0 12.0
19. SBD1	* 382870	3748127	382870	3747990	* AG	1490	0.92	0.0 15.0
20. SBD2	* 382871	3747990	382870	3747841	* AG	1490	0.70	0.0 15.0

III. RECEPTOR LOCATIONS

RECEPTOR	* X	Y	Z
1.	* 382861	3748140	1.8
2.	* 382836	3748138	1.8
3.	* 382811	3748137	1.8
4.	* 382786	3748136	1.8
5.	* 382761	3748135	1.8
6.	* 382736	3748135	1.8
7.	* 382861	3748165	1.8

- 8. * 382861 3748190 1.8
- 9. * 382862 3748215 1.8
- 10. * 382862 3748240 1.8
- 11. * 382862 3748265 1.8
- 12. * 382905 3748142 1.8
- 13. * 382930 3748142 1.8
- 14. * 382955 3748144 1.8
- 15. * 382980 3748144 2.8
- 16. * 383005 3748144 3.8
- 17. * 383030 3748144 4.8
- 18. * 382903 3748167 1.8
- 19. * 382903 3748192 1.8
- 20. * 382903 3748217 2.8
- 21. * 382903 3748242 3.8
- 22. * 382902 3748267 4.8
- 23. * 382906 3748114 1.8
- 24. * 382931 3748115 1.8
- 25. * 382956 3748116 1.8
- 26. * 382981 3748117 2.8
- 27. * 383006 3748118 3.8
- 28. * 383031 3748118 4.8
- 29. * 382906 3748089 1.8
- 30. * 382906 3748064 1.8
- 31. * 382906 3748039 2.8
- 32. * 382906 3748014 3.8
- 33. * 382906 3747989 4.8
- 34. * 382861 3748111 1.8
- 35. * 382836 3748110 1.8
- 36. * 382811 3748109 1.8
- 37. * 382786 3748108 2.8
- 38. * 382761 3748106 3.8
- 39. * 382736 3748107 4.8
- 40. * 382711 3748107 5.8
- 41. * 382862 3748086 1.8
- 42. * 382862 3748061 1.8
- 43. * 382862 3748036 2.8
- 44. * 382862 3748011 3.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	* BRG * (DEG)	* PRED * CONC * (PPM)	CONC/LINK (PPM)							
			* 1	* 2	* 3	* 4	* 5	* 6	* 7	* 8
1.	* 97.	* 0.39	* 0.00	0.00	0.00	0.07	0.01	0.00	0.14	0.01
2.	* 95.	* 0.39	* 0.00	0.00	0.00	0.06	0.01	0.00	0.10	0.01
3.	* 95.	* 0.40	* 0.00	0.00	0.00	0.07	0.01	0.00	0.06	0.01
4.	* 94.	* 0.40	* 0.00	0.01	0.01	0.06	0.01	0.00	0.04	0.01
5.	* 94.	* 0.38	* 0.00	0.02	0.01	0.06	0.01	0.00	0.03	0.00
6.	* 93.	* 0.34	* 0.00	0.02	0.01	0.05	0.01	0.00	0.03	0.00
7.	* 170.	* 0.24	* 0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
8.	* 170.	* 0.23	* 0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
9.	* 171.	* 0.23	* 0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
10.	* 171.	* 0.22	* 0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
11.	* 171.	* 0.23	* 0.00	0.01	0.00	0.01	0.00	0.00	0.01	0.00
12.	* 258.	* 0.38	* 0.01	0.05	0.01	0.00	0.00	0.00	0.08	0.00
13.	* 261.	* 0.37	* 0.02	0.05	0.01	0.00	0.00	0.00	0.15	0.00
14.	* 260.	* 0.34	* 0.01	0.06	0.01	0.00	0.00	0.00	0.17	0.01
15.	* 261.	* 0.33	* 0.01	0.05	0.01	0.01	0.00	0.00	0.18	0.01
16.	* 262.	* 0.31	* 0.01	0.04	0.00	0.02	0.00	0.00	0.17	0.01
17.	* 263.	* 0.31	* 0.01	0.04	0.00	0.02	0.00	0.00	0.17	0.02
18.	* 186.	* 0.25	* 0.00	0.00	0.00	0.03	0.00	0.00	0.04	0.00
19.	* 186.	* 0.22	* 0.00	0.00	0.00	0.02	0.00	0.00	0.03	0.00
20.	* 186.	* 0.20	* 0.00	0.00	0.00	0.02	0.00	0.00	0.02	0.00
21.	* 185.	* 0.18	* 0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00

22.	*	185.	*	0.17	*	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.01	0.00
23.	*	277.	*	0.38	*	0.00	0.12	0.01	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24.	*	275.	*	0.41	*	0.00	0.08	0.01	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25.	*	275.	*	0.41	*	0.00	0.05	0.01	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26.	*	274.	*	0.39	*	0.00	0.04	0.01	0.24	0.00	0.00	0.01	0.00	0.00	0.00	0.00
27.	*	274.	*	0.35	*	0.00	0.03	0.00	0.22	0.00	0.00	0.02	0.00	0.00	0.00	0.00
28.	*	274.	*	0.32	*	0.00	0.02	0.00	0.19	0.00	0.00	0.03	0.01	0.00	0.00	0.00
29.	*	349.	*	0.23	*	0.00	0.00	0.00	0.04	0.00	0.00	0.03	0.00	0.00	0.00	0.00
30.	*	350.	*	0.22	*	0.00	0.00	0.00	0.03	0.00	0.00	0.02	0.00	0.00	0.00	0.00
31.	*	351.	*	0.20	*	0.00	0.00	0.00	0.02	0.00	0.00	0.02	0.00	0.00	0.00	0.00
32.	*	352.	*	0.18	*	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00
33.	*	353.	*	0.17	*	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00
34.	*	80.	*	0.41	*	0.00	0.08	0.00	0.17	0.00	0.01	0.06	0.01	0.00	0.00	0.00
35.	*	81.	*	0.36	*	0.00	0.12	0.00	0.11	0.00	0.01	0.06	0.01	0.00	0.00	0.00
36.	*	81.	*	0.34	*	0.00	0.16	0.00	0.07	0.00	0.01	0.06	0.01	0.00	0.00	0.00
37.	*	82.	*	0.33	*	0.00	0.17	0.00	0.05	0.00	0.01	0.06	0.01	0.00	0.00	0.00
38.	*	82.	*	0.29	*	0.00	0.15	0.00	0.04	0.00	0.01	0.05	0.01	0.00	0.00	0.00
39.	*	83.	*	0.29	*	0.01	0.13	0.01	0.03	0.00	0.01	0.04	0.01	0.00	0.00	0.00
40.	*	84.	*	0.26	*	0.03	0.10	0.01	0.03	0.01	0.01	0.04	0.01	0.00	0.00	0.00
41.	*	7.	*	0.26	*	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42.	*	6.	*	0.23	*	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
43.	*	6.	*	0.21	*	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
44.	*	5.	*	0.19	*	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

RECEPTOR	CONC/LINK (PPM)								
	* 9	10	11	12	13	14	15	16	
1.	*	0.08	0.00	0.00	0.00	0.00	0.02	0.00	0.00
2.	*	0.16	0.00	0.00	0.00	0.00	0.01	0.00	0.00
3.	*	0.21	0.00	0.00	0.00	0.00	0.01	0.00	0.00
4.	*	0.23	0.00	0.00	0.01	0.00	0.00	0.00	0.00
5.	*	0.23	0.00	0.00	0.01	0.00	0.00	0.00	0.00
6.	*	0.16	0.04	0.00	0.00	0.00	0.00	0.00	0.00
7.	*	0.04	0.00	0.01	0.02	0.01	0.00	0.00	0.00
8.	*	0.02	0.00	0.01	0.02	0.01	0.00	0.00	0.00
9.	*	0.02	0.00	0.01	0.02	0.01	0.00	0.00	0.00
10.	*	0.01	0.00	0.01	0.03	0.01	0.00	0.00	0.00
11.	*	0.01	0.00	0.01	0.03	0.01	0.00	0.00	0.00
12.	*	0.15	0.00	0.00	0.00	0.00	0.04	0.00	0.00
13.	*	0.10	0.00	0.00	0.00	0.00	0.02	0.00	0.00
14.	*	0.05	0.00	0.00	0.00	0.00	0.01	0.00	0.00
15.	*	0.04	0.00	0.00	0.00	0.00	0.01	0.00	0.00
16.	*	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17.	*	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18.	*	0.00	0.00	0.01	0.07	0.01	0.07	0.00	0.00
19.	*	0.00	0.00	0.00	0.05	0.01	0.09	0.00	0.00
20.	*	0.00	0.00	0.00	0.03	0.01	0.09	0.00	0.00
21.	*	0.00	0.00	0.00	0.03	0.01	0.09	0.00	0.00
22.	*	0.00	0.00	0.00	0.02	0.01	0.08	0.00	0.00
23.	*	0.06	0.01	0.00	0.05	0.01	0.00	0.00	0.00
24.	*	0.05	0.01	0.00	0.02	0.00	0.00	0.00	0.00
25.	*	0.06	0.01	0.00	0.01	0.00	0.00	0.00	0.00
26.	*	0.05	0.01	0.00	0.01	0.00	0.00	0.00	0.00
27.	*	0.05	0.01	0.00	0.01	0.00	0.00	0.00	0.00
28.	*	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00
29.	*	0.00	0.00	0.00	0.06	0.00	0.05	0.00	0.01
30.	*	0.00	0.00	0.00	0.09	0.00	0.03	0.00	0.01
31.	*	0.00	0.00	0.00	0.09	0.00	0.02	0.00	0.01
32.	*	0.00	0.00	0.00	0.09	0.00	0.01	0.00	0.01
33.	*	0.00	0.00	0.00	0.08	0.01	0.01	0.00	0.01
34.	*	0.00	0.00	0.00	0.02	0.01	0.00	0.00	0.00
35.	*	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00
36.	*	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00

37.	*	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
38.	*	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00
39.	*	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40.	*	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
41.	*	0.03	0.00	0.00	0.00	0.00	0.01	0.01	0.01
42.	*	0.02	0.00	0.00	0.00	0.00	0.01	0.01	0.01
43.	*	0.02	0.00	0.00	0.00	0.00	0.01	0.01	0.00
44.	*	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01

*CONC/LINK
*(PPM)

RECEPTOR	*	17	18	19	20
1.	*	0.05	0.01	0.00	0.00
2.	*	0.02	0.01	0.00	0.00
3.	*	0.02	0.00	0.00	0.00
4.	*	0.01	0.00	0.00	0.00
5.	*	0.01	0.00	0.00	0.00
6.	*	0.01	0.00	0.00	0.00
7.	*	0.09	0.00	0.05	0.00
8.	*	0.11	0.00	0.03	0.00
9.	*	0.13	0.00	0.02	0.00
10.	*	0.13	0.01	0.01	0.00
11.	*	0.14	0.02	0.00	0.00
12.	*	0.02	0.01	0.00	0.00
13.	*	0.02	0.01	0.00	0.00
14.	*	0.01	0.00	0.00	0.00
15.	*	0.01	0.00	0.01	0.00
16.	*	0.00	0.00	0.00	0.00
17.	*	0.00	0.00	0.00	0.00
18.	*	0.00	0.00	0.00	0.01
19.	*	0.00	0.00	0.01	0.01
20.	*	0.00	0.00	0.01	0.01
21.	*	0.00	0.00	0.01	0.01
22.	*	0.00	0.00	0.01	0.01
23.	*	0.00	0.00	0.02	0.00
24.	*	0.00	0.00	0.01	0.00
25.	*	0.00	0.00	0.01	0.00
26.	*	0.00	0.00	0.01	0.00
27.	*	0.01	0.00	0.00	0.00
28.	*	0.01	0.00	0.00	0.00
29.	*	0.02	0.02	0.00	0.00
30.	*	0.02	0.02	0.00	0.00
31.	*	0.02	0.02	0.00	0.00
32.	*	0.02	0.01	0.00	0.00
33.	*	0.02	0.01	0.00	0.00
34.	*	0.00	0.00	0.05	0.00
35.	*	0.00	0.00	0.02	0.00
36.	*	0.00	0.00	0.01	0.00
37.	*	0.00	0.00	0.01	0.00
38.	*	0.00	0.00	0.01	0.00
39.	*	0.00	0.00	0.01	0.00
40.	*	0.00	0.00	0.00	0.00
41.	*	0.08	0.01	0.07	0.00
42.	*	0.06	0.01	0.09	0.00
43.	*	0.04	0.01	0.10	0.00
44.	*	0.03	0.01	0.09	0.00

3.0.3 PC (32 BIT) VERSION
(C) COPYRIGHT 2009, TRINITY CONSULTANTS

Run Began on 4/02/2018 at 11:47:13

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Avalon and Victoria
RUN: 2035 NP AM (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 1.0 M/S Z0= 108. CM ALT= 0. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 4 (D) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 5. DEGREES TEMP= 9.9 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	* X1	Y1	X2	Y2	* TYPE	EF VPH (G/MI)	H (M)	W (M)
1. EBA	* 382758	3748114	382585	3748110	* AG	920	0.47	0.0 12.0
2. EBT	* 382884	3748120	382758	3748114	* AG	820	0.93	0.0 15.0
3. EBL	* 382884	3748130	382758	3748118	* AG	100	0.97	0.0 9.0
4. EBD1	* 382884	3748120	383033	3748125	* AG	1340	0.98	0.0 12.0
5. EBD2	* 383032	3748125	383199	3748131	* AG	1340	0.47	0.0 12.0
6. WBA	* 383032	3748137	383198	3748143	* AG	830	0.47	0.0 12.0
7. WBT	* 382886	3748134	383032	3748137	* AG	740	0.90	0.0 15.0
8. WBL	* 382886	3748129	383032	3748138	* AG	90	0.98	0.0 9.0
9. WBD1	* 382886	3748134	382757	3748128	* AG	790	0.68	0.0 12.0
10. WBD2	* 382757	3748129	382598	3748123	* AG	790	0.47	0.0 12.0
11. NBA	* 382896	3747989	382898	3747839	* AG	1030	0.47	0.0 15.0
12. NBT	* 382897	3748128	382896	3747988	* AG	880	0.85	0.0 18.0
13. NBL	* 382885	3748129	382891	3747988	* AG	150	0.97	0.0 9.0
14. NBD1	* 382896	3748129	382895	3748274	* AG	1040	0.57	0.0 15.0
15. NBD2	* 382894	3748274	382895	3748425	* AG	1040	0.47	0.0 15.0
16. SBA	* 382871	3748275	382871	3748425	* AG	1220	0.47	0.0 15.0
17. SBT	* 382869	3748127	382871	3748275	* AG	740	0.85	0.0 15.0
18. SBL	* 382885	3748129	382874	3748275	* AG	480	0.97	0.0 12.0
19. SBD1	* 382870	3748127	382870	3747990	* AG	830	0.57	0.0 15.0
20. SBD2	* 382871	3747990	382870	3747841	* AG	830	0.47	0.0 15.0

III. RECEPTOR LOCATIONS

RECEPTOR	* X	Y	Z
1.	* 382861	3748140	1.8
2.	* 382836	3748138	1.8
3.	* 382811	3748137	1.8
4.	* 382786	3748136	1.8
5.	* 382761	3748135	1.8
6.	* 382736	3748135	1.8
7.	* 382861	3748165	1.8

8. * 382861 3748190 1.8
9. * 382862 3748215 1.8
10. * 382862 3748240 1.8
11. * 382862 3748265 1.8
12. * 382905 3748142 1.8
13. * 382930 3748142 1.8
14. * 382955 3748144 1.8
15. * 382980 3748144 2.8
16. * 383005 3748144 3.8
17. * 383030 3748144 4.8
18. * 382903 3748167 1.8
19. * 382903 3748192 1.8
20. * 382903 3748217 2.8
21. * 382903 3748242 3.8
22. * 382902 3748267 4.8
23. * 382906 3748114 1.8
24. * 382931 3748115 1.8
25. * 382956 3748116 1.8
26. * 382981 3748117 2.8
27. * 383006 3748118 3.8
28. * 383031 3748118 4.8
29. * 382906 3748089 1.8
30. * 382906 3748064 1.8
31. * 382906 3748039 2.8
32. * 382906 3748014 3.8
33. * 382906 3747989 4.8
34. * 382861 3748111 1.8
35. * 382836 3748110 1.8
36. * 382811 3748109 1.8
37. * 382786 3748108 2.8
38. * 382761 3748106 3.8
39. * 382736 3748107 4.8
40. * 382711 3748107 5.8
41. * 382862 3748086 1.8
42. * 382862 3748061 1.8
43. * 382862 3748036 2.8
44. * 382862 3748011 3.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	* BRG * (DEG)	* PRED * CONC * (PPM)	CONC/LINK (PPM)							
			* 1	* 2	* 3	* 4	* 5	* 6	* 7	* 8
1.	* 97.	* 0.15 *	0.00	0.00	0.00	0.04	0.01	0.00	0.04	0.01
2.	* 96.	* 0.14 *	0.00	0.00	0.00	0.04	0.00	0.00	0.03	0.00
3.	* 95.	* 0.13 *	0.00	0.00	0.00	0.04	0.01	0.00	0.02	0.00
4.	* 94.	* 0.13 *	0.00	0.00	0.00	0.03	0.01	0.00	0.01	0.00
5.	* 94.	* 0.12 *	0.00	0.01	0.00	0.03	0.00	0.00	0.01	0.00
6.	* 93.	* 0.12 *	0.00	0.01	0.00	0.02	0.01	0.00	0.01	0.00
7.	* 169.	* 0.09 *	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
8.	* 169.	* 0.09 *	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
9.	* 167.	* 0.10 *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.	* 168.	* 0.10 *	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
11.	* 170.	* 0.11 *	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.	* 258.	* 0.13 *	0.00	0.02	0.01	0.00	0.00	0.00	0.02	0.00
13.	* 260.	* 0.12 *	0.01	0.02	0.01	0.00	0.00	0.00	0.04	0.00
14.	* 260.	* 0.11 *	0.00	0.02	0.00	0.00	0.00	0.00	0.05	0.00
15.	* 261.	* 0.11 *	0.00	0.02	0.00	0.00	0.00	0.00	0.05	0.00
16.	* 261.	* 0.11 *	0.00	0.02	0.00	0.01	0.00	0.00	0.05	0.01
17.	* 262.	* 0.11 *	0.00	0.02	0.00	0.02	0.00	0.00	0.05	0.01
18.	* 186.	* 0.12 *	0.00	0.00	0.00	0.02	0.00	0.00	0.01	0.00
19.	* 186.	* 0.11 *	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00
20.	* 185.	* 0.10 *	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00
21.	* 185.	* 0.09 *	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00

22.	*	184.	*	0.08	*	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
23.	*	80.	*	0.16	*	0.00	0.00	0.00	0.13	0.00	0.01	0.01	0.00
24.	*	81.	*	0.17	*	0.00	0.00	0.00	0.14	0.01	0.01	0.01	0.00
25.	*	275.	*	0.18	*	0.00	0.02	0.00	0.12	0.00	0.00	0.00	0.00
26.	*	274.	*	0.17	*	0.00	0.01	0.00	0.12	0.00	0.00	0.00	0.00
27.	*	273.	*	0.16	*	0.00	0.01	0.00	0.11	0.00	0.00	0.00	0.00
28.	*	274.	*	0.14	*	0.00	0.01	0.00	0.10	0.00	0.00	0.01	0.00
29.	*	348.	*	0.12	*	0.00	0.00	0.00	0.02	0.00	0.00	0.01	0.00
30.	*	350.	*	0.12	*	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00
31.	*	351.	*	0.11	*	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
32.	*	352.	*	0.10	*	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
33.	*	353.	*	0.09	*	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
34.	*	81.	*	0.18	*	0.00	0.03	0.00	0.09	0.00	0.01	0.02	0.00
35.	*	82.	*	0.15	*	0.00	0.04	0.00	0.06	0.00	0.01	0.02	0.00
36.	*	82.	*	0.14	*	0.00	0.05	0.00	0.04	0.00	0.00	0.02	0.00
37.	*	83.	*	0.13	*	0.00	0.06	0.00	0.03	0.00	0.00	0.01	0.00
38.	*	83.	*	0.11	*	0.00	0.05	0.00	0.03	0.00	0.00	0.01	0.00
39.	*	84.	*	0.11	*	0.00	0.05	0.00	0.02	0.00	0.00	0.01	0.00
40.	*	84.	*	0.10	*	0.01	0.04	0.00	0.02	0.00	0.00	0.01	0.00
41.	*	7.	*	0.11	*	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
42.	*	7.	*	0.10	*	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
43.	*	6.	*	0.09	*	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
44.	*	5.	*	0.08	*	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00

RECEPTOR	* CONC/LINK (PPM)													
	* 9	10	11	12	13	14	15	16						
1.	*	0.02	0.00	0.00	0.00	0.00	0.01	0.00	0.00					
2.	*	0.04	0.00	0.00	0.00	0.00	0.01	0.00	0.00					
3.	*	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
4.	*	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
5.	*	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
6.	*	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00					
7.	*	0.01	0.00	0.01	0.01	0.00	0.00	0.00	0.00					
8.	*	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00					
9.	*	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00					
10.	*	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00					
11.	*	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00					
12.	*	0.04	0.00	0.00	0.00	0.00	0.00	0.02	0.00					
13.	*	0.02	0.00	0.00	0.00	0.00	0.01	0.00	0.00					
14.	*	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00					
15.	*	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
16.	*	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
17.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
18.	*	0.00	0.00	0.00	0.04	0.00	0.04	0.00	0.00					
19.	*	0.00	0.00	0.00	0.03	0.00	0.05	0.00	0.00					
20.	*	0.00	0.00	0.00	0.02	0.00	0.05	0.00	0.00					
21.	*	0.00	0.00	0.00	0.02	0.00	0.04	0.00	0.00					
22.	*	0.00	0.00	0.00	0.01	0.00	0.04	0.00	0.00					
23.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
24.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
25.	*	0.02	0.00	0.00	0.01	0.00	0.00	0.00	0.00					
26.	*	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00					
27.	*	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
28.	*	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
29.	*	0.00	0.00	0.00	0.04	0.00	0.02	0.00	0.00					
30.	*	0.00	0.00	0.00	0.05	0.00	0.01	0.00	0.01					
31.	*	0.00	0.00	0.00	0.05	0.00	0.01	0.00	0.01					
32.	*	0.00	0.00	0.00	0.05	0.00	0.01	0.00	0.01					
33.	*	0.00	0.00	0.00	0.05	0.00	0.01	0.00	0.01					
34.	*	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00					
35.	*	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00					
36.	*	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00					

37.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
39.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
41.	*	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00
42.	*	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.00
43.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
44.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00

*CONC/LINK
*(PPM)

RECEPTOR	*	17	18	19	20
1.	*	0.02	0.01	0.00	0.00
2.	*	0.01	0.01	0.00	0.00
3.	*	0.01	0.00	0.00	0.00
4.	*	0.00	0.00	0.00	0.00
5.	*	0.00	0.00	0.00	0.00
6.	*	0.00	0.00	0.00	0.00
7.	*	0.04	0.00	0.02	0.00
8.	*	0.05	0.00	0.01	0.00
9.	*	0.05	0.01	0.00	0.00
10.	*	0.05	0.01	0.00	0.00
11.	*	0.06	0.02	0.00	0.00
12.	*	0.01	0.01	0.00	0.00
13.	*	0.01	0.01	0.00	0.00
14.	*	0.00	0.00	0.00	0.00
15.	*	0.00	0.00	0.00	0.00
16.	*	0.00	0.00	0.00	0.00
17.	*	0.00	0.00	0.00	0.00
18.	*	0.00	0.00	0.00	0.01
19.	*	0.00	0.00	0.00	0.01
20.	*	0.00	0.00	0.00	0.00
21.	*	0.00	0.00	0.00	0.00
22.	*	0.00	0.00	0.00	0.00
23.	*	0.00	0.00	0.00	0.00
24.	*	0.00	0.00	0.00	0.00
25.	*	0.00	0.00	0.00	0.00
26.	*	0.00	0.00	0.00	0.00
27.	*	0.00	0.00	0.00	0.00
28.	*	0.00	0.00	0.00	0.00
29.	*	0.01	0.02	0.00	0.00
30.	*	0.01	0.02	0.00	0.00
31.	*	0.01	0.02	0.00	0.00
32.	*	0.01	0.01	0.00	0.00
33.	*	0.01	0.01	0.00	0.00
34.	*	0.00	0.00	0.02	0.00
35.	*	0.00	0.00	0.01	0.00
36.	*	0.00	0.00	0.01	0.00
37.	*	0.00	0.00	0.00	0.00
38.	*	0.00	0.00	0.00	0.00
39.	*	0.00	0.00	0.00	0.00
40.	*	0.00	0.00	0.00	0.00
41.	*	0.03	0.01	0.03	0.00
42.	*	0.02	0.01	0.03	0.00
43.	*	0.02	0.01	0.04	0.00
44.	*	0.01	0.01	0.03	0.00

3.0.3 PC (32 BIT) VERSION
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Run Began on 4/02/2018 at 11:48:36

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Avalon and Victoria
RUN: 2035 NP PM (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 1.0 M/S Z0= 108. CM ALT= 0. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 4 (D) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 5. DEGREES TEMP= 9.9 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	* X1	Y1	X2	Y2	* TYPE	EF VPH (G/MI)	H (M)	W (M)
1. EBA	* 382758	3748114	382585	3748110	* AG	1350	0.47	0.0 12.0
2. EBT	* 382884	3748120	382758	3748114	* AG	1220	1.31	0.0 15.0
3. EBL	* 382884	3748130	382758	3748118	* AG	130	1.43	0.0 9.0
4. EBD1	* 382884	3748120	383033	3748125	* AG	1550	1.37	0.0 12.0
5. EBD2	* 383032	3748125	383199	3748131	* AG	1550	0.47	0.0 12.0
6. WBA	* 383032	3748137	383198	3748143	* AG	1470	0.47	0.0 12.0
7. WBT	* 382886	3748134	383032	3748137	* AG	1300	0.90	0.0 15.0
8. WBL	* 382886	3748129	383032	3748138	* AG	170	0.97	0.0 9.0
9. WBD1	* 382886	3748134	382757	3748128	* AG	1270	0.71	0.0 12.0
10. WBD2	* 382757	3748129	382598	3748123	* AG	1270	0.47	0.0 12.0
11. NBA	* 382896	3747989	382898	3747839	* AG	1260	0.47	0.0 15.0
12. NBT	* 382897	3748128	382896	3747988	* AG	1050	0.87	0.0 18.0
13. NBL	* 382885	3748129	382891	3747988	* AG	210	0.97	0.0 9.0
14. NBD1	* 382896	3748129	382895	3748274	* AG	1300	0.59	0.0 15.0
15. NBD2	* 382894	3748274	382895	3748425	* AG	1300	0.47	0.0 15.0
16. SBA	* 382871	3748275	382871	3748425	* AG	1520	0.47	0.0 15.0
17. SBT	* 382869	3748127	382871	3748275	* AG	1180	1.31	0.0 15.0
18. SBL	* 382885	3748129	382874	3748275	* AG	340	0.97	0.0 12.0
19. SBD1	* 382870	3748127	382870	3747990	* AG	1480	0.62	0.0 15.0
20. SBD2	* 382871	3747990	382870	3747841	* AG	1480	0.47	0.0 15.0

III. RECEPTOR LOCATIONS

RECEPTOR	* X	Y	Z
1.	* 382861	3748140	1.8
2.	* 382836	3748138	1.8
3.	* 382811	3748137	1.8
4.	* 382786	3748136	1.8
5.	* 382761	3748135	1.8
6.	* 382736	3748135	1.8
7.	* 382861	3748165	1.8

22.	*	185.	*	0.11	*	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00
23.	*	276.	*	0.27	*	0.00	0.10	0.01	0.08	0.00	0.00	0.00	0.00
24.	*	274.	*	0.29	*	0.00	0.07	0.01	0.16	0.00	0.00	0.00	0.00
25.	*	274.	*	0.30	*	0.00	0.05	0.01	0.19	0.00	0.00	0.00	0.00
26.	*	274.	*	0.28	*	0.00	0.03	0.01	0.19	0.00	0.00	0.01	0.00
27.	*	273.	*	0.25	*	0.00	0.03	0.00	0.17	0.00	0.00	0.01	0.00
28.	*	274.	*	0.22	*	0.00	0.01	0.00	0.15	0.00	0.00	0.02	0.00
29.	*	347.	*	0.16	*	0.00	0.00	0.00	0.03	0.00	0.00	0.02	0.00
30.	*	349.	*	0.15	*	0.00	0.00	0.00	0.02	0.00	0.00	0.01	0.00
31.	*	350.	*	0.14	*	0.00	0.00	0.00	0.02	0.00	0.00	0.01	0.00
32.	*	351.	*	0.13	*	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
33.	*	352.	*	0.12	*	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
34.	*	81.	*	0.29	*	0.00	0.06	0.00	0.14	0.00	0.01	0.03	0.00
35.	*	81.	*	0.26	*	0.00	0.09	0.00	0.09	0.00	0.01	0.03	0.01
36.	*	82.	*	0.24	*	0.00	0.11	0.00	0.07	0.00	0.01	0.03	0.01
37.	*	82.	*	0.23	*	0.00	0.13	0.00	0.04	0.00	0.01	0.03	0.01
38.	*	82.	*	0.20	*	0.00	0.11	0.00	0.03	0.00	0.01	0.03	0.00
39.	*	84.	*	0.20	*	0.01	0.10	0.00	0.03	0.00	0.01	0.02	0.00
40.	*	84.	*	0.17	*	0.02	0.07	0.01	0.03	0.00	0.01	0.02	0.00
41.	*	6.	*	0.19	*	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
42.	*	6.	*	0.17	*	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
43.	*	5.	*	0.15	*	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
44.	*	5.	*	0.14	*	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00

RECEPTOR	* CONC/LINK (PPM)													
	* 9	10	11	12	13	14	15	16						
1.	*	0.03	0.00	0.00	0.00	0.00	0.01	0.00	0.00					
2.	*	0.06	0.00	0.00	0.00	0.00	0.01	0.00	0.00					
3.	*	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
4.	*	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
5.	*	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
6.	*	0.06	0.02	0.00	0.00	0.00	0.00	0.00	0.00					
7.	*	0.01	0.00	0.01	0.01	0.00	0.00	0.00	0.00					
8.	*	0.01	0.00	0.01	0.01	0.01	0.00	0.00	0.00					
9.	*	0.01	0.00	0.00	0.02	0.01	0.00	0.00	0.00					
10.	*	0.01	0.00	0.00	0.02	0.01	0.00	0.00	0.00					
11.	*	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00					
12.	*	0.05	0.00	0.00	0.00	0.00	0.03	0.00	0.00					
13.	*	0.03	0.00	0.00	0.00	0.00	0.01	0.00	0.00					
14.	*	0.02	0.00	0.00	0.00	0.00	0.01	0.00	0.00					
15.	*	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
16.	*	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
17.	*	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
18.	*	0.00	0.00	0.00	0.05	0.01	0.05	0.00	0.00					
19.	*	0.00	0.00	0.00	0.03	0.01	0.06	0.00	0.00					
20.	*	0.00	0.00	0.00	0.02	0.01	0.06	0.00	0.00					
21.	*	0.00	0.00	0.00	0.02	0.01	0.06	0.00	0.00					
22.	*	0.00	0.00	0.00	0.01	0.00	0.05	0.00	0.00					
23.	*	0.02	0.01	0.00	0.03	0.00	0.00	0.00	0.00					
24.	*	0.02	0.01	0.00	0.02	0.00	0.00	0.00	0.00					
25.	*	0.02	0.01	0.00	0.01	0.00	0.00	0.00	0.00					
26.	*	0.02	0.01	0.00	0.01	0.00	0.00	0.00	0.00					
27.	*	0.02	0.01	0.00	0.01	0.00	0.00	0.00	0.00					
28.	*	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
29.	*	0.00	0.00	0.00	0.05	0.00	0.02	0.00	0.00					
30.	*	0.00	0.00	0.00	0.06	0.00	0.02	0.00	0.01					
31.	*	0.00	0.00	0.00	0.06	0.00	0.01	0.00	0.00					
32.	*	0.00	0.00	0.00	0.06	0.00	0.01	0.00	0.00					
33.	*	0.00	0.00	0.00	0.06	0.00	0.01	0.00	0.01					
34.	*	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00					
35.	*	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00					
36.	*	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00					

37.	*	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
38.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
39.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40.	*	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
41.	*	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01
42.	*	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00
43.	*	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00
44.	*	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.00

*CONC/LINK
*(PPM)

RECEPTOR	*	17	18	19	20
1.	*	0.05	0.01	0.00	0.00
2.	*	0.02	0.00	0.00	0.00
3.	*	0.02	0.00	0.00	0.00
4.	*	0.01	0.00	0.00	0.00
5.	*	0.01	0.00	0.00	0.00
6.	*	0.00	0.00	0.00	0.00
7.	*	0.08	0.00	0.04	0.00
8.	*	0.11	0.00	0.02	0.00
9.	*	0.13	0.00	0.01	0.00
10.	*	0.13	0.01	0.01	0.00
11.	*	0.14	0.01	0.00	0.00
12.	*	0.02	0.01	0.00	0.00
13.	*	0.01	0.00	0.00	0.00
14.	*	0.01	0.00	0.00	0.00
15.	*	0.00	0.00	0.00	0.00
16.	*	0.00	0.00	0.00	0.00
17.	*	0.00	0.00	0.00	0.00
18.	*	0.00	0.00	0.00	0.01
19.	*	0.00	0.00	0.00	0.01
20.	*	0.00	0.00	0.01	0.01
21.	*	0.00	0.00	0.01	0.01
22.	*	0.00	0.00	0.01	0.01
23.	*	0.00	0.00	0.01	0.00
24.	*	0.00	0.00	0.01	0.00
25.	*	0.00	0.00	0.01	0.00
26.	*	0.00	0.00	0.00	0.00
27.	*	0.00	0.00	0.00	0.00
28.	*	0.01	0.00	0.00	0.00
29.	*	0.03	0.01	0.00	0.00
30.	*	0.03	0.01	0.00	0.00
31.	*	0.03	0.01	0.00	0.00
32.	*	0.03	0.01	0.00	0.00
33.	*	0.02	0.01	0.00	0.00
34.	*	0.00	0.00	0.03	0.00
35.	*	0.00	0.00	0.01	0.00
36.	*	0.00	0.00	0.01	0.00
37.	*	0.00	0.00	0.01	0.00
38.	*	0.00	0.00	0.01	0.00
39.	*	0.00	0.00	0.00	0.00
40.	*	0.00	0.00	0.00	0.00
41.	*	0.08	0.01	0.05	0.00
42.	*	0.06	0.01	0.06	0.00
43.	*	0.05	0.01	0.06	0.00
44.	*	0.03	0.01	0.06	0.00

3.0.3 PC (32 BIT) VERSION
(C) COPYRIGHT 2009, TRINITY CONSULTANTS

Run Began on 4/03/2018 at 11:12:33

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Avalon and Victoria
RUN: 2035 PP AM (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 1.0 M/S Z0= 108. CM ALT= 0. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 4 (D) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 5. DEGREES TEMP= 9.9 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	* X1	Y1	X2	Y2	* TYPE	EF VPH (G/MI)	H (M)	W (M)
1. EBA	* 382758	3748114	382585	3748110	* AG	1640	0.47	0.0 12.0
2. EBT	* 382884	3748120	382758	3748114	* AG	1560	0.94	0.0 15.0
3. EBL	* 382884	3748130	382758	3748118	* AG	80	0.98	0.0 9.0
4. EBD1	* 382884	3748120	383033	3748125	* AG	2160	0.98	0.0 12.0
5. EBD2	* 383032	3748125	383199	3748131	* AG	2160	0.47	0.0 12.0
6. WBA	* 383032	3748137	383198	3748143	* AG	1350	0.47	0.0 12.0
7. WBT	* 382886	3748134	383032	3748137	* AG	1270	0.90	0.0 15.0
8. WBL	* 382886	3748129	383032	3748138	* AG	80	0.98	0.0 9.0
9. WBD1	* 382886	3748134	382757	3748128	* AG	1440	0.84	0.0 12.0
10. WBD2	* 382757	3748129	382598	3748123	* AG	1440	0.47	0.0 12.0
11. NBA	* 382896	3747989	382898	3747839	* AG	1100	0.47	0.0 15.0
12. NBT	* 382897	3748128	382896	3747988	* AG	830	0.85	0.0 18.0
13. NBL	* 382885	3748129	382891	3747988	* AG	270	0.98	0.0 9.0
14. NBD1	* 382896	3748129	382895	3748274	* AG	1090	0.59	0.0 15.0
15. NBD2	* 382894	3748274	382895	3748425	* AG	1090	0.47	0.0 15.0
16. SBA	* 382871	3748275	382871	3748425	* AG	1520	0.47	0.0 15.0
17. SBT	* 382869	3748127	382871	3748275	* AG	870	0.87	0.0 15.0
18. SBL	* 382885	3748129	382874	3748275	* AG	650	0.98	0.0 12.0
19. SBD1	* 382870	3748127	382870	3747990	* AG	950	0.57	0.0 15.0
20. SBD2	* 382871	3747990	382870	3747841	* AG	950	0.47	0.0 15.0

III. RECEPTOR LOCATIONS

RECEPTOR	* X	Y	Z
1.	* 382861	3748140	1.8
2.	* 382836	3748138	1.8
3.	* 382811	3748137	1.8
4.	* 382786	3748136	1.8
5.	* 382761	3748135	1.8
6.	* 382736	3748135	1.8
7.	* 382861	3748165	1.8

8. * 382861 3748190 1.8
9. * 382862 3748215 1.8
10. * 382862 3748240 1.8
11. * 382862 3748265 1.8
12. * 382905 3748142 1.8
13. * 382930 3748142 1.8
14. * 382955 3748144 1.8
15. * 382980 3748144 2.8
16. * 383005 3748144 3.8
17. * 383030 3748144 4.8
18. * 382903 3748167 1.8
19. * 382903 3748192 1.8
20. * 382903 3748217 2.8
21. * 382903 3748242 3.8
22. * 382902 3748267 4.8
23. * 382906 3748114 1.8
24. * 382931 3748115 1.8
25. * 382956 3748116 1.8
26. * 382981 3748117 2.8
27. * 383006 3748118 3.8
28. * 383031 3748118 4.8
29. * 382906 3748089 1.8
30. * 382906 3748064 1.8
31. * 382906 3748039 2.8
32. * 382906 3748014 3.8
33. * 382906 3747989 4.8
34. * 382861 3748111 1.8
35. * 382836 3748110 1.8
36. * 382811 3748109 1.8
37. * 382786 3748108 2.8
38. * 382761 3748106 3.8
39. * 382736 3748107 4.8
40. * 382711 3748107 5.8
41. * 382862 3748086 1.8
42. * 382862 3748061 1.8
43. * 382862 3748036 2.8
44. * 382862 3748011 3.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	* * BRG * * (DEG) *	* * PRED * * CONC * * (PPM) *	CONC/LINK (PPM)							
			* 1	* 2	* 3	* 4	* 5	* 6	* 7	* 8
1.	* 97. *	0.22 *	0.00	0.00	0.00	0.05	0.01	0.00	0.07	0.00
2.	* 96. *	0.22 *	0.00	0.00	0.00	0.05	0.01	0.00	0.04	0.00
3.	* 95. *	0.22 *	0.00	0.00	0.00	0.05	0.01	0.00	0.03	0.00
4.	* 94. *	0.22 *	0.00	0.01	0.00	0.05	0.01	0.00	0.02	0.00
5.	* 94. *	0.21 *	0.00	0.01	0.00	0.04	0.01	0.00	0.02	0.00
6.	* 94. *	0.19 *	0.00	0.02	0.00	0.03	0.00	0.00	0.01	0.00
7.	* 169. *	0.12 *	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
8.	* 169. *	0.12 *	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
9.	* 167. *	0.12 *	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00
10.	* 168. *	0.13 *	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
11.	* 170. *	0.14 *	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
12.	* 258. *	0.21 *	0.01	0.04	0.00	0.00	0.00	0.00	0.04	0.00
13.	* 261. *	0.20 *	0.01	0.03	0.00	0.00	0.00	0.00	0.07	0.00
14.	* 260. *	0.18 *	0.01	0.04	0.00	0.00	0.00	0.00	0.08	0.00
15.	* 261. *	0.18 *	0.01	0.04	0.00	0.01	0.00	0.00	0.09	0.00
16.	* 262. *	0.17 *	0.01	0.03	0.00	0.01	0.00	0.00	0.08	0.00
17.	* 262. *	0.16 *	0.01	0.03	0.00	0.03	0.00	0.00	0.08	0.01
18.	* 186. *	0.14 *	0.00	0.00	0.00	0.02	0.00	0.00	0.02	0.00
19.	* 186. *	0.13 *	0.00	0.00	0.00	0.02	0.00	0.00	0.01	0.00
20.	* 186. *	0.11 *	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00
21.	* 185. *	0.10 *	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00

22.	*	185.	*	0.10	*	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00
23.	*	277.	*	0.25	*	0.00	0.08	0.00	0.08	0.00	0.00	0.00	0.00
24.	*	275.	*	0.28	*	0.00	0.05	0.00	0.16	0.00	0.00	0.00	0.00
25.	*	275.	*	0.28	*	0.00	0.03	0.00	0.19	0.00	0.00	0.00	0.00
26.	*	274.	*	0.27	*	0.00	0.03	0.00	0.18	0.00	0.00	0.01	0.00
27.	*	273.	*	0.24	*	0.00	0.02	0.00	0.16	0.00	0.00	0.01	0.00
28.	*	274.	*	0.21	*	0.00	0.01	0.00	0.14	0.00	0.00	0.02	0.00
29.	*	348.	*	0.14	*	0.00	0.00	0.00	0.03	0.00	0.00	0.02	0.00
30.	*	349.	*	0.13	*	0.00	0.00	0.00	0.02	0.00	0.00	0.01	0.00
31.	*	351.	*	0.12	*	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00
32.	*	352.	*	0.11	*	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00
33.	*	353.	*	0.10	*	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
34.	*	81.	*	0.26	*	0.00	0.05	0.00	0.13	0.00	0.01	0.03	0.00
35.	*	82.	*	0.23	*	0.00	0.08	0.00	0.09	0.01	0.01	0.02	0.00
36.	*	82.	*	0.21	*	0.00	0.10	0.00	0.06	0.00	0.01	0.03	0.00
37.	*	82.	*	0.21	*	0.00	0.11	0.00	0.04	0.00	0.01	0.03	0.00
38.	*	82.	*	0.18	*	0.00	0.10	0.00	0.03	0.00	0.00	0.02	0.00
39.	*	84.	*	0.18	*	0.01	0.09	0.00	0.03	0.00	0.01	0.02	0.00
40.	*	84.	*	0.16	*	0.02	0.07	0.00	0.02	0.00	0.01	0.02	0.00
41.	*	7.	*	0.14	*	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
42.	*	6.	*	0.12	*	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
43.	*	6.	*	0.11	*	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
44.	*	5.	*	0.10	*	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00

	*	CONC/LINK (PPM)											
RECEPTOR	*	9	10	11	12	13	14	15	16				
1.	*	0.04	0.00	0.00	0.00	0.00	0.01	0.00	0.00				
2.	*	0.08	0.00	0.00	0.00	0.00	0.01	0.00	0.00				
3.	*	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
4.	*	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
5.	*	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
6.	*	0.08	0.03	0.00	0.00	0.00	0.00	0.00	0.00				
7.	*	0.02	0.00	0.01	0.01	0.01	0.00	0.00	0.00				
8.	*	0.01	0.00	0.00	0.01	0.01	0.00	0.00	0.00				
9.	*	0.01	0.00	0.00	0.02	0.01	0.00	0.00	0.00				
10.	*	0.00	0.00	0.00	0.02	0.01	0.00	0.00	0.00				
11.	*	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00				
12.	*	0.08	0.00	0.00	0.00	0.00	0.02	0.00	0.00				
13.	*	0.05	0.00	0.00	0.00	0.00	0.01	0.00	0.00				
14.	*	0.03	0.00	0.00	0.00	0.00	0.01	0.00	0.00				
15.	*	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
16.	*	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
17.	*	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
18.	*	0.00	0.00	0.00	0.04	0.01	0.04	0.00	0.00				
19.	*	0.00	0.00	0.00	0.03	0.01	0.05	0.00	0.00				
20.	*	0.00	0.00	0.00	0.02	0.01	0.05	0.00	0.00				
21.	*	0.00	0.00	0.00	0.01	0.01	0.05	0.00	0.00				
22.	*	0.00	0.00	0.00	0.01	0.01	0.05	0.00	0.00				
23.	*	0.03	0.01	0.00	0.02	0.01	0.00	0.00	0.00				
24.	*	0.03	0.01	0.00	0.01	0.00	0.00	0.00	0.00				
25.	*	0.03	0.01	0.00	0.01	0.00	0.00	0.00	0.00				
26.	*	0.03	0.01	0.00	0.01	0.00	0.00	0.00	0.00				
27.	*	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00				
28.	*	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
29.	*	0.00	0.00	0.00	0.03	0.00	0.02	0.00	0.01				
30.	*	0.00	0.00	0.00	0.05	0.00	0.01	0.00	0.01				
31.	*	0.00	0.00	0.00	0.05	0.00	0.01	0.00	0.01				
32.	*	0.00	0.00	0.00	0.05	0.00	0.01	0.00	0.01				
33.	*	0.00	0.00	0.00	0.04	0.00	0.01	0.00	0.01				
34.	*	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00				
35.	*	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00				
36.	*	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00				

37.	*	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38.	*	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
39.	*	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40.	*	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
41.	*	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00
42.	*	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00
43.	*	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.00
44.	*	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00

*CONC/LINK
*(PPM)

RECEPTOR	*	17	18	19	20
1.	*	0.03	0.01	0.00	0.00
2.	*	0.01	0.01	0.00	0.00
3.	*	0.01	0.00	0.00	0.00
4.	*	0.00	0.00	0.00	0.00
5.	*	0.00	0.00	0.00	0.00
6.	*	0.00	0.00	0.00	0.00
7.	*	0.04	0.00	0.02	0.00
8.	*	0.06	0.00	0.01	0.00
9.	*	0.06	0.01	0.00	0.00
10.	*	0.06	0.02	0.00	0.00
11.	*	0.07	0.02	0.00	0.00
12.	*	0.01	0.01	0.00	0.00
13.	*	0.01	0.01	0.00	0.00
14.	*	0.00	0.00	0.00	0.00
15.	*	0.00	0.00	0.00	0.00
16.	*	0.00	0.00	0.00	0.00
17.	*	0.00	0.00	0.00	0.00
18.	*	0.00	0.00	0.00	0.01
19.	*	0.00	0.00	0.00	0.01
20.	*	0.00	0.00	0.00	0.01
21.	*	0.00	0.00	0.00	0.01
22.	*	0.00	0.01	0.01	0.00
23.	*	0.00	0.00	0.01	0.00
24.	*	0.00	0.00	0.01	0.00
25.	*	0.00	0.00	0.00	0.00
26.	*	0.00	0.00	0.00	0.00
27.	*	0.00	0.00	0.00	0.00
28.	*	0.00	0.00	0.00	0.00
29.	*	0.01	0.02	0.00	0.00
30.	*	0.01	0.02	0.00	0.00
31.	*	0.01	0.02	0.00	0.00
32.	*	0.01	0.02	0.00	0.00
33.	*	0.01	0.01	0.00	0.00
34.	*	0.00	0.00	0.02	0.00
35.	*	0.00	0.00	0.01	0.00
36.	*	0.00	0.00	0.01	0.00
37.	*	0.00	0.00	0.00	0.00
38.	*	0.00	0.00	0.00	0.00
39.	*	0.00	0.00	0.00	0.00
40.	*	0.00	0.00	0.00	0.00
41.	*	0.04	0.02	0.03	0.00
42.	*	0.03	0.02	0.04	0.00
43.	*	0.02	0.02	0.04	0.00
44.	*	0.02	0.01	0.04	0.00

3.0.3 PC (32 BIT) VERSION
(C) COPYRIGHT 2009, TRINITY CONSULTANTS

Run Began on 4/02/2018 at 11:51:32

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: Avalon and Victoria
RUN: 2035 PP PM (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 1.0 M/S Z0= 108. CM ALT= 0. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 4 (D) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 5. DEGREES TEMP= 9.9 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	* X1	Y1	X2	Y2	* TYPE	EF VPH (G/MI)	H (M)	W (M)
1. EBA	* 382758	3748114	382585	3748110	* AG	2000	0.47	0.0 12.0
2. EBT	* 382884	3748120	382758	3748114	* AG	1860	0.98	0.0 15.0
3. EBL	* 382884	3748130	382758	3748118	* AG	140	0.98	0.0 9.0
4. EBD1	* 382884	3748120	383033	3748125	* AG	2320	0.98	0.0 12.0
5. EBD2	* 383032	3748125	383199	3748131	* AG	2320	0.47	0.0 12.0
6. WBA	* 383032	3748137	383198	3748143	* AG	2000	0.47	0.0 12.0
7. WBT	* 382886	3748134	383032	3748137	* AG	1900	0.98	0.0 15.0
8. WBL	* 382886	3748129	383032	3748138	* AG	100	0.98	0.0 9.0
9. WBD1	* 382886	3748134	382757	3748128	* AG	2120	0.98	0.0 12.0
10. WBD2	* 382757	3748129	382598	3748123	* AG	2120	0.47	0.0 12.0
11. NBA	* 382896	3747989	382898	3747839	* AG	1650	0.47	0.0 15.0
12. NBT	* 382897	3748128	382896	3747988	* AG	1210	0.87	0.0 18.0
13. NBL	* 382885	3748129	382891	3747988	* AG	440	0.98	0.0 9.0
14. NBD1	* 382896	3748129	382895	3748274	* AG	1510	0.62	0.0 15.0
15. NBD2	* 382894	3748274	382895	3748425	* AG	1510	0.47	0.0 15.0
16. SBA	* 382871	3748275	382871	3748425	* AG	1780	0.47	0.0 15.0
17. SBT	* 382869	3748127	382871	3748275	* AG	1260	0.89	0.0 15.0
18. SBL	* 382885	3748129	382874	3748275	* AG	520	0.98	0.0 12.0
19. SBD1	* 382870	3748127	382870	3747990	* AG	1480	0.62	0.0 15.0
20. SBD2	* 382871	3747990	382870	3747841	* AG	1480	0.47	0.0 15.0

III. RECEPTOR LOCATIONS

RECEPTOR	* X	Y	Z
1.	* 382861	3748140	1.8
2.	* 382836	3748138	1.8
3.	* 382811	3748137	1.8
4.	* 382786	3748136	1.8
5.	* 382761	3748135	1.8
6.	* 382736	3748135	1.8
7.	* 382861	3748165	1.8

8. * 382861 3748190 1.8
9. * 382862 3748215 1.8
10. * 382862 3748240 1.8
11. * 382862 3748265 1.8
12. * 382905 3748142 1.8
13. * 382930 3748142 1.8
14. * 382955 3748144 1.8
15. * 382980 3748144 2.8
16. * 383005 3748144 3.8
17. * 383030 3748144 4.8
18. * 382903 3748167 1.8
19. * 382903 3748192 1.8
20. * 382903 3748217 2.8
21. * 382903 3748242 3.8
22. * 382902 3748267 4.8
23. * 382906 3748114 1.8
24. * 382931 3748115 1.8
25. * 382956 3748116 1.8
26. * 382981 3748117 2.8
27. * 383006 3748118 3.8
28. * 383031 3748118 4.8
29. * 382906 3748089 1.8
30. * 382906 3748064 1.8
31. * 382906 3748039 2.8
32. * 382906 3748014 3.8
33. * 382906 3747989 4.8
34. * 382861 3748111 1.8
35. * 382836 3748110 1.8
36. * 382811 3748109 1.8
37. * 382786 3748108 2.8
38. * 382761 3748106 3.8
39. * 382736 3748107 4.8
40. * 382711 3748107 5.8
41. * 382862 3748086 1.8
42. * 382862 3748061 1.8
43. * 382862 3748036 2.8
44. * 382862 3748011 3.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	* PRED *		CONC/LINK							
	* BRG *	* CONC *	(PPM)							
	* (DEG) *	* (PPM) *	1	2	3	4	5	6	7	8
1.	* 97. *	0.30 *	0.00	0.00	0.00	0.05	0.01	0.00	0.11	0.01
2.	* 96. *	0.31 *	0.00	0.00	0.00	0.06	0.01	0.00	0.06	0.00
3.	* 95. *	0.31 *	0.00	0.00	0.00	0.05	0.01	0.00	0.04	0.00
4.	* 94. *	0.32 *	0.00	0.01	0.00	0.05	0.01	0.00	0.03	0.00
5.	* 94. *	0.30 *	0.00	0.02	0.00	0.04	0.01	0.00	0.02	0.00
6.	* 94. *	0.27 *	0.00	0.03	0.00	0.04	0.01	0.00	0.02	0.00
7.	* 169. *	0.18 *	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
8.	* 170. *	0.17 *	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
9.	* 170. *	0.17 *	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
10.	* 170. *	0.17 *	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00
11.	* 171. *	0.18 *	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
12.	* 258. *	0.30 *	0.01	0.04	0.01	0.00	0.00	0.00	0.06	0.00
13.	* 261. *	0.29 *	0.01	0.04	0.01	0.00	0.00	0.00	0.11	0.00
14.	* 260. *	0.26 *	0.01	0.05	0.01	0.00	0.00	0.00	0.13	0.00
15.	* 262. *	0.25 *	0.01	0.04	0.00	0.00	0.00	0.00	0.13	0.00
16.	* 262. *	0.24 *	0.01	0.04	0.00	0.01	0.00	0.00	0.13	0.01
17.	* 263. *	0.23 *	0.01	0.03	0.00	0.02	0.00	0.00	0.13	0.01
18.	* 186. *	0.19 *	0.00	0.00	0.00	0.02	0.00	0.00	0.03	0.00
19.	* 186. *	0.18 *	0.00	0.00	0.00	0.02	0.00	0.00	0.02	0.00
20.	* 186. *	0.16 *	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00
21.	* 185. *	0.14 *	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00

22.	*	185.	*	0.13	*	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00
23.	*	277.	*	0.31	*	0.00	0.10	0.01	0.09	0.00	0.00	0.00	0.00
24.	*	276.	*	0.33	*	0.00	0.06	0.01	0.17	0.00	0.00	0.00	0.00
25.	*	275.	*	0.33	*	0.00	0.04	0.00	0.20	0.00	0.00	0.00	0.00
26.	*	274.	*	0.31	*	0.00	0.03	0.00	0.19	0.00	0.00	0.01	0.00
27.	*	274.	*	0.28	*	0.00	0.02	0.00	0.18	0.00	0.00	0.02	0.00
28.	*	274.	*	0.25	*	0.00	0.02	0.00	0.15	0.00	0.00	0.03	0.00
29.	*	349.	*	0.18	*	0.00	0.00	0.00	0.03	0.00	0.00	0.02	0.00
30.	*	349.	*	0.17	*	0.00	0.00	0.00	0.02	0.00	0.00	0.02	0.00
31.	*	351.	*	0.16	*	0.00	0.00	0.00	0.02	0.00	0.00	0.01	0.00
32.	*	352.	*	0.15	*	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00
33.	*	352.	*	0.14	*	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00
34.	*	80.	*	0.32	*	0.00	0.07	0.00	0.13	0.00	0.01	0.05	0.00
35.	*	81.	*	0.28	*	0.00	0.10	0.00	0.09	0.00	0.01	0.04	0.00
36.	*	81.	*	0.27	*	0.00	0.13	0.00	0.05	0.00	0.01	0.05	0.00
37.	*	82.	*	0.26	*	0.00	0.14	0.00	0.04	0.00	0.01	0.04	0.00
38.	*	82.	*	0.23	*	0.00	0.13	0.00	0.03	0.00	0.01	0.04	0.00
39.	*	83.	*	0.22	*	0.01	0.11	0.00	0.02	0.00	0.01	0.03	0.00
40.	*	84.	*	0.20	*	0.02	0.08	0.00	0.02	0.00	0.01	0.03	0.00
41.	*	7.	*	0.19	*	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
42.	*	7.	*	0.17	*	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
43.	*	6.	*	0.16	*	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
44.	*	6.	*	0.14	*	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00

	*	CONC/LINK											
	*	(PPM)											
RECEPTOR	*	9	10	11	12	13	14	15	16				
1.	*	0.06	0.00	0.00	0.00	0.00	0.01	0.00	0.00				
2.	*	0.14	0.00	0.00	0.00	0.00	0.01	0.00	0.00				
3.	*	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
4.	*	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
5.	*	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
6.	*	0.13	0.04	0.00	0.00	0.00	0.00	0.00	0.00				
7.	*	0.03	0.00	0.01	0.01	0.01	0.00	0.00	0.00				
8.	*	0.02	0.00	0.01	0.02	0.01	0.00	0.00	0.00				
9.	*	0.01	0.00	0.01	0.02	0.01	0.00	0.00	0.00				
10.	*	0.01	0.00	0.00	0.02	0.01	0.00	0.00	0.00				
11.	*	0.01	0.00	0.00	0.02	0.01	0.00	0.00	0.00				
12.	*	0.12	0.00	0.00	0.00	0.00	0.03	0.00	0.00				
13.	*	0.08	0.00	0.00	0.00	0.00	0.01	0.00	0.00				
14.	*	0.04	0.00	0.00	0.00	0.00	0.01	0.00	0.00				
15.	*	0.04	0.00	0.00	0.00	0.00	0.01	0.00	0.00				
16.	*	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
17.	*	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
18.	*	0.00	0.00	0.00	0.05	0.01	0.06	0.00	0.00				
19.	*	0.00	0.00	0.00	0.04	0.01	0.07	0.00	0.00				
20.	*	0.00	0.00	0.00	0.03	0.01	0.07	0.00	0.00				
21.	*	0.00	0.00	0.00	0.02	0.01	0.07	0.00	0.00				
22.	*	0.00	0.00	0.00	0.02	0.01	0.07	0.00	0.00				
23.	*	0.05	0.01	0.00	0.04	0.01	0.00	0.00	0.00				
24.	*	0.05	0.01	0.00	0.02	0.01	0.00	0.00	0.00				
25.	*	0.05	0.01	0.00	0.01	0.00	0.00	0.00	0.00				
26.	*	0.04	0.01	0.00	0.01	0.00	0.00	0.00	0.00				
27.	*	0.04	0.01	0.00	0.01	0.00	0.00	0.00	0.00				
28.	*	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00				
29.	*	0.00	0.00	0.00	0.05	0.00	0.04	0.00	0.01				
30.	*	0.00	0.00	0.00	0.07	0.00	0.02	0.00	0.01				
31.	*	0.00	0.00	0.00	0.07	0.00	0.01	0.00	0.01				
32.	*	0.00	0.00	0.00	0.07	0.01	0.01	0.00	0.01				
33.	*	0.00	0.00	0.00	0.06	0.01	0.01	0.00	0.01				
34.	*	0.00	0.00	0.00	0.02	0.01	0.00	0.00	0.00				
35.	*	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00				
36.	*	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00				

37.	*	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
38.	*	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
39.	*	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40.	*	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
41.	*	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.00
42.	*	0.02	0.00	0.00	0.00	0.00	0.01	0.01	0.00
43.	*	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.00
44.	*	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.00

*CONC/LINK
*(PPM)

RECEPTOR	*	17	18	19	20
1.	*	0.04	0.01	0.00	0.00
2.	*	0.02	0.01	0.00	0.00
3.	*	0.01	0.00	0.00	0.00
4.	*	0.01	0.00	0.00	0.00
5.	*	0.00	0.00	0.00	0.00
6.	*	0.00	0.00	0.00	0.00
7.	*	0.06	0.00	0.03	0.00
8.	*	0.08	0.00	0.02	0.00
9.	*	0.09	0.00	0.01	0.00
10.	*	0.09	0.01	0.00	0.00
11.	*	0.10	0.02	0.00	0.00
12.	*	0.02	0.01	0.00	0.00
13.	*	0.01	0.01	0.00	0.00
14.	*	0.01	0.00	0.00	0.00
15.	*	0.00	0.00	0.00	0.00
16.	*	0.00	0.00	0.00	0.00
17.	*	0.00	0.00	0.00	0.00
18.	*	0.00	0.00	0.00	0.01
19.	*	0.00	0.00	0.00	0.01
20.	*	0.00	0.00	0.01	0.01
21.	*	0.00	0.00	0.01	0.01
22.	*	0.00	0.00	0.01	0.01
23.	*	0.00	0.00	0.01	0.00
24.	*	0.00	0.00	0.01	0.00
25.	*	0.00	0.00	0.01	0.00
26.	*	0.00	0.00	0.00	0.00
27.	*	0.00	0.00	0.00	0.00
28.	*	0.00	0.00	0.00	0.00
29.	*	0.01	0.02	0.00	0.00
30.	*	0.02	0.02	0.00	0.00
31.	*	0.02	0.02	0.00	0.00
32.	*	0.02	0.01	0.00	0.00
33.	*	0.02	0.01	0.00	0.00
34.	*	0.00	0.00	0.03	0.00
35.	*	0.00	0.00	0.01	0.00
36.	*	0.00	0.00	0.01	0.00
37.	*	0.00	0.00	0.01	0.00
38.	*	0.00	0.00	0.01	0.00
39.	*	0.00	0.00	0.00	0.00
40.	*	0.00	0.00	0.00	0.00
41.	*	0.06	0.01	0.05	0.00
42.	*	0.04	0.01	0.06	0.00
43.	*	0.03	0.01	0.07	0.00
44.	*	0.02	0.01	0.06	0.00

B.4 Ramboll – Air Quality Impacts Analysis 2019

Prepared by
Ramboll US Corporation
San Francisco

Project Number
1690013624

Date
July 2019

CALIFORNIA STATE UNIVERSITY—
DOMINGUEZ HILLS
AIR QUALITY IMPACTS ANALYSIS
CARSON, CALIFORNIA

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1. INTRODUCTION

This report presents an estimate of the potential health impact of the emissions of criteria pollutants that may result from the adoption and implementation of California State University Dominguez Hills (CSUDH)'s 2018 Campus Master Plan (the proposed Project). The proposed Project retains the existing campus enrollment cap of 20,000 full-time-equivalent students (FTES), while providing a framework for development of the University's campus in a forward-looking manner that accommodates growth from the current enrollment of approximately 11,000 FTES to the maximum enrollment of 20,000 FTES over a planning horizon extending to 2035.

As background, Environmental Impact Reports (EIRs) prepared pursuant to the California Environmental Quality Act (CEQA) have long evaluated project-related health impacts of toxic air contaminants, such as diesel particulate matter, through quantitative and/or qualitative means relative to air district-issued thresholds of significance. However, EIRs historically have not evaluated the specific health impacts of project-related increases in criteria pollutants,¹ other than to note and summarize scientific literature regarding the general effect of those pollutants on health. Instead, in accordance with air district-issued thresholds of significance and industry standard practice at the time, CEQA analysis historically and traditionally focused on estimating project-related mass emissions totals for criteria pollutants and, in certain cases, conducting dispersion modeling to assess impacts on local ambient air quality concentrations.

In response to comment on the proposed Project's Draft EIR, and in light of a cited decision issued by the California Supreme Court issued in December 2018, this analysis estimates the health impacts of criteria pollutants and their precursors, specifically those that are evaluated by the U.S. Environmental Protection Agency (USEPA) in rulemaking setting the national ambient air quality standards: oxides of nitrogen (NO_x), volatile organic compounds (VOC), carbon monoxide (CO), ozone (O₃), sulfur dioxide (SO₂), and particulate matter smaller than 2.5 microns in diameter² (PM_{2.5}). NO_x and VOCs are not criteria air pollutants but, in the presence of sunlight, they form O₃ and contribute to the formation of secondary PM_{2.5} and thus are analyzed here. As a conservative measure, SO₂ and CO are evaluated due to their small contribution to the formation of secondary PM_{2.5} and ozone. The health impacts from O₃ and PM_{2.5} are examined for this Project because the USEPA has determined that these criteria pollutants would have the greatest impact to human health. The emissions of other criteria pollutants, including VOC, NO_x and SO₂, are analyzed in their contribution in the formation of O₃ and secondary PM_{2.5}.

Notably, CEQA practitioners and other expert agencies (like air districts) are still developing tools and methodologies to provide the type of CEQA analysis described in the California Supreme Court's decision. In this report, Ramboll presents one method that can be used to correlate project-related mass emissions totals for criteria pollutants to estimated health-based consequences. More specifically, in order to estimate the health impacts of the increases of criteria pollutants for the

¹ Criteria pollutants are those pollutants with an air pollution standard or pollutants which are precursors to those with a standard. Pollutants with an air pollution standard include nitrogen dioxide, sulfur dioxide, ozone, carbon monoxide, particulate matter smaller than 2.5 microns and 10 microns and ozone. Precursor pollutants to criteria pollutants include oxides of nitrogen (NO_x), oxides of sulfur (SO_x), and volatile organic compounds (VOCs).

² USEPA's default health effect functions in BenMAP for PM use fine particulate (PM_{2.5}) as the causal PM agent, so the health effects of PM₁₀ are represented using PM_{2.5} as a surrogate.

proposed Project, Ramboll applied a photochemical grid model (PGM), Comprehensive Air Quality Model with extensions (CAMx),³ to estimate the small increases in concentrations of ozone and PM_{2.5} in the region as a result of the emissions of criteria and precursor pollutants from the Project. We then applied a USEPA-authored program, the Benefits Mapping and Analysis Program (BenMAP)⁴, to estimate the resulting health impacts from the small increases in concentration. Only the impacts of ozone and PM_{2.5} are estimated, as those are the pollutants that USEPA uses in BenMAP to estimate the impact of emissions of NO_x, VOCs, CO, SO₂, and PM_{2.5}. Ozone and PM_{2.5} have the most critical health impacts and thus are the emissions evaluated to determine the Project's health impacts.

³ Comprehensive Air Quality Model with Extensions.

⁴ <https://www.epa.gov/benmap/benmap-ce-manual-and-appendices>.

2. TECHNICAL APPROACH

The first step in the process is to run the PGM with appropriate information to assess the small increases in ambient air concentrations that the Project emissions may cause. PGMs require a database of information, including the spatial allocation of emissions, in the area to be modeled. This includes both base (background/existing) emissions and Project emissions. The latest publicly available PGM database for Southern California, which contains base emissions, was developed by the South Coast Air Quality Management District (SCAQMD) in support of its adopted 2016 Air Quality Management Plan (AQMP)⁵ and was adapted for use in this analysis. This PGM database is tailored for Southern California (including Los Angeles County) using California-specific input tools (e.g., the Emission FACTors (EMFAC)⁶ mobile source emissions model) and uses a high-resolution 4-kilometer (km) horizontal grid to better simulate meteorology and air quality in the complex terrain and coastal environment of California.

Project emissions included NO_x, SO₂, CO, respirable (PM₁₀) and fine (PM_{2.5}) primary particulate matter (PM), and VOCs. As discussed above, NO_x and VOC are precursors to ozone and, along with SO₂, are also precursors to secondarily formed PM_{2.5}. CO also plays a smaller role in the formation of ozone and is thus conservatively evaluated here.

The USEPA's air quality modeling guidelines (Appendix W⁷) and ozone and PM_{2.5} modeling guidance⁸ recommend using a PGM to estimate ozone and secondary PM_{2.5} concentrations. The USEPA's modeling guidance does not recommend specific PGMs but provides procedures for determining an appropriate PGM on a case-by-case basis. Both the modeling guidelines and guidance note that the CAMx⁹ and the Community Multiscale Air Quality (CMAQ¹⁰) PGMs have been used extensively in the past and would be acceptable PGMs. As such, the USEPA has prepared a memorandum¹¹ documenting the suitability for using CAMx and CMAQ for ozone and secondary PM_{2.5} modeling of single-sources or group of sources.

To estimate the potential impacts of the proposed Project's emissions on ambient air concentrations, the Project's emissions were added to the CAMx 4-km annual PGM modeling database.¹² Operational and construction emissions from the Project were estimated as described in the Air Quality Section of the Draft EIR.¹³ For almost all pollutants, for any year, the maximum operational emissions at full buildout were greater than construction emissions. The exception is VOCs from architectural coatings during one year of construction. In order to estimate the worst-case impacts, the emissions from the highest year of construction VOCs were added to the full buildout emissions of all other pollutants. By

⁵ <https://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/final-2016-aqmp>.

⁶ <https://www.arb.ca.gov/emfac/>.

⁷ https://www3.epa.gov/ttn/scram/appendix_w/2016/AppendixW_2017.pdf.

⁸ https://www3.epa.gov/ttn/scram/guidance/guide/O3-PM-RH-Modeling_Guidance-2018.pdf.

⁹ <http://www.camx.com/>.

¹⁰ <https://www.epa.gov/cmaq>.

¹¹ https://www3.epa.gov/ttn/scram/guidance/clarification/20170804-Photochemical_Grid_Model_Clarification_Memo.pdf.

¹² SCAQMD performed WRF meteorological modeling for the CCOS 4-km domain and 2012 calendar year that has been processed by WRFCAMx to generate CAMx 2012 4-km meteorological inputs for the CCOS domain. The CMAQ 2012 emissions have been converted to the format used by CAMx using the CMAQ2CAMx processor.

¹³ To the extent that the Draft EIR used conservative inputs to estimate Project-related criteria pollutants and precursors, the analysis provided herein also is conservatively influenced by those inputs.

doing this, the results below present a worst-case analysis for the construction years and operational years.

For use in PGMs, each Project emissions source must be spatially distributed across the modeling grid cells so that they can be incorporated into the gridded emission inventory. The total unmitigated emission inventory for the Project was used in the analysis. This includes architectural coatings, VOCs in consumer products, natural gas combustion, landscaping, and emissions associated with motor vehicle use. The emissions from architectural coatings, consumer products, natural gas combustion, and landscaping are located onsite, and were therefore allocated to the grid cells representing the Project site (the University campus). The mobile source category includes both passenger vehicles and trucks. The mobile sources are also spatially distributed in both the site's grid cells, as well as the immediately adjacent grid cells. While it is expected that passenger vehicles and trucks may travel some distance outside of the Project site, they were conservatively distributed near the site's grid cells based on travel routes. Annual emission estimates from the Project were spatially gridded, temporally allocated, and chemically speciated to be used for photochemical grid modelling using the Sparse Matrix Operating Kernel Emissions (SMOKE) emissions modelling system supported by the USEPA. The emissions inventory, spatial allocation, and SMOKE inputs and outputs are shown in Appendix A.

As discussed above, the SCAQMD's Southern California 2016 AQMP modeling database was used for this Project. The Southern California 4-km CAMx modeling databases is based on a 2012 base meteorological year and includes future year emission scenarios. The 2023 future year projections were used for this analysis, as that is the nearest future year with base emissions available as of the date of this report. The Project's emissions were tagged for treatment by the source apportionment tools in CAMx to obtain the incremental ozone and PM_{2.5} concentration impacts due to the Project's emissions. More details and inputs for the PGM modeling are included in Appendix B.

Following completion of the CAMx source apportionment modeling, Ramboll used the USEPA's BenMAP^{14, 15} program to estimate the potential health impacts of the Project's contribution to ozone and PM_{2.5} concentration. BenMAP uses the concentration estimates produced by CAMx, along with population and health effect concentration-response (C-R) functions, to estimate various health effects of the concentration increases. BenMAP has a wide history of applications by the USEPA and others, including for local-scale analysis¹⁶ as needed for assessing the health impacts of a project's emissions. We used the USEPA default BenMAP health effects C-R functions that are typically used in national rulemaking, such as the health effects impact assessment¹⁷ for the 2012 PM_{2.5} National Ambient Air Quality Standard (NAAQS). The health effects that we used for PM_{2.5} include mortality (all causes), hospital admissions (respiratory, asthma, cardiovascular), emergency room visits (asthma), and acute myocardial infarction (non-fatal). For ozone, the endpoints are mortality, emergency room visits (respiratory) and hospital admissions (respiratory). Details on the BenMAP inputs and outputs and definitions for the health outcomes are shown in Appendix C.

¹⁴ <https://www.epa.gov/benmap/how-benmap-ce-estimates-health-and-economic-effects-air-pollution>.

¹⁵ https://www.epa.gov/sites/production/files/2015-04/documents/benmap-ce_user_manual_march_2015.pdf.

¹⁶ <https://www.epa.gov/benmap/benmap-ce-applications-articles-and-presentations#local>.

¹⁷ https://www3.epa.gov/ttn/naaqs/standards/pm/data/PM_RA_FINAL_June_2010.pdf.

3. RESULTS

This section presents the results of the health impact analysis for the incremental increases in PM_{2.5} and ozone resulting from primary and precursor emissions for these constituents¹⁸.

PM_{2.5}-related health outcomes attributed to Project-related increases in ambient air concentrations included asthma-related emergency room visits (4.38 incidences per year), asthma-related hospital admissions (0.38 incidences per year), all cardiovascular-related hospital admissions (not including myocardial infarctions) (1.05 incidences per year), all respiratory-related hospital admissions (2.44 incidences per year), mortality (10.31 incidences per year), and nonfatal acute myocardial infarction (less than 0.53 incidences per year for all age groups).

Ozone-related health outcomes attributed to Project-related increases in ambient air concentrations included respiratory-related hospital admissions (0.67 incidences per year), mortality (0.28 incidences per year), and asthma-related emergency room visits for any age range (lower than 3.38 incidences per year for all age groups).

For all these health endpoints, the number of estimated incidences is less than 0.0058% of the background health incidence. The “background health incidence” is the actual incidence of health effects as measured in the local population in the absence of additional emissions from the Project. When taken into context, the small increase in incidences and the very small percent of the number of background incidences indicate that these health impacts are negligible in a developed, urban environment. Because the health impacts from ozone and PM_{2.5} were negligible in light of background incidences, and health impacts from other criteria pollutants would be even smaller, the health impacts of those other criteria pollutants were not quantified.

UNCERTAINTY

Analyses that evaluate the increases in concentrations resulting from individual sources, and the health impacts of increases or decreases in pollutants as a result of regulation on a localized basis are routinely done. This analysis does not tie the increase in concentration to a specific health impact in an individual; however, it does use scientific correlations of certain types of health impacts from pollution to estimate increases in effects to the population at large.

There is a degree of uncertainty in these results from a combination of the uncertainty of the increase in concentration resulting from the PGM and the uncertainty of the application of the C-R increase. All simulations of physical processes, whether ambient air concentrations, or health impacts from air pollution, have a level of uncertainty associated with them, due to simplifying assumptions. The overall uncertainty is a combination of the uncertainty associated with each piece of the modeling study, in this case, the emissions model, the PGM, and BenMAP. While these results reflect a level of uncertainty, regulatory agencies, including the USEPA have judged that, even with the uncertainty in the results, the results provide sufficient information to the public to allow them to understand the health effects of increases or decreases in air pollution. In addition, the health impacts estimation using this method presumes that impacts seen at large concentration differences can be linearly scaled down to small increases in concentration. This

¹⁸ Health outcomes presented above also conservatively utilize maximum daily emissions, assumed to occur for an entire year. Should average daily emissions be used, results would be even lower. Specifically for mortality impacts from PM_{2.5} emissions, average daily emissions would be approximately 20% lower, and the corresponding mortality incidence rate would be similarly lower.

methodology of linearly scaling impacts is broadly accepted for use in regulatory evaluations and is considered as being health protective.¹⁹ These health impacts are conservatively estimated, and the actual impacts may be zero.

¹⁹ USEPA (2010). Quantitative Risk Assessment for Particulate Matter – Final Report. Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, NC. EPA-452/R-10-005. June 2010. Available: https://www3.epa.gov/ttn/naaqs/standards/pm/data/PM_RA_FINAL_June_2010.pdf.

APPENDIX A
EMISSIONS INVENTORY, SPATIAL ALLOCATION, AND SMOKE SETUP

APPENDIX A

EMISSIONS INVENTORY, SPATIAL ALLOCATION, AND SMOKE SETUP
CALIFORNIA STATE UNIVERSITY – DOMINGUEZ HILLS
CARSON, CALIFORNIA

1. INTRODUCTION

As set forth in the Project's Draft Environmental Impact Report (EIR), construction and operational emissions from the Project were estimated using methodologies consistent with the California Emissions Estimator Model (CalEEMod®) and Project-specific data, where available. The model employs widely accepted calculation methodologies for emission estimates combined with appropriate default data if site-specific information is not available.

Annual emission estimates from CalEEMod® need to be spatially gridded, temporally allocated, and chemically speciated to be used for photochemical grid modeling. The Sparse Matrix Operating Kernel Emissions (SMOKE) emissions modeling system (Coats, 1996; Coats and Houyoux, 1996)¹ is used for this process.

Development of the gridded Project emissions is described in detail in Section 0.

2. PROJECT EMISSIONS AND SPATIAL ALLOCATION

Emissions were estimated for the Project to support the photochemical grid model (PGM) and are allocated into 4 kilometer (km) x 4 km grid cells. This section describes those emissions and how they were spatially allocated.

2.1 Project Emissions and Spatial Allocation

For use in PGMs, emissions must be spatially allocated over the area so that they can be incorporated into the gridded emission inventory. The total incremental emission inventory for the Project is below in Table 2-1. Mobile source emissions were split into categories based on the EMFAC2014 emission rates. For particulate matter, less than 2.5 microns in diameter (PM_{2.5}) emissions are used in the modelling; less than 10 microns in diameter (PM₁₀) emissions are presented for information below.

Table 2-1. Maximum Daily Criteria Air Pollutant Emissions Estimates						
Emission Category	ROG	NOx	PM ₁₀	PM _{2.5}	SO ₂	CO
	lbs/day	lbs/day	lbs/day	lbs/day	lbs/day	lbs/day
Mobile	38.4	220.2	284.2	76.8	2.6	499.2
Diurnal	2.4	0.0	0.0	0.0	0.0	0.0
Hotsoak	5.8	0.0	0.0	0.0	0.0	0.0
Idling Exhaust	0.2	1.3	0.0	0.0	0.0	2.0
Brakewear	0.0	0.0	1.0	1.0	0.0	0.0
Tirewear	0.0	0.0	0.2	0.1	0.0	0.0
Resting Loss	2.4	0.0	0.0	0.0	0.0	0.0
Road Dust	0.0	0.0	283.0	75.7	0.0	0.0
Running Exhaust	5.1	181.4	0.0	0.1	2.5	381.7
Running Loss	19.6	0.0	0.0	0.0	0.0	0.0
Starting Exhaust	2.8	37.5	0.0	0.0	0.1	115.5
Energy	2.0	17.4	1.4	1.4	0.1	12.1
Consumer Products	93.9	0.0	0.0	0.0	0.0	0.0

¹ <https://www.cmascenter.org/smoke/>.

Landscaping	6.5	2.5	1.2	1.2	0.0	216.3
Architectural Coatings	341.9	0.0	0.0	0.0	0.0	0.0
Operational	9.9	0.0	0.0	0.0	0.0	0.0
Construction (2024)	332	0.0	0.0	0.0	0.0	0.0
Abbreviations: CO - Carbon Monoxide lbs – Pounds NOx - Nitrogen Oxides PM _{2.5} - Particulate Matter less than 2.5 microns in diameter PM ₁₀ - Particulate Matter less than 10 microns in diameter ROG - Reactive Organic Gas SO ₂ - Sulfur Dioxide						

All emissions listed in Table 2-1 represent the maximum daily operational emissions estimated for the proposed Project's 2035 buildout scenario, aside from the construction architectural coatings emissions (labeled as such). This analysis utilizes the 2035 operational emissions as they constitute the highest maximum daily emissions for the Project, with the exception of 2024 Reactive Organic Gas (ROG) emissions from architectural coatings during construction. Those emissions were also included as a conservative approach, as they represent the highest maximum daily total Volatile Organic Compounds (VOC)² emissions for the Project. The analysis presented here conservatively assumes maximum daily emissions occur over an entire year. Should average daily emissions be used, corresponding results would be approximately 20% lower.

Mobile emissions include light, medium, and heavy-duty vehicles. Table 2-2 below provides a summary of the spatial distribution of mobile emissions broken down by major freeway. Values in this table were calculated based on estimated average vehicle miles traveled (VMT) during the operational phase of the Project. VMT were estimated based on peak hour traffic demands on various freeway routes located near the Project site, using data provided in the proposed Project's Transportation Impact Study³ (Appendix F of the Draft EIR).

Freeway	Distribution (%)
State Route 91	25.0%
Interstate 110	46.6%
Interstate 405	26.8%
Interstate 710	1.6%

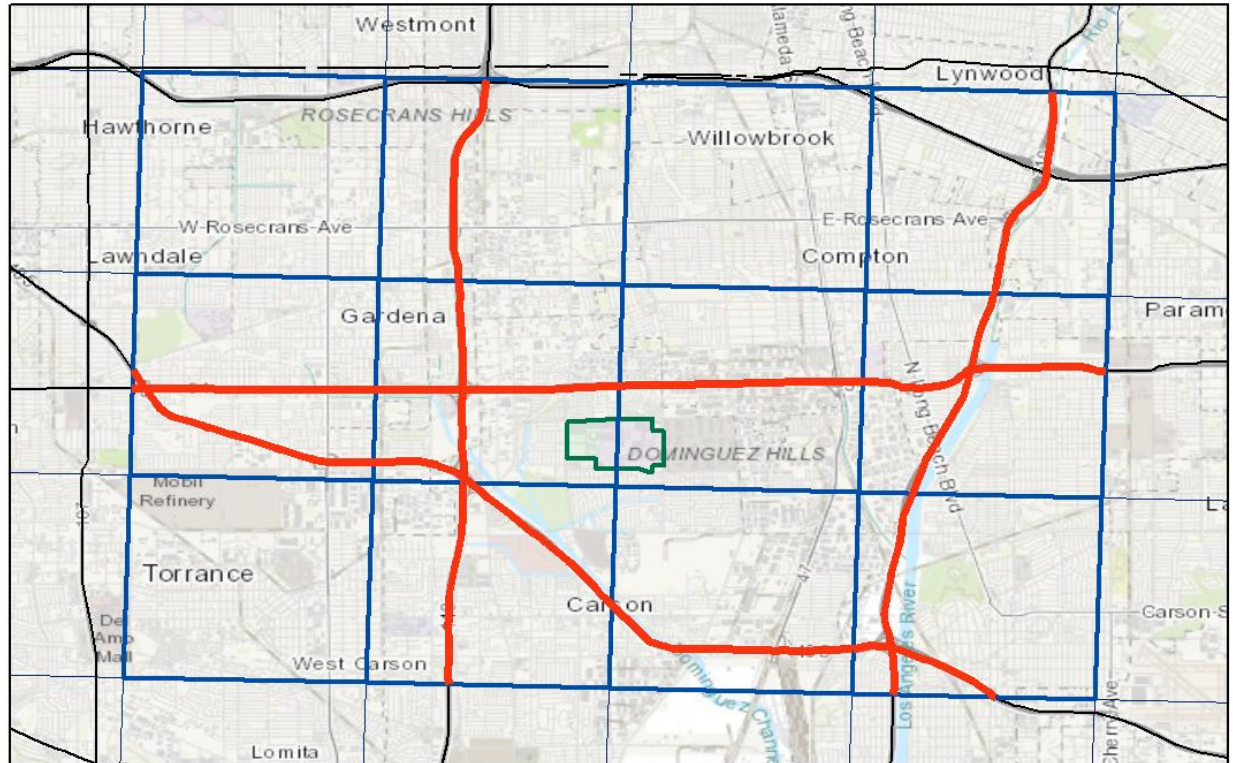
Project emissions are allocated evenly across the Project site into 4 km x 4 km grid cells for the PGM. Figure 2-1 below shows the Project boundary overlay with the 4-km grid. The Project site is shown in

² ROG means total organic gases minus ARB's "exempt" compounds (e.g., methane, ethane, CFCs, etc.). ROG is similar, but not identical, to USEPA's term "VOC", which is based on USEPA's exempt list, which is slightly different from ARB's list.

³ Appendix F of the Draft Environmental Impact Report for the 2018 Campus Master Plan. Available at: <https://www.csudh.edu/Assets/csudh-sites/fpcm/docs/campus-master-plan/csudh-cmp-deir-2019-appendices-updated.pdf>. Accessed: June 2019.

green, and the major roadways are shown in red. The 4x3 grid is presented on the figure with 12 blue grid cells. For major roadways that cross into multiple cells, emissions were allocated proportionally based on the length of roadway within each cell.

Figure 2-1. Overlap of Model Grid Cells on Project Site



2.2 Convert Project Inventories to SMOKE Input Format

The first step in the emissions processing was to convert the Project emission inventory into the Flat File 2010 (FF10) format for input to SMOKE. We assigned appropriate Source Classification Codes (SCCs) to the Project emissions sources. Table 2-3 provides the SCC assigned to each Project source.

Table 2-3. Assigned SCC to Project Emission Sources

Emission Source	SCC	SCC Description
Energy	2102006000	Stationary Source Fuel Combustion; Industrial; Natural Gas; Total: Boilers and IC Engines
Landscaping	2265004010	Mobile Sources; Off-highway Vehicle Gasoline, 4-Stroke; Lawn and Garden Equipment; Lawn Mowers (Residential)
Fugitive Dust	2294000000	Mobile Sources; Paved Roads; All Paved Roads; Total: Fugitives
Architectural Coating	2401001000	Solvent Utilization; Surface Coating; Architectural Coatings; Total: All Solvent Types
Consumer Products	2460000000	Solvent Utilization; Miscellaneous Non-industrial: Consumer and Commercial; All Processes; Total: All Solvent Types
Consumer Products	2460100000	Solvent Utilization; Miscellaneous Non-industrial: Consumer and Commercial; All Personal Care Products; Total: All Solvent Types
Consumer Products	2460200000	Solvent Utilization; Miscellaneous Non-industrial: Consumer and Commercial; All Household Products; Total: All Solvent Types
Consumer Products	2460400000	Solvent Utilization; Miscellaneous Non-industrial: Consumer and Commercial; All Automotive Aftermarket Products; Total: All Solvent Types
Consumer Products	2460500000	Solvent Utilization; Miscellaneous Non-industrial: Consumer and Commercial; All Coatings and Related Products; Total: All Solvent Types
Consumer Products	2460600000	Solvent Utilization; Miscellaneous Non-industrial: Consumer and Commercial; All Adhesives and Sealants; Total: All Solvent Types
Consumer Products	2460800000	Solvent Utilization; Miscellaneous Non-industrial: Consumer and Commercial; All FIFRA Related Products; Total: All Solvent Types
Consumer Products	2460900000	Solvent Utilization; Miscellaneous Non-industrial: Consumer and Commercial; Miscellaneous Products (Not Otherwise Covered); Total: All Solvent Types
Mobile -LDA	220100111B	Mobile Sources; Highway Vehicles - Gasoline; Light Duty Gasoline Vehicles (LDGV); Rural ⁴ Interstate: Brake Wear
Mobile -LDA	220100111R	Mobile Sources; Highway Vehicles - Gasoline; Light Duty Gasoline Vehicles (LDGV); Rural Interstate: Resting Loss
Mobile -LDA	220100111S	Mobile Sources; Highway Vehicles - Gasoline; Light Duty Gasoline Vehicles (LDGV); Rural Interstate: Start
Mobile -LDA	220100111T	Mobile Sources; Highway Vehicles - Gasoline; Light Duty Gasoline Vehicles (LDGV); Rural Interstate: Tire Wear
Mobile -LDA	220100111V	Mobile Sources; Highway Vehicles - Gasoline; Light Duty Gasoline Vehicles (LDGV); Rural Interstate: Evap (except Refueling)
Mobile -LDA	220100111X	Mobile Sources; Highway Vehicles - Gasoline; Light Duty Gasoline Vehicles (LDGV); Rural Interstate: Exhaust

⁴ Rural and Urban mobile designations provide equivalent chemical speciation and temporal distributions, as the EMFAC mobile emissions model does not distinguish between the two.

Emission Source	SCC	SCC Description
Mobile -LDT1	220102011B	Mobile Sources; Highway Vehicles - Gasoline; Light Duty Gasoline Trucks 1 & 2 (M6) = LDGT1 (M5); Rural Interstate: Brake Wear
Mobile -LDT1	220102011R	Mobile Sources; Highway Vehicles - Gasoline; Light Duty Gasoline Trucks 1 & 2 (M6) = LDGT1 (M5); Rural Interstate: Resting Loss
Mobile -LDT1	220102011S	Mobile Sources; Highway Vehicles - Gasoline; Light Duty Gasoline Trucks 1 & 2 (M6) = LDGT1 (M5); Rural Interstate: Start
Mobile -LDT1	220102011T	Mobile Sources; Highway Vehicles - Gasoline; Light Duty Gasoline Trucks 1 & 2 (M6) = LDGT1 (M5); Rural Interstate: Tire Wear
Mobile -LDT1	220102011V	Mobile Sources; Highway Vehicles - Gasoline; Light Duty Gasoline Trucks 1 & 2 (M6) = LDGT1 (M5); Rural Interstate: Evap (except Refueling)
Mobile -LDT1	220102011X	Mobile Sources; Highway Vehicles - Gasoline; Light Duty Gasoline Trucks 1 & 2 (M6) = LDGT1 (M5); Rural Interstate: Exhaust
Mobile -HHDT	220107011B	Mobile Sources; Highway Vehicles - Gasoline; Heavy Duty Gasoline Vehicles 2B thru 8B & Buses (HDGV); Rural Interstate: Brake Wear
Mobile -LHDT1	220107011I	Mobile Sources; Highway Vehicles - Diesel; Heavy Duty Diesel Vehicles (HDDV) Class 2B; Rural Interstate: Idling
Mobile -HHDT	220107011R	Mobile Sources; Highway Vehicles - Gasoline; Heavy Duty Gasoline Vehicles 2B thru 8B & Buses (HDGV); Rural Interstate: Resting Loss
Mobile -HHDT	220107011S	Mobile Sources; Highway Vehicles - Gasoline; Heavy Duty Gasoline Vehicles 2B thru 8B & Buses (HDGV); Rural Interstate: Start
Mobile -HHDT	220107011T	Mobile Sources; Highway Vehicles - Gasoline; Heavy Duty Gasoline Vehicles 2B thru 8B & Buses (HDGV); Rural Interstate: Tire Wear
Mobile -HHDT	220107011V	Mobile Sources; Highway Vehicles - Gasoline; Heavy Duty Gasoline Vehicles 2B thru 8B & Buses (HDGV); Rural Interstate: Evap (except Refueling)
Mobile -HHDT	220107011X	Mobile Sources; Highway Vehicles - Gasoline; Heavy Duty Gasoline Vehicles 2B thru 8B & Buses (HDGV); Rural Interstate: Exhaust
Mobile -OBUS	220107013B	Mobile Sources; Highway Vehicles - Gasoline; Heavy Duty Gasoline Vehicles 2B thru 8B & Buses (HDGV); Rural Other Principal Arterial: Brake Wear
Mobile -OBUS	220107013I	Mobile Sources; Highway Vehicles - Gasoline; Heavy Duty Gasoline Vehicles 2B thru 8B & Buses (HDGV); Rural Other Principal Arterial: Idling
Mobile -OBUS	220107013R	Mobile Sources; Highway Vehicles - Gasoline; Heavy Duty Gasoline Vehicles 2B thru 8B & Buses (HDGV); Rural Other Principal Arterial: Resting Loss
Mobile -OBUS	220107013S	Mobile Sources; Highway Vehicles - Gasoline; Heavy Duty Gasoline Vehicles 2B thru 8B & Buses (HDGV); Rural Other Principal Arterial: Start
Mobile -OBUS	220107013T	Mobile Sources; Highway Vehicles - Gasoline; Heavy Duty Gasoline Vehicles 2B thru 8B & Buses (HDGV); Rural Other Principal Arterial: Tire Wear

Emission Source	SCC	SCC Description
Mobile -OBUS	220107013V	Mobile Sources; Highway Vehicles - Gasoline; Heavy Duty Gasoline Vehicles 2B thru 8B & Buses (HDGV); Rural Other Principal Arterial: Evap (except Refueling)
Mobile -OBUS	220107013X	Mobile Sources; Highway Vehicles - Gasoline; Heavy Duty Gasoline Vehicles 2B thru 8B & Buses (HDGV); Rural Other Principal Arterial: Exhaust
Mobile -MCY	220108011B	Mobile Sources; Highway Vehicles - Gasoline; Motorcycles (MC); Rural Interstate: Brake Wear
Mobile -MCY	220108011R	Mobile Sources; Highway Vehicles - Gasoline; Motorcycles (MC); Rural Interstate: Resting Loss
Mobile -MCY	220108011S	Mobile Sources; Highway Vehicles - Gasoline; Motorcycles (MC); Rural Interstate: Start
Mobile -MCY	220108011T	Mobile Sources; Highway Vehicles - Gasoline; Motorcycles (MC); Rural Interstate: Tire Wear
Mobile -MCY	220108011V	Mobile Sources; Highway Vehicles - Gasoline; Motorcycles (MC); Rural Interstate: Evap (except Refueling)
Mobile -MCY	220108011X	Mobile Sources; Highway Vehicles - Gasoline; Motorcycles (MC); Rural Interstate: Exhaust
Mobile -LDA	223000111B	Mobile Sources; Highway Vehicles - Diesel; Light Duty Diesel Vehicles (LDDV); Rural Interstate: Brake Wear
Mobile -LDA	223000111T	Mobile Sources; Highway Vehicles - Diesel; Light Duty Diesel Vehicles (LDDV); Rural Interstate: Tire Wear
Mobile -LDA	223000111X	Mobile Sources; Highway Vehicles - Diesel; Light Duty Diesel Vehicles (LDDV); Rural Interstate: Exhaust
Mobile -LDT1	223006011B	Mobile Sources; Highway Vehicles - Diesel; Light Duty Diesel Trucks 1 thru 4 (M6) (LDDT); Rural Interstate: Brake Wear
Mobile -LDT1	223006011T	Mobile Sources; Highway Vehicles - Diesel; Light Duty Diesel Trucks 1 thru 4 (M6) (LDDT); Rural Interstate: Tire Wear
Mobile -LDT1	223006011X	Mobile Sources; Highway Vehicles - Diesel; Light Duty Diesel Trucks 1 thru 4 (M6) (LDDT); Rural Interstate: Exhaust
Mobile -LHDT1	223007111B	Mobile Sources; Highway Vehicles - Diesel; Heavy Duty Diesel Vehicles (HDDV) Class 2B; Rural Interstate: Brake Wear
Mobile -LHDT1	223007111I	Mobile Sources; Highway Vehicles – Diesel; Heavy Duty Diesel Vehicles (HDDV) Class 2B; Rural Interstate: Idling
Mobile -LHDT1	223007111T	Mobile Sources; Highway Vehicles - Diesel; Heavy Duty Diesel Vehicles (HDDV) Class 2B; Rural Interstate: Tire Wear
Mobile -LHDT1	223007111X	Mobile Sources; Highway Vehicles - Diesel; Heavy Duty Diesel Vehicles (HDDV) Class 2B; Rural Interstate: Exhaust
Mobile -MHDT	2230072110	Mobile Sources; Highway Vehicles - Diesel; Heavy Duty Diesel Vehicles (HDDV) Class 3, 4, & 5; Rural Interstate: Total
Mobile -LHDT2	223007211B	Mobile Sources; Highway Vehicles - Diesel; Heavy Duty Diesel Vehicles (HDDV) Class 3, 4, & 5; Rural Interstate: Brake Wear
Mobile -LHDT2	223007211I	Mobile Sources; Highway Vehicles - Diesel; Heavy Duty Diesel Vehicles (HDDV) Class 3, 4, & 5; Rural Interstate: Idling

Emission Source	SCC	SCC Description
Mobile -LHDT2	223007211T	Mobile Sources; Highway Vehicles - Diesel; Heavy Duty Diesel Vehicles (HDDV) Class 3, 4, & 5; Rural Interstate: Tire Wear
Mobile -LHDT2	223007211X	Mobile Sources; Highway Vehicles - Diesel; Heavy Duty Diesel Vehicles (HDDV) Class 3, 4, & 5; Rural Interstate: Exhaust
Mobile -HHDT	223007311B	Mobile Sources; Highway Vehicles - Diesel; Heavy Duty Diesel Vehicles (HDDV) Class 6 & 7; Rural Interstate: Brake Wear
Mobile -HHDT	223007311I	Mobile Sources; Highway Vehicles - Diesel; Heavy Duty Diesel Vehicles (HDDV) Class 6 & 7; Rural Interstate: Idling
Mobile -HHDT	223007311S	Mobile Sources; Highway Vehicles - Diesel; Heavy Duty Diesel Vehicles (HDDV) Class 6 & 7; Rural Interstate: Start
Mobile -HHDT	223007311T	Mobile Sources; Highway Vehicles - Diesel; Heavy Duty Diesel Vehicles (HDDV) Class 6 & 7; Rural Interstate: Tire Wear
Mobile -HHDT	223007311X	Mobile Sources; Highway Vehicles - Diesel; Heavy Duty Diesel Vehicles (HDDV) Class 6 & 7; Rural Interstate: Exhaust
Mobile -OBUS	223007513B	Mobile Sources; Highway Vehicles - Diesel; Heavy Duty Diesel Buses (School & Transit); Rural Other Principal Arterial: Brake Wear
Mobile -OBUS	223007513I	Mobile Sources; Highway Vehicles - Diesel; Heavy Duty Diesel Buses (School & Transit); Rural Other Principal Arterial: Idling
Mobile -OBUS	223007513S	Mobile Sources; Highway Vehicles - Diesel; Heavy Duty Diesel Buses (School & Transit); Rural Other Principal Arterial: Start
Mobile -OBUS	223007513T	Mobile Sources; Highway Vehicles - Diesel; Heavy Duty Diesel Buses (School & Transit); Rural Other Principal Arterial: Tire Wear
Mobile -OBUS	223007513X	Mobile Sources; Highway Vehicles - Diesel; Heavy Duty Diesel Buses (School & Transit); Rural Other Principal Arterial: Exhaust

2.2.1 Generate Spatial Surrogates for 4-km Domains

As part of the analysis, the Project source emissions need to be spatially allocated to appropriate geographic locations. The emissions can be allocated to modeling grid cells using gridding surrogates. To process the Project emissions, a Project area-based spatial surrogate was developed. The surrogate was developed using the US Environmental Protection Agency (USEPA's) Spatial Allocation Tool,⁵ which combines geographical information system (GIS)-based data (shapefiles) and modeling domain definitions to generate the appropriate gridded surrogate data set. The Project sources were then assigned specific surrogates for gridding by cross-referencing the SCCs. As mentioned above, all Project emissions were distributed in the modeling grid cells where the Project is located as shown in Figure 2-1. The mobile sources are spatially distributed in the site's grid cells and surrounding grid cells, as outlined in Table 2-2.

2.2.2 SMOKE 4 km Processing of Project Emissions

SMOKE system was used to process emissions for the Southern California 4-km modeling grid shown in Figure 2-1. A representative week from each month (seven days a month) was used to represent

⁵ https://www.cmascenter.org/sa-tools/documentation/4.2/html/srgtool/SurrogateToolUserGuide_4_2.pdf

the entire month's emissions. Holidays were modeled separately as if they were a Sunday. SMOKE was applied to perform following tasks:

1. Chemical Speciation: Emission estimates of criteria pollutants were speciated for the SAPRC07 AERO6 chemical mechanism employed in Community Multiscale Air Quality (CMAQ) in SMOKE processing. We used speciation profiles compatible with the SAPRC07 AERO6 mechanism from the SCAQMD's modeling system to be consistent with the regional modeling emissions. We then converted those emissions into Comprehensive Air Quality Model with extensions (CAMx)-ready formats using CMAQ2CAMx conversion program and species mapping.
2. Temporal Allocation: Annual emission estimates were resolved on an hourly timescale for CAMx modeling. These allocations were determined from the particular source category, specified by the SCC. Monthly, weekly, and diurnal profiles were cross-referenced to the SCCs to provide the appropriate temporal resolution. The temporal profiles were also obtained from the BAAQMD's emissions modeling system, as they were unavailable from South Coast Air Quality Management District (SCAQMD).
3. Spatial Allocation: The Project emission estimates were spatially resolved to the grid cells for modeling using spatial surrogates as described above.

2.2.3 QA/QC of Emissions Modeling

Standard quality assurance/quality control (QA/QC) was conducted during all aspects of the SMOKE emissions processing. These steps followed the approach recommended in the USEPA modeling guidance (USEPA, 2007). SMOKE includes quality assurance (QA) and reporting features to keep track of the adjustments at each processing stage and ensure that data integrity is not compromised. We carefully reviewed the SMOKE log files for error messages and ensured that appropriate source profiles were used. All error records reported during processing were reviewed and resolved. This is important to ensure that source categories are correctly characterized. We also compared SMOKE input and output emissions: Summary tables were generated to compare input inventory totals against model-ready output totals to confirm consistency. Spatial plots were generated to visually verify correct spatial allocation of the emissions.

2.2.4 Merge SMOKE Pre-merged Emissions to Generate CAMx-ready Emission Inputs

The final step in the emissions processing is to merge the Project gridded emissions with other regional components through the gridded merge program (MRGUAM) for CAMx. We merged the daily emissions in the time format required by CAMx.

2.2.5 Emissions Summary

Summaries of the Project gridded CAMx model-ready emissions data are provided in this section. Table 2-4 summarizes the Project emission inventory data input to SMOKE from the FF10 data files in pounds per day by source type. Table 2-5 presents the emissions data after SMOKE processing. The consistency in data in Tables 2-4 and 2-5 offer confidence in the correct operation of the SMOKE emissions processing for CAMx.

Table 2-4. Project Emission Inventory Data Input to SMOKE by Source Type (lbs/day)

Type	CO	NO _x	VOC	SO ₂	PM ₁₀	PM _{2.5}
Mobile	499.2	220.2	38.4	2.6	284.2	76.8
Energy	12.1	17.4	2.0	0.1	1.4	1.4
Consumer Products	0.0	0.0	93.9	0.0	0.0	0.0

Landscaping	216.3	2.5	6.5	0.0	1.2	1.2
Architectural Coatings	0.0	0.0	341.9	0.0	0.0	0.0
Total	727.6	240.1	482.6	2.7	286.8	79.5
Abbreviations: CO - Carbon Monoxide NO _x - Nitrogen Oxides PM _{2.5} - Particulate Matter less than 2.5 microns in diameter PM ₁₀ - Particulate Matter less than 10 microns in diameter SO ₂ - Sulfur Dioxide VOC - Volatile Organic Compounds						

Table 2-5. Emission Inventory Data Output from SMOKE by Project Region (lbs/day)

Type	CO	NO _x	VOC	SO ₂	PM ₁₀	PM _{2.5}
Mobile	499.2	220.2	38.4	2.6	284.2	76.8
Energy	12.1	17.4	2.0	0.1	1.4	1.4
Consumer Products	0.0	0.0	93.9	0.0	0.0	0.0
Landscaping	216.3	2.5	6.5	0.0	1.2	1.2
Architectural Coatings	0.0	0.0	341.9	0.0	0.0	0.0
Total	727.6	240.1	482.6	2.8	286.8	79.4
Abbreviations: CO - Carbon Monoxide NO _x - Nitrogen Oxides PM _{2.5} - Particulate Matter less than 2.5 microns in diameter PM ₁₀ - Particulate Matter less than 10 microns in diameter SO ₂ - Sulfur Dioxide VOC - Volatile Organic Compounds						

Spatial displays of the gridded emissions data are presented below. We examined the gridded emissions in 4-km grid to verify accurate spatial allocation by SMOKE. Figures 2-2 through 2-7 displays gridded emissions for the Project inventory in the 4-km modeling grid.

Figure 2-2. Spatial Distribution of CO Emissions (in lbs/day) for the Project in the Southern California 4-km Domain

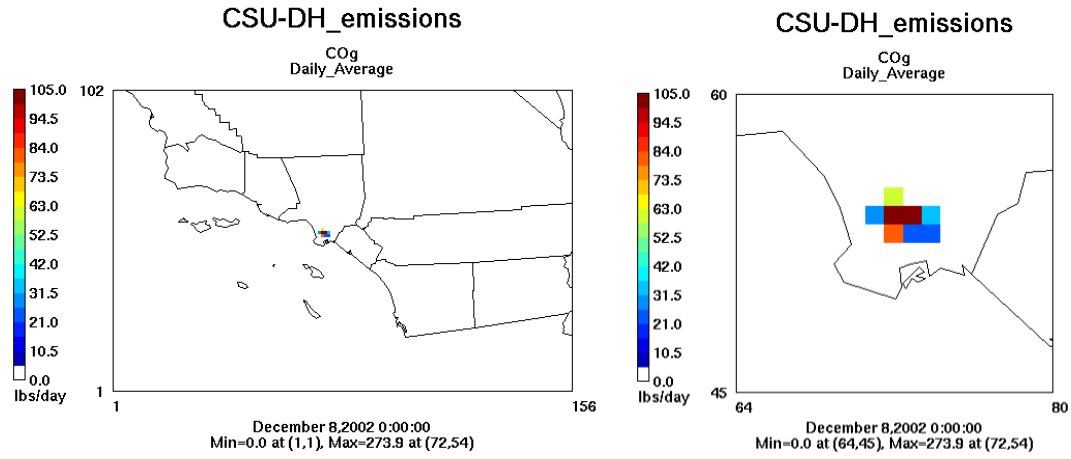


Figure 2-3. Spatial Distribution of NO_x Emissions (in lbs/day) for the Project in the Southern California 4-km Domain

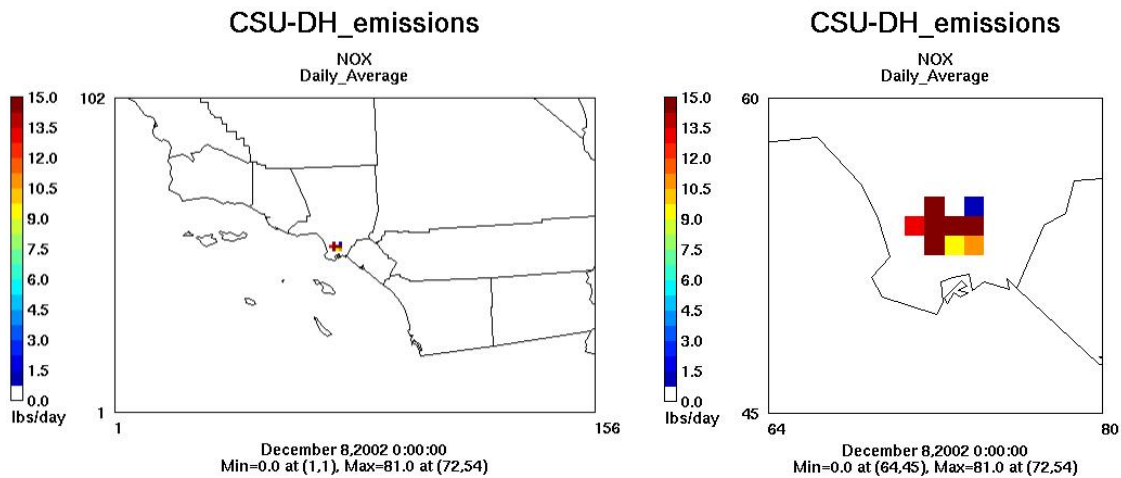


Figure 2-4. Spatial Distribution of VOC Emissions (in lbs/day) for the Project in the Southern California 4-km Domain

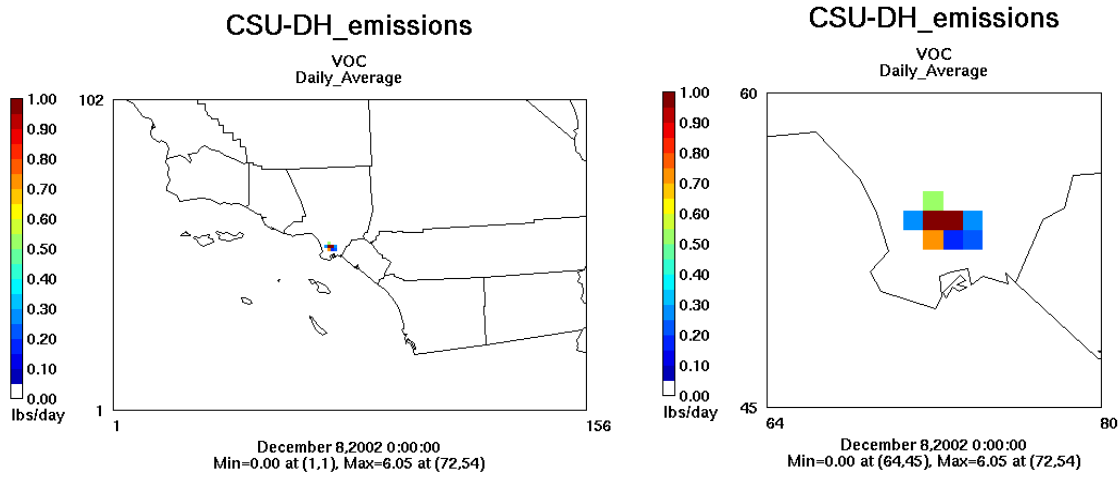


Figure 2-5. Spatial Distribution of SO₂ Emissions (in lbs/day) for the Project in the Southern California 4-km Domain

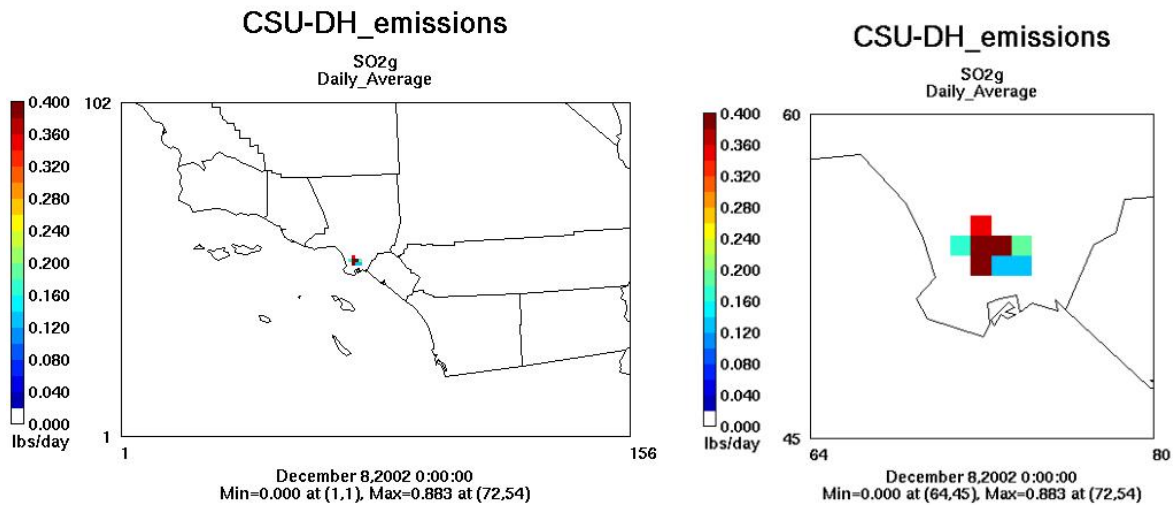


Figure 2-6. Spatial Distribution of PM₁₀ Emissions (in lbs/day) for the Project in the Southern California 4-km Domain

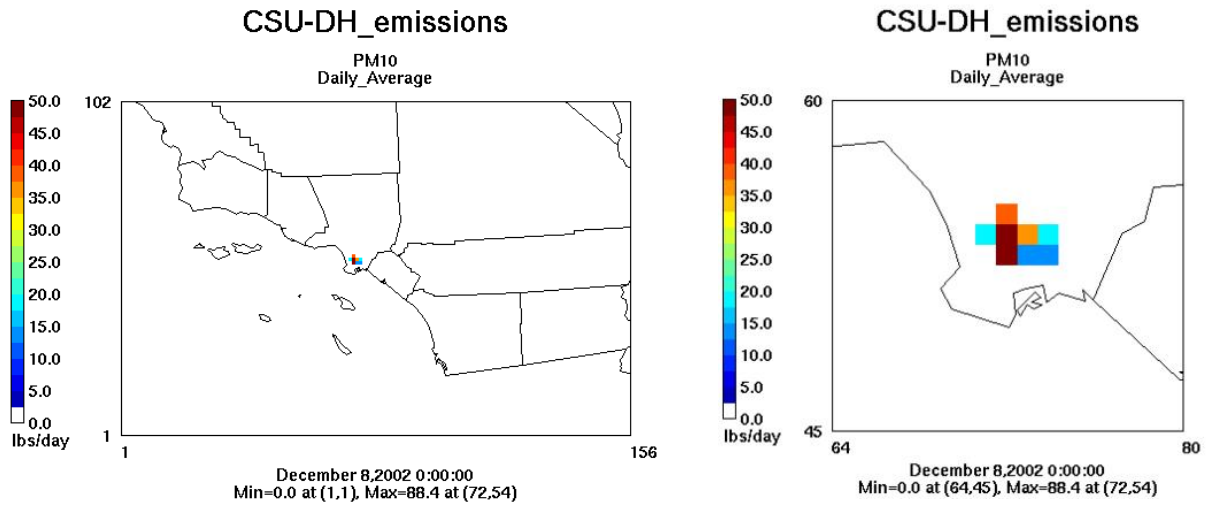
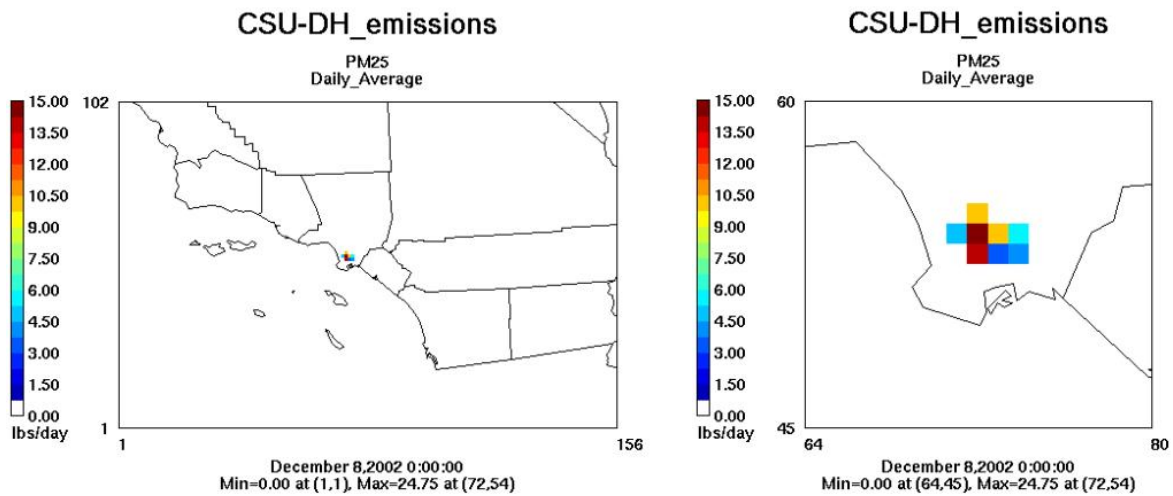


Figure 2-7. Spatial Distribution of PM_{2.5} Emissions (in lbs/day) for the Project in the Southern California 4-km Domain



3. REFERENCES

- /1/ Coats Jr., C.J., 1996. High-performance algorithms in the Sparse Matrix Operator Kernel Emissions (SMOKE) modeling system. Proc. Ninth AMS Joint Conference on Applications of Air Pollution Meteorology with AWMA. Amer. Meteor. Soc., Atlanta, GA, 584-588.
- /2/ Coats Jr., C.J., Houyoux, M.R., 1996. Fast Emissions Modeling with the Sparse Matrix Operator Kernel Emissions (SMOKE) Modeling System. The Emission Inventory: Key to Planning, Permits, Compliance, and Reporting, Air & Waste Management Association. New Orleans, Louisiana.
- /3/ USEPA, 2007. Guidance on the Use of Models and Other Analyses for Demonstrating Attainment of Air Quality Goals for Ozone, PM2.5 and Regional Haze. Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, NC. EPA-454/B-07-002.

APPENDIX B
PGM INPUTS, OUTPUTS, AND ASSUMPTIONS

APPENDIX B

PGM INPUTS, OUTPUTS, AND ASSUMPTIONS
CALIFORNIA STATE UNIVERSITY – DOMINGUEZ HILLS
CARSON, CALIFORNIA

1. REGIONAL AIR QUALITY MODELING PLATFORM

The Southern California 2012 4-kilometer (km) Comprehensive Air Quality Model with extensions (CAMx) modeling database and a projected 2023 emissions database were used in this assessment. The 2012 base case is based on a Photochemical Grid Model (PGM) database developed by the South Coast Air Quality Management District (SCAQMD) as part of the modeling and attainment demonstration for their 2016 Air Quality Management Plan¹. This PGM database is tailored for Southern California and reflects updated emissions estimates, new technical information and enhanced air quality modeling techniques. The database uses a high-resolution 4-km horizontal grid to better simulate meteorology and air quality in the complex terrain and coastal environment of California. This contrasts with the United States Environmental Protection Agency's (USEPA's) national modeling platforms² used for national rulemakings (e.g., transport rules such as CSAPR³ or defining new National Ambient Air Quality Standards [NAAQS]) that use a coarser 12-km horizontal grid resolution.

Details of the model inputs, configuration, and results are presented in Section 2 of this Appendix.

Figure 1-1. Air Quality Modeling Domain for Southern California⁴



¹ <http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/final-2016-aqmp>.

² <https://www.epa.gov/air-emissions-modeling/2014-2016-version-7-air-emissions-modeling-platforms>.

³ <https://www.epa.gov/csapr>.

⁴ <https://ww3.arb.ca.gov/research/cabots/docs/9a-cabots-baaqmd-20170419.pdf>.

2. REGIONAL GRID MODELING

In this section, we describe the regional PGM modeling setup to assess the impact of the Project emissions on the ambient Particulate Matter less than 2.5 microns in diameter ($PM_{2.5}$) levels in the region. The 2012 base case modeling databases were developed by the SCAQMD for the Community Multiscale Air Quality (CMAQ) PGM. The CMAQ annual 2012 4-km modeling database and annual 2012 4-km Weather Research and Forecasting (WRF) meteorological model output files were obtained from the SCAQMD. The SCAQMD CMAQ and WRF 2012 4-km data were then processed to generate a 2012 4-km annual PGM modeling database suitable for the CAMx. The following paragraphs describe how Ramboll developed the CAMx 2012 4-km annual database used in this study, starting with the SCAQMD CMAQ and WRF 2012 4-km data.

2.1 Model Inputs and Configuration

The SCAQMD emissions database has both 2012 and 2023 future year projections for CMAQ area and in-line point emissions. Ramboll converted both years' emissions to corresponding CAMx area and point-source emissions files using the CMAQ2CAMx interface program⁵. Sea salt emissions were developed using an emissions processor that integrates published sea spray flux algorithms to estimate sea salt PM emissions for input to CAMx. The CAMx sea salt emissions were then merged with area emissions files.

The most commonly used prognostic meteorological models to provide meteorological fields for air quality modeling are the WRF model (Skamarock et al., 2005) and the Fifth-Generation Mesoscale Model (MM5; Grell et al, 1994). MM5 is a nonhydrostatic, prognostic meteorological model developed in the 1970s by Pennsylvania State University and the National Center for Atmospheric Research (NCAR) and has been widely used for urban- and regional-scale photochemical, fine particulate, and regional haze regulatory modeling studies. However, development of MM5 ceased in 2006, and WRF has become the new standard model used in place of the older MM5 for regulatory air quality applications in the US. Developed jointly by NCAR and the National Center for Environmental Prediction in late 1990s, WRF has been under continuous development, improvement, testing and open peer-review for more than 10 years and used world-wide by hundreds of researchers and practitioners around the globe for a variety of mesoscale studies. SCAQMD adopted WRF version 3.6 for the 2012 simulations. For the current application, the meteorology remains unchanged for the future year simulation and SCAQMD WRF 2012 4-km model outputs were processed using the WRF-CAMx⁶ processor to generate the meteorological fields ready for CAMx. The WRF model employs a terrain-following coordinate system defined by pressure, using multiple layers that extend from the surface to 50 millibars (approximately 19 kilometers above ground level [AGL]). A layer averaging scheme is adopted for CAMx simulations to reduce the computational burden. Table 2-1 presents the mapping from the WRF vertical layer structure to the CAMx vertical layers.

⁵ <http://www.camx.com/download/support-software.aspx>.

⁶ WRF-CAMx is available on the CAMx website (<http://www.camx.com/download/support-software.aspx>).

Table 2-1 Vertical Layer Structure for WRF and CAMx Modeling					
WRF		CAMx			
Layer	Height (m)	Layer	Height (m)	Thickness (m)	Sigma
30	19260	18	19260	4769	0.0000
29	17456				
28	15900				
27	14492	17	14492	6027	0.0788
26	13185				
25	11945				
24	10755				
23	9597				
22	8465	16	8465	4906	0.2930
21	7345				
20	6237				
19	5177				
18	4295				
17	3559	15	3559	1560	0.6254
16	2944				
15	2430				
14	1999	14	1999	358	0.7733
13	1641	13	1641	300	0.8107
12	1341	12	1341	251	0.8431
11	1090	11	1090	209	0.8709
10	881	10	881	175	0.8946
9	706	9	706	146	0.9148
8	561	8	561	121	0.9319
7	439	7	439	101	0.9463
6	338	6	338	85	0.9585
5	253	5	253	70	0.9688
4	183	4	183	59	0.9774
3	124	3	124	49	0.9846
2	75	2	75	41	0.9907
1	34	1	34	34	0.9958
0	0		0	0	1

The SCAQMD data set provided the lateral boundary conditions (BCs) for the 4-km state-wide modeling grid. The SCAQMD simulated a 12-km domain whose boundary concentrations were extracted from a global model simulation for the year 2012. The Model for Ozone and Related Chemical Tracers Version 4 (MOZART-4; Emmons et al., 2010) is a global chemical transport model

developed jointly by NCAR, the Geophysical Fluid Dynamics Laboratory, and the Max Planck Institute for Meteorology, and simulates chemistry and transport of tropospheric gases and bulk aerosols. The 12-km outputs were saved and used to derive the boundary conditions for the 4-km domain. The CMAQ2CAMX processor was used to convert the CMAQ 4-km boundary conditions to suitable CAMx BCs. The model was initialized from clean initial concentrations and five days of spin-up period were used for the 4-km grids to minimize their influence.

Additional data used in the air quality modeling include ozone column data from the Ozone Monitoring Instrument (OMI), which continues the Total Ozone Mapping Spectrometer (TOMS) record for total ozone and other atmospheric parameters related to ozone chemistry (OMI officially replaced the TOMS ozone column satellite data on January 1, 2006). OMI data are available every 24-hours and are obtained from the TOMS ftp site⁷. The CAMx O3MAP program reads the OMI ozone column txt file data and interpolates to fill gaps and generated gridded daily ozone column input data. The OMI data is used in the CAMx (TUV) radiation models, which is a radiative transfer model that develops clear-sky photolysis rate inputs for CAMx. The land use file was generated with the WRF-CAMx processor and modified to remove lakes and set coastal waters with a surf zone width of 50 m; this file was used to update the emissions database and provide more realistic representation of sea salt emissions.

Table 2-2 presents the CAMx configuration used for the modeling in this Project analysis. In the past, the Carbon-Bond IV (CB4) chemical mechanism (Gery et al., 1989) has been predominantly used for the California State Implementation Plan (SIP) modeling. In 1999, however, the California Air Resources Board's (CARB's) Reactivity Scientific Advisory Committee recommended switching to the 1999 State-wide Air Pollution Research Center (SAPRC99) chemical mechanism (Carter, 2000) based on a comprehensive review by Stockwell (1999), and SAPRC99 has since been the mechanism of choice for the California SIPs. The 2007 update to the SAPRC chemistry mechanism, called SAPRC07 (Carter, 2010), replaced the dated SAPRC99 mechanism. The version implemented in CAMx is SAPRC07TC, which includes additional model species to explicitly represent selected toxics and reactive organic compounds and uses numerical expressions of rate constants that are compatible with the current chemistry mechanism solver. The partitioning of inorganic aerosol constituents (sulfate, nitrate ammonium and chloride) between gas and aerosol phases is performed using the ISORROPIA module. The SOAP semi-volatile equilibrium scheme performs the organic aerosol-gas partitioning. These processes are described in more detailed in the CAMx user guide.

⁷ <ftp://toms.gsfc.nasa.gov/pub/omi/data/>.

Table 2-2. CAMx Modeling Configuration		
Science Option	Configuration	Notes
Model Code	CAMx v6.5	Released June 2010
Horizontal Grid	4-km 1-way nesting	
O3 and PM 4-km	156 x 102 grid cells	
Vertical Grid	18 vertical layers extending up to ~19 km AGL	Collapsed from 30 WRF layers (see Table 3-1)
Initial Conditions	Clean initial conditions	5-day spin-up for 4-km domain
Boundary Conditions	CMAQ 4km lateral concentrations converted to CAMx	
Photolysis Rate	Photolysis rates lookup table	Derived from satellite measurements and TUV processor
Gas-phase Chemistry	SAPRC07TC	Solved by the Euler Backward Iterative (EBI) solver
Aerosol-phase Chemistry	ISORROPIA (inorganic aerosol) SOAP v2.1 (organic aerosol)	
Meteorological Input Preprocessor	WRFCAMx v4.7	
Advection	Piecewise Parabolic Method (PPM)	
Diffusion	Eddy diffusion algorithm	

2.2 Model Results

The future modeling scenario was simulated using the CAMx source apportionment technology. Both cumulative concentrations from all the sources and the concentrations from Project-specific emissions are derived from a single simulation following the previous section model configuration. The model results of hourly PM_{2.5} concentrations were processed into aggregated metrics that are relevant to health effects.

The metrics relevant to the PM_{2.5} health effects selected in this study are 24-hour annual average concentrations (see Appendix C). Figure 2-1 shows spatial plots of annual average and a single day episode maximum 24-hour average PM_{2.5} concentrations from the base case. In the base case, the Los Angeles County is the region most impacted along with the southern portion of Imperial County. Annual PM_{2.5} concentrations in these counties range between 10 and 20 micrograms per cubic meter (µg/m³) with isolated regions that could reach up to 25 µg/m³. Contributions of the Project emissions to annual average PM_{2.5} are about 0.16 µg/m³ at the most impacted areas and contributions to the maximum 24-hour average are as large as 0.42 µg/m³ at the most impacted areas. Figure 2-2 presents increases in annual average and maximum 24-hour average PM_{2.5} due to the Project by PM_{2.5}

component at the grid cell of maximum impact. It confirms that the PM_{2.5} increases due to the Project are mostly due to primary PM components.

Figure 2-1. Results of the 4 km PM_{2.5} Modeling Domain

PM_{2.5} Concentrations from the Base Case Scenario (left panels);
 Increases in PM_{2.5} due to the Project (center and right panels);
 Annual Averages (top panels);
 Maximum 24-hour Averages (bottom panels)

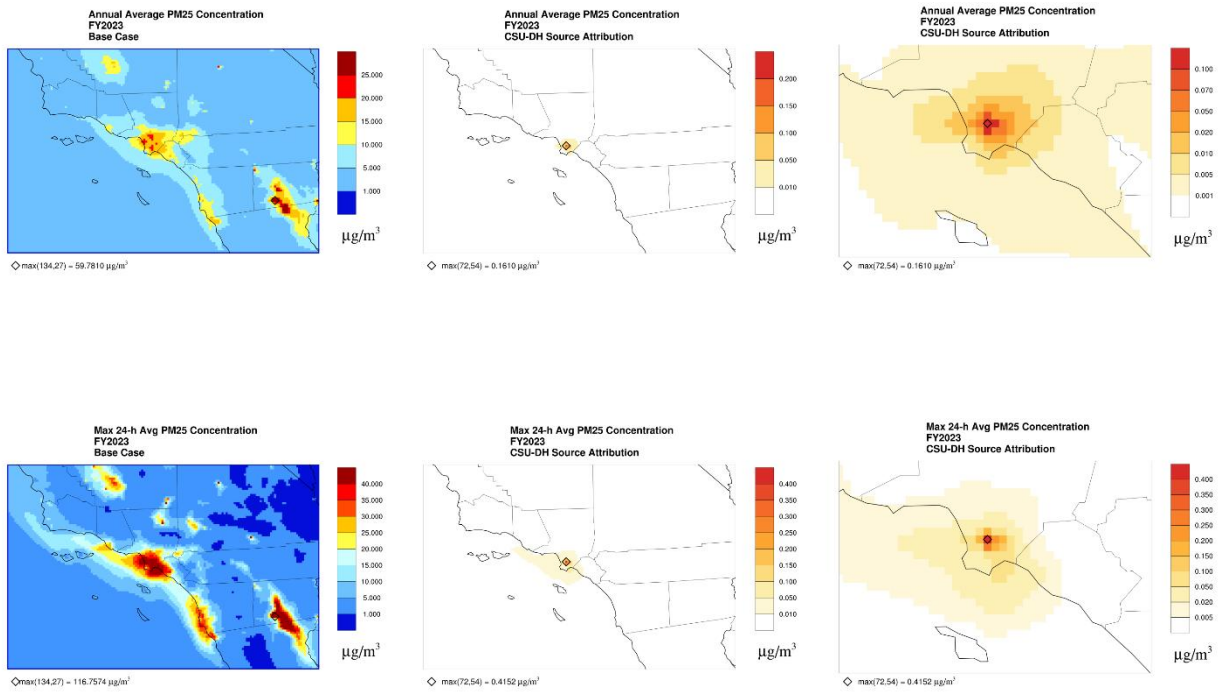
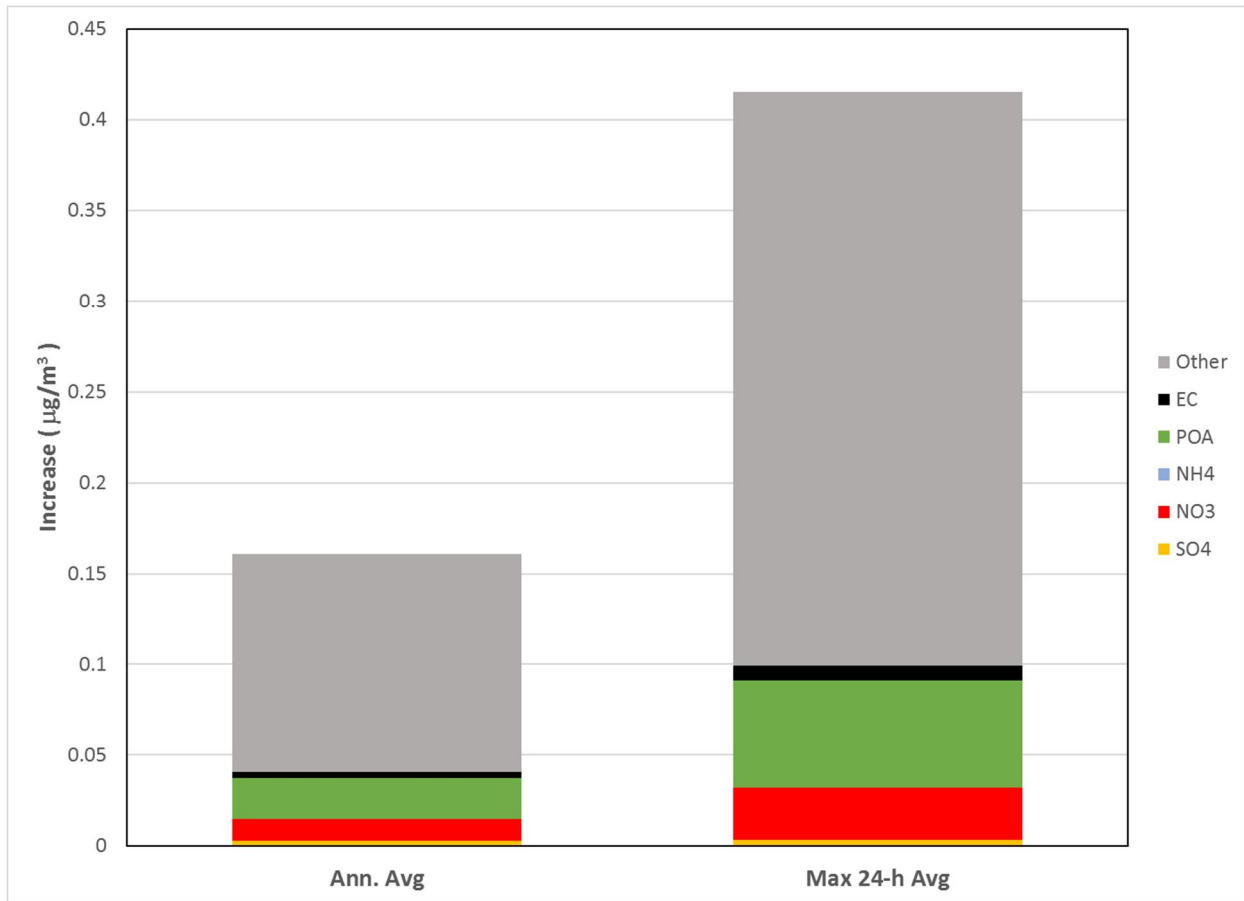


Figure 2-2. Increases in Annual Average and Episode Maximum 24-hour Average PM_{2.5} Concentrations due to the Project by PM_{2.5} Component: fine particulate sulfate (SO₄), nitrate (NO₃), ammonium (NH₄), primary organic aerosol (POA), elemental carbon (EC), and other primary PM (Other); Where the Maximum Impact of the Project's Emissions Occurred



The metrics relevant to the ozone health effects selected in this study are consistent with the ozone NAAQS (see Appendix C). The model provides hourly concentrations that are further post-processed to produce maximum daily average 8-hour (MDA8) ozone concentrations for each day. Figure 2-3 displays spatial plots of the annual highest MDA8 ozone for the 2023 emissions scenario and the increases in highest MDA8 ozone concentrations due to the Projects emissions. In the 2023 base case emissions scenario, the western Los Angeles, northern Orange, southern San Bernardino and eastern Riverside counties show the highest MDA8 ozone concentration between 90 and 100 ppb. The maximum increase in the highest MDA8 ozone concentrations due to the Project is 0.112 ppb in southern Los Angeles County.

Figure 2-4 displays MDA8 ozone for the base case and increases in MDA8 ozone due to the project on August 13, the day that the Project has the highest ozone contribution. The highest MDA8 ozone contribution due to the Project is 0.121 ppb (Figure 2-4, right) that occurs in southern Los Angeles County where total MDA8 ozone concentrations are 75 ppb.

Figure 2-3. Highest MDA8 Ozone Concentrations from the Base Case Scenario (left) and Increases in Highest MDA8 Ozone Concentrations due to the Project (right) for the Annual Modeling of the 2023 Emissions Scenario

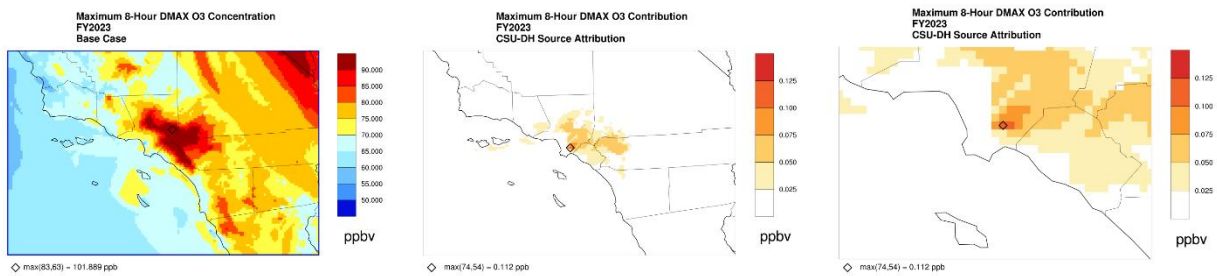
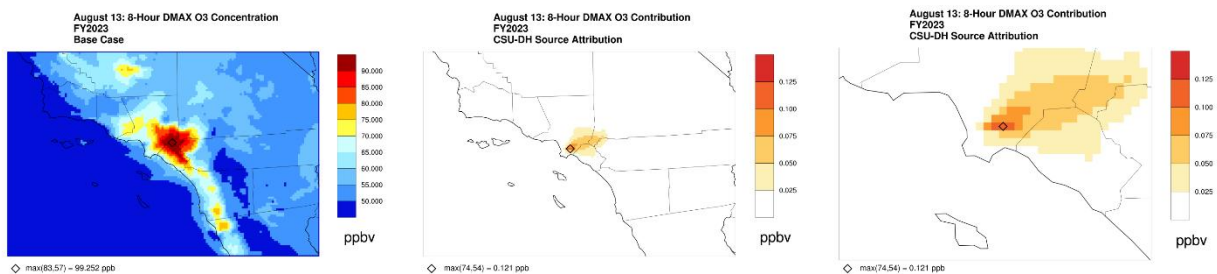


Figure 2-4. MDA8 Ozone Concentrations from the Base Case Scenario (left) and Increases in MDA8 Ozone Concentrations due to the Project (right) on August 13, the Day with the Highest Project Ozone Contributions for the Annual Modeling of the 2023 Emissions Scenario



3. REFERENCES

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APPENDIX C
BENMAP AND HEALTH OUTCOMES

APPENDIX C

BENMAP AND HEALTH OUTCOMES
CALIFORNIA STATE UNIVERSITY, DOMINGUEZ HILLS
CARSON, CALIFORNIA

1. HEALTH IMPACT ANALYSIS

The potential health effects of ozone and Particulate Matter less than 2.5 microns in diameter (PM_{2.5}) concentrations due to the Project's emissions were estimated using the Environmental Benefits Mapping and Analysis Program (BenMAP), Community Edition v1.4 (July 2018).¹ BenMAP, originally developed by the United States Environmental Protection Agency (USEPA), is a powerful and flexible tool that helps users estimate human health impacts and economic benefits resulted from changes in air quality. BenMAP outputs include PM- and ozone-related health endpoints such as premature mortality, hospital admissions, and emergency room visits. BenMAP uses the following formula to relate changes in ambient air pollution to certain health endpoints (AAI, 2018):

$$\text{Health Effect} = \text{Air Quality Change} \times \text{Health Effect Estimate} \times \text{Exposed Population} \times \text{Background Health Incidence}$$

- Air Quality Change - The difference between the starting air pollution level (the base) and the air pollution level after some change, such as a new source.
- Health Effect Estimate - An estimate of the percentage change in an adverse health effect due to a one unit change in ambient air pollution. Effect estimates, also referred to as concentration-response functions (CRFs), are obtained from epidemiological studies.
- Exposed Population - The number of people affected by the air quality change. The government census office is a good source for this information. This analysis uses data from PopGrid, which is an add-on program to BenMAP that allocates the block-level U.S. Census population to a user-defined grid.²
- Background Health Incidence - An estimate of the average number of people that die (or suffer from some adverse health effect) in a given population over a given period of time. For example, the health incidence rate might be the probability that a person will die in a given year. Health incidence rates and other health data are typically collected by the government as well as the World Health Organization.

The health endpoints analyzed in this study and the BenMAP results are presented in Section 2 of this appendix.

2. HEALTH IMPACT ANALYSIS

This section presents the health impact of the Project emissions on the population in the southern California domain, estimated by the BenMAP model. The Comprehensive Air Quality Model with extensions (CAMx) modeling results are processed to generate aggregated daily averages PM_{2.5} and maximum daily 8-hour ozone appropriate for various health endpoints. The CAMx simulation results from the full year (January to December) are used to estimate the health effects of PM_{2.5} and ozone. BenMAP translates increases in the pollutant concentration due to the Project emissions to changes in the incidence rate for each health effect using a CRF derived from previously published epidemiological studies. BenMAP often provides multiple CRFs based on different epidemiological studies for a given health endpoint. We used the USEPA default CRFs when evaluating health impacts. This analysis uses

¹ <http://www.epa.gov/air/benmap/>

² <https://www.epa.gov/benmap/benmap-community-edition>

population data from PopGrid, which allocates the census population to each modeled 4x4 kilometer (km) grid cell.

The population used for both the quantified health effects and the background health incidence presented here is future year 2035, for consistency with the Project buildout year.

2.1 PM_{2.5} Health Impact

Although there are a large number of potential health endpoints that could be included in the analysis as described above, we selected the key health endpoints that have been the focus of recent United States Environmental Protection Agency (USEPA) risk assessments (e.g., USEPA, 2010; USEPA, 2014). For example, the USEPA notes that health endpoints were selected based on consideration of at-risk populations (e.g. asthmatics), endpoints that have public health significance, and endpoints for which information is sufficient to support a quantitative concentration-response relationship (USEPA, 2014).

The health endpoints and associated CRFs examined in this study are presented in Table 2-1. Each CRF is based on a certain age range for the given health endpoint depending on the underlying epidemiological study on which it is based. Increases in the BenMAP-estimated health effect incidences and percent of background health incidence due to the Project emissions are presented in Table 2-2. These values reflect the total health impact in California across the Project domain.

Health Endpoint	Age Range	Daily Metric	Seasonal Metric	Annual Metric	CRF Selected
Emergency Room Visits, Asthma	0-99	24-hr mean			Mar et al., 2010 ¹
Mortality, All Cause	30-99	24-hr mean	Quarterly mean	Mean	Krewski et al., 2009 ¹
Hospital Admissions, Asthma	0-64	24-hr mean	-	-	Sheppard, 2003 ¹
Hospital Admissions, All Cardiovascular (less Myocardial Infarctions)	65-99	24-hr mean	-	-	Bell, 2012 ¹
Hospital Admissions, All Respiratory	65-99	24-hr mean	-	-	Zanobetti et al., 2009 ¹
Acute Myocardial Infarction, Nonfatal	18-24	24-hr mean	-	-	Zanobetti et al., 2009 ¹
Acute Myocardial Infarction, Nonfatal	25-44	24-hr mean	-	-	
Acute Myocardial Infarction, Nonfatal	45-54	24-hr mean	-	-	
Acute Myocardial Infarction, Nonfatal	55-64	24-hr mean	-	-	
Acute Myocardial Infarction, Nonfatal	65-99	24-hr mean	-	-	

¹ CRFs available in BenMAP (AAI, 2018)

The results show that the highest impact is for all-cause mortality, with an estimated mean increased incidence of 10.31 deaths per year due to the Project emissions. Smaller mean increased incidences per year were estimated for other relevant PM_{2.5}-related health outcomes: 4.38 increase in incidence of asthma related emergency room visits, 2.44 increase in incidence of respiratory hospital admissions, and 1.05 increase in incidence of cardiovascular hospital admissions.

It should be noted, however, that the estimated increased incidence in those health effects are quite minor compared to the background health incidence values (shown in Table 2-2 as percent of Background Health Incidence). For example, for mortality, the increase of 10.31 deaths per year due to Project emissions represents 0.0032% of the total all-cause mortality for people ages 30 to 99.

It is also important to note the uncertainty and conservative nature of the results presented, particularly for all-cause mortality. These estimates are based on a single epidemiological study that found an association between PM_{2.5} concentrations and mortality. While similar studies suggest that such an association exists, there remains uncertainty regarding a clear causal link. This uncertainty stems from the limitations of epidemiological studies, such as inadequate exposure estimates and the inability to control for many factors that could explain the association between PM_{2.5} and mortality such as lifestyle factors like smoking. In addition, the components of PM that may be associated with adverse health effects are yet unknown, but the analysis assumes that all PM is equally toxic, making it very conservative.

Health Endpoint ²	Incidences (Mean)	Percent of Background Health Incidence (%)
Emergency Room Visits, Asthma [0-99]	4.38	0.0033%
Mortality, All Cause [30-99]	10.31	0.0032%
Hospital Admissions, Asthma [0-64]	0.38	0.0021%
Hospital Admissions, All Cardiovascular (less Myocardial Infarctions) [65-99]	1.05	0.00047%
Hospital Admissions, All Respiratory [65-99]	2.44	0.0013%
Acute Myocardial Infarction, Nonfatal [18-24]	0.00044	0.0012%
Acute Myocardial Infarction, Nonfatal [25-44]	0.024	0.0013%
Acute Myocardial Infarction, Nonfatal [45-54]	0.068	0.0013%
Acute Myocardial Infarction, Nonfatal [55-64]	0.13	0.0014%
Acute Myocardial Infarction, Nonfatal [65-99]	0.53	0.0013%

¹ Health effects are shown terms of incidences of each health endpoint and how it compares to the base (2035 base year health effect incidences) values.

² Affected age ranges are shown in square brackets.

2.2 Ozone Health Impact

As noted above, although a larger number of health endpoints could be evaluated, we selected the health endpoints based on recent USEPA risk assessments (USEPA, 2010; USEPA, 2014). The health endpoints and associated CRFs examined in this study are presented in Table 2-3. Each CRF is associated with a certain age range for the given health endpoint depending on the epidemiological study on which it is based. Increases in the BenMAP-estimated health effect incidences and percent of

background health incidence due to the Project emissions are presented in Table 2-4. These values reflect the total health impact in California across the Project domain.

Table 2-3. Summary of Ozone Health Endpoints Used in this Study.

Health Endpoint	Age Range	Daily Metric	Seasonal Metric	Annual Metric	CRF Selected
Hospital Admissions, All Respiratory	65 - 99	MDA8	-	-	Katsouyanni et al., 2009 ¹
Mortality, Non-Accidental	0 - 99	MDA8	-	-	Smith et al., 2009 ¹
Emergency Room Visits, Asthma	0 - 17	MDA8	-	-	Mar and Koenig, 2009 ¹
Emergency Room Visits, Asthma	18 - 99	MDA8	-	-	Mar and Koenig, 2009 ¹

¹ CRFs available in BenMAP (AAI, 2018)

For this Project, asthma-related emergency room visits are associated with the highest health impacts due to the Project emissions in the southern California domain (3.38 incidences per year for adults ages 18 to 99 and 2.92 incidences per year for children ages 0 to 17). Hospital admissions due to respiratory issues for adults age 65-99 and non-accidental mortality have lower incidence increases (0.67 and 0.28 incidences per year, respectively).

It should be noted, however, that the estimated increases in those health effect incidences are quite minor compared to the background health incidence (shown in Table 2-4 as percent of Background Health Incidence). For example, the increase in asthma emergency room visits represents 0.0058% of the total asthma-related emergency room visits for children.

Table 2-4. BenMAP-Estimated Mean Ozone Health Effects of the Project Emissions Across the Southern California Domain¹

Health Endpoint ²	Incidences (Mean)	Percent of Background Health Incidence (%)
Hospital Admissions, All Respiratory [65-99]	0.67	0.00034%
Mortality, Non-Accidental [0-99]	0.28	0.00013%
Emergency Room Visits, Asthma [0-17]	2.92	0.0058%
Emergency Room Visits, Asthma [18-99]	3.38	0.0042%

¹ Health effects are shown terms of incidences of each health endpoint and how it compares to the base (2035 base year health effect incidences) values.

² Affected age ranges are shown in square brackets.

2.3 Conclusion

The PM_{2.5} and ozone concentration changes modeled by CAMx were converted to impacts on various health endpoints including premature mortality, hospitalizations, and emergency room visits, using the BenMAP health impact assessment model and USEPA defaults for health endpoints. Estimated changes in the health effect incidences are presented across the California grids in the southern California domain. For the PM_{2.5}-related health endpoints, the health impact on mortality is the highest

(Incidence = 10.31). For ozone-related health endpoints, asthma-related emergency room visits are most affected (Incidence = 3.38 for adults ages 18 to 99 and Incidence = 2.92 for children ages 0 to 17). Other health effect incidences are lower. Across the board, the estimated increases in those health effect incidences are quite minor compared to the background health incidence values with the largest PM_{2.5} health impact (all-cause mortality) representing only 0.0032% of the total of all deaths, and the largest impact for ozone (asthma related emergency room visits by adults) representing 0.0042% of all emergency room visits.

Health outcomes presented above conservatively utilize maximum daily emissions, assumed to occur for an entire year. Should average daily emissions be used, results would be even lower. Specifically for mortality impacts from PM_{2.5} emissions, average daily emissions would be approximately 20% lower, and the corresponding mortality incidence rate would be similarly lower. Overall, the estimated health impacts from the Project are low and represent only a very small fraction of the total background health incidence.

3. REFERENCES

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APPENDIX D
RESUMES OF TECHNICAL STAFF

SHARI BETH LIBICKI, PHD

Principal Air Quality Service Line Leader

Dr. Shari Beth Libicki, Ramboll Environ's global Air Quality Service Line Leader, has over 25 years of chemical fate and transport experience, as applied to managing greenhouse gas (GHG) emissions, odor evaluations, and estimating air emissions and dispersion from chemical processes, landfills and new developments. Her experience includes providing technical expertise to entitlement and litigation teams, negotiating complex technical agreements and permits with agencies and assisting facilities with compliance programs. She is an expert on GHG evaluations for California Environmental Quality Act (CEQA) documents, and is at the forefront of developing regulations in California, having served on the Regional Targets Advisory Council. She has conducted extensive air quality regulatory assessments for New Source Review/Prevention of Significant Deterioration (NSR/PRD) permitting and compliance auditing. Shari has lectured widely on evaluating climate change impacts for new developments and estimating chemical exposure for risk assessments. She currently serves as a Lecturer in the Department of Chemical Engineering at Stanford University.



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EDUCATION

PhD, Chemical Engineering, Stanford University, 1985
MS, Chemical Engineering, Stanford University, 1981
BSE, Chemical Engineering, University of Michigan, 1979

EXPERIENCE HIGHLIGHTS

Land Use Entitlement

- Project director for online tool to display risks from rail and freeways for the SMAQMD. The tool is designed to provide a first tier analysis of traffic and rail risks for land use decision making.
- Project director for air quality and greenhouse gas analyses for a new marine terminal in Northern California. Critical evaluation issues included risks from diesel exhaust of maritime vessels and GHG emissions reductions from a "green cement" production plant.
- Prepared comprehensive air quality analysis for two large municipal solid waste landfills in Southern California. Evaluation included impact of exhaust from non-road heavy equipment, dust from waste operations, and emissions from landfill gas escaping the collection system, and flares and turbines used to destroy the landfill gas. Projects included public testimony on results of analysis.

- Analyzed the impacts of potential accident scenarios prior to the construction of several new industrial facilities. The results of the analyses were used to make recommendations as to how to improve the safety and minimize the risks to the surrounding community.
- Project director for the Chevron Renewal Project Revised Environmental Impact Report. The Revised EIR is intended to fulfill the requirements of a court decision with specific focus on the Climate Change and Air Quality sections of the EIR. The revision of the Climate Change section will describe mitigation measures and quantification of the efficacy of those mitigation measures. The Air Quality section will address a range of process alternatives in the refinery.
- Project director for the development of the California Air Pollution Control Officer's Association (CAPCOA) manual on quantifying mitigation for a wide variety of carbon reduction measures that can be used for residential and commercial development.
- Project director for CalEEMod®, a new software package to estimate GHG, air toxics and criteria pollutant emissions from new development projects in California.
- Evaluated climate change impacts of dozens of new projects under CEQA and National Environmental Policy Act (NEPA). Specific types of projects include large, multi-use developments, landfill expansions, and transportation hubs.
- Provided innovative air quality services for entitlement activities, including evaluating the impacts of freeways on air quality, the estimation of emissions from complex industrial facilities, and the impact on public health of those emissions. Provided testimony at public hearings in support of technical analyses.

Monitoring

- Conceptualized, designed and implemented a mobile application to characterize, locate, obtain meteorological data for, and time-stamp odor observations. The OdorApp allows the management of odor observations, and also allows easy display of odor observations in a manner that allows for analysis of odor complaints.
- Directed a yearlong ambient air-monitoring program to measure particulate matter and diesel particulate matter (DPM) at the boundary of a large landfill in Los Angeles and a nearby school. The results of the monitoring program were analyzed temporally and as a function of meteorology. The results of the program showed that nearby freeways provided an overwhelming fraction of the measured DPM.
- Designed a complex fourteen-station ambient air monitoring network around a co-disposal landfill to measure the concentrations of 19 toxic chemicals in both gaseous and particulate phase for risk assessment purposes and negotiated approval with local, state and federal regulators.
- Analyzed the results of a complex multi-year total suspended particulate monitoring program to understand the sources of arsenic in the ambient air, and to evaluate the health risks of the arsenic levels that could be related to nearby facility emissions.
- Designed and conducted the compliance ambient air monitoring program for a large hazardous waste facility. The ongoing program collects whole air and total suspended particulate samples at five stationary sites. Prepared risk assessment based on the program, and quarterly reports for review by the local air district and the California Environmental Protection Agency's (EPA)'s Department of Toxic Substances and Control (DTSC).
- Designed, negotiated and managed a novel cost-effective ambient air monitoring program that yielded real-time information on the health impacts of a site remediation. This study is the basis of a well-received paper.

Permitting and Enforcement

- Provided nationwide compliance assistance to six iron and steel mini-mills. Work conducted includes: preparation of Title V permit applications and supporting emissions estimates; preparation of PSD permits and associated emissions and dispersion modeling; evaluation of RACT controls for mini-mills.
- Managed PSD permit applications for two aluminum smelting facilities. This work included preparation of the emissions inventories, managing the Class I and Class II modeling effort, conducting the best available control technology (BACT) analysis, and preparing the technical document. She also negotiated permit conditions with the agencies, and assisted with cross-border discussions with other impacted agencies.
- Assisted a large landfill in Southern California respond to a series of Notices of Violation surrounding odor issues. Ramboll Environ conducted computational fluid dynamic (CFD) modeling study to evaluate the sources of odors at the landfill, as well as to predict where odors might occur in the neighborhood and under what conditions. Ramboll Environ also conducted a surrogate sampling study where it was found that ethanol was a surrogate for odors. Finally, Ramboll Environ assisted in the negotiations which allowed the landfill to continue operations.
- Managed the preparation of an application for an Authority to Construct for a state-of-the-art hazardous waste treatment storage and disposal facility, which included a risk assessment for the project, and successfully negotiated permit conditions with state and local agencies. Currently working with facility and regulators to implement permit conditions.
- Worked as a technical advisor to the Imperial County Air Pollution Control District (ICAPCD) for the permitting of a rail-haul landfill. This landfill is proposed to be the largest landfill in the United States, and had monitoring, modeling, and enforceability issues associated with the permit. Of particular interest was a phased permitting approach that allowed the landfill operator to take advantage of newer technologies that could reduce emissions of criteria pollutants over time.
- Prepared and submitted several Federal Operating Permit Applications under Title V of the Clean Air Act for industrial facilities. Currently working on ongoing negotiation for permits.

Other

- Evaluated the transport of perfluorooctanoic acid (PFOA) in the air and in the ocean as a part of a large multiphase study being carried out by DuPont. The study resulted in a poster presentation at the American Geophysical Union and centered on how the chemical properties of PFOA impact its transport.
- Provided support to a large shipping company in evaluating the effectiveness of its emissions reduction programs; oversaw design of an automated database system to track fuel use and emissions reductions from a variety of innovative programs to improve reporting and streamline the program.
- Conducted preliminary evaluation of whether patterns of measured lead in soil supported contention that lead resulted from airborne emissions from a lead emitting stack located at the site. Concluded that insufficient data was available for analysis.
- Designed a protocol for estimating the quantities of specific hazardous chemicals disposed of in California by region and waste type, and worked with the Department of Health Services to verify protocol.

Prior to joining Ramboll Environ, Shari held the following positions:

- Physical Sciences Officer, Bureau of Oceans and Environmental and Scientific Affairs, US Department of State
 - Developed and implemented a successful negotiation strategy for cooperative scientific projects with Japan and the Soviet Union.
 - Worked with Japan's Science and Technology Agency to initiate a Japanese funding organization for innovative international biotechnological studies.
- Staff Scientist, Alza Corporation

- Led teams that created, designed, tested, and patented controlled release transdermal and osmotic pump drug delivery systems.
- Studied the correlation between drug physical chemical data and dermal transport and absorption.
- Designed and implemented systems to provide effective membrane thickness control in the manufacture of miniature osmotic pumps.
- Lecturer, Department of Chemical Engineering, Stanford University
 - Taught courses in Chemical Engineering Laboratory and Technical Speaking and Writing.

CREDENTIALS

Awards and Honors

American Association for the Advancement of Sciences Diplomacy Fellow, 1987-1988

United States Department of State Meritorious Honor Award, March 1989

PROFESSIONAL AFFILIATIONS AND ACTIVITIES

Member, American Institute of Chemical Engineers

Member, Air & Waste Management Association

PATENTS

H.F. Sanders, Y.L. Cheng, D.J. Ensore, S.B. Libicki. Transdermal Drug Composition with Dual Permeation Enhancers. Patent Number: 4,820,720. April 11, 1989.

R.M. Gale, D.J. Ensore, D.E. Nedberge, M. Nelson, Y.L. Cheng, S.B. Libicki. Transdermal Administration of Progesterone, Estradiol Esters, and Mixtures Thereof. Patent Number: 4,788,062. November 29, 1988.

PUBLICATIONS & PRESENTATIONS

Klug, S.E., K.L. Krieger, D.W. Weaver, M.T. Keinath, S.B. Libicki. 2012. "Quantifying Filtration Impacts on Indoor Exposure to Particulates." Presented at Air & Waste Management Association Conference and Exposition. June 19, 2012.

Bowie, T.; S.B. Libicki, K.L. Davis, C. Emery. 2011. "Strategies for Designing an Odor Monitoring Program for Municipal Solid Waste Landfills." Presented at Air & Waste Management Association Conference and Exposition. June 22, 2011.

Keinath, M.T. and S.B. Libicki. 2010. "Preventing GHG Leakage: Benchmarking Emissions to Design a Fair Cap and Trade System under AB32." Presented at the 2010 California Construction and Industrial Materials Association (CalCIMA) Education Conference. San Diego, CA. September.

Van de Griend, R., R.W. Andersen, S.B. Libicki, J. Ilisco, U. Senturk. 2009. Arsenic In Glass Highway Marking Beads. A&WMA's 102nd Annual Conference & Exhibition, Detroit, MI. June.

Hou, M., M.T. Keinath, C. Helvestine, S.B. Libicki. 2008. Predicting Human Exposure near Freeways: A Comparison of AERMOD and CAL3QHCR. AWMA Annual Conference, Portland, Oregon. June.

Weaver D.W., S.B. Libicki, K.L. Davis. 2008. VMT, GHG Reduction, and Planning: Looking Under the Hood. Presented at American Planning Association California Chapter (APACA) Conference. September 21-24.

Keinath, M.T. and S.B. Libicki. 2008. Local Sourcing for Green Building: How Homegrown Materials Can Reduce Your Carbon Footprint. California Construction & Industrial Materials Association (CalCIMA) Annual Conference. September.

DiBiase, M. and S.B. Libicki. 2008. Emissions and the Shipping Industry: Emission Reductions for Ocean-Going Vessels in California. Air & Waste Management Association Conference. June.

- Libicki, S.B., D. Weaver, and D. Kim. 2007. A Technical Approach to Addressing Climate Change in Environmental Impact Reports. 2007 Environmental Law Conference at Yosemite. Environmental Law Section of the State Bar of California. October.
- Kemball-Cook, S.R. and S.B. Libicki. 2006. "Using surface drifter buoys to estimate oceanic transport of surfactants". Presented at the American Geophysical Union Ocean Sciences Meeting.
- Libicki, S.B. 1999. When Good Data Goes Bad: What the Numbers Really Mean. American Bar Association Section of Environment, Energy and Resources 7th Section Fall Meeting, San Diego, California. October.
- Libicki, S.B. and R. Van de Griend. 1996. RMPs, RMPPs and SB 1889: Consolidation of State and Federal Risk Management Programs. Presented as a Minimum Continuing Legal Education course at various law firms. San Francisco, California. November-December.
- Stuart, A.L., S. Jain and S.B. Libicki. 1996. The Use of Long-Term Meteorological Information to Predict Impact Probabilities Resulting from Toxic Chemical Releases. PSA 96-International Topical Meeting on Probabilistic Safety Assessment. American Nuclear Society, Park City, Utah. October.
- Libicki, S.B. 1995. The Use of Simplified Quantitative Risk Analysis in Risk Management Decisions at Small and Medium-Sized Process Plants. 88th Annual Air & Waste Management Association Annual Meeting, San Antonio. June.
- Jain, S. and Libicki, S.B. 1995. Estimating the Additional Airborne Release Due to Heat of Reaction and Aerosolization When Strong Acids React With Water during a Release. Air & Waste Management Association Annual Meeting, San Antonio. June.
- Libicki, S.B. 1994. Emergency Release Modeling: Software options and usage strategies. Southwest Safety Congress and Exposition. May.
- Libicki, S.B. and R. van de Griend. 1994. Practical Compliance Strategies for Laboratory and Production: Ensuring Compliance from the Ground Up. Bio International '94. Toronto. May.
- Libicki, S.B., A. Andersen and R. Scofield. 1994. The Use of Ambient Air Monitoring Data for the Evaluation of Risks due to Particulate-Borne Metals: A Case Study. California Mining Association Annual Meeting. April.
- Libicki, S.B. and R. Scofield. 1993. Issues and Solutions in Air Toxics Source Impacted Ambient Air Monitoring for Use in Risk Assessment. Fourth Annual West Coast Regional Conference: Current Issues in Air Toxics. November.
- Gates, L.J., S.B. Libicki, R. Scofield, and J. Wilhelmi. 1993. A flexible real-time ambient air monitoring program during Superfund Site redevelopment. EPA/AWMA Field Screening Methods for Hazardous wastes and Toxic Chemicals. February 24-26.
- P.M. Salmon, S.B. Libicki, and C.R. Robertson. 1988. A theoretical investigation of convective transport in the hollow fiber reactor. Chemical Engineering Communications 66:221 248.
- Libicki, S.B., P.M. Salmon, and C.R. Robertson. 1986. Measurement of inert gas permeabilities in compact bacterial cell aggregates using an annular reactor. Annals of the New York Academy of Sciences, Vol. IV; and Biochemical Engineering 469:145 151.
- Karel, S., S. Libicki, and C.R. Robertson. 1985. The immobilization of whole cells: Engineering principles. Chemical Engineering Science 40(8):1321 1354.
- Campbell, J.H., P. Peters, S.B. Libicki, M.L. Gregg, and J.E. Clarkson. 1981. Analysis of the operation of Occidental's modified in situ retort 6. In Fourteenth Oil Shale Symposium Proceedings, Golden, Colo.: Colorado School of Mines Press.
- Campbell, J.H., J.H. Raley, F.H. Ackerman, W.A. Sandholtz, and S.B. Libicki. 1980. Investigation of critical parameters in modified in situ retorting. In Thirteenth Oil Shale Symposium Proceedings, Golden, Colo.: Colorado School of Mines Press

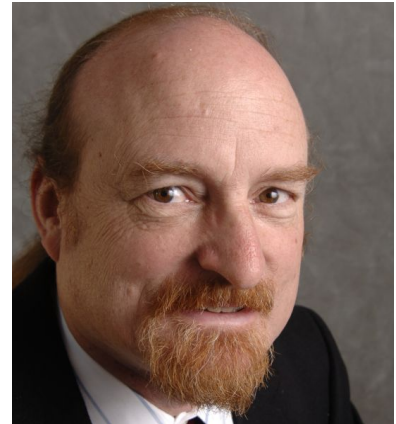
RALPH E MORRIS

Managing Principal

Ralph Morris is the Managing Principal at Ramboll's North California, Utah and Colorado Offices, where he directs air quality modeling and analysis, emission inventory development, control strategy evaluation and regulatory air issues projects. With almost 40 years of air quality experience, Ralph is one of the original developers of many of the photochemical air quality models that are being or have been used for regulatory decision making in the United States and around the world, including co-developer of Ramboll's Comprehensive Air Quality Model with extensions (CAMx) as well as the UAM and UAM-V models.

In the late 1970s and 1980s, Ralph was one of the pioneers in modeling air pollution in Los Angeles using one of the first ever photochemical grid models (PGM), the Urban Airshed Model (UAM). The UAM was used to identify the optimal emissions control strategies for reducing ozone in Los Angeles targeting reducing ozone precursors that most efficiently reduce ozone and avoid reducing emissions from sources that would increase ozone. In the late 1980s, Ralph performed the EPA Five Cities UAM Study for the United States Environmental Protection Agency (USEPA) that demonstrated the use the UAM PGM for ozone air quality planning culminating in the delivery of the UAM to USEPA in 1990 as the USEPA-recommended ozone model. In the late 1980s and early 1990s, Ralph developed the next generation variable grid PGM (UAM-V) that treats urban city and regional transport issues within the same model and was used by the Ozone Transport Assessment Group (OTAG) to define the first regional control strategies designed to reduce the contributions of transport in the eastern U.S. (i.e., NO_x SIP Call). Ralph also led the development of ozone and PM_{2.5} State Implementation Plans (SIPs) for numerous cities to allow them to achieve clean air. After joining Ramboll Environ in 1994, Ralph was one of the leaders in the development of the Comprehensive Air-quality Model with extensions (CAMx) PGM that is being used today around the world for air quality planning, including for USEPA's transport rules. During the 1990s Ralph was involved in numerous ozone and PM_{2.5} SIP modeling studies and analyzed long-range transport of air pollutants.

In the 2000s, Ralph directed the development of an updated Pollutants in the ATmosphere for Hong Kong (PATH) air quality modeling system for the Hong Kong Environmental Protection Department (HKEPD) and applied it to southeast Asia to assess regional transport and urban ozone and particulate matter formation. During this time he directed the application of regional particulate matter (PM), ozone and visibility modeling using CMAQ and CAMx photochemical grid models for the southeastern (VISTA/ASIP), western (WRAP) and central (CENRAP) US Regional Planning Organizations (RPOs) for the development of the first round of regional haze State Implementation Plans (SIPs) that were due in 2007.



CONTACT INFORMATION

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For the last decade Ralph has been leading regional air quality modeling for Alberta Environment and Park for a variety of issues including to assess the impacts of oil sands, development of modeling databases for various regions in Alberta and most recently to model the high winter PM_{2.5} occurrences in Edmonton and Red Deer. He led or is leading the application of the CMAQ and CAMx models to address numerous ozone and PM_{2.5} State implementation Plans (SIPs), as well as to address other air quality and air quality-related value (AQRV) issues associated with oil and gas development projects. Ralph has also addressed NO₂ and SO₂ issues including SIPs. Ralph was an original member of USEPA's ozone and fine particulate guidance workgroup and the CMAS Models-3/CMAQ External Advisory Committee (EAC).

CAREER

1994-Present

Managing Principal

Ramboll (formerly Ramboll Environ and ENVIRON), Northern California, United States

1979-1994

Manager Advanced Modeling Group and Director of Model Development Program

ICF/Systems Applications International, San Rafael, California, United States

1977-1979

Associate Professor

University of California, Davis, California, United States

EDUCATION

1977-1979

MA, Mathematics

University of California, Davis, California, United States

1974-1976

BA, Mathematics

University of California, Berkeley, California, United States

1972-1974

University of California, San Diego, California, United States

EXPERIENCE

Over the last 39 years, Ralph has been involved in thousands of air quality studies. These studies include the development of clean air plans for cities and states so that they attain the health-based air quality standards and the evaluation of the air quality impacts of numerous types of sources. A few examples for some of Ralph's more recent projects are provided below.

- WRAP Regional Haze Photochemical Modeling. Ralph is currently leading the development of photochemical modeling databases for western states to be used in the next round of regional haze SIPs due July 2021. For the Western Regional Air Partnership (WRAP), Ralph has set up the CMAQ and CAMx models for the 2014 calendar year and conducted model performance evaluations.
- Denver 2020 and 2023 Ozone Attainment Demonstration Modeling. Ralph is currently leading the next round of Denver ozone attainment demonstration modeling. The CAMx and CMAQ models are being set-up for the 2016 summer ozone season and 2020 and 2023 future year attainment demonstration modeling is being conducted to address attainment of the 2008 and 2015 ozone NAAQS, respectively.
- Allegheny County Annual PM_{2.5} State Implementation Plan. Project Director for performing the air quality modeling to define emissions control strategy to demonstrate that Allegheny County

(Pittsburgh), Pennsylvania will attain the annual PM_{2.5} National Ambient Air Quality Standard (NAAQS). Performed 36/12/4/1.30.444 km WRF meteorological modeling for the 2011 year. SMOKE emissions modeling for 2011 and 2021. CAMx regional 36/12 km modeling to provided boundary conditions for mesoscale 4/1.33 km PM source apportionment modeling for 2011 base and 2021 future years. 2021 PM control strategy evaluation.

- Evaluation of USEPA’s 2011 National Air Toxics Assessment (NATA). Evaluated and assessed USEPA’s 2011 NATA modeling approach and results for modeling hundreds of air toxics compounds on a national scale. The 2011 NATA combined CMAQ national modeling results for reactive and non-reactive pollutants at 12 km grid cell resolution with AERMOD local-scale non-reactive modeling results by using the AERMOD results for receptors in the 12 km grid cell in a relative fashion to scale the CMAQ 12 km average concentrations. This unique method of model fusion of the CMAQ and AERMOD modeling results overcomes some of the issues associated with other techniques (e.g., CMAQ zero-out runs) when combining modeling results with disparate formulations.
- Dynamic Evaluation of Ozone Models for the South Coast (Los Angeles) Air Basin (SoCAB). Project Manager for conducting a dynamic evaluation of the CMAQ photochemical grid model in the SoCAB (Los Angeles, California region) using a 2008 and 2012 CMAQ modeling database. The dynamic evaluation compared the CMAQ modeled ozone trends over a long time period (1990-2015) with the observed ozone trends and found the CMAQ model underestimated the observed rate of ozone reductions over time. Potential reasons for this included the likely underestimation of VOC or overestimation of NO_x emissions in the region.
- Denver 2017 Ozone SIP Modeling. For over a decade, Ralph has led the Denver ozone SIP modeling for the 2003, 2008 and now the 2017 Denver ozone SIPs. For the Denver 2017 ozone SIP modeling we developed 2011 CAMx PGM modeling database using WRF meteorological and SMOKE emissions modeling. This included high-resolution mobile source emissions for the Denver region using link-based activity data from a Transportation Demand Model (TDM) and mobile source emission factors from MOVES2014. Conducted CAMx 2011 base case modeling and model performance evaluation. Projected emission to 2007 and 2023 and conducted emission reduction control strategy modeling to demonstrate attainment of the ozone standard.
- Allegheny County 1-Hour SO₂ State Implementation Plan. Project Manager for performing the air quality modeling to define emissions control strategy to demonstrate that Allegheny County (Pittsburgh), Pennsylvania will attain the 1-hour SO₂ National Ambient Air Quality Standard (NAAQS). Perform 36/12/4/1.3 km WRF meteorological modeling for multiple years. Conduct model shoot-out using multiple models (e.g., AERMOD, CALPUFF and SCICHEM) and model configurations to determine best performing model for simulating SO₂ and use model to demonstrate attainment of the SO₂ NAAQS.
- BLM Environmental Impact Statement and Resource Management Plan for Oklahoma, Texas and Kansas. Project Manager for preparing the air quality and climate change sections of the Environmental Impact Statement (EIS)/ Resource Management Plan (RMP) for the U.S. Bureau of Land Management (BLM) and Bureau of Indian Affairs (BIA) to guide the management of BLM- and BIA-administered lands in the states of Oklahoma, Texas and Kansas
- Navajo Generating Station Environmental Impact Statement. Project Manager for coordinating the Environmental Impact Statement (EIS) required under the National Environmental Policy Act (NEPA) for the Navajo Generating Station coal-fired power plant and Kayenta Coal Mine Complex in Arizona. Technical services include air quality modeling and analysis of air monitoring data for criteria and hazardous air pollutants, assessments of human health risk and ecological risk due to atmospheric deposition from the emission sources, and preparation of Technical Support Documents for the EIS.
- Western Air Quality Study (WAQS). Project Manager for WRF meteorological, SMOKE emissions and CMAQ/CAMx air quality modeling of the western U.S. to develop the next generation air quality modeling databases to address ozone, PM_{2.5}, visibility and deposition issues in the western U.S.. Develop new 2008, 2011 and 2014 regional modeling platforms and distribute using the Intermountain West Data Warehouse (IWDW). Assess the role of regional transport on ozone, PM and visibility issues in western U.S. states.
- Air Quality Impacts of Off-Shore Oil and Gas Production. Ralph is currently leading two studies for BOEM to estimate the on-shore air quality impacts due to off-shore oil and gas development in the

Arctic Sea near Alaska and the Gulf of Mexico. This multi-year multi-million dollar study will project future year emissions and air quality impacts and develop emission exception screening thresholds.

- Air Quality Impacts of Fires. Project Manager of studies to assess the contributions of wildfires, prescribed burns and agricultural burning to ozone and PM air quality throughout the USA. Develop fire emission inventories and use the CAMx photochemical grid model source apportionment tool to calculate the contributions of fires to ozone and PM air quality. Results are used to identify exceptional events and assist planners in fire management practices.
- BLM Montana/Dakotas Photochemical Grid Model Modeling Study. Project Manager for the BLM Montana/Dakotas PGM modeling study to assess the air quality and AQRV impacts due to oil and gas development. The Bakken Shale formation in the Montana/Dakotas region is the most rapidly growing oil and gas development area in the U.S. Under this study, Ramboll is developing a comprehensive oil and gas emissions inventory and performing base year 2012/2013 and future year 2032 modeling using the CAMx photochemical grid model.
- Allegheny County PM_{2.5} SIP Modeling. The PM_{2.5} problem in Allegheny County (Pittsburgh), Pennsylvania is due to a combination of regional transport from upwind states and local sources within a river valley complex terrain environment. Ralph Morris led the Allegheny County PM_{2.5} SIP modeling effort that used the CAMx photochemical grid model with a 36 km CONUS, 12 km Midwest, 4 km southeastern Pennsylvania and 0.8 km Allegheny County grid nests to demonstrate the area would achieve the 24-hour PM_{2.5} standard by 2010. CAMx was run on the 36/12/4/0.8 km grids using two-way grid nesting. Local sources were treated using the CAMx subgrid-scale Plume-in-Grid treatment.
- Development of Air Quality Modeling System for Hong Kong. Ralph was Project Manager and led the development of a new air quality modeling system for Hong Kong. The WRF/MM5 meteorological, SMOKE/CONCEPT emissions and CMAQ/CAMx air quality models were set up for a 27/9/3/1 km modeling domain with the 36 km domain covering Asia and the 1 km domain focused on Hong Kong. The modeling system was delivered to the HKEPD as a turn-key system.
- St. Louis Ozone and PM_{2.5} SIP. Ralph led the air quality modeling efforts for the development of clean air plans for St. Louis, Missouri that were included in the St. Louis ozone and PM_{2.5} State Implementation Plans (SIPs). He worked with the states of Missouri and Illinois to identify the optimal control plan for the region and performed air quality modeling to demonstrate that St. Louis would achieve the ozone and PM_{2.5} standards.
- Air Quality Assessments in Alberta, Canada. For almost a decade, Ralph Morris has been leading air quality studies for Alberta Environment to address Canada wide standards and Province air quality goals and objectives. These activities have included developing emission inventories for the Alberta oil sands region and urban areas, conducting meteorological modeling and performing air quality modeling using the CMAQ model to address ozone, PM_{2.5}, SO₂, NO₂, exposure and deposition issues in the Province.
- Expert Testimony for Air Quality Related Issues. Because of Ralph's vast expertise in air quality issues and in particular air quality modeling, over the last two decades he has served as an expert witness in numerous litigation cases.
 - Ameren Rush Island: Ralph was an expert witness and testified at trial in St. Louis April 2019 in a case where the Rush Island coal-fired power plant was accused of causing health effect impacts due to alleged illegal emissions since it failed to obtain a PSD permit and install BACT.
 - LG&E Cane Run Class Action Suit: Starting in 2015, Mr. Morris is serving as an expert witness led by Hunton and Williams in a case involving nuisance dust deposition from the Louisville Gas and Electric Cane Run coal-fired EGU.
 - Minnesota Power Plant Damage Assessment: During 2015, Ralph performed air quality modeling of the potential damages and costs associated with fossil-fueled power generation in Minnesota and prepared testimony.
 - Mead Westvaco Luke Mill: Expert witness and testify at trial in a case where a Maryland paper mill was accused of violating the Clean Air Act (CAA) and emitting illegal emissions (2012-2016).

- DTE Energy Monroe: In 2010-2011 Ralph was retained as an expert witness by Hunton and Williams and prepared expert report and attended trial in Detroit for the USDOJ NOV case against then Monroe coal-fired power plant in the Detroit, Michigan region.
- AEP NOV: Ralph was an expert witness for American Electric Power (AEP) from 2003-2006 through Sidley Austin in the US DOJ NOV charges against 9 coal-fired power plants in the Midwestern US.
- Illinois Power/Dynegy Baldwin NOV: Ralph was an expert witness for Illinois Power through Akin Gump in the US DOJ Notice of Violation case against the Baldwin Power Plant in Illinois. Ralph prepared expert reports and was deposed on the ozone and PM impacts of the alleged excess emissions including a review and critique of the plaintiffs CALPUFF modeling that found errors and omissions.
- First Energy Samsis: Expert witness for the Samsis coal fired power plant in Ohio NOV case.
- Louisiana Generating Big Cajun 2: Ralph was an expert witness for a USDOJ NOV case against the Big Cajun 2 coal-fired power plant in Baton Rouge, Louisiana during 2012.
- WE Energies Power the Future: In 2004, Ralph performed air quality modeling using CAMx and testified in front of a judge in Madison, WI on the Wisconsin Electric's plans to retire an old and build a new coal fired power plant at the Oak Creek facility. Testimony also included a critical review of CALPUFF modeling performed by the opponents.
- Minnesota Acid Rain Legislation: In the early 1980s Ralph performed modeling and testified in Minneapolis, MN in front of a judge for Northern States Power regarding the impacts of local sources in Minnesota on acid deposition in Minnesota.
- Oil and Gas Environmental Impact Statements. Ralph has led the air quality modeling component of several oil and gas Environmental Impact Statements to assess the air quality, visibility and deposition impact of oil and gas development in Colorado, Utah, Wyoming and New Mexico
- Air Quality Permitting Studies. As part of the permitting process, Ralph has conducted numerous air quality modeling studies to demonstrate that new sources would be compliant with air quality standard and thresholds of concern. Sources evaluated include coal and natural gas powered electricity generation; cement plants and oil and gas production, distribution and refining.
- Air Quality Impacts of Mobile Sources. Ralph has performed numerous studies to assess the air quality impacts of alternative engine technologies and fuels. In the 1980s he modeled the air quality impacts of alternative fuels in five cities for the USEPA. In the 1990s he led the air quality modeling component of the \$20M Auto/Oil Program for the automobile manufacturers and oil companies. He also led the assessment of the air quality impacts of hybrid vehicles for a joint study by General Motors and Toyota. More recently he evaluated air quality impacts of passenger vehicles for Toyota and the air quality impacts in California due to the use of biodiesel in on-road and non-road diesel engines.
- Technical Assistance to USEPA. For over three decades, Ralph has provided technical assistance to the USEPA to assist them in implementing their air program and developing the USEPA air quality modeling guidelines. This assistance included demonstrating how photochemical grid models (PGMs) can be used in ozone air quality planning and delivering the UAM PGM to USEPA in 1990 as a turn-key PGM ozone modeling system. In 2012 Ralph evaluated six long range transport (LRT) models using atmospheric field study tracer tests, evaluated chemical dispersion models using aircraft data and demonstrated how a PGM can be used for single-source modeling that helped EPA formulate their new July 2015 air quality modeling guidelines. More recently he is assisting USEPA to update the chemical mechanisms in the CAMx and CMAQ models and implement improved aqueous-chemistry and secondary organic aerosol modules.
- Various Clients. Prior to joining ENVIRON, Ralph worked for over 15 years at Systems Applications International (SAI) in San Rafael (now part of ICF Consulting), California, where he was Director of the Advanced Modeling Program, managed model development activities and air quality modeling and analysis studies. His work at SAI included the development and application of the RPM, UAM, UAM-V and REMSAD modeling systems.

PEER-REVIEWED PUBLICATIONS

- Posner, L.N., G. Theodoritsi, A. Robinson, G. Yarwood, B. Koo, R. Morris, M. Mavko, T. Moore and S. Pandis. 2019. "Simulation of Fresh and Chemically-Aged Biomass Burning Organic Aerosol." *Atmos. Env.* 196 (2019) 27-37.
- Karamchandani, P., R. Morris, G. Yarwood, B. Brashers, D. Henn, I. Sykes, E. Knipping and N. Kumar. "SCICHEM: An Alternative Photochemical Model to Calculate Single Source Impacts of Ozone and Fine Particulate Matter." *A&WMA EM Magazine*, October 2018.
- Karamchandani, P., R. Morris, A. Wentland, T. Shah, and J. Lester. 2017. "Dynamic evaluation of photochemical grid model response to emission changes in the South Coast Air Basin in California." *Atmosphere*, 2017, 8, 145; doi:10.3390/atmos8080145.
- Brashers, B., R. Morris and J. Maranche. 2017. "The Challenges of Modeling Air Quality in Allegheny County, Pennsylvania." *A&WMA EM Magazine*, June 2017.
- Koo, B., P. Piyachaturawat, R. Morris and E. Knipping. 2012. "Evaluation of the Variability in Chemical Transport Model Performance for Deposition and Ambient Concentrations of Nitrogen and Sulfur Compounds." *Atmosphere*, V3, pp 400-418. August.
- Cho, S., R. Morris, P. McEachern, T. Shah, J. Johnson and U. Nopmongcol. 2012. "Emission Sources Sensitivity Study for Ground-Level Ozone and PM2.5 Due to Oil Sands Development Using Air Quality Modeling System: Part I – Model Evaluation for Current Year Base Case Simulation." *Atmos. Env.*, V55, pp 533-541.
- Cho, S., R. Morris, P. McEachern, T. Shah, J. Johnson and U. Nopmongcol. 2012. "Emission Sources Sensitivity Study for Ground-Level Ozone and PM2.5 Due to Oil Sands Development Using Air Quality Modeling System: Part II – Source apportionment modeling." *Atmos. Env.*, V55, pp 542-556.
- Emery, C.A., J. Jung, N. Downey, J. Johnson, M. Jimenez, G. Yarwood, R.E. Morris. 2012. "Regional and Global Modeling Estimates of Policy Relevant Background Ozone Over the United States." *Atmos. Env.*, V47, pp 206-217. February.
- Emery, C.A., E. Tai, R.E. Morris and G. Yarwood. 2011. "Investigation into Approaches to Reduce Excessive Vertical Transport Over Complex Terrain in a Regional Photochemical Grid Model." *Atmos. Env.*, V45, Issue 39, pp 7341-7351. December.
- Koo, B., C. Chien, G. Tonnesen, R.E. Morris, J.R. Johnson, T. Sakulyanontvittaya, G. Yarwood. 2010. "Natural Emissions for Regional Modeling of Background Ozone and Particulate Matter and Impacts on Emissions Control Strategies." *Atmos Environ.*, 44 (2010) 2372-2382, (doi:10.1016/j.atmosenv.2010.02.041) June.
- Koo, B., G. M. Wilson, R. E. Morris, A. M. Dunker, and G. Yarwood. 2009. Comparison of Source Apportionment and Sensitivity Analysis in a Particulate Matter Air Quality Model. *Environ. Sci. Technol.*, 43, 6669-6675.
- Wagstrom, K., M. Spyros, N. Pandis, G. Yarwood, G.M. Wilson and R.E. Morris. 2008. "Development and Application of a Computationally Efficient Particulate Matter Apportionment Algorithm in a Three-Dimensional Chemical Transport Model." *Atmos Env*, 42: 5650-5659. July.
- Morris, R.E., B. Koo, A. Guenther, G. Yarwood, D. McNally, T. Tesche, G. Tonnesen, J. Boylan and P. Brewer. 2006. "Model Sensitivity Evaluation for Organic Carbon Using Two Multi-Pollutant Air Quality Models that Simulate Haze in the Southeastern United States." *Atmos. Env.* 40 (2006) 4960-4972.
- Morris, R., T.W. Tesche, G. Tonnesen, D. McNally, J. Boylan and P. Brewer. 2006. "CMAQ/CAMx Annual 2002 Performance Evaluation Over the Eastern U.S." *Atmos. Env.* 40 4906-4919.
- Morris, R., B. Koo and G. Yarwood. 2005. "Evaluation of Multisectional and two-Section Particulate Matter Photochemical Grid Models in the Western United States." *J. Air & Waste Man. Assoc.*, V55, No. 11, pp1683-1693. November.
- Morris, R., D. McNally, T.W. Tesche, G. Tonnesen, J. Boylan and P. Brewer. 2005. "Preliminary Evaluation of the Community Multiscale Air Quality Model for 2002 Over the Southeastern United States." *J. Air & Waste Man. Assoc.*, V55, No. 11, pp1694-1708. November.
- Morris, R.E., B. Koo, Alex Guenther, G. Yarwood, D. McNally, T.W. Tesche, G. Tonnesen, J. Boylan, P. Brewer. 2004. "Diagnostic Model Performance Evaluation Using Multiple Air Quality Models For

Simulating Ozone, Particulate Matter and Regional Haze in the Southeastern United States." Atmos Env., March.

Morris, R.E., and R.D. Scheffe. 1993. "A Review of the Development and Application of the Urban Airshed Model." Atmos Env. V27B, No. 1, pp 23-39.

PRESENTATIONS

Morris, R. 2019. Single-Source Visibility Ranking and Modeling Techniques for Regional Haze SIPs. Presented at A&WMA 112th Annual Conference and Exhibition, Quebec City, Canada. June 25-28, 2019.

Morris, R., M. Zatko, B. Brashers and J. Maranche. 2019. PM2.5 Precursor Insignificance Demonstration for Allegheny County, Pennsylvania. Presented at A&WMA Guideline on Air Quality Models: Planning Ahead. Durham, North Carolina. March 19-21, 2019.

Morris, R., 2019. Air Quality Modeling of the Gulf of Mexico Region. Presented at A&WMA Guideline on Air Quality Models: Planning Ahead. Durham, North Carolina. March 19-21, 2019.

Morris, R. and B. Brashers. Introduction to CAMx. Half Day Course Presented at A&WMA Guideline on Air Quality Models: Planning Ahead. Durham, North Carolina. March 19-21, 2019.

Morris, R., L. Parker and T. Stoeckenius. 2019. Analysis of Recent Observed Ozone Increases in the South Coast Air Basin in 2016-2018 While Emissions Are Reduced. Presented at Coordinating Research Council (CRC) 29th Real World Emissions Conference, Long Beach, California. March 11-13, 2019.

Morris, R. Denver Ozone Modeling Update. Presented at David Graham and Stubbs Air Quality Summit, Denver, Colorado. September 13, 2018.

Morris, R., L. Parker and T. Stoeckenius. 2018. Effects of Meteorology and Other Processes on Observed and Modeling Ozone in the SoCAB. Presented at Southern California Ozone Research Symposium (SCORES), UC Riverside, California. June 6-7, 2018.

Morris, R. 2018. Contributions of International Emissions to Ozone Attainment in the United States. Presented at 111th A&WMA Conference and Exhibition, Hartford, Connecticut. June 25-28, 2018.

Morris, R. 2018. Assessment of the Air Quality Impacts due to Oil and Gas Development in the Gulf of Mexico Region. Presented at 111th A&WMA Conference and Exhibition, Hartford, Connecticut. June 25-28, 2018.

Morris, R. and U. Nopmongcol. 2018. Source Contribution to Secondary PM2.5 in Central Alberta. Presented at 2018 A&MA CPANS Conference -- Western Canada: Environment State of the Union. Calgary, Alberta. May 9, 2018.

Morris, R., L. Parker and T. Stoeckenius. 2018. Analysis of Recent Ozone Increases in the South Coast Air Basin. Presented at CRC 28th Real World Emissions Conference, Garden Grove, California. March 18-21, 2018.

Morris. 2017. Fires and International Uncontrollable Emissions. Presented at Regional Haze Planning Workshop, Denver, CO. December 5-7, 2017.

Morris, R. and D. McNally. 2017. Preliminary Future Ozone Projections and Source Contributions. Regional Air Quality Council Board Meeting. Denver, CO. November 3, 2017.

Morris, R. and D. McNally. 2017. Modeling Sensitivities Overview. Denver Ozone Modeling Forum. Denver, CO. November 2, 2017.

Morris, R. and D. McNally. 2017. Local Source 2017 Ozone Source Apportionment Modeling. Denver Ozone Modeling Forum. Denver, CO. November 2, 2017.

Morris, R. and D. McNally. 2017. Ozone Contributions of International Emissions using 2011 Modeling Platform. Denver Ozone Modeling Forum. Denver, CO. November 2, 2017.

Morris, R. and D. McNally. 2017. 2023 Preliminary Modeling: 2023 Ozone Projections and VOC/NOx Sensitivity. Denver Ozone Modeling Forum. Denver, CO. November 2, 2017.

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- Morris, R.E., P.D. Guthrie, and C.A. Knopes. 1995. "Photochemical Modeling Analysis Under Global Warming Conditions." Presented at the 88th Annual AWMA Meeting & Exhibition, San Antonio, Texas.
- Morris, R.E., C. O'Donnell, D.F. Shearer, and L. Kawaski. 1995. "Development of an Alternative Ozone Attainment Plan for the Los Angeles Region for Use in the 1994 State Implementation Plan." Presented at the 88th Annual AWMA Meeting & Exhibition, San Antonio, Texas.
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- Morris, R. E., T. C. Myers, and M. A. Yocke. 1994. "Evaluation of the Nested-Grid Urban Airshed Model (UAM-V) using the Extensive Lake Michigan Ozone Study (LMOS) Field Study Data Base." Presented at 87th Annual AWMA Meeting and Exhibition, Cincinnati, OH. June.
- Morris, R. E. and G. E. Mansell. 1994. "Application and Evaluation of the Nested-Grid Urban Airshed Model to the Northeast US." Presented at the AWMA Specialty Conference "Tropospheric Ozone: Critical Issues in the Regulatory Process" Orlando, FL. May.
- Morris, R. E., A. K. Pollack, J. Heuss, J. Shiller, and H. Wimette. 1994. "Evaluation of the Air Quality Impacts of the Low Emissions Vehicle/Clean Fuels (LEV/CF) Program in the Baltimore-Washington D.C. Nonattainment Region." Presented at the AWMA Specialty Conference "Tropospheric Ozone: Critical Issues in the Regulatory Process" Orlando, FL.
- Morris, R. E., T. C. Myers, M. A. Yocke, and T. W. Tesche. 1994. "Evaluation of the Nested-Grid Urban Airshed Model Using the Extensive Lake Michigan Ozone Study (LMOS) Field Study Data Base."

- Presented at AWMA Specialty Conference Regional Photochemical Measurement and Modeling Studies, San Diego, CA. November.
- Morris, R. E., M. A. Yocke, and T. C. Myers. 1993. "Application and Evaluation of the Nested-Grid Urban Airshed Model (UAM-V) in the Lake Michigan Ozone Study (LMOS)." Presented at Regional Photochemical Measurements and Modeling Studies, San Diego, CA. November.
- Morris, R. E. and G. E. Mansell. 1993. "Procedures for Developing Boundary Conditions and Sensitivity of Simulating Ozone Formation in the Lake Michigan to the Definition of Boundary Conditions." Presented at Regional Photochemical Measurements and Modeling Studies, San Diego, CA. November.
- Morris, R. E., T. C. Myers, and M. A. Yocke. 1993. "Design of the UAM-V Integrated Photochemical Modeling System -- Discussion of Model Components and Adaptation of the System to the Lake Michigan, Gulf Coast, and Northeast US Regions." Presented at Regional Photochemical Measurements and Modeling Studies, San Diego, CA. November.
- Morris, R. E., C. A. Emery, and J. E. Langstaff. 1993. "Ozone Modeling Study to Assess the Contribution of Power Plant Emissions to Ozone in the Philadelphia Nonattainment Region." Presented at 86th Annual AWMA Meeting and Exhibition, Denver, CO. June.
- Morris, R. E. and C. A. Emery. 1992. "Sensitivity of the Urban Airshed Model to Meteorological Inputs When Applied to the New York Metropolitan Region Using the ROM-UAM Interface." Presented at the AWMA specialty conference Tropospheric Ozone: Nonattainment and Design Value Issues, Boston, MA. November.
- Morris, R. E., T. C. Myers, and M. A. Yocke. 1992. "Overview of the Variable Grid Urban Airshed Model (UAM-V)." Presented at the 85th Annual AWMA Meeting and Exhibition, Kansas City MO. June.
- Morris, R. E., A. M. Dunker, C. H. Schleyer, and A. K. Pollack. 1992. "Methodology for Trajectory and Grid Modeling to Determine the Impact of Different Vehicle/Fuel Systems on Air Quality--Auto/Oil Air Quality Improvement Research Program." Presented at the 85th Annual AWMA Meeting and Exhibition, Kansas City, MO. June.
- Morris, R. E., M. A. Yocke, T. C. Myers, and R. C. Kessler. 1991. "Development and Testing of a Nested-Grid Version of the Urban Airshed Model." Presented at the Air and Waste Management Association Specialty Conference: Tropospheric Ozone and the Environment II, Atlanta, GA. November.
- Morris, R. E. 1991. "Evaluation of the Sensitivity of Emissions Controls to Grid Resolution Using the Urban Airshed Model." Presented at the Air and Waste Management Association Specialty Conference: Tropospheric Ozone and the Environment II, Atlanta, GA. November.
- Morris, R. E., G. Z. Whitten, and S. M. Greenfield. 1991. "Preliminary Assessment of the Effects of Global Climate Change on Tropospheric Ozone Concentrations." Presented at the Air and Waste Management Association Specialty Conference: Tropospheric Ozone and the Environment II, Atlanta, GA. November.
- Morris, R. E., T. C. Myers, S. G. Douglas, M. A. Yocke, and V. Mirabella. 1991. "Development of a Nested-Grid Urban Airshed Model and Application to Southern California." Presented at the 84th Annual AWMA Meeting and Exhibition, Vancouver BC. June.
- Morris, R. E. and R. C. Kessler. 1991. "Mesoscale Simulation of Photochemical Air Quality in the San Joaquin Valley of California." Presented at the 84th Annual AWMA Meeting and Exhibition, Vancouver BC. June.
- Morris, R. E. and A. K. Pollack. 1991. "Methodology for Evaluation of the Air Quality Impacts of Auto/Oil Reformulated and Alternative Fuels Using the Urban Airshed Model." Presented at the AWMA Specialty Conference: Tropospheric Ozone and the Environment II, Atlanta, GA. November.
- Morris, R. E., T. C. Myers, and M. A. Yocke. 1991. "Effects of Grid Resolution in the UAM on the Evaluation of Emission Control Strategies." Presented at AWMA Specialty Conference: Tropospheric Ozone and the Environment II, Atlanta, GA. November.
- Morris, R. E. and others. 1990. "Use of the Urban Airshed Model to Assess the Effects of Ethanol Blended Fuels on Ozone Concentration in New York and St. Louis." Presented at the 83rd Annual AWMA Meeting and Exhibition, Anaheim, CA. June.

TEACHING EXPERIENCE

1977-1979

Calculus, University of California at Davis

MEMBERSHIPS

Air and Waste Management Association (AWMA)

Air Quality Modeling Subcommittee (AQMS) of the Science Advisory Board (SAB)

EPA Fine Particulate Modeling Guidance Workgroup

EPA UAM Guidance Workgroup

Modeling Peer-Review Group for the Los Angeles SIP Air Quality Modeling

TEJAS SHAH

Managing Consultant

Tejas Shah has over 15 years' experience with air pollution analyses. His expertise includes emission modeling, air quality modeling, emission inventory development, spatial analysis with GIS, database tool development, control-measure evaluation and economic impact analysis. He provided GIS support to developing oil and gas emissions inventories for current and future years in the western US for the Western Regional Air Partnership (WRAP). He has recently managed a review of available emission inventories for Mexico that are used in photochemical modeling studies of North America in which we used satellite-derived data products for sulfur dioxide (SO₂), nitrogen dioxide (NO₂) and natural gas flaring to evaluate spatial characterization and magnitude of the emissions inventories. Tejas has managed photochemical modeling studies for the US and other world regions in which key model inputs, such as the emission inventories and landuse inputs, depend on GIS analyses of geospatial data. Additionally, he has extensive experience using the RPOs emissions inventory, the USEPA's national emissions inventory (NEI) and the Environment Canada national inventory. Tejas' work at Ramboll includes Sparse Matrix Operator Kernel Emissions (SMOKE) processing of regional and project-level emission inventories for various oil and gas EIS projects in the Intermountain West; preparing gridding surrogates and speciation profiles for the SMOKE model input; augmenting SPECIATE—a repository of speciation profiles; spatial analyses and preparing landuse/landcover files for the Comprehensive Air Quality Model with extensions (CAMx) and MEGAN models using GIS; and developing database tools.



CONTACT INFORMATION

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7250 Redwood Boulevard
Suite 105
Novato, CA 94945
United States of America

EDUCATION

2000-2003

MS, Chemical Engineering

Lamar University, Beaumont, Texas, United States

1996-2000

BS, Chemical Engineering

Mumbai University, Mumbai, India

SELECTED RELEVANT EXPERIENCE

Ozone Air Quality Modeling of the Arabian Gulf

- Managed emission inventory modeling for a confidential air quality study in the Middle East. Ramboll developed a photochemical ozone modeling system based on the Comprehensive Air quality Model with extensions (CAMx).
- Developed a comprehensive emission inventory of ozone precursors (NO_x, VOC and CO) for the Kingdom of Bahrain. The inventory was compiled using publicly-available data to characterize

stationary sources, mobile sources and area sources and support photochemical ozone modeling.

- Managing emission inventory modeling for a confidential study in the Middle East to assess the environmental impacts of changes to transportation infrastructure and emissions.

Air Quality and Emissions Modeling Support to EPA OAQPS

- Developed ancillary files for processing oil and gas emissions for use in the EPA's national modeling platform. Work included development and assignment of speciation profiles for WRAP Phase III oil and gas source categories, development and assignment of spatial surrogates, and preparation of inventory input files for SMOKE.

BOEM Air Quality Impacts of Off-Shore Oil and Gas Production

- Currently managing regional emissions modeling for analyzing the on-shore air quality impacts of outer continental shelf oil and gas development in the Arctic Sea near Alaska and the Gulf of Mexico. This multi-year multi-million dollar study will project future year emissions and air quality impacts and develop emission exception screening thresholds.

Allegheny County PM2.5 State Implementation Plans

- Task Manager for developing emissions input for air quality modeling to demonstrate that Allegheny County (Pittsburgh), Pennsylvania will attain the PM2.5 National Ambient Air Quality Standard (NAAQS).

Western Regional Air Partnership (WRAP) Region-Wide Emissions Inventory

- Provided GIS support in developing a region-wide O&G emissions inventory for current and future years in the western US for the Western Regional Air Partnership (WRAP). It includes performing spatial analyses using ARC/GIS tools, preparing map displays using ARC/MAP and developing gridding surrogates based on O&G activities using ARC Macro Language (AML) scripts.

Development of Gridded Ocean-Going Vessel Emissions Inventories

- Prepared gridded Commercial Marine Vessel Emissions Inventory for EPA. Detailed US port emission inventory was spatially allocated into a gridded format. The port emissions were then blended with the STEEM data, which together create the merged, gridded commercial marine vessel emissions inventory. ARC/GIS buffer tool was used to define various distance regions (25, 50, 100, and 200 nautical miles) from the US shore line.

Development of California Emission Estimator Model (CalEEMod)

- Assisted in the development of CalEEMod - a statewide land use emissions computer model designed to provide a uniform platform to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operational from a variety of land use projects.

Rosebud Mine, Montana EIS

- Emissions modeling Task Manager to develop regional and project-specific emissions inputs for photochemical modeling study to assess direct effects due to the Rosebud mine and indirect effects due to the nearby power plant under NEPA.

BLM Oklahoma-Kansas-Texas (OKT) EIS and Resource Management Plan

- Managed emissions modeling task of the BLM Oklahoma-Kansas-Texas (OKT) modeling study to assess the air quality impacts of oil and gas development and coal mines on federal and non-federal lands and other cumulative regional sources. Emissions of criteria air pollutants from predicted oil and gas development in the three-state area were developed for this study.

BLM Colorado Air Resource Management Modeling Study (CARMMS)

- Emissions Modeling Lead for the BLM CARMMS study that assess the air quality (AQ) and air quality related value (AQRV) impacts of new federal oil and gas and other cumulative sources including non-federal O&G, mining and other regional emissions in each of the BLM Colorado Field Office planning areas, as well as the Mancos Shale area in northwest New Mexico. Air quality modeling emissions inputs were developed for high, medium and low O&G development scenarios for future years 2021 and 2025.

BLM Montana/Dakotas PGM Modeling Study

- Task Manager for developing air quality modeling emissions for the BLM Montana/Dakotas PGM modeling study to assess the AQ and AQRV impacts due to oil and gas development. The Bakken Shale formation in the Montana/Dakotas region is the most rapidly growing oil and gas development area in the U.S. Under this study, Ramboll Environ is developing a comprehensive oil and gas emissions inventory and performing base year 2012/2013 and future year 2032 modeling using the CAMx photochemical grid model.

Navajo Generating Stations (NGS) EIS Assessment

- Task Manager for developing criteria and HAP emission inventory for NGS for lease extension EIS. This was the most comprehensive and complete AQ, ecological and human health assessment ever performed for an EIS.

SMOKE-MOVES Processing for Denver Ozone Modeling

- Developed an approach to use link-based data from TDM models as input to SMOKE-MOVES processing tool. Processed detailed vehicular activity data to prepare model-ready emissions for onroad sources. The pre-gridded activity data was input to the tool for the on-network processing and treated each grid cell and speed class as a pseudo-county. The off-network emissions were spatially allocated using surrogates developed from trip starts (start exhaust) and trip ends (for evaporative processes) by Traffic Analysis Zone (TAZ). This approach takes advantage of detailed link-based spatial and temporal varying activity data available from the TDM model and the robust emissions calculation methodology of SMOKE-MOVES that takes into account temporal and spatial variations in meteorology and has EPA approval and support.

Air Quality Assessments in Alberta, Canada

- Performed emissions modeling of regional emission inventories for North East Alberta modeling studies and North Saskatchewan Region of Alberta.

PRESENTATIONS & PUBLICATIONS

- Shah, T. 2017. "Composition of Organic Gas Emissions from Flaring Natural Gas" Presented at the EPA's 2017 International Emissions Inventory Conference. August
https://www.epa.gov/sites/production/files/2017-11/documents/organic_gas.pdf
- Shah, T., Y. Alvarez, M. Jimenez, R. Morris, A. Brimmer and K. Lloyd. 2016. "Incorporate Traffic Demand Model Data in SMOKE-MOVES Processing for Denver Ozone Modeling" Presented at the 2016 CMAS Conference. October
- Nopmongcol, U., J. Grant, E. Knipping, M. Alexander, R. Schurhoff, D. Young, J. Jung, T. Shah, G. Yarwood. 2017. "Air Quality Impacts of Electrifying Vehicles and Equipment across the United States." Environmental Science & Technology. <http://dx.doi.org/10.1021/acs.est.6b04868>
- Karamchandani, P., R. Morris, A. Wentland, T. Shah, and J. Lester. 2017. "Dynamic evaluation of photochemical grid model response to emission changes in the South Coast Air Basin in California." Atmosphere, in review.
- Collet, S., T. Kidokoro, P. Karamchandani, T. Shah, and J. Jung. 2017. "Future year ozone prediction for the United States using updated models and inputs." J. Air Waste Manage. Assoc., in review.
- Vijayaraghavan, K., C. Lindhjem, B. Koo, A. DenBleyker, E. Tai, T. Shah, Y. Alvarez, G. Yarwood. 2016. "Source Apportionment of Emissions from Light-Duty Gasoline Vehicles and Other Sources in the United States for Ozone and Particulate Matter." Journal of the Air & Waste Management Association, 66, 2, 98-119. doi: 10.1080/10962247.2015.1112316.
- Cho, S., R. Morris, P. McEachern, T. Shah, J. Johnson and U. Nopmongcol. 2012. "Emission sources Sensitivity Study for Ground-Level Ozone and PM2.5 Due to Oil Sands Development Using Air Quality Modeling System: Part I – Model Evaluation for Current Year Base Case Simulation." Atmos. Env., Volume 55, pp 533-541.
- Cho, S., R. Morris, P. McEachern, T. Shah, J. Johnson and U. Nopmongcol. 2012. "Emission Sources Sensitivity Study for Ground-Level Ozone and PM2.5 Due to Oil Sands Development Using Air Quality Modeling System: Part II – Source Apportionment Modeling." Atmos. Env., Volume 55, pp 542-556.

MARCO A. RODRIGUEZ, PHD

Senior Consultant

Dr. Marco Antonio Rodriguez is a Senior Consultant and recognized expert with 18 years of experience using analytical techniques to solve complex air quality problems. Marco has worked on issues including oil and gas development and Better-than-BART assessments and has provided modeling advice to legal firms in cases involving litigation. He is intimately familiar with CAMx and CMAQ, and has evaluated modeling datasets using R, FORTRAN and Python. He is passionate about applying data science techniques to environmental and air quality issues.



CAREER

2018

Senior Consultant

Ramboll (formerly Ramboll Environ)

2012-2018

Air Quality Scientist, Project Manager

AECOM, Fort Collins, Colorado

- managed photochemical grid modeling projects, including evaluation, application and data analysis
- provided air quality support for impact assessments involving the National Environmental Policy Act (NEPA), oil and gas projects, winter ozone modeling, and regional haze assessment of coal-fired power plants.

2005–2012

Research Scientist, Air Quality Modeler

Cooperative Institute for Research in the Atmosphere, Fort Collins, Colorado

- provided data preparation, model setup and analysis of CAMx modeling for various environmental assessment projects funded by the national park service (NPS).
- performed nitrogen deposition modeling for NPS.
- evaluated air quality impacts from oil and gas on class I areas.
- acted as linux system administrator

2004–2005

Postgraduate Researcher

Advanced Power and Energy Program, University of California, Irvine

CONTACT INFORMATION

MARCO A. RODRIGUEZ

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Ramboll
7250 Redwood Boulevard
Suite 105
Novato, 94945
United States of America

- acted as principal air quality modeler of a project funded by the California Air Resources Board to analyze the air quality impacts in the South Coast Air Basin of California (SoCAB) caused by the implementation of distributed power generation.

EDUCATION

2004

Ph.D., Mechanical and Aerospace Engineering

University of California, Irvine, United States

2001

MS, Mechanical and Aerospace Engineering

University of California, Irvine, United States

1997

BA, Physics

Universidad Autónoma Metropolitana Iztapalapa, México

EXPERIENCE (PRIOR TO RAMBOLL)

- **Wyoming Department of Environmental Quality, Wyoming Photochemical Grid.** Assistant project manager and air quality modeler lead for a project studying winter ozone formation in the Upper Green River Basin (UGRB). Elevated levels of ozone have been measured during winter in the UGRB since 2005. Ongoing studies have led scientists to believe that oil and gas development activities combined with specific meteorological conditions are contributing to elevated levels of ozone in winter. The study evaluated the results of two photochemical grid models to determine if the models can reproduce ozone events with sufficient accuracy to be used as a tool for regulatory planning purposes. Drafted all analysis documents and reports.
- **Arizona Public Service Company, Four Corners Power Plant NEPA Services.** Assistant task manager of the ozone modeling effort for a project to retrofit the power plant with emissions controls. Responsibilities included study design and planning efforts, coordinating with the proponent and interagency review team, senior oversight of emissions inventory development, task management, oversight of photochemical modeling, and authoring sections of the air quality technical support document.
- **US Bureau of Land Management - Utah State Office, Air Resource Management Strategy Modeling.** Senior photochemical modeler and data analyst for a regional cumulative air impact assessment. The study was conducted to provide a reusable modeling platform for BLM air management decisions and future NEPA analyses in the Uinta Basin. An evaluation of two photochemical grid models was conducted and the better performing model (CMAQ) was selected for analysis of future year air quality conditions, including winter ozone.
- **Environmental Impact Statement, Casper, Wyoming.** Senior photochemical grid modeler for a programmatic oil and gas development EIS project for an area that covers approximately 1.5 million acres. The proposed development would involve drilling 5,000 new wells on 1,500 new well pads producing from multiple horizons, plus an additional 450 pads for supporting ancillary facilities. The EIS is being developed under the direction of the BLM Casper Field Office as the lead agency. Major issues include air quality (potential ozone impacts); flaring and associated noise; water supply/disposal and water quality; wildlife (impacts to sage grouse); range (impacts to grazing allotments); and transportation impacts associated with increased truck traffic. In addition to numerous cooperating agencies, a key co-operator is the US Forest Service, the federal agency responsible for management of the Thunder Basin National Grasslands that comprise approximately 4% of the surface ownership in the project area
- **Cooperative Institute for Research in the Atmosphere, Rocky Mountain Sulfur and Nitrogen Study, Colorado.** Lead photochemical air quality modeler for the RoMANS project. Responsible for preparation of input datasets required for running CAMx and model performance evaluation with available observations. Excess wet and dry deposition of nitrogen-containing compounds is a concern at a number of national parks. Rocky Mountain National Park provides a

well-documented example of the role of excess nitrogen deposition in sensitive alpine environments. The RoMANS was conducted during the spring and summer of 2006 to identify the overall mix of ambient and deposited sulfur and nitrogen in the park. The Comprehensive Air Quality Model with extensions (CAMx) was used to simulate the fate of gaseous and particulate species subjected to multiple chemical and physical processes during RoMANS. The work presents an operational evaluation with special emphasis on the model performance of reduced nitrogen species. Results showed that there were large negative biases and errors at RMNP and the entire domain for ammonia; therefore, the model was deemed inadequate for source apportionment applications. The CAMx Integrated Processes Rate (IPR) analysis tool was used here to investigate the reasons behind poor model performance. In particular, IPR served as a tool to diagnose the relative contributions of individual physical and chemical processes to the final concentrations of reduced nitrogen species. Finally, guided by the information provided by the process analysis results, a series of sensitivity simulations were performed to investigate the effects of different deposition velocities in the modeled concentrations.

- **Cooperative Institute for Research in the Atmosphere, Oil and Gas Development on Ozone Formation Regional Impacts.** Lead photochemical air quality modeler and performed evaluation of regional impacts of oil and gas development using the Phase I WRAP emissions inventory. The Intermountain West is currently experiencing increased growth in oil and gas production, which has the potential to affect the visibility and air quality of various Class I areas in the region. The project presented an analysis of these impacts using the Comprehensive Air Quality Model with extensions (CAMx). Meteorology and emissions inventories developed by the Western Regional Air Partnership Regional Modeling Center for regional haze analysis and planning were used to establish an ozone baseline simulation for the year 2002. The predicted range of values for ozone in the national parks and other Class I areas in the western US was then evaluated with available observations from the Clean Air Status and Trends Network (CASTNET). The evaluation demonstrated the model's suitability for subsequent planning, sensitivity, and emissions control strategy modeling. An analysis of the model results was performed to investigate the regional impacts of oil and gas development on the ozone concentrations that affect the air quality of Class I areas.
- **California Energy Commission, Distributed Generation Air Quality Impacts.** Lead air quality modeler of a project funded by the California Air Resources Board to understand and analyze the air quality impacts in the South Coast Air Basin of California (SoCAB) caused by the implementation of distributed power generation (DG). Developed a methodology to investigate the spatial effects of placing DG in specific locations within the SoCAB. Distributed energy resources (DER) have the potential to supply a significant portion of increased power demands in California and the rest of the United States. DG is characterized by a dispersion of many stationary power generators throughout an urban air basin. As a result, DG may lead to increased pollutant emissions within an urban air basin, which could adversely affect air quality. The project developed a systematic approach based on land-use GIS data for characterizing the installation of DER in an urban air basin and simulated the potential air quality impacts using a state-of-the-art 3D computer model. Model sensitivity and model uncertainty analyses were developed in the project. The assessment of the air quality impacts associated with DER was made in the South Coast Air Basin (SoCAB) for the year 2010. Results suggest that DER characterization could be systematically applied to urban air basins, and that realistic DER implementation in SoCAB by the year 2010 only slightly affected concentrations of ozone and particulate matter in the basin. However, DG may increase localized exposure to pollutants, and higher levels of DG penetration in years beyond 2010 may lead to more significant air quality impacts than those presented in this study.

PUBLICATIONS

Paine, R. J., Taylor, C. and Rodriguez, M.A. Ozone and PM2.5: Ongoing Challenges for New Source Permitting. *Natural Gas & Electricity*, 34: 9–14. doi:10.1002/gas.22015, 2017.

Paine, R., Rodriguez, M. A. and Taylor, C. New Source Review Permitting Challenged by Ozone Modeling Requirements. *Natural Gas & Electricity*, 33: 10–15. doi:10.1002/gas.21935, 2016.

Malm, W.C., Rodriguez, M. A., Bret A. Schichtel, Kristi A. Gebhart, Tammy M. Thompson, Michael G. Barna, Katherine B. Benedict, Christian M. Carrico, Jeffrey L. Collett, A hybrid modeling approach for

- estimating reactive nitrogen deposition in Rocky Mountain National Park, In *Atmospheric Environment*, Volume 126, Pages 258-273, ISSN 1352-2310, 2016.
- Thompson, T. M., Rodriguez, M.A., M. G. Barna, K. A. Gebhart, J. L. Hand, D. E. Day, W. C. Malm, K. B. Benedict, J. L. Collett Jr., and B. A. Schichtel. Rocky Mountain National Park reduced nitrogen source apportionment, *J. Geophys. Res. Atmos.*, 120, 4370–4384. doi:10.1002/2014JD022675, 2015
- Gebhart, K.A., Malm, W. C., Rodriguez, M.A. et al., Meteorological and Back Trajectory Modeling for the Rocky Mountain Atmospheric Nitrogen and Sulfur Study II, *Advances in Meteorology*, vol. 2014, Article ID 414015, 19 pages, doi:10.1155/2014/414015, 2014.
- Malm, W. C., Schichtel, B.A., Barna, M.G., Gebhart, K.A., Rodriguez, M.A., Collett Jr., J.L., Carrico, C.M., Benedict, K.B. Prenni, A.J., Kreidenweis, S.M. Aerosol species concentrations and source apportionment of ammonia at Rocky Mountain National Park. *Journal of the Air & Waste Management Association* Vol. 63, Iss. 11, 2013.
- Schichtel, B.A., Rodriguez, M.A., Barna, M. G., Gebhart, K. A., M.L. Pitchford, M. L., Malm, W.C. A semi-empirical, receptor-oriented Lagrangian model for simulating fine particulate carbon at rural sites. *Atmospheric Environment*, Volume 61, 2012, Pages 361-370, 2012.
- Rodriguez, M. A., Barna, M. G., Gebhart, K. A., Hand, J. L., Adelman, Z., Schichtel, B. A., Collett Jr., J. L., and Malm, W. C. Modeling the fate of atmospheric reduced nitrogen during the Rocky Mountain Atmospheric Nitrogen and Sulfur Study (RoMANS): Performance evaluation and diagnosis using integrated processes analysis. *Atmospheric Environment*, 45, 223–234, doi:10.1016/j.atmosenv.2010.09.011, 2011.
- Gebhart, K. A., Schichtel, B. A., Malm, W. C., Barna, M. G., Rodriguez, M. A., and Collett Jr., J. L. Back-Trajectory-Based Source Apportionment of Airborne Sulfur and Nitrogen Concentrations at Rocky Mountain National Park, Colorado, USA, *Atmospheric Environment* 45, 621–633, doi:10.1016/j.atmosenv.2010.10.035, 2011.
- Rodriguez, M. A., Barna, M. G., and Moore, T. Regional Impacts of Oil and Gas Development on Ozone Formation in the Western United States, *Journal of the Air&Waste Management Association* 59, 1111-1118, doi:10.3155/1047-3289.59.9.1111, 2009.
- Rodriguez, M. A., Brouwer, J., Samuelsen, G. S., and Dabdub, D. Air Quality Impacts of Distributed Power Generation in the South Coast Air Basin of California 2: Model Uncertainty and sensitivity analysis, *Atmospheric Environment* 41, 5618–5635, 2007.
- Rodriguez, M. A., Carreras-Sospedra, M., Medrano, M., Brouwer, J., Samuelsen, G. S., and Dabdub, D. Air Quality Impacts of Distributed Power Generation in the South Coast Air Basin of California 1: Scenario Development and Modeling Analysis, *Atmospheric Environment* 40, 5508–5521, 2006.
- Rodriguez, M. A., and Dabdub, D. Monte Carlo uncertainty and sensitivity analysis of the CACM chemical mechanism, *Journal of Geophysical Research Atmospheres* 108, (D15), 4443, doi:10.1029/2002JD003281, 2003.

CHAO-JUNG CHIEN, PHD

Senior Consultant

Dr. Chien is an Atmospheric Scientist with over 18 years of experience in the air quality field. Dr. Chien is an expert in atmospheric chemistry and has comprehensive knowledge of primary and secondary air pollutants formation and their chemistry and transport in complex 3-dimensional urban and regional air quality models. He has performed photochemical grid models (PGMs) such as CMAQ and CAMx, and has extensive experience in processing/evaluating/validating input and output data for all components of air quality modeling studies, including meteorology, e.g. WRF, emissions, e.g. SMOKE, MOVES, MEGANS, etc., and pre-processors of each respective model. He has developed and implemented a model performance software package tool to create comprehensive statistical and graphical results to evaluate model performance.



CAREER

2018

Senior Consultant

Ramboll (formerly Ramboll Environ)

2009-2018

Senior Air Quality Scientist

AECOM, Fort Collins, Colorado

Technical lead on all aspects of emissions processing, photochemical grid modeling (CAMx and CMAQ) and dispersion modeling (AERMOD and CALPUFF) practices, and air quality data analysis:

- Actively participated in developing regional cumulative air quality impact assessment for various Environmental Impact Studies (EIS) related to Oil and Gas development projects located in states of Wyoming and Montana, under supervision of various state (Wyoming) and federal governments (BLM, EPA region 8). Challenges among these projects include studying elevated winter ozone formation due to oil and gas development activities combined with specific meteorological conditions, and areas with pending designation as an ozone non-attainment area.
- Responsibilities included developing spatially-allocated air resource emissions inventories (EIs), conducting PGMs with CMAQ and CAMx, performing model performance evaluation, and authoring sections of various Air Quality Technical Support Documents.
- Maintained and administrated Linux-based HPC clusters to provide computing services for various air quality modeling applications throughout the company.

CONTACT INFORMATION

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Ramboll
7250 Redwood Boulevard
Suite 105
Novato, 94945
United States of America

2001–2009

Senior Development Engineer, Research Associate

Center of Environmental Research and Technology (CERT), College of Engineering, University of California, Riverside, California

As a core member of Western Regional Air Partnership (WRAP) sponsored Regional Modeling Center (RMC):

- Configured and performed air quality model simulations including all components of CMAQ, CAMx, SMOKE, in assisting and supporting various Regional Planning Organization (RPOs), including WRAP, CENRAP, VISTAS (now SESARM), and MRPO/LADCO, for their development of SIPs and the regional component of fine particulate and 8-hour ozone SIPs.
- Developed and evaluated observation-based methods for assessing ozone sensitivity to precursor reductions (Smog Chamber Studies).
- Designed and developed model performance evaluation software (UCR_MPE Tool) for data analysis and evaluation of modeling results.

EDUCATION

2001

Ph.D., Atmospheric Chemistry and Organic Analytical Chemistry

University of North Carolina, Chapel Hill, United States

1989

BA, Chemistry

National Cheng Kung University, Taiwan

RELEVANT PROJECT EXPERIENCE

- **Wyoming Department of Environmental Quality (WDEQ), Wyoming Photochemical Grid.** Team lead on performing CMAQ air quality modeling and model shootouts between CMAQ and CAMx for a project studying winter ozone formation in the Upper Green River Basin (UGRB). Elevated levels of ozone have been measured during winter in the UGRB since 2005. Ongoing studies have led scientists to believe that oil and gas development activities combined with specific meteorological conditions are contributing to elevated levels of ozone in winter. The study evaluated the results of two photochemical grid models, CMAQ and CAMx, to determine if the models can reproduce ozone events with sufficient accuracy to be used as a tool for regulatory planning purposes. Assisted and as a reviewer in all analysis documents and reports.
- **US Bureau of Land Management - Utah State Office, Air Resource Management Strategy Modeling.** Team lead on a project for developing a regional cumulative air impact assessment for Utah BLM. Responsibilities included preparing and providing a spatially-allocated Air Resource Emission Inventory (EI) and providing air quality modeling platform using either CMAQ or CAMx to meet the needs of the Utah State Office of BLM for future NEPA and resource management plans (RMP) actions.
- **California Air Resources Board (CARB). Advanced Data Analysis for the Central California Ozone Study (CCOS).** Assisted in developing methods to characterize emissions, meteorology and atmospheric processes affecting the production of ozone in central CA. Performed model predictions for indicator species to observations to validate model processes. Model Inter-comparison was also conducted for SAQM, CMAQ and CAMx with CB4 and SAPRC99.
- **Arizona Public Service Company (APS Co.), Four Corners Power Plant NEPA Services.** Team lead on emissions processing for an ozone modeling project conducted to assess the impacts associated with retrofitting the Four Corners Power Plant with emissions controls. Responsible for the emission inventory processing in SMOKE for the photochemical modeling, and authoring sections of the Air Quality Technical Support Document.
- **Bureau of Land Management (EOG Resources), LaBarge Platform Exploration and Development Project EIS, Wyoming.** Team lead on emissions developing and photochemical

chemical grid modeling for a medium in-fill oil and gas development project in Southwestern Wyoming. This project is anticipated to be particularly challenging due to the area's pending designation as an ozone non-attainment area. Current responsibilities include developing emissions inventory with SMOKE, conducting photochemical grid model with CAMx, analyzing model performance and authoring sections of the Air Quality Technical Support Document

- **Coordinating research Council (CRC). Accuracy of Regional Simulations of Background Ozone and Particulate Matter.** Co-lead in Investigating natural contribution to atmospheric ozone and PM formation. Improved and refined emissions from various natural sources of ozone precursors (such as biogenic, lightning NOx) and PMs, including both direct emissions of primary PM (such as sea salt and volcanautic activities) and emissions of gaseous species that undergo photochemical transformation or condensation to form secondary PM. Conducted annual CMAQ modeling to investigate the effects that natural sources and background concentrations have on the development of ozone and PM attainment emission control strategies.
- **Regional Modeling Center (RMC), WRAP.** Assisted in regional particulate matter, ozone and haze modeling using CMAQ and CAMx for the western (WRAP), central (CENRAP), southeast (VISTAS), and Midwest (MRPO) Regional Planning Organization (RPOs) for the development of Regional Haze State Implementation Plans (SIPs) and the regional component of fine particulate and 8-hour ozone SIPs. Designed and developed model performance evaluation software (UCR_MPE Tool) for data analysis and evaluation of modeling results. Activities include obtaining ambient measurement data from various national ambient monitoring networks, assess the quality and usefulness of these data, and develop procedures of applying these data to validate air quality models.
- **UC-Riverside. Evaluation of Observation Based Methods (OBM) for Assessing the Sensitivity of Ozone to VOC and NOx.** Performed analysis on experimental results from state-of-art smog chamber experiments to determine whether observation based methods (OBMs) can be used reliably to distinguish conditions in which either VOC or NOx controls are more effective for reducing ambient ozone concentrations. More than 40 chamber experiments were carried out and 90 sets of data were accumulated. Key indicator species including H₂O₂, HNO₃, HCHO, NO₂, OH and HO₂ were also analyzed and compared with computer model simulations using SAPRC-99 photochemical mechanism.

SELECTED PUBLICATIONS

- Koo, B., Chien, C.-J., Tonnesen G.S., Yarwood, G., Johnson, J., Sakulyanonitvittaya, T., Piyachaturawat, P., and Morris, R., Natural Emissions for Regional Modeling of Background Ozone and Particulate Matter and Impacts on Emissions Control Strategies., *Atmospheric Environment*, 44, p2372-2382, 2010.
- Wang, Z. S., Chien, C.-J., Tonnesen, G.S., Development of a tagged species source apportionment algorithm to characterize three-dimensional transport and transformation of precursors and secondary pollutants. *J. Geophys. Res.*, 114, D21206, 2009.
- Tonnesen, G.S., Wang, Z.S., Omary, M., Chien, C.-J., Formulation and application of regional air quality modeling for integrated assessments of urban and wildland pollution, in *Developments in Environmental Science*, vol 2, (eds. Bytnerowicz, A., Arbaugh, M., Alonso, R.), pp 1-26. 2008.
- Chien, C.-J, Tonnesen, G.S., Wang, Z.S., Omary, M. Bytnerowicz, A., Atmospheric Modeling of Nitrogen Species in San Bernardino Mountain, CA Areas. Presented in 22nd International Meeting for Specialists in Air Pollution Effects on Forest Ecosystems (IUFRO conference), September 10-15, 2006, Riverside, California, USA
- Chien, C.-J, Tonnesen, G.S., Wang, Y., Wang, Z.S., Omary, M., Model Performance Evaluations for Fine Particulates Using Unpaired in Space and Time Analysis. Presented in 4th Annual CMAS Models-3 Users' Conference, September 26-28, 2005, Chapel Hill, North Carolina, USA.
- Chien, C.-J ; Tonnesen, G.S.; Wang, B. CMAQ Model Performance Evaluation with the Updated CB4-2002. Presented in 2nd Annual US-EPA's Models-3 Users' Workshop, October 27-29, 2003, Research Triangle Park, North Carolina, USA.

SONJA SAX

Managing Consultant

Dr. Sonja Sax is an environmental health scientist with over 20 years of exposure and health risk assessment experience. Dr. Sax has particular expertise in assessing exposures and risks from airborne gases and particles, and has performed indoor and outdoor air quality investigations, managed several large environmental projects, conducted critical evaluations of toxicology and epidemiology studies, and helped prepare technical and expert reports. Dr. Sax has authored and co-authored several publications, presented her research and consulting work at various conferences and testified before scientific panels. Dr. Sax earned an MS and doctorate in environmental health from the Harvard T.H. Chan School of Public Health, where she also served as a postdoctoral fellow.



CAREER

2016->>>

Managing Consultant, Ramboll

Senior manager in charge of multiple exposure and health effects projects. Specific tasks include litigation support for toxic torts, conduct systematic reviews of the health effects literature for a number of chemicals, including bitumen fumes, welding fumes, diesel particulate, and carbon black, and critically review epidemiological and toxicological literature.

2005-2015

Senior Project Manager, Gradient

Managed and worked on multiple projects related to evaluation of human exposures and health risks associated with environmental pollutants; routinely conducted air dispersion modeling and exposure assessments to support health risk assessments; reviewed and interpreted epidemiology and toxicology studies for use in preparing expert reports, peer-reviewed publications, regulatory comments, and risk communications.

2003-2005

Postdoctoral Fellow, Harvard School of Public Health

Managed two large exposure assessment projects, developed study protocols, organized field studies, and managed staff. Additional duties included writing grants, analyzing data, and publishing manuscripts in peer-reviewed journals.

CONTACT INFORMATION

Sonja Sax

ssax@ramboll.com
+1 (413) 8354358

Ramboll
28 Amity Street
Suite 2A
Amherst, MA 01002
United States of America

1998-2003

Research/Teaching Assistant, Harvard School of Public Health

Designed, conducted, and managed a large air pollution exposure assessment study of inner-city teenagers in New York City and Los Angeles; measured and analyzed indoor, outdoor, and personal concentrations of volatile organic compounds (VOCs), carbonyls, PM2.5, and particle-associated metals. Teaching assistant for an introductory environmental health course.

1995

Intern, Environmental Protection Agency

Analyzed health effects data to assess the impact of ozone concentrations on hospital admissions in Massachusetts.

1994-1997

Research Assistant, Harvard School of Public Health

Proposed, designed, and implemented an indoor air quality study of a green community of homes.

1991-1994

Research Associate, Repligen Corporation

Managed the peptide chemistry lab. Conducted research to improve the synthesis of peptides. Trained and supervised laboratory staff.

EDUCATION

2003

ScD, Environmental Health Sciences

Harvard T.H. Chan School of Public Health

1996

MS, Environmental Health Management

Harvard T.H. Chan School of Public Health

1991

BA, Biological Chemistry

Wellesley College

COURSES/CERTIFICATIONS

Winner of the HERA Human Risk Assessment Paper of the Year Award, 2008

Probabilistic Analysis of Human Health Risks Associated with Background Concentrations of Inorganic Arsenic: Use of a Margin of Exposure Approach. Human and Ecological Risk Assessment 14:1159-1201.

LANGUAGE SKILLS

Spanish (mother tongue), **English** (mother tongue)

PROJECTS

Cost-benefit Analyses

Conducted cost-benefit analyses of air pollution reductions in the US and Middle East using the US Environmental Protection Agency Benefits Mapping and Analysis (BenMAP) Program.

Litigation Support

Contributed to the preparation of expert reports in litigation projects that involved a variety of different chemical exposures including volatile organic compounds (e.g., vinyl chloride and formaldehyde), asbestos, carbon black, particulate matter, sulfur dioxide, pesticides, and odors.

Critical Reviews and Syntheses

Conducted an extensive literature search on the toxicity and health effects of several different chemical compounds including cobalt and cobalt alloys found in dental materials, diesel exhaust, carbon black, welding fumes, sulfur dioxide, and odors.

Systematic Reviews

Conducted weight-of-evidence evaluation of cardiovascular and respiratory effects from exposures to ozone, diesel particles, and carbon black. Results of the critical evaluation of toxicology, epidemiology, and mode-of-action studies were published in several peer-reviewed manuscripts.

Exposure and Risk Assessment

For numerous projects prepared technical analyses on exposures and potential health effects associated with various pollutants including volatile organic compounds, asbestos, carbon black, particulate matter, sulfur dioxide, pesticides, and odor. Exposure assessments included air dispersion modeling or indoor air modeling.

Regulatory Support

Provided written and oral testimony on several occasions to the Clean Air Scientific Advisory Committee (CASAC) on human exposure, epidemiology, toxicology, and mechanistic studies and their bearing on US EPA's National Ambient Air Quality Standards (NAAQS) for particulate matter and ozone.

Indoor Exposure and Risk Assessment

Conducted exposure and risk assessments of residential exposures to various chemicals including formaldehyde from wood products, emissions of carbon black from industrial sources, vapor intrusion of tetrachloroethylene, exposures to mercury from wallboard and concrete, exposures to flame retardants from various indoor sources, and odor issues from a composting facility.

PUBLICATIONS

2018

Cancer Risk Associated with Exposure to Bitumen and Bitumen Fumes: An Updated Systematic Review and Meta-Analysis.

Journal of Occupational and Environmental Medicine; 2018 Jan;60(1):e6-e54.

Authors: Mundt KA, Dell LD, Crawford L, Sax SN, Boffetta P

2018

Short-term ozone exposure and asthma severity: Weight-of-evidence analysis.

Environmental Research 2018 Jan;160:391-397.

Authors: Goodman JE, Zu K, Loftus CT, Lynch HN, Prueitt RL, Mohar I, Shubin SP, Sax SN.

2017

Particle size distributions of lead measured in battery manufacturing and secondary smelter facilities and implications in setting workplace lead exposure limits.

Journal of Occupational and Environmental Hygiene 2017 Aug;14(8):594-608.

Authors: Petito Boyce C, Sax SN, Cohen JM

2015

Are the Elements of the Proposed Ozone National Ambient Air Quality Standards Informed by the Best Available Science?

Regulatory Toxicology and Pharmacology 2015;72(1):134-140

Authors: Goodman JE, Sax SN, Lange SS, Rhomberg LR

2015

Providing Perspective for Interpreting Cardiovascular Mortality Risks Associated with Ozone Exposures.

Regulatory Toxicology and Pharmacology 2015;72(1):107-116.

Authors: Petito Boyce C, Goodman JE, Sax SN, Loftus CT

2015

Rethinking Meta-analysis: Applications for Air Pollution Data and Beyond.

Risk Analysis 2015;35(6):1017-1039.

Authors: Goodman JE, Petito Boyce C, Sax SN, Beyer LA, Prueitt RL

2015

Ozone Exposure and Systemic Biomarkers: Evaluation of Evidence for Adverse Cardiovascular Health Impacts.

Critical Reviews in Toxicology 2015;45(5):412-452.

Authors: Goodman JE, Prueitt RL, Sax SN, Pizzurro DM, Lynch HN, Zu K, Venditti FJ

2014

Weight-of-evidence Evaluation of Short-term Ozone Exposure and Cardiovascular Effects.

Critical Reviews in Toxicology 2014;44(9):725-790.

Authors: Goodman JE, Prueitt RL, Sax SN, Lynch HN, Zu K, Lemay JC, King JM, Venditti FJ

2014

The dubious benefits of further ozone reductions (Op-ed).

The Wall Street Journal May 11, 2014 at

<http://online.wsj.com/news/articles/SB10001424052702304178104579536120366671620?mg=reno64-wsj>

Authors: Goodman JE, Sax S

2014

Weight-of-evidence Evaluation of Long-term Ozone Exposure and Cardiovascular Effects.

Critical Reviews in Toxicology 2014;44(9):791-822.

Authors: Prueitt RL, Lynch HN, Zu K, Sax SN, Venditti FJ, Goodman JE.

2014

Letter to the editor Re: Long-Term Residential Exposure to Air Pollution and Lung Cancer Risk.

Epidemiology 2014;25(1):159.

Authors: Sax, SN, Goodman JE

2014

Evaluation of adverse human lung function effects in controlled ozone exposure studies.

Journal of Applied Toxicology 2014;34(5):516-24.

Authors: Goodman JE, Prueitt RL, Chandalia J, Sax SN

2013

Letter re: article, 'Controlled Exposure of Healthy Young Volunteers to Ozone Causes Cardiovascular Effects.'

Circulation 127(4):e432.

Authors: Goodman JE, Sax SN

2013

Evaluation of the causal framework used for setting national ambient air quality standards.

Critical Reviews in Toxicology 2013;43(10):829-49.

Authors: Goodman JE, Prueitt RL, Sax SN, Bailey LA, Rhomberg LR.

2013

Letter to the editor Re: Air pollution and lung cancer incidence in 17 European cohorts: Prospective analyses from the European Study of Cohorts for Air Pollution Effects (ESCAPE).

The Lancet Oncology 2013;14(11):e439-40.

Authors: Sax SN, Zu K, Goodman JE

2013

Letter re: Equivocal evidence for confounding effects of components of particulate matter on the relationship between ozone and mortality [Letter].

American Journal of Epidemiology 2013;177(12): 1460-1462.

Authors: Sax SN, Goodman JE

2012

Potential indoor air exposures and health risks from mercury off-gassing of coal combustion products (CCPs) used in building materials.

Coal Combustion and Gasification Products 2013;4:68-74.

Authors: Long CM, Sax SN, Lewis AS

2011

Particulate matter in new technology diesel exhaust (NTDE) is quantitatively and qualitatively very different from that found in traditional diesel exhaust (TDE).

Journal of the Air & Waste Management Association 2011;61(9):894-913.

Authors: Hesterberg TW, Long CM, Sax SN, Lapin CA, McClellan RO, Bunn WB, Valberg PA.

2011

Human health hazards of exposure to new technology diesel exhaust (NTDE).

Toxicologist - Supplement to Toxicological Sciences 2011;120(Suppl. 2).

Authors: Hesterberg TW, Long CM, Sax SN, Lapin CA, Bunn WB, Valberg PA, McClellan RO

2011

Non-chemical stressors and cumulative risk assessment: An overview of current initiatives and potential air pollutant interactions.

International Journal of Environmental Research and Public Health 2011;8(6):2020-2073.

Authors: Lewis AS, Sax SN, Wason SC, Campleman SL

2011

Risk characterization of the brominated flame retardant decabromodiphenyl ethane in indoor dust.

Toxicologist - Supplement to Toxicological Sciences 2011;120(Suppl. 2):271.

Authors: Dodge DG, Pollock MC, Sax SN, Petito Boyce C, Goodman JE

2010

Letter re: Xue et al. (2010) article addressing probabilistic modeling of dietary arsenic exposure and dose.

Environmental Health Perspectives 2010;118(8). E-pub ahead of print doi:10.1289/ehp.1002328.

Authors: Petito Boyce C, Lewis AS, Sax SN, Beck BD, Eldan M, Cohen SM

2009

Human exposure to decabromodiphenyl ether, tetrabromobisphenol A, and decabromodiphenyl ethane in indoor dust.

Journal of Environmental Protection Science 3:75-96

Authors: Petito Boyce C, Sax SN, Dodge DG, Pollock MC, Goodman JE

2009

Non-cancer health effects of diesel exhaust: A critical assessment of recent human and animal toxicological literature.

Critical Reviews in Toxicology 2009;39(3):195-227.

Authors: Hesterberg TW, Long CM, Bunn WB, Sax SN, Lapin CA, Valberg PA

2008

Measurement of particle concentrations in a dental office.

Environmental Monitoring and Assessment 2008;137(1-3):351-61.

Authors: Sotiriou M, Ferguson SF, Davey M, Wolfson JM, Demokritou P, Lawrence J, Sax SN, Koutrakis P.

2008

Probabilistic analysis of human health risks associated with background concentrations of inorganic arsenic: Use of a margin of exposure approach.

Human and Ecological Risk Assessment 2008;14:1159-1201. **Winner of the HERA Human Risk Assessment Paper of the Year Award in 2008.

Authors: Petito Boyce C, Lewis AS, Sax SN, Eldan ME, Cohen, SM, Beck BD

2007

Modeling time-location patterns of inner-city high school students in New York and Los Angeles using a longitudinal approach with generalized estimating equations.

Journal of Exposure Science & Environmental Epidemiology 2007;17(3):233-47.

Authors: Decastro BR, Sax SN, Chillrud SN, Kinney PL, Spengler JD.

2007

Trends in the elemental composition of fine particulate matter in Santiago, Chile, from 1998 to 2003.

Journal of the Air & Waste Management Association 2007;57(7):845-855.

Authors: Sax SN, Koutrakis P, Rudolph PA, Cereceda-Balic F, Gramsch E, Oyola P

2006

Integrating studies on carcinogenic risk of carbon black: Epidemiology, animal exposures, and mechanism of action.

Journal of Occupational and Environmental Medicine 2006;48(12):1291-1307.

Authors: Valberg P, Long CM, Sax SN

2006

A cancer health risk assessment of a cohort of inner-city teenagers in New York City and Los Angeles.

Environmental Health Perspectives 2006;114(10):1558-1566.

Authors: Sax SN, Bennett DH, Chillrud SN, Kinney P, Ross J, Spengler JD

2005

Steel dust in the New York City subway system as a source of manganese, chromium, and iron exposures for transit workers.

Journal of Urban Health 2005;82(1):33-42.

Authors: Chillrud SN, Grass D, Ross JM, Coulibaly D, Slavkovich V, Epstein D, Sax SN, Pederson D, Johnson D, Spengler JD, Kinney PL, Simpson HJ, Brandt-Rauf P.

2005

Analysis of PM10, PM2.5, and PM2.5-10 concentrations in Santiago, Chile, from 1989 to 2001.

Journal of the Air & Waste Management Association 2005;55(3):342-351.

Authors: Koutrakis P, Sax SN, Sarnat JA, Coull B, Demokritou P, Oyola P, Garcia J, Gramsch E

2004

Differences in source emission rates of volatile organic compounds in inner-city residences of New York City and Los Angeles.

Journal of Exposure Analysis and Environmental Epidemiology 2004;14 Suppl 1:S95-S109.

Authors: Sax SN, Bennett DH, Chillrud SN, Kinney PL, Spengler JD

2004

Elevated airborne exposures to manganese, chromium and iron from steel dust in New York City's subway system.

Environmental Science & Technology 2004 Feb;38(3):732-737.

Authors: Chillrud SN, Epstein D, Ross JM, Sax SN, Pederson D, Spengler JD, Kinney PL

2002

Exposures to multiple air toxics in New York City.

Environmental Health Perspectives 2002;110(Suppl. 4):539-546.

Authors: Kinney PL, Chillrud SN, (Sax) Ramstrom S, Ross J

OTHER ACTIVITIES

Technical peer reviewer for the following Journals:

Journal of the Air & Waste Management Association
Journal of Exposure Science and Environmental Epidemiology
Environmental Health Perspectives
Atmospheric Environment
Environmental Pollution

MEMBERSHIPS

Air & Waste Management Association (AWMA)
International Society of Exposure Science (ISES)
Society for Risk Analysis (SRA)
Society for Risk Analysis New England Chapter (SRA-NE)

JEAN GUO

Consultant

Jean Guo, a Consultant at Ramboll, is experienced in air quality modeling, climate change assessment, and health impact analysis. She has conducted air quality modeling studies using models including GEOS-Chem, CAMx, CMAQ, and HYSPLIT, and used the results to evaluate the sources and impacts of air pollutants. She also has experience working with observations from surface monitors including the IMPROVE and EPA AQS networks. She has a strong background in atmospheric chemistry, particularly in ozone and particulate matter pollution. Jean is proficient at programming languages including MATLAB, Python, and Linux, and has extensive experience in ArcGIS, BenMAP, and data analysis and visualization.



CAREER

2018-Present

Consultant

Ramboll (formerly Ramboll Environ)

2015-2018

Graduate Research Assistant

Columbia University, Earth and Environmental Sciences Department, New York, United States

2014

Researcher

NASA Student Airborne Research Program, Irvine, California, United States

2012-2015

Research Assistant

Columbia University, Earth and Environmental Sciences Department, New York, United States

EDUCATION

2017-2018

Master of Philosophy, Earth and Environmental Sciences (Atmospheric Science, Modern and Future Climate, Oceanography)

Columbia University, New York City, New York, United States

2015-2017

Master of Arts, Earth and Environmental Sciences (Atmospheric Science, Modern and Future Climate, Oceanography)

Columbia University, New York City, New York, United States

2011-2015

Bachelor of Arts, Environmental Sciences

Columbia University, New York City, New York, United States

CONTACT INFORMATION

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Ramboll

7250 Redwood Blvd

Suite 105

Novato, CA 94945

United States of America

SELECTED PROJECTS**Health Impact Analyses**

- Compared the health impacts of various electrification scenarios on human health and converted the impacts to dollar estimates.
- Ran health impact analyses to compare the health effects of criteria air pollutants under various developments as per the requirements of the California Environmental Quality Act (CEQA).
- Visualized the various health impacts of proposed projects on disadvantaged communities.

Climate Change

- Contributed to Environmental Impact Statements for various projects, analyzing the effect of the proposed project on the affected environment and climate.
- Analyzed the future projected impacts of natural hazards such as flooding, wild fires, extreme heat, and water stress on various properties.
- Prepared reports to guide property owners and buyers on the potential risks to their properties from future climate change.

Air Quality Modeling

- Modeled the impact of various pollutants on select regions and quantified the source contributions from different sectors.
- Tracked the source of pollution by activity sector and geographic location to determine the impact of each sector on specific regions.
- Determined the source contributions to criteria pollutants during days with bad air quality to determine the drivers of non-attainment days in various parts of the U.S.

PUBLICATIONS

Guo, J. J., Fiore, A. M., Murray, L. T., Jaffe, D. A., Schnell, J. L., Moore, T., and Milly, G.: Average versus high surface ozone levels over the continental U.S.A.: Model bias, background influences, and interannual variability, *Atmos. Chem. Phys.*, <https://doi.org/10.5194/acp-2018-115>, **2018**.

Young PJ, Naik V, Fiore AM, Gaudel A, **Guo J**, Lin MY, et al. Tropospheric Ozone Assessment Report: Assessment of global-scale model performance for global and regional ozone distributions, variability, and trends. *Elem Sci Anth.* **2018**; 6(1):10. DOI: <http://doi.org/10.1525/elementa.265>

Guo, J.J.: Interannual Variability in Background Tropospheric O₃ in the U.S.A., **2017**. Abstract.

Guo, J.J.: Seasonal and Regional Variability in the Relationship between Ground-Level Ozone (O₃) and Fine Particulate Matter (PM_{2.5}) in the United States, **2015**. Abstract.

TAYLOR A VENCILL

Senior Managing Consultant

Taylor Vencill is a Senior Managing Consultant in the Air Sciences Practice, currently located in the San Francisco, California office. Taylor's experience includes emissions estimation, air dispersion modeling, permitting, regulatory compliance, and greenhouse gas (GHG) emissions analyses and verifications. She has contributed to climate action plan development, climate change technical reports, environmental impact reports (EIRs), permit applications, health risk assessments (HRAs), and litigation support. Taylor's analytical skills include emissions inventories, air dispersion modeling, and data analysis using Microsoft Excel, Microsoft Access, and Geographic Information Systems (GIS). She has experience with a variety of emissions estimation and air dispersion modeling software including CalEEMod, EMFAC, OFFROAD, AERMOD, CAL3QHCR, and HARP. Taylor is a Registered Professional Engineer (Chemical) in California and a California Air Resources Board-Accredited GHG Lead Verifier with Specialty in Oil & Gas and Process Emissions (Executive Order H-18-159).



CONTACT INFORMATION

Taylor A Vencill

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Ramboll
201 California Street
Suite 1200
San Francisco, 94111
United States of America

EDUCATION

MS, Civil and Environmental Engineering, Stanford University, 2014
BS, Chemical Engineering, Cornell University, 2009

EXPERIENCE HIGHLIGHTS

CEQA

- Contributed to and managed GHG, air quality, and energy analyses for various developments under the California Environmental Quality Act (CEQA).
- Prepared GHG, air quality, and energy technical reports in support of EIRs for various types of development.
- Developed inventories for all aspects of developments including construction, energy use of buildings, mobile sources, area sources, municipal sources and vegetation change.
- Used the California Emissions Estimator Model (CalEEMod), the Emission Factor Model (EMFAC), OFFROAD2007 and the In-Use Off-Road Equipment Model (2010 and 2011), and the Urban Emission Model (URBEMIS) to evaluate construction, area, and mobile emission inventories.

Climate Change

- For various projects, have evaluated and presented mitigation options and potential offsets, showing potential GHG reductions and related costs of implementation.
- Evaluated the significance of development emissions in relation to established thresholds.
- Led the development of baseline and future GHG inventories for the Port of San Diego in support of their climate action plan (CAP). Incorporated the effect of California regulations on future emissions.
 - Following the CAP development, helped evaluate the Port's progress towards meeting the CAP goals and assisted the Port in implementation efforts.
- Provided technical analyses for several GHG verifications under the California Air Resources Board (ARB) Mandatory Reporting Regulation. Verifications have included a poultry processing facility (general stationary combustion source), a transportation fuel supplier, an electricity importer, and an underground natural gas storage facility. Served as Lead Verifier on a set-aside verification from Reporting Year 2014 for an onshore petroleum and natural gas production facility.

Emissions Estimation

- Assisted with the development of emissions inventories for various industrial sites for litigation support, permit applications and permit compliance.
- Specifically assisted in preparing emissions inventories for complex industrial facilities in support of an initial Title V application as well as Title V Renewal applications.
- Managed development of a Facility-wide emissions inventory for a California refinery.
- Assisted in historical emissions estimations and emission source identification for litigation support. Included extensive review of historical documents.
- Assisted in development of emissions inventories for proposed modifications to industrial facilities.
 - Related permitting efforts included New Source Review (NSR), Prevention of Significant Deterioration (PSD) and Title V applicability analyses.
 - Used Hotspots Analysis and Reporting Program (HARP) to manage the facilities' emissions and assess the facilities' prioritization score.

Air Dispersion Modeling

- Conducted AERMOD, ISCST3, CAL3QHCR and SCREEN3 dispersion modeling for HRAs, permit applications and regulatory compliance.
- Performed the following tasks in relation to air dispersion modeling:
 - Meteorological data processing
 - Surface parameter analysis
 - Model and receptor setup using GIS tools
 - Post-processing of model results to analyze the magnitude and location of potential risks
- Performed reconciliation of air dispersion modeling and offsite monitoring results to determine source strengths of potential fugitive emission sources.
- Managed large-scale air dispersion modelling for traffic and maritime impacts (city-wide scale), to determine PM_{2.5} and health risk impacts.

Specialized Modeling

- Used Automated Data Inquiry for Oil Spills (ADIOS2) in support of litigation.

Regulatory Compliance

- Assisted a Class I Hazardous Waste Treatment, Storage, and Disposal Facility (TSDF) with air permit compliance, including an ambient air monitoring program (AAMP) and annual health risk evaluation (HRE).
- Conducted performance audits to evaluate the organic and inorganic sampling procedures, on-site meteorological station, spike test analyses and calibration procedures.
- Conducted onsite compliance assistance for a biotechnology company, including tracking for continual air permit compliance and the development of related tools to assist in the tracking efforts.
- Assisted industrial clients with their annual Toxics Release Inventory (TRI) reporting requirements, including applicability determinations and release quantifications.
- Assisted various clients with the ARB In-Use Off-Road Diesel-Fueled Fleets Regulation and LSI Fleet Requirements Regulation, including navigation through the regulations, evaluation of current and future fleet compliance to assist in purchasing and retrofit decisions, and assistance with the Diesel Off-Road Online Reporting System (DOORS).
 - Attended four related ARB training classes: Course #504 – In-Use Off-Road Diesel Vehicle Regulation Training, Course #505 – Large Spark-Ignition Fleet Regulation, Course #520 – How to Comply with CARB Diesel Regulations, Course #521.8 – Diesel Truck Regulation Compliance Course
- Project manager for the preparation of an Air Toxics Hot Spots Information and Assessment Act (AB 2588) HRA for an industrial client, using HARP to assess potential inhalation and multipathway health risk impacts.
- Assisted an industrial facility with evaluation of impact areas and preparation of warnings under Proposition 65.

Prior to joining Ramboll, Taylor held the following positions:

- Intern, Rhodia Inc, Martinez, California
 - Used Ultrapipe software to analyze pipe measurements for effects of corrosion, oversaw several maintenance routines while shadowing a process engineer, and was present for the two-week plant shutdown when various inspections took place.
- Intern, ENVIRON, Emeryville, California
 - Assisted in preparing a Title V Renewal Application, developing carbon footprint analyses and emission inventories, and preparing technical memos, inventory management plans, and technical reports.

CREDENTIALS

Registrations and Certifications

California Air Resources Board-Accredited Greenhouse Gas (GHG) Lead Verifier with Specialty in Oil & Gas and Process Emissions (Executive Order H-18-159)

Registered Professional Engineer (Chemical), California

B.5 Friant Ranch Interim Recommendation

Background

The California Supreme Court in the case of *Sierra Club v. County of Fresno* (2018) 6 Cal. 5th 502 regarding the proposed Friant Ranch project determined the air quality analysis in the environmental impact report (EIR) was inadequate because it did not make “a reasonable effort to substantively connect the project’s air quality impacts to likely health consequences.” The Court determined that “the EIR should be revised to relate the expected adverse air quality impacts to likely health consequences or explain in meaningful detail why it is not feasible at the time of drafting to provide such an analysis.”

Need

Lead agencies and practitioners preparing documents to comply with the California Environmental Quality Act (CEQA) have requested guidance from the Sacramento Metropolitan Air Quality Management District (Sac Metro Air District) on implementing the Friant Ranch decision in the review and analysis of proposed projects in Sacramento County.

Interim Recommendation

The Sac Metro Air District does not currently have a methodology that would correlate the expected air quality emissions of projects to the likely health consequences of the increased emissions. The Sac Metro Air District is in the process of developing a methodology to assess these impacts, and anticipates releasing it in the fall of 2019. In the interim, agencies should follow the Friant Court’s advice to explain in meaningful detail why this analysis is not yet feasible.

This explanation should describe the background underlying air regulations, the regional nature of the regulatory approach, and why the approach is not amenable to project level assessments. This should include a discussion of the public health impact analyses that form the basis for the state and federal health-based pollutant concentration standards, and the application of the standards to regions that were established based upon a commonality of factors impacting air quality. Air districts, in turn, have focused on reducing regional emissions from all sectors to meet the health-based concentration standards, thereby reducing the pollutant specific health impacts for the entire population. For example, the Sac Metro Air District prepared plans to attain and maintain the ozone and particulate matter ambient air quality standards. These attainment plans include emissions inventories, air monitoring data, control measures, modeling, future pollutant-level estimates, and general health information. Attainment planning models rely on regional inputs to determine ozone and particulate matter formation and concentrations in a regional context, not a project specific context. Because of the complexity of ozone formation, the pounds or tons of emissions from a proposed project in a specific geographical location does not equate to a specific concentration of ozone formation in a given area, because in addition to emission levels, ozone formation is affected by atmospheric chemistry, geography, and weather. Secondary formation of particulate matter is very similar to the complexity of ozone formation, and localized impacts of directly emitted particulate matter do not always equate to local particulate matter concentrations due to transport of emissions. The analysis should explain that because air district attainment plans and supporting air model tools are regional in nature, they do not allow for analysis of the health impacts of specific projects on any given geographic location. More information is included in the threshold justification documents developed by the Sac Metro Air District, and available at our website at www.airquality.org.

The analysis should also discuss the current models¹ used in CEQA in air quality analyses, which, in contrast to attainment models, are designed to calculate and disclose the mass emissions expected from the construction and operation of a proposed project (pounds/day and tons/year). The estimated emissions are then compared to significance thresholds, which are in turn keyed to reducing emissions to levels that will not interfere with the region’s ability to attain the health-based standards. The Sac Metro Air District adopted operational emission thresholds for ozone precursors, nitrogen oxides (NOx) and reactive organic gasses (ROG), with the goal of obtaining 0.45 tons/year of NOx and 0.49 tons/year of ROG reductions from new

development projects exceeding the thresholds by including emission reducing design features as mitigation.ⁱⁱ More recently, the Sac Metro Air District adopted particulate matter thresholds, PM10 and PM2.5, to align with the new source review permit offset levels, which are designed to prevent new emission sources from affecting attainment progress.ⁱⁱⁱ Sac Metro Air District thresholds are set at 65 pounds/day NOx (11.8 tons/year), 65 pounds/day ROG (11.8 tons/year), 80 pounds/day PM10 (14.6 tons/year), and 82 pounds/day PM2.5 (15 tons/year).^{iv} CEQA thresholds are a tool Sac Metro Air District uses to obtain emission reductions from development projects to support attainment of the Federal and State ambient air quality standards. This protects public health in the overall region, but there is currently no methodology to determine the impact of emissions on concentration levels in specific geographic areas.

The CEQA analysis should consider the degree to which various other tools, such as CalEEMod, EMFAC, OFFROAD, AERMOD, and HARP and CAMx, could assist in assessing specific health impacts of a project, and, where those tools would not be useful, explain why. For example, while CalEEMod may be useful in comparing emissions to significance thresholds, it is not able to assess transport of pollutants or the impacts of external factors (weather, terrain, etc.) on pollutant concentrations at particular locations.

In Sacramento, concentration modeling of ozone has not been an analytical tool used for project level emissions due to the complex nature of pollution concentration formation and numerous regional influences (multiple emission sources, meteorology, atmospheric chemistry and geography). Although some particulate matter concentration modeling has been conducted for project specific emissions for stationary source permitting purposes, concentration modeling has mainly been used to support ozone attainment demonstration.

Outside of these tools, neither the Sac Metro Air District nor any other air district currently have methodologies that would provide Lead Agencies and CEQA practitioners with a consistent, reliable, and meaningful analysis to correlate specific health impacts that may result from a proposed project's mass emissions.

An expanded discussion of health impacts resulting from specific air pollutants may also be warranted for projects with emissions exceeding the Sac Metro Air District's thresholds of significance. There is an array of information on health impacts related to exposure to ozone^v and particulate matter^{vi} emissions published by the US EPA and the California Air Resources Board. Health studies are used by these agencies to set the Federal and State ambient air quality standards. A more general discussion of health impacts related to air pollution is also available on www.sparetheair.com and in the Sac Metro Air District's *Guide to Air Quality Assessment in Sacramento County*.^{vii} None of the health-related information can be directly correlated to the pounds/day or tons/year of emissions estimated from a single, proposed project.

Developing Guidance

The interim recommendation is in place to assist lead agencies and practitioners with CEQA document preparation until Sac Metro Air District develops a methodology that provides a consistent, reliable and meaningful analysis to address the Court's direction on correlating health impacts to a project's emissions.

Sac Metro Air District staff have initiated discussions with the other air district's in the Sacramento Federal Ozone Nonattainment area regarding developing guidance in response to Friant Ranch since we share air quality issues and use the same growth assumptions, mobile source emissions, and modeling efforts to support our ozone and particulate matter attainment plans.

One potentially useful tool in developing a methodology is the US EPA's BenMap tool^{viii}. According to US EPA's website, BenMap is an "open-source computer program that calculates the number and economic value of air pollution-related deaths and illnesses. The software incorporates a database that includes many of the concentration-response relationships, population files, and health and economic data needed to quantify these impacts." BenMap may be able to provide the detailed health information needed for the guidance under development.

Sac Metro Air District is working with its engineering and environmental technical support consultant, Ramboll USA Corporation, to develop a methodology that will provide a consistent, reliable, efficient, and meaningful analysis that correlates health impacts from proposed projects' emissions for the Sacramento region. The current strategy will analyze how various levels of emissions (the CEQA tonnage estimates) impact attainment pollutant concentration levels, and use BenMap to correlate increases in concentration levels to health impacts. Once a methodology is available, Sac Metro Air District staff will inform interested stakeholders and provide updated guidance in this document and in its *Guide to Air Quality Assessment in Sacramento County*.

Contact Information

Lead agencies and CEQA practitioners may contact Mr. Paul Philley, CEQA and Land Use Section Program Supervisor at 916-874-4882 or pphilley@airquality.org regarding Sac Metro Air District's recommendations.

ⁱ CalEEMod, Road Construction Emissions Model, EMFAC, OFFROAD

ⁱⁱ Foundation for a Threshold, Justification for Air Quality Thresholds of Significance In the Sacramento Federal Nonattainment Area, August 15, 2001, Adopted March 28, 2002.

ⁱⁱⁱ Proposed Particulate Matter CEQA Thresholds of Significance, March 19, 2015, Adopted May 28, 2015.

^{iv} Sac Metro Air District, Guide to Air Quality Assessment in Sacramento County, December 2009 (latest update September 2018), Chapter 2, Thresholds of Significance table. <http://www.airquality.org/LandUseTransportation/Documents/CH2ThresholdsTable5-2015.pdf>

^v <https://www.epa.gov/ozone-pollution-and-your-patients-health/health-effects-ozone-general-population>

^{vi} <https://www.arb.ca.gov/research/health/pm-mort/PMmortalityreportFINALR10-24-08.pdf>

^{vii} Sac Metro Air District, Guide to Air Quality Assessment in Sacramento County, December 2009 (latest update September 2018), Chapter 1. <http://www.airquality.org/LandUseTransportation/Documents/Ch1IntroAq%20FINAL12-2016.pdf>

^{viii} <https://www.epa.gov/benmap>

Appendix C. Biological Resources

C.1 Vernal Pool Branchiopods Study

November 20, 2012

6987-01

Recovery Permit Coordinator
U. S. Fish and Wildlife Service
6010 Hidden Valley Road
Carlsbad, California 92008

Subject: Results of Focused Dry Season Presence/Absence Survey for Vernal Pool Branchiopods on the California State University, Dominguez Hills Campus, Los Angeles County, California

Dear Recovery Permit Coordinator:

A dry season presence/absence survey for vernal pool branchiopods was conducted on the California State University, Dominguez Hills Campus, located within the urbanized City of Carson, Los Angeles, California. The soil collection for the survey and evaluation of cysts was conducted by biologist Brock A. Ortega (permit number TE-813545) on October 21, 2011. The survey focused on the determination of the presence/absence of two federally-listed endangered vernal pool branchiopod species: Riverside fairy shrimp (*Streptocephalus woottoni*) and San Diego fairy shrimp (*Branchinecta sandiegonensis*) according to the April 19, 1996 *Interim Survey Guidelines to Permittees for Recovery Permits* under Section 10(a)(1)(A) of the Endangered Species Act for the Listed Vernal Pool Branchiopods (USFWS 1996). The survey consisted of the dry season sampling survey of one vernal pool and attempt at a wet season survey. Branchiopod cysts were detected in the pool.

Project Location and Existing Conditions

The investigation was performed on a portion of the California State University, Dominguez Hills (CSUDH) campus located in Los Angeles County, California (*Figure 1*). The approximately 343-acre CSUDH campus is located east of Alameda Street, west of Highway 710, north of Highway 405, and south of Highway 91. The campus can be found on the U.S. Geological Survey (USGS) 7.5-minute Torrance, California quadrangle map, in Section 32, T. 3 S., R. 13 W. The CSUDH Facilities Planning and Construction Management Division is in the process of determining how to proceed with an infill portion (*study area*) of the campus between Lot 3 and Lot 6, east of the existing Extended Education building (*Figure 2*). An approximately 50-foot by 50-foot man-made depression occurs within the 0.59-acre study area that periodically retains surface water during higher-than-normal rainfall years. The Universal Transverse Mercator coordinates corresponding to the approximate center of the study area are 383,618.82mE and 3,747,936.74mN.

Recovery Permit Coordinator

Subject: Results of Focused Dry Season Presence/Absence Survey for Vernal Pool Branchiopods on the California State University, Dominguez Hills Campus, Los Angeles County, California

Currently the study area exists in a disturbed condition as a result of previous grading and stockpiling activities associated with campus improvements and the adjacent Home Depot Center projects. The study area is characterized as a disturbed community dominated by ruderal vegetation. Land surrounding the ruderal area is either devoid of vegetation or developed. A majority of the study area occurs within a slight topographic depression. Local storm flow from the adjacent campus is transported under Toro Center Drive via a concrete culvert and continues in a westerly direction to the study area. Soil material has been placed on either side of the small storm drain to the north and south. As a result, the seasonal storm flow appears as a well-defined channel.

Elevations range from approximately 90 feet above mean sea level (AMSL) in the eastern channel inlet to 85 feet AMSL in the center of the depression. The campus itself is situated within a densely urbanized setting.

Vernal Pool Description

The approximate 50-foot by 50-foot depressional area included soil cracking where visible through the moderate vegetative cover. Vegetation that covers the sides and bottom of the depression include red-stem filaree (*Erodium cicutarium*), knotweed (*Polygonum arenastrum*), crabgrass (*Digitaria sanguinalis*), English plantain (*Plantago lanceolata*), cheeseweed (*Malva parciflora*), mustard (*Brassica* sp.), pigweed (*Amaranthus* sp.), curly doc (*Rumex crispus*), nut sedge (*Cyperus* sp.), and willow-herb (*Epilobum* sp.), pine (*Pinus* sp.), and eucalyptus (*Eucalyptus* sp.). The depression itself (Figure 3) is roughly oval in shape and appears to be approximately 10 to 31 cm deep if it were capable of holding water for extended periods.

Previous Studies and Historical Context

Prior to 1960, the land where the depression occurs was purchased for development of the CSUDH campus. The study area at that time, did not retain water and were well drained. In 1969 the study area was part of a tree nursery (the likely origin of the pine trees and eucalyptus tree within the study area) and was rough graded. In 1972 campus development occurred adjacent to the study area and as a result, the current depression was created. Between 1982 and 2004 various improvements and construction activities occurred on and around the study area. In 2004, additional soils were deposited in the area as a result of soils imports for the X Games.

Recovery Permit Coordinator

Subject: Results of Focused Dry Season Presence/Absence Survey for Vernal Pool Branchiopods on the California State University, Dominguez Hills Campus, Los Angeles County, California

During the 2004/2005 wet season, there was above normal precipitation and the study area filled with water twice. During the first period, there was an unconfirmed identification of fairy shrimp within the depression. As a result, the school roped off the study area until more was known.

During the 2005/2006 wet season, an attempt was made to perform a protocol-level wet-season survey by PCR. Unfortunately, the depression did not fill with water so no survey could be performed. Later that year, PCR performed a protocol-level dry-season survey, identifying five *Branchinecta* cysts. These were hydrated, but did not grow after a two-month grow period. PCR made a request to the U.S. Fish and Wildlife Service (USFWS) to perform 2006/2007 surveys and to artificially hydrate the depression if conditions were not suitable, but never received authorization and the project was put on hold.

In January 2011, Dudek was requested to perform the same services in an attempt to finally identify the species of fairy shrimp which was present. Dudek attempted to perform a wet-season survey during the remainder of the 2010/2011 wet-season, but water never satisfied the pooling criteria for initiating wet-season surveys. Therefore Dudek collected dry-soil samples in late October 2011, and held them in dry storage until after the 2011/2012 wet-season (Notification letter sent on July 30, 2011). During the 2011/2012 wet-season, no pooling of water occurred that satisfied criteria and analysis of the soil samples commenced.

Methods

Dry season sampling for the vernal pool branchiopods was conducted on the project area on October 21, 2011 by Dudek biologist Brock Ortega (federal permit number TE-813545) and were analyzed for cysts, then hydrated from March through late August. One pool (Depression 1) was sampled within the CSUDH study area. The survey was conducted following the currently accepted protocol of the USFWS. Ten soil samples, approximately 100mL each, were collected from Depression 1. Soil samples were collected as intact clumps from the deepest portions of the depression. Samples were taken from locations scattered within the depression as indicated in Figure 3.

Each soil sample was placed in a zip-lock bag, labeled with the locality number, and held in dry-storage within an enclosed and climate-controlled closet until it was determined that analysis was necessary. Samples were identified according to the numbers assigned to them in the field, which were recorded on a base map (*Figure 3*).

Soil samples were prepared for examination in the laboratory by dissolving the clumps of soil in water and sequentially sieving the material through 500-, 300-, and 150-micron pore size bronze screens. The small size of these screens ensures that the eggs from the fairy shrimp species will

Recovery Permit Coordinator

Subject: Results of Focused Dry Season Presence/Absence Survey for Vernal Pool Branchiopods on the California State University, Dominguez Hills Campus, Los Angeles County, California

be retained. The portion of each sample retained in the screens was rinsed with a dissolved brine solution to separate the organic material from the inorganic material, and water was removed through filter paper by vacuum suction. The organic fraction was then examined under a 6.3-570x power Olympus SZX9 Zoom Stereo Microscope. If fairy shrimp cysts were observed, they were counted for each sample. In addition, the washed soil and organic material was retained.

Following cyst identification, all of the filter paper holdings from each screen size (500, 300, 150), for each sample (1 through 10), were placed into individual 48-ounce plastic containers for hydration. Each filter paper was submerged in deionized and dechlorinated water and monitored. Each sample was kept in a controlled climate lab with regularly cycled UV florescent lighting intended to mimic typical southern California winter lighting (i.e., approximately 10 hours per day).

The samples were maintained from mid-February through late April with no success. The samples were allowed to dry for a period of two weeks, then hydrated again and maintained until early July with no success. At that time it was decided to combine the dried material from the filter sheets, previously rinsed soil, organic debris, and the contents of two back-up soil samples which were collected during the initial October 2011 sampling. These were placed into a plastic tub in an outdoor facility, hydrated and left in place. Within two weeks, approximately 12 fairy shrimp had emerged. These were protected and allowed to grow and were finally analyzed once they had attained sexual maturity.

Photographs of the pools are provided in Figure 4. The Vernal Pool Data Sheet Dry Season Survey forms are included in Appendix A.

Results and Discussion

Of the 12 fairy shrimps that were eventually hydrated, ten reached sexual maturity and were identified as the non-sensitive versatile fairy shrimp (*Branchinecta lindahli*). No special-status shrimp were hydrated from any of the soil samples evaluated from the CSUDH depression.

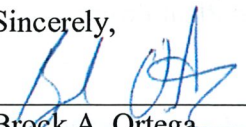
A final wet-season survey has not been conducted due to a lack of suitable conditions, but given the urban nature of the location, lack of historical pools, history of the site, manufactured depression, import of other soils, historically poor ponding characteristics, and dry-season identification of the non-listed versatile fairy shrimp, we believe that no further wet-season studies should be necessary.

Recovery Permit Coordinator

*Subject: Results of Focused Dry Season Presence/Absence Survey for Vernal Pool
Branchiopods on the California State University, Dominguez Hills Campus, Los
Angeles County, California*

Please feel free to call me at 760.479.4254 or email me at bortega@dudek.com if you have any questions regarding the contents of this letter.

Sincerely,



Brock A. Ortega
Senior Wildlife Biologist
Permit Number TE-813545

*Att: Figures 1-4
Appendix A*

*cc: Nathaniel Dotti, CSU Dominguez Hills
Brian Grover, Dudek*

Recovery Permit Coordinator

Subject: Results of Focused Dry Season Presence/Absence Survey for Vernal Pool Branchiopods on the California State University, Dominguez Hills Campus, Los Angeles County, California

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- Dudek and Associates. 2005. Wet Season Presence/Absence Survey for Vernal Pool Branchiopods for the Otay Ranch Village Three, City of Chula Vista, California. Prepared for Otay Ranch Company.
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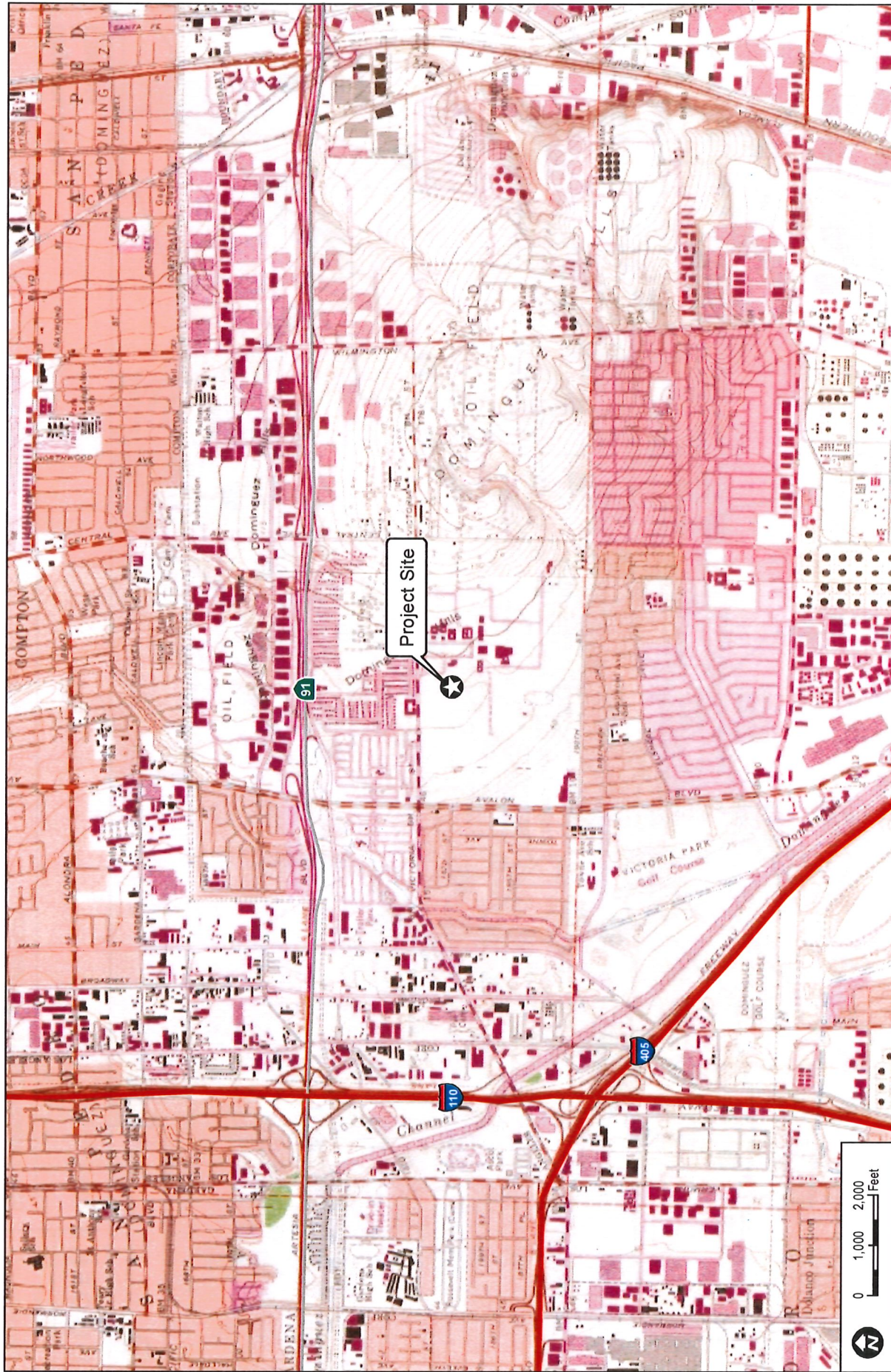


FIGURE 2
Vicinity Map

SOURCE: SanGIS 2012, USGS Topo

CSU DOMINGUEZ HILLS POOL PROJECT

DUDEK

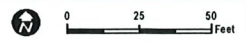
6987

NOVEMBER 2012



Soil Samples Location

- EW
- NS
- Transects
- ▭ Study Area



DUDEK

SOURCE: ERM3 2012

6987
NOVEMBER 2012

CSU Dominguez Hills Pool Project

FIGURE 3
Study Area Map



Photo 1: View to Northwest



Photo 2: View to Southwest



Photo 3: View to Southeast



Photo 4: View to Northeast



Panoramic View

APPENDIX A

Vernal Pool Data Sheet Dry Season Survey

U.S. Fish and Wildlife Service Vernal Pool Data Sheet Dry Season Survey

Note: Please fill out the required information completely for each site visit.

This form is being submitted to serve as part of the 90-day report: _____ no yes

Required color slides and/or photographs for the project site are included: _____ no yes

Date: 10 / 21 / 2011 Time: 1000-1100 County: Los Angeles Quad: Torrance

Collector(s): Brock A. Ortega Permit #: TE 813 545

Site/Project Name: CSU Dominguez Hills Pool #: TE 813 545 #1

Township: 03S Range: 13W Section: 32 33.685261^N lat. -118.258242^W long.

Habitat Condition: (circle where appropriate)

- undisturbed disturbed tire tracks garbage discing/plowing
- ungrazed grazed: cattle horses sheep other non-native trees, dense weeds,
light moderate heavy historical grading
- land use of habitat:

Pool Bottom Surface: (circle where appropriate)

hardpan claypan cobbly/rocky lava flow other fill soils

Pool Depth: 31 cm (estimated maximum) Surface Area: 520 m² (estimated maximum)

Sketch of pool and transects showing:

- scale
- indication of North
- sampling locations

U.S Fish and Wildlife Service Vernal Pool Data Sheet
Dry Season Survey
Soil Analysis

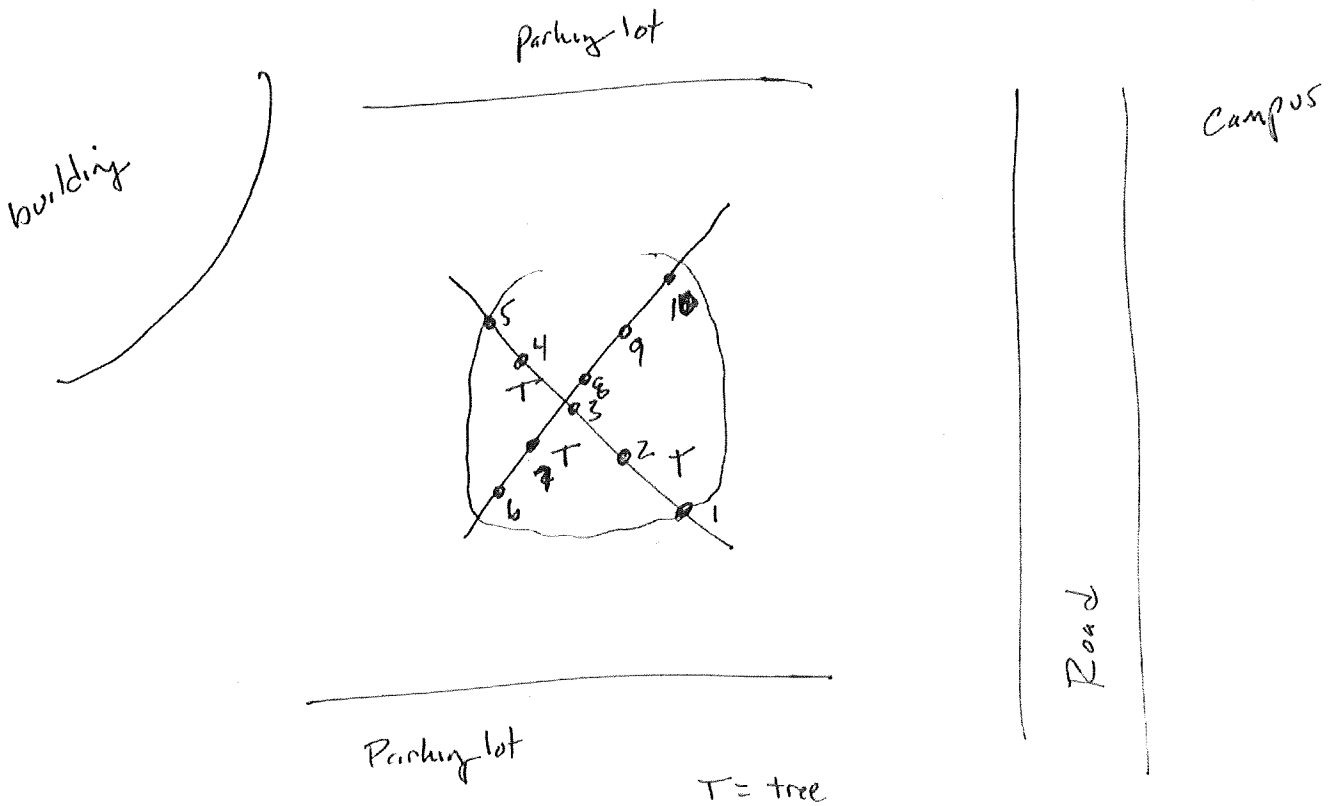
Note: Please fill out the required information completely for each site visit.

Sample ID	Sample Volume(ml)	Genus (/species)	# Cysts (or None)	Cyst Density (#/100ml)
1 (1EW)	100 ml	Branchinecta	20	20/
2 (2EW)	100 ml	Branchinecta	50	50/
3 (3EW)	100 ml	Branchinecta	10	10/
4 (4EW)	100 ml	—	—	—
5 (5EW)	100 ml	Branchinecta	12	12/
6 (1NS)	100 ml	Branchinecta	15	15/
7 (2NS)	100 ml	—	—	—
8 (3EW)	100 ml	Branchinecta	50	50/
9 (3NS)	100 ml	Branchinecta	36	36/
10 (4NS)	100 ml	Branchinecta	5	5/

Voucher Specimens

Cysts shall be stored dry and shall be preserved according to the standards of the institution in which they will be accessioned.

Genus (/species) # Cysts Catalog/Accession # Pool #



C.2 Jurisdictional Delineation Report

CAL
STATE

CALIFORNIA STATE
UNIVERSITY DOMINGUEZ
HILLS MASTER PLAN
UPDATE PRELIMINARY
WETLAND / WATERS
DELINEATION AND
ASSESSMENT

October 2017

**California State University Dominguez Hills
Master Plan Update
Preliminary Wetland / Waters Delineation and Assessment
Carson, Los Angeles County, California**

Prepared for:

WSP USA
444 South Flower Street, Ste 800
Los Angeles, CA 90071

Prepared by:

Matthew Schaap

October 2017

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1 INTRODUCTION

1.1 Scope

This report serves as a preliminary wetland delineation and assessment that summarizes existing hydrology, soil, and vegetative conditions for the California State University Dominguez Hills (CSUDH) Master Plan Update Project (project) in Carson, Los Angeles County, California (refer to Figures 1 and 2). This report was prepared at the request of WSP USA, and it is intended for use by CSUDH, and other regulatory agencies. The area studied (i.e., delineation area) for this report includes the drainages and retention basins located south of Pacific View Drive near the facilities services building, and adjacent to the Extended Education Center west of Toro Center Drive.

A formal jurisdictional delineation was conducted to delineate the extent of wetlands and waters of the United States, as defined by the United States Army Corps of Engineers (USACE), and waters of the State, as defined by the Regional Water Quality Control Board (RWQCB) and California Department of Fish and Wildlife (CDFW). Findings reported herein are based on information gathered during the field investigation and the investigator's understanding of the *U.S. Army Corps of Engineers Wetland Delineation Manual* (USACE 1987), the *Final Regional Supplement to the Corps of Engineers Wetland Delineation Manual Arid West Region (Version 2.0)* (USACE 2010), *A Field Guide to the Identification of the Ordinary High Water Mark in the Arid West Region of the Western United States* (USACE 2008a), and federal and state guidelines for identification of wetlands and water features. This report is subject to review by the affected agencies and should be submitted to USACE, RWQCB, and CDFW for verification during the permitting phase of the project.

1.2 Project Location

The project is located on the CSUDH campus within the city of Carson, Los Angeles County, California, approximately 0.6 to 1.0 mile south of California State Route 91 and approximately 1.5 to 2.0 miles east of Interstate 110 (Figure 1). The site is relatively flat and ranges from 57 to 115 feet above sea level over approximately 2,000 linear feet, draining in a general southwest direction. The project is divided into two separate locations on the campus: the northern site and the southern site. The northern site is located approximately 40 to 260 feet west of Toro Center Drive, in an open field with two mature Canary Island pines (*Pinus canariensis*) and paved parking lots to the north and south (Figures 2 and 3). The northern project site is located in Section 32, Township 3 South, Range 13 West. The center point decimal coordinates of the northern project site are 33.865248°, -118.258229°.

The southern site is located immediately north of East University Drive and west of Central Avenue, and is surrounded by a mosaic of open fields and developed lots (Figures 2 and 3). The southern project site is located in Section 33, Township 3 South, Range 13 West. The center point decimal coordinates of the southern project site are 33.859263°, -118.252274°.

1.3 Project Description

CSUDH is in the process of updating the campus Facilities Master Plan, a strategy for modifying the physical campus to accommodate the growth and changes the campus is expected to experience over the next fifteen to twenty years. The scope of the Master Plan embraces five specific areas of concern on the Core Campus: renewal of academic and administrative facilities; increasing housing for students, and providing housing opportunities for faculty and staff; expanding student life and campus life facilities; making functional modifications to the campus; and adjustments to campus infrastructure. In addition, the 2018 Master Plan addresses the development of the University Village on the east of the campus as a mixed-use development incorporating market-rate housing facilities, retail development, parking, open space areas and business park development.

Figure 2. Project Location Map

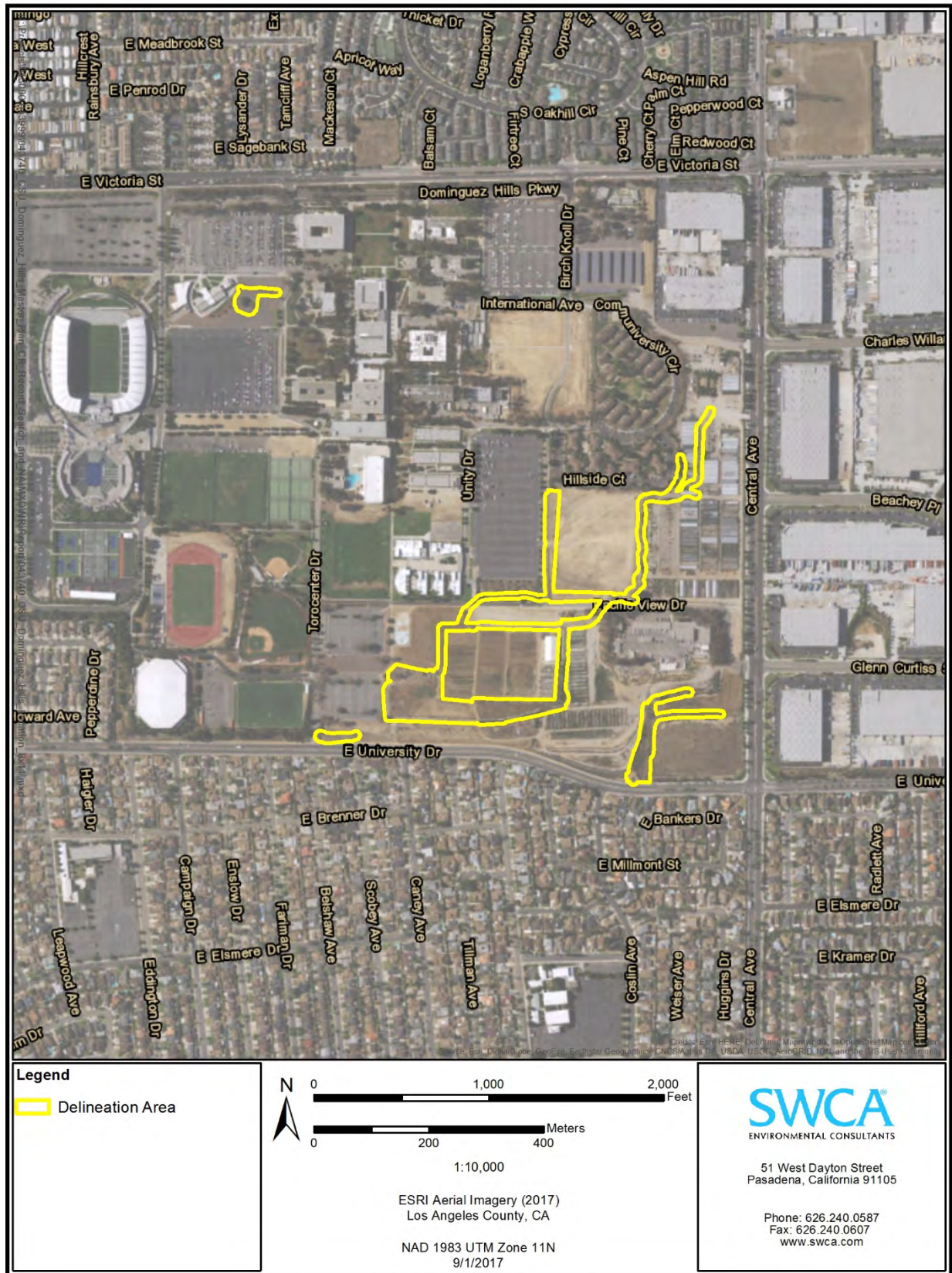
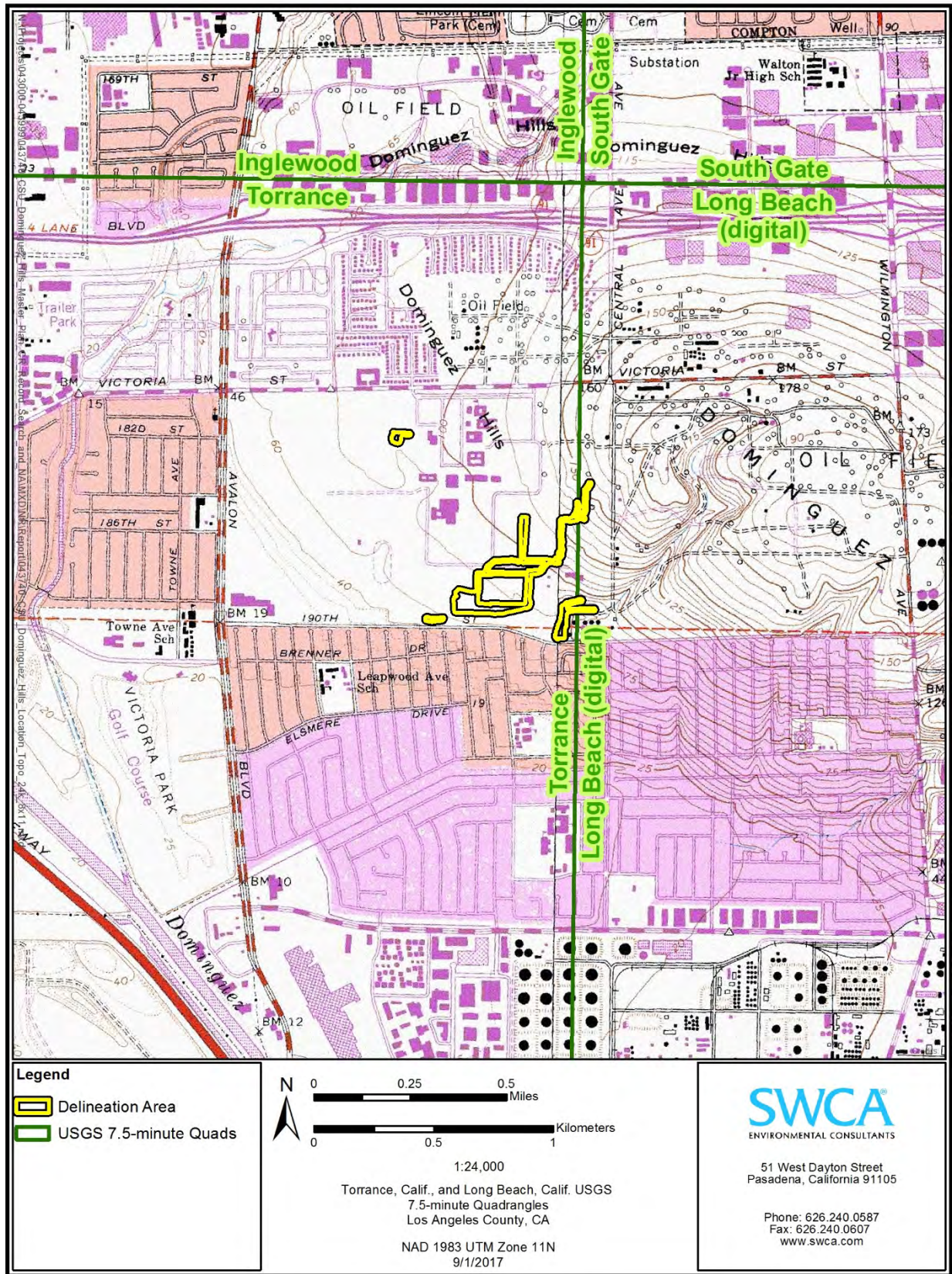


Figure 3. Project Topographic Map



2 REGULATORY BACKGROUND

2.1 U.S. Army Corps of Engineers, Section 404

USACE regulates discharges of dredged or fill material into waters of the United States. These waters include wetland and non-wetland water bodies that meet specific criteria. USACE regulatory jurisdiction, pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 United States Code [U.S.C.] 403), regulates almost all work in, over, and under waters listed as “navigable waters of the U.S.” that results in a discharge of dredged or fill material within USACE regulatory jurisdiction, pursuant to Section 404 of the Clean Water Act. Under Section 404, USACE regulates traditional navigable waters, wetlands adjacent to traditional navigable waters, relatively permanent non-navigable tributaries that have a continuous flow at least seasonally (typically 3 months), and wetlands that directly abut relatively permanent tributaries. USACE will determine jurisdiction over waters that are non-navigable tributaries, that are not relatively permanent and wetlands adjacent to non-navigable tributaries, and that are not relatively permanent only after making a significant nexus finding.

Code of Federal Regulations (CFR) Title 33, Section 328.3 defines waters of the United States as:

- (1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce;
- (2) All interstate waters including interstate wetlands;
- (3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams) the use, degradation or destruction of which could affect interstate or foreign commerce;
- (4) All impoundments of waters otherwise defined as waters of the United States under the definition;
- (5) Tributaries of waters defined in paragraphs (a)(1)–(4) of this section;
- (6) The territorial seas; and,
- (7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) (1)–(6) of this section.

USACE jurisdiction over nontidal waters of the United States extends laterally to the ordinary high water mark (OHWM) or beyond the OHWM to the limit of any adjacent wetlands, if present (33 CFR 328.4). The OHWM is defined in 33 CFR 328.3 as:

“that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.”

2.2 Regional Water Quality Control Boards, Section 401

Nine RWQCBs regulate discharges of fill and dredged material in California under Section 401 of the Clean Water Act and the Porter-Cologne Water Quality Control Act. State Water Quality Certification is necessary for all projects that require a USACE permit, or fall under other federal jurisdiction, and have the potential to impact waters of the State. “Isolated” waters were determined by the U.S. Supreme Court under the Solid Waste Agency of Northern Cook County (SWANCC) decision to be non-jurisdictional under Section 404, and Section 404/401 permits and State Water Quality Certifications are not issued for projects determined by the USACE to contain only isolated waters.

Waters of the State are defined by the Porter-Cologne Act as:

“any surface water or groundwater, including saline waters, within the boundaries of the state.”

Discharges of dredged or fill material to waters of the State not subject to Clean Water Act Section 404 are regulated by RWQCB under Porter-Cologne Act Article 4, Individual or General Waste Discharge Requirement Permits (WDR). The WDR permit requirements ensure that the permitted activities comply with state water quality standards over the term of the action, and are consistent with the requirements of the California Environmental Quality Act, California Endangered Species Act, and Porter-Cologne Act. Permit requirements and costs under WDR regulations are similar to Section 401 procedures.

2.3 California Department of Fish and Wildlife

Pursuant to Division 2, Chapter 6, Sections 1600–1602 of the California Fish and Game Code, CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake, which supports fish or wildlife. CDFW defines a “stream” (including creeks and rivers) as “a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation.” CDFW’s definition of “lake” includes “natural lakes or man-made reservoirs.” CDFW jurisdiction within altered or artificial waterways is based upon the value of those waterways to fish and wildlife. The CDFW Legal Advisor has prepared the following opinion:

- Natural waterways that have been subsequently modified and which have the potential to contain fish, aquatic insects, and riparian vegetation will be treated like natural waterways...
- Artificial waterways that have acquired the physical attributes of natural stream courses, and which have been viewed by the community as natural stream courses, should be treated as natural waterways...
- Artificial waterways without the attributes of natural waterways should generally not be subject to Fish and Game Code provisions.

In practice, CDFW usually extends its jurisdictional limit to the top-of-bank for a stream or a lake, plus outer edge of the riparian vegetation, whichever is wider. CDFW can be expected to take jurisdiction over all areas that have evidence of cut bank and channel, or evidence of historical flows, to the point where no confining feature is present.

3 METHODOLOGY

Wetland delineation efforts utilized the routine delineation methodology described in the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987), and as supplemented in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (USACE 2008b). The delineator also utilized *A Field Guide to the Identification of the Ordinary High Water Mark in the Arid West Region of the Western United States* (USACE 2008a). United States Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) maps and U.S. Geological Survey (USGS) *Torrance* and *Long Beach* quadrangle topographic maps were reviewed (USFWS 2017). The habitat and plant species descriptions follow *A Manual of California Vegetation* (Sawyer et al. 2009), *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986), *The Jepson Manual* (Baldwin et al. 2012), and the Arid West Regional Wetland Plant List (Lichvar et al. 2015). Soils data was obtained from the U.S. Department of Agriculture, Natural Resource Conservation Service (NRCS) Web Soil Survey (2017). Specific references not listed above are cited in text.

Delineation of waters in the delineation area were based on review of pertinent literature and a thorough on-site field investigation. Prior to beginning the field investigation, the USGS *Torrance* and *Long Beach* quadrangle maps and recent aerial photographs of the project site were examined to gain insight on the topography and waterways in the CSUDH campus and surrounding areas. These resources were also used as a reference to determine hydrologic connectivity to a navigable water body and/or relatively permanent waters.

Following the literature review, an on-site investigation was conducted on August 9, 2017, by biologist Matthew Schaap, to identify the extent of potentially jurisdictional wetlands and waters as defined by the USACE, RWQCB, and CDFW. Representative sampling plots were evaluated to determine the boundary between uplands and wetlands, and to ensure compliance with Arid West requirements. Seven sampling plots were examined in the delineation area (Appendix A) to observe and record soil characteristics, vegetation types, and hydrologic features. Soil matrix colors were classified according to the *Munsell Soil Color Charts* (Munsell Color 2000). Plant species identified at sample point locations were assigned a wetland status according to the Arid West 2014 regional Wetland Plant List (Lichvar 2015). *Wetland Determination Data Form – Arid West Region*, and *Arid West Ephemeral and Intermittent Streams OHWM Datasheets* were filled out as appropriate for all Project area features (Appendix B).

Observed water features were mapped using a Trimble GeoXH Geoplotter 2008 handheld GPS unit capable of sub-meter accuracy. A Wetland / Waters Delineation and Assessment Map showing the delineation area and sample plot locations is included in Appendix A, and Arid West data sheets are included in Appendix B. Photos of the existing conditions observed during the assessment are shown in Appendix C.

4 RESULTS

The northern site consists of a bare, open field that has been heavily altered from its natural state and is surrounded by development. The site contains a seasonally flooded wetland, classified as palustrine emergent temporarily flooded wetland (PEMA). The wetland feature delineation area begins at a culvert at Toro Center Drive, continues west through a narrow channelized swale, and eventually spreads out in an open area located east of the Extended Education Center (Appendix A). The wetland is not identified within the NWI internet-based Wetlands Mapper (Appendix D).

The southern site contains a series of ephemeral drainage features. The northwestern most drainage feature located along Birchknoll Road (Drainage 1) is an altered, ephemeral drainage that extends south from Parking Lot 5B on the east side of Birchknoll Road to Pacific View Drive to a culvert which enters into Heritage Creek Nature Preserve and flows to into culvert which connects to Drainage 2. Drainage 2 is an ephemeral altered drainage that extends from Pacific View Drive south through open fields to a manmade basin and culvert north of East University Drive. East of Drainage 2 is a large ephemeral drainage (Drainage 3) south of Pacific View Drive flowing southwest and south to a manmade basin and culvert north of East University Drive. South of the Physical Plant and Pacific View Drive is Drainage 4 which flows west and south to a culvert north of East University Drive.

4.1 Soils

The NRCS Web Soil Survey shows one soil type occurring in the delineation area (NRCS 2017) – Urban land-Typic Xerorthents, terraced-Windfetch complex, 2 to 9 percent slopes, MLRA 19 (Figure 4). This soil type is found at an elevation of 20 to 260 feet above sea level, includes fan remnants, and is a loam from discontinuous human-transported material over mixed alluvium. This soil is well drained, consists of loam from 0 down to 80 inches with some clay 16 to 37 inches, and is more than 80 inches from the water table. In general, this soil type has no flooding, and no frequency of ponding. The NRCS California Hydric Soils List does not include Urban land-Typic Xerorthents, terraced-Windfetch as a hydric soil.

4.2 Vegetation

Vegetation within the northern portion of the delineation area is largely absent. The area receives regular landscaping maintenance during which vegetation is removed. Plant species observed within the delineation area at the time of the survey were two Canary Island pines, eucalyptus (*Eucalyptus* sp.), widely spaced laurel sumac (*Malosma laurina*), cudweed (*Pseudognaphalium canescens*), and spike rush (*Eleocharis* sp.).

The dominant vegetation community present within the southern site is classified as *Brassica nigra* and other mustards Herbaceous Semi-Natural Alliance and is dominated by short pod mustard (*Hirschfeldia incana*), sunflower (*Helianthis annuus*), tree tobacco (*Nicotiana glauca*), and Russian thistle (*Salsola tragus*). Portions of the delineation area located along Birchknoll Road and Pacific View Drive are devoid of vegetation as a result of regular maintenance.

4.3 Hydrology

The northern site is generally concave and appears to have historically supported a seasonally flooded wetland, yet has been altered and is now seasonally functioning as a wetland. The southern site is comprised of open fields where storm water runoff has been channelized into manmade ephemeral drainages. These drainage features flow into manmade basins and storm drains which have hydrological connectivity to the Dominguez Channel and the Los Angeles River.

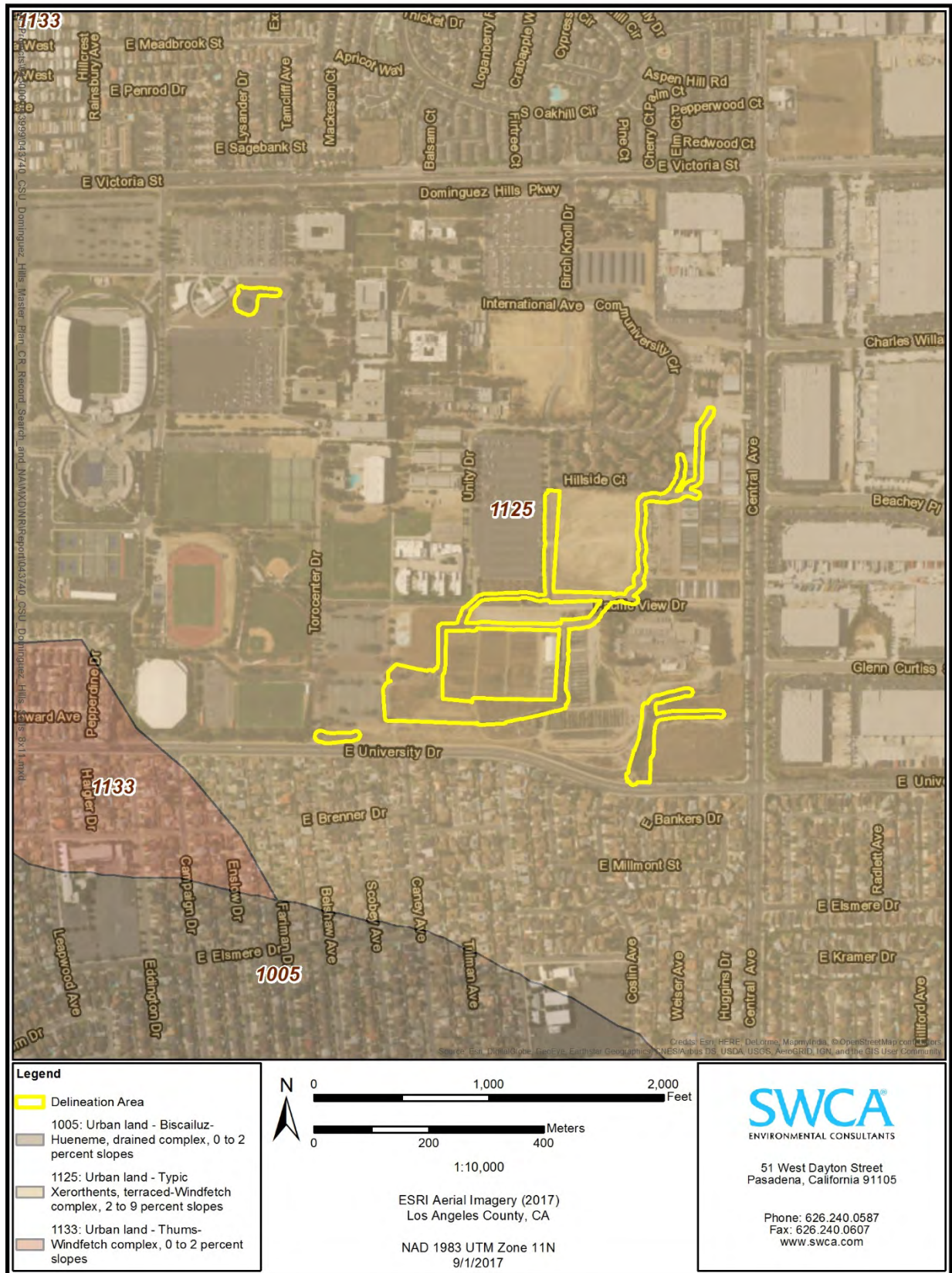
4.4 Sample Plot Results

Seven sample plots including soil pits (locations shown in Appendix A) were examined and data recorded on Arid West data sheets. Observations are discussed below, and data sheets are included in Appendix B.

4.4.1 Sample Plot 1

Sample Plot 1 is located at the northern site and documents conditions in the freshwater emergent wetland located near the Extended Education Center. The soil pit was located in a low-lying depressed area 200 feet west of Toro Center Drive and 110 feet south of Parking Lot 3. Vegetation within the sample plot contained Canary Island pines and cudweed. The area is a managed plant community which receives regular maintenance and has a thick layer of mulch. Based on a review of the historical aerial imagery, the sample area has been historically dominated by grasses or grass like species. Vegetation present within the sample plot was insufficient to pass the hydrophytic vegetation dominance test. The investigation of soils revealed clay loam and clay soils that were saturated throughout the pit. The soil from the surface down to 3 inches was clay loam (10YR 3/1). Red redox concentrations (5YR 5/6) occurred from 3 to 18 inches; and clay (10YR 3/1) soils from 18 to 22 inches. The redox concentrations, matrix value and chroma met the criteria for depleted dark surface (F7). No wetland hydrology indicators were observed in the sample plot during the survey. However, in 2004 to 2005, CSUDH conducted fairy shrimp surveys within the wetland feature during the dry season and sampling identified fairy shrimp cysts (*Branchinecta lindahli*) which is considered a hydrological indicator (B13). Due to the presence of hydric soils, and wetland hydrology, Sample Plot 1 may meet the requirements of a USACE problematic wetland.

Figure 4. Soils Map



4.4.2 Sample Plot 2

Sample Plot 2 included a 10-foot diameter plot located in the open field approximately 200 feet north and slightly upslope from Sample Plot 1, and approximately 25 feet west of the drainage swale (refer to Appendix A for plot location). Vegetation consisted of native and non-native grasses and forbs, including Italian wild rye (*Festuca perennis*), wild oats (*Avena* sp.), English plantain (*Plantago erecta*), bristly ox-tongue (*Helminthotheca echioides*), and Fuller's teasel (*Dipsacus fullonum*). The dominance of Italian wild rye was sufficient to pass the hydrophytic vegetation dominance test. The soil from the surface down to 2 inches was sandy clay (10YR 3/2) and included roots and decomposing organic material; sandy clay (10YR 5/3) with yellowish brown redox concentrations (10YR 5/8) and large patches of a dark reduced matrix (10YR 2/1) occurred from 2 to 6 inches; and silty clay (10YR 5/3) occurred from 6 to 22 inches. Fill material was observed throughout the pit with a few isolated patches of red concentrations around the fill material. Soil in Sample Plot 2 met the criteria for redox depressions (F8). No wetland hydrology features were observed in the sample plot. Sample Plot 2 did not meet the criteria for a USACE three-parameter wetland.

4.4.3 Sample Plot 3

Sample Plot 3 is located at the northern site and documents conditions in the freshwater emergent wetland located near the Extended Education Center. The soil pit is located in a low-lying depressed area 200 feet west of Toro Center Drive and 110 feet south of Parking Lot 3. Vegetation within the sample plot consisted of a small patch of common spikerush. The area is a managed plant community which receives regular maintenance and has a thick layer of mulch. Vegetation present within the sample location was sufficient to pass the hydrophytic vegetation dominance test. The investigation of soils revealed clay loam and clay soils that were saturated throughout the pit. The soils at the sample plot from the surface down to 24 inches were clay loam (10YR 3/1). Soils in Sample Plot 3 met the criteria for depleted below dark surface (A11). No wetland hydrology indicators were observed in the sample plot during the survey. However, in 2004 to 2005, CSUDH conducted fairy shrimp surveys within the wetland feature during the dry season and sampling identified fairy shrimp cysts (*Branchinecta lindahli*) which is considered a hydrological indicator (B13). Due to the presence of hydrophytic vegetation, hydric soils, and wetland hydrology, Sample Plot 3 may meet the requirements of a USACE wetland.

4.4.4 Sample Plot 4

Sample Plot 4 is located at the northern site and is situated along the northern edge of the freshwater emergent wetland. The plot included a two meter diameter plot that was located in an unvegetated swale, just downstream from a culvert located on the edge of Toro Center Drive (Appendix A). Vegetation within the feature appears to receive regular maintenance (e.g., mulching, herbicide application) which prevents the establishment of vegetation. The lack of hydrophytic vegetation results in the plot not meeting the criteria for the dominance test. The vegetation is considered to be problematic due to the manipulation that occurs within the feature. The soil from the surface down to 3 inches was sandy clay (10YR 3/1), from 3 to 24 inches the soil clay loam (10YR 4/3) with patches of a dark reduced matrix (10YR 5/2). Soil in Sample Plot 4 met the criteria for depleted below dark surface (A11) and redox dark surface (F6). A biotic crust was observed in the sample plot (B12). In addition, in 2004 to 2005 CSUDH conducted fairy shrimp surveys within the wetland feature during the dry season and sampling identified fairy shrimp cysts (*Branchinecta lindahli*) which is considered a hydrological indicator (B13). Due to the presence of hydric soils, wetland hydrology, and problematic vegetation, Sample Plot 4 may meet the requirements of a USACE problematic wetland.

4.4.5 Sample Plot 5

Sample Plot 5 is located in the southern portion of the delineation area along Drainage 1. It included a five meter diameter plot located at the southern end of the ephemeral drainage located along Birchknoll Road, which terminates at a culvert located within a man-made detention basin (Appendix A). The basin

had been recently mowed at the time of the delineation; therefore vegetation was identified based on the remains of the cut vegetation within the plot. Vegetation within the plot consists of mowed mulefat (*Baccharis salicifolia*), saltmarsh club-rush (*Schoenoplectus maritimus*), short pod mustard, and spotted spurge (*Euphorbia maculata*). The vegetation observed did not meet the criteria for hydrophytic vegetation. Soil consisted of heavily compacted loamy sand (2.5YR 5/4) from the surface down to 16 inches. Soil within the plot consists of fill material and was observed throughout the pit. No evidence of wetland hydrology was observed within the sample plot. Due to the lack of hydrophytic vegetation, hydric soils and wetland hydrology indicators, this sample plot did not meet the requirements of a USACE three-parameter wetland.

4.4.6 Sample Plot 6

Sample Plot 6 is located in the southern portion of the delineation area along Drainage 1. It included a five meter diameter plot located approximately 280 feet north of East University Drive (Appendix A). The basin had been recently mowed at the time of the delineation; therefore vegetation was identified based on the remains of the cut vegetation within the plot. Vegetation within the plot is dominated by short pod mustard and spotted spurge and does not meet the criteria for any of the hydrophytic vegetation indicators. Soil consisted of heavily compacted loamy sand (2.5YR 5/4) from the surface down to 16 inches. Soil within the plot consists of fill material and was observed throughout the pit. No evidence of wetland hydrology was observed within the sample plot. Due to the lack of hydrophytic vegetation, hydric soils, and wetland hydrology indicators, this sample plot did not meet the requirements of a USACE three-parameter wetland.

4.4.7 Sample Plot 7

Sample Plot 7 is located in the southern portion of the delineation area along Drainage 3. It included a five meter diameter plot located approximately 200 feet north of East University Drive (Appendix A). The plot is dominated by a dense short pod mustard and hairy leaved sunflower (*Helianthus annuus*) and does not meet the criteria for any of the hydrophytic vegetation indicators. Soil consisted of heavily compacted loamy sand (2.5YR 5/4) from the surface down to 16 inches. Soil within the plot consists of fill material and was observed throughout the pit. No evidence of wetland hydrology was observed within the sample plot. Due to the lack of hydrophytic vegetation, hydric soils, and wetland hydrology indicators, this sample plot did not meet the requirements of a USACE three-parameter wetland.

4.4.8 Sample Plot 8

Sample Plot 8 is located in the southern portion of the delineation area along Drainage 4. It included a five meter diameter plot located approximately 80 feet north of East University Drive (Appendix A). The plot is located approximately 20 feet east of the ephemeral drainage in an area dominated by short pod mustard and tree tobacco. A small stand of mulefat is located to the south adjacent to rip-rap that was installed before the culvert. Vegetation in the sample plot consisted of dense stands of short pod mustard, hairy leaved sunflower, and tree tobacco on the western slope and did not meet the criteria for any of the hydrophytic vegetation indicators. Soil consisted of heavily compacted loamy sand (2.5YR 5/4) from the surface down to 16 inches. Soil within the plot consists of fill material and was observed throughout the pit. No evidence of wetland hydrology was observed within the sample plot. Due to the lack of hydrophytic vegetation, hydric soils, and wetland hydrology indicators, this sample plot did not meet the requirements of a USACE three-parameter wetland.

4.5 Drainages

The southern portion of the delineation area contains a series of ephemeral drainage features (Drainages 1, 2, 3, and 4). Due to the presence of bed and bank, the drainages are potentially subject to CDFW jurisdiction under Sections 1600–1602 of the California Fish and Game Code. The drainages may also be considered

non-wetland waters of the U.S. and State due to the presence of OHWM and connectivity to Dominguez Channel and the Los Angeles River.

4.5.1 Drainage 1

Drainage 1 is an ephemeral drainage that is characterized as a road side ditch/ drainage flowing south on the west side of Birchknoll Road to Pacific View Drive and a culvert which enters into Heritage Creek Nature Preserve and flows to into culvert which connects to Drainage 2. The drainage is fed from runoff from Birchknoll Road, Pacific View Drive, and from a graded lot located adjacent to the feature. The width of the OHWM varies but has an average width of 2 feet (Appendix B, OHWM Field Form 1). The distance between the top of bank and the OHWM is narrow, generally with a width of 1 foot. No water was observed in the drainage at the time of the survey. The drainage was devoid of all vegetation. Soils within the drainage are largely coarse silt.

4.5.2 Drainage 2

Drainage 2 is an ephemeral altered drainage that extends from Pacific View Drive south through open fields to a manmade basin and culvert north of East University Drive. The drainage is fed from Heritage Creek Nature Preserve and Parking Lot 7. The width of the OHWM varies but has an average width of 3 feet (Appendix B, OHWM Field Forms 5 and 7). The distance between the top of bank and the OHWM is narrow, generally with a width 2 feet. No water was observed in the drainage at the time of the survey. The portion of the drainage located on the western end of the maintenance is lined with large pieces of broken concrete. The drainage is largely devoid of vegetation or contains mowed ruderal upland species. Soils within the drainage vary from coarse silt to fine sand.

4.5.3 Drainage 3

Drainage 3 is an ephemeral drainage south of Pacific View Drive flowing southwest and south to a manmade basin and culvert north of East University Drive. The drainage is fed from runoff from vacant lots located north of Pacific View Drive and from culverts located along Pacific View Drive. The width of the OHWM varies but has an average width of 3 feet (Appendix B, OHWM Field Forms 2, 3, and 4). The distance between the top of bank and the OHWM is generally narrow, with an average width of 2 feet. No water was observed in the drainage at the time of the survey. Vegetation within the drainage consists of ruderal upland species including bristly ox-tongue, short pod mustard, prickly lettuce (*Lactuca serriola*) and tree tobacco. Vegetation within the manmade basin consists of hairy leaved sunflower, and short pod mustard. The drainage on the eastern side of the maintenance facility has been filled with soil and construction debris. Soils within the drainage vary from coarse silt to fine sand.

4.5.4 Drainage 4

Drainage 4 is an ephemeral drainage that is located south of the Physical Plant and flows west and south to a culvert north of East University Drive. The drainage is fed from runoff from the area around the Physical Plant. The width of the OHWM varies but has an average width of 4 feet (Appendix B, OHWM Field Form 6). The distance between the top of bank and the OHWM is narrow generally with a width of 3 feet. No water was observed in the drainage at the time of the survey. Vegetation within the drainage consists of ruderal upland species including short pod mustard, tree tobacco and hairy leaved sunflower. Soils within the drainage vary from coarse silt to fine sand.

4.6 Functions and Values of Jurisdictional Areas

Overall the jurisdictional features in the delineation area do not provide significant wildlife habitat and primarily provide dispersion of storm water and sediment into manmade basins and the storm water drains. However, the freshwater emergent wetland and surrounding uplands in the northern portion of the delineation area provides habitat function and values for fairy shrimp which have historically occurred at that location.

5 WETLAND/WATERS DELINEATION

This Wetlands/Waters Delineation and Assessment identifies potential federal and state jurisdictional areas within the delineation area. These jurisdictional results are preliminary and are subject to review by the USACE prior to issuance of any permits. This preliminary jurisdictional determination report should be submitted to USACE and CDFW to determine if a nationwide permit under Section 404 of the Clean Water Act and a Streambed Alteration Agreement under Sections 1600–1602 of the California Fish and Game Code are necessary for the project. A determination by USACE is necessary to allow RWQCB to proceed with the Waste Discharge Requirements (WDR) permit process. During the permit review process, USACE and/or CDFW may conduct a site visit to verify the conditions and jurisdictional areas identified in this report, and will approve or request amendments to the report based on their findings. The rationale for considering wetlands and waters in the delineation area to be potentially jurisdictional is discussed below.

Based on the literature review and field investigation, it is the delineator's opinion that the freshwater seasonally flooded wetland does not meet the criteria of a CDFW aquatic resource or state waters under the jurisdiction of RWQCB (Table 1). The wetland is in a depressed area that has been altered by the construction of the Extended Education Center and associated parking lots. This feature contains hydric soils and wetland hydrology. Although Sample Plots 1, 3 and 4 may meet the requirements of a USACE three-parameter wetland; the wetland is isolated and has no outlet and therefore no hydrological connection to any traditional navigable water and may not be considered wetland waters of the U.S. under the jurisdiction of the USACE pursuant to Section 404 of the CWA.

In addition, it is the delineator's opinion that the drainage channels (Drainages 1, 2, 3, and 4) located in the southern portion of the delineation area meet the criteria of a USACE and RWQCB jurisdictional non-wetland waters, as well as a CDFW aquatic resource (Table 1). The drainage features in the delineation area contain defined bed and banks, and OHWMs. The drainage channels flow in a general southerly direction where they enter culverts and are presumed to enter the Dominguez Channel and eventually the Los Angeles River. Table 1 quantifies the total area of potential USACE, CDFW, and RWQCB jurisdictional waters within the survey areas.

Table 1. Aquatic Resources within the Survey Areas

Project Location	Aquatic Resource Type	Aquatic Resources Classification		Aquatic Resource Size for Wetlands (acres)	Aquatic Resource Size Required for Stream Channels USACE/RWQCB (acres)	Aquatic Resource Size Required for Stream Channels CDFW (acres)
		Cowardin	Location (lat/lon)			
Survey Area	Seasonally Flooded Wetland	Palustrine Emergent Wetland	33.865184° 118.258212°	0.238	-	-
Survey Area	Ephemeral Drainage 1	NA	33.861014° 118.252525°	-	0.078	0.138
Survey Area	Ephemeral Drainage 2	NA	33.859597° 118.254535°	-	0.427	0.642
Survey Area	Ephemeral Drainage 3	NA	33.859886° 118.252208°	-	0.477	0.754
Survey Area	Ephemeral Drainage 4	NA	33.858467° 118.250619°	-	0.216	0.431

5.1 U.S. Army Corps of Engineers Jurisdictional Areas

As mapped on the Wetlands/Waters Delineation and Assessment Map, areas potentially subject to USACE jurisdiction under Section 404 of the Clean Water Act consist of the of the freshwater emergent wetland and four ephemeral drainage features (Drainages 1, 2, 3, and 4). Potential jurisdiction is based on the evidence of dominant wetland vegetation, hydric soil, and wetland hydrology, OHWM and hydrological connection of the ephemeral drainages to the Dominguez Channel and the Los Angeles River, a traditional navigable water. The total non-wetland waters potentially subject to USACE jurisdiction consist of 1.198 acres and 6,543 linear feet (Appendix A).

5.2 Regional Water Quality Control Board Jurisdictional Areas

As mapped on the Wetlands/Waters Delineation and Assessment Map, areas potentially subject to RWQCB jurisdiction under Section 401 of the Clean Water Act consist of the freshwater emergent wetland and four ephemeral drainage features (Drainages 1, 2, 3, and 4). Potential jurisdiction is based on the evidence of dominant wetland vegetation, hydric soil, and wetland hydrology, OHWM and hydrological connection of the ephemeral drainages to the Dominguez Channel and the Los Angeles River, traditional navigable water. The total wetland waters potentially subject to RWQCB jurisdiction consists of 0.238 acres. The total non-wetland waters potentially subject to RWQCB jurisdiction consist of 1.198 acres and 6,543 linear feet (Appendix A).

5.3 California Department of Fish and Wildlife Jurisdictional Areas

As mapped on the Wetlands/Waters Delineation and Assessment Map, areas potentially subject to CDFW jurisdiction under Sections 1600–1602 of the California Fish and Game Code consist of the four ephemeral

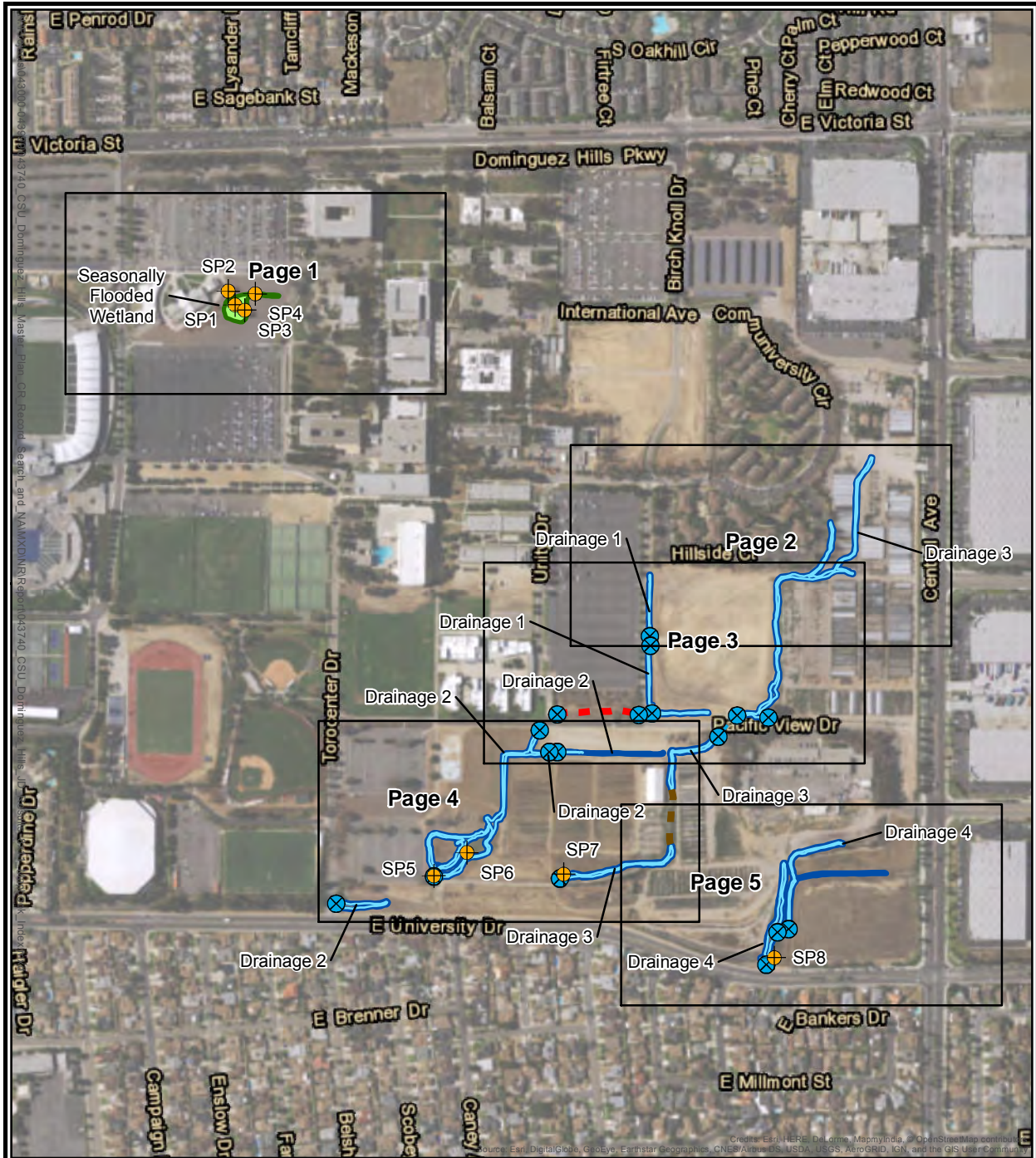
drainage features (Drainages 1, 2, 3, and 4). Potential jurisdiction is based on the evidence of a bed and bank. The total wetland waters potentially subject to CDFW jurisdiction consists of 0.238 acres. The total potential CDFW jurisdictional streambeds consist of 1.965 acres and 7,270 linear feet (Appendix A).

6 REFERENCES

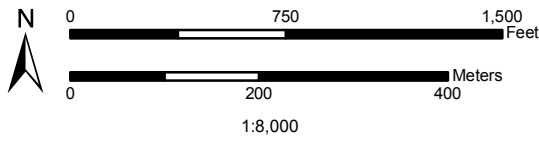
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**Appendix A:
Wetland / Waters Delineation and Assessment Map**



- Legend**
- OHWM - Potential USACE/RWQCB Jurisdictional Water (1.20 acres)
 - Potential CDFW Jurisdiction (1.96 acres)
 - Palustrine Emergent Wetland (0.28 acres)
 - Culverts
 - Culvert Connections
 - Filled Drainage
 - Inaccessible, Potential USACE / RWQCB / CDFW Feature
 - Sample Points



ESRI Aerial Imagery (2017)
 Los Angeles County, CA
 NAD 1983 UTM Zone 11N
 10/31/2017

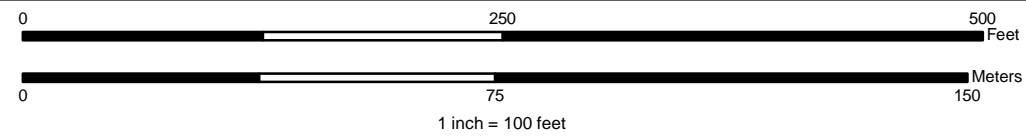


51 West Dayton Street
 Pasadena, California 91105

Phone: 626.240.0587
 Fax: 626.240.0607
 www.swca.com



- Legend**
- Delineation Area (12.07 acres)
 - Palustrine Emergent Wetland (0.28 acres)
 - Culvert Connections
 - Filled Drainage
 - ▲ Control Points (Latitude, Longitude)
 - ⊕ Sample Points
 - Inaccessible, Potential USACE / RWQCB / CDFW Feature
 - ⊗ Culverts
 - Contours (20-foot intervals)



Seasonally Flooded Wetland

ESRI Aerial Imagery (2017)
 Los Angeles County, CA
 NAD 1983 UTM Zone 11N
 10/31/2017



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Legend

Delineation Area (12.07 acres)	Culvert Connections	Control Points (Latitude, Longitude)
OHWM – Potential USACE/RWQCB Jurisdictional Water (1.20 acres)	Filled Drainage	Sample Points
Potential CDFW Jurisdiction (1.96 acres)	Inaccessible, Potential USACE / RWQCB / CDFW Feature	Culverts
Contours (20-foot intervals)		

N

0 250 500
Feet

0 75 150
Meters

1 inch = 100 feet

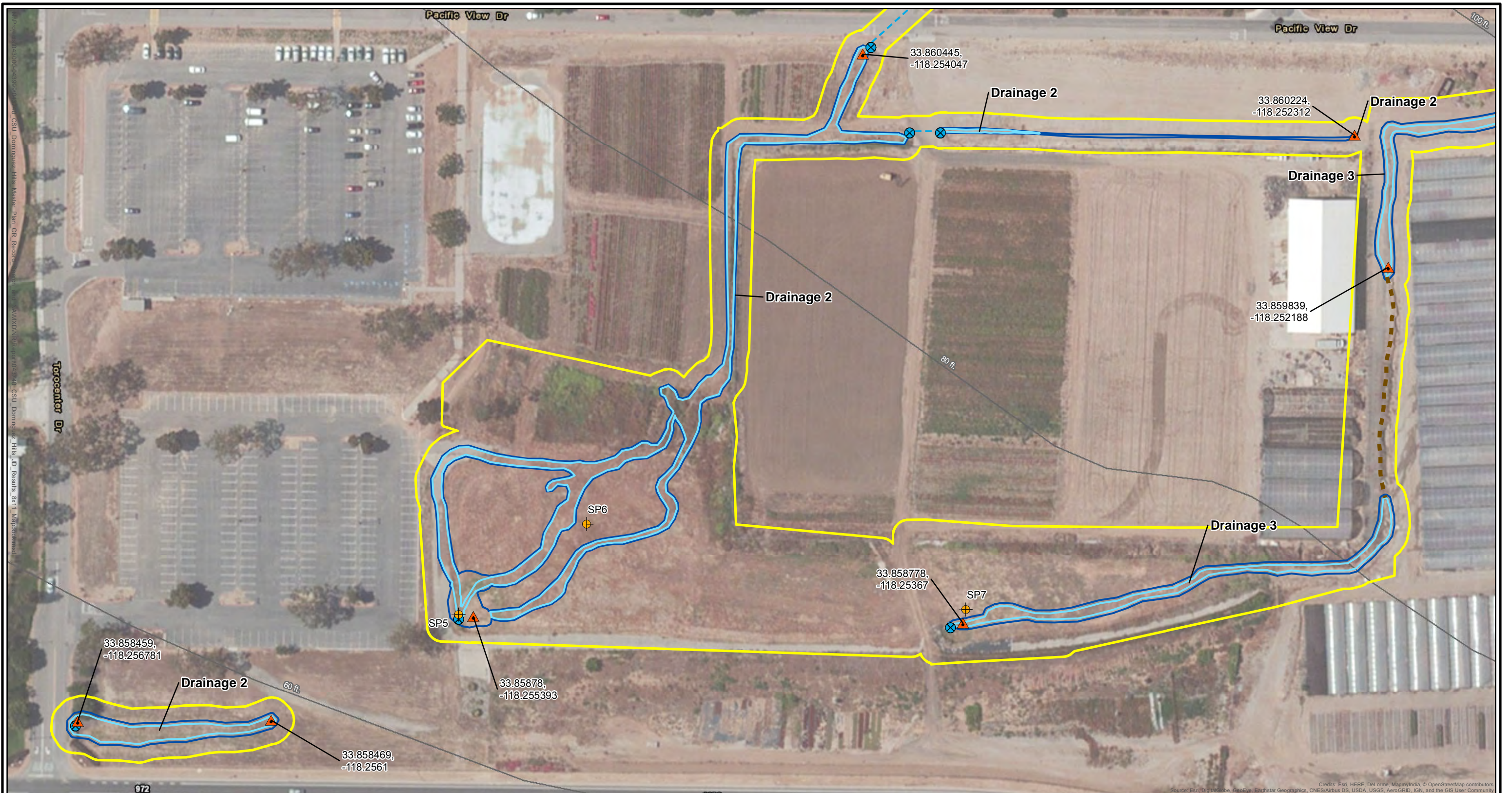
Drainages 1, 2, and 3

ESRI Aerial Imagery (2017)
Los Angeles County, CA
NAD 1983 UTM Zone 11N
10/31/2017

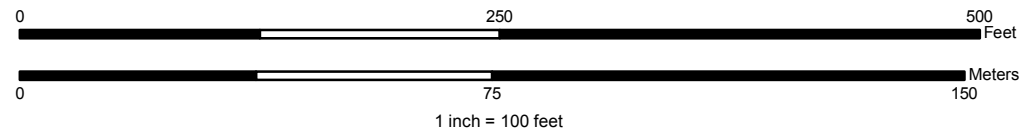
SWCA
ENVIRONMENTAL CONSULTANTS

51 West Dayton Street
Pasadena, California 91105

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www.swca.com



- Legend**
- Delineation Area (12.07 acres)
 - OHWM – Potential USACE/RWQCB Jurisdictional Water (1.20 acres)
 - Potential CDFW Jurisdiction (1.96 acres)
 - Culvert Connections
 - Filled Drainage
 - Inaccessible, Potential USACE / RWQCB / CDFW Feature
 - Contours (20-foot intervals)
 - ▲ Control Points (Latitude, Longitude)
 - ⊕ Sample Points
 - ⊗ Culverts



Drainages 2 and 3
 ESRI Aerial Imagery (2017)
 Los Angeles County, CA
 NAD 1983 UTM Zone 11N
 10/31/2017

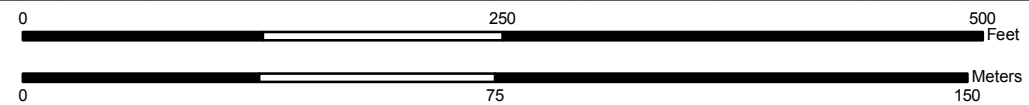


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- Legend**
- Delineation Area (12.07 acres)
 - OHWM – Potential USACE/RWQCB Jurisdictional Water (1.20 acres)
 - Potential CDFW Jurisdiction (1.96 acres)
 - Culvert Connections
 - Filled Drainage
 - Inaccessible, Potential USACE / RWQCB / CDFW Feature
 - Contours (20-foot intervals)
 - ▲ Control Points (Latitude, Longitude)
 - ⊕ Sample Points
 - ⊗ Culverts



1 inch = 100 feet

Drainage 4

ESRI Aerial Imagery (2017)
Los Angeles County, CA
NAD 1983 UTM Zone 11N
10/31/2017



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Pasadena, California 91105

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Appendix B: Field Data Sheets

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: CSUDH City/County: CARSON/LOS ANGELES Sampling Date: 8/19/2017
 Applicant/Owner: CSUDH State: CA Sampling Point: 01
 Investigator(s): Matt Scump Section, Township, Range: S0622, T33, R19W
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 2
 Subregion (LRR): L.P.R.C. Lat: 33.86531° Long: -118.258302° Datum: NAD 83
 Soil Map Unit Name: Upland earths, formed with clay, 2-4% NW classification: NA
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Remarks: <u>Area is heavily altered as a result of construction of Extended Education Center and parking lots. Area is regularly maintained resulting in no absents of plants. Only shrub have been identified within the depression.</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>5.4</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
1. <u>Plants</u>	<u>40</u>	<u>Yes</u>	<u>LPL</u>	
2. _____				
3. _____				
4. _____				
Sapling/Shrub Stratum (Plot size: <u>5.4</u>) <u>40</u> = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species <u>1</u> x 4 = <u>4</u> UPL species <u>40</u> x 5 = <u>200</u> Column Totals: <u>41</u> (A) <u>204</u> (B) Prevalence Index = B/A = <u>4.97</u>
1. _____				
2. _____				
3. _____				
4. _____				
Herb Stratum (Plot size: <u>5.4</u>) <u>0</u> = Total Cover				Hydrophytic Vegetation Indicators: ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 ¹ ___ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Pseudotsuga-Flemingia canescens</u>	<u>1</u>	<u>Yes</u>	<u>FACU</u>	
2. _____				
3. _____				
4. _____				
Woody Vine Stratum (Plot size: <u>5.4</u>) <u>1</u> = Total Cover				Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
1. _____				
% Bare Ground in Herb Stratum <u>99%</u> % Cover of Biotic Crust <u>0</u>				
Remarks: <u>Vegetation within the site has largely been removed. Area receives regular maintenance and mulching preventing plant establishment.</u>				

SOIL

Sampling Point: _____

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-8	10YR 3/1	100					SCL	
4-24	10YR 4/1	95	10YR 5/4	5	D	M	SCL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) <input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) (LRR C) <input type="checkbox"/> 1 cm Muck (A9) (LRR D) <input checked="" type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input checked="" type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Vernal Pools (F9)	Indicators for Problematic Hydric Soils³: <input type="checkbox"/> 1 cm Muck (A9) (LRR C) <input type="checkbox"/> 2 cm Muck (A10) (LRR B) <input type="checkbox"/> Reduced Vertic (F18) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)
---	--	--

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):
 Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes _____ No _____

Remarks: _____

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) (Nonriverine) <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Salt Crust (B11) <input type="checkbox"/> Biotic Crust (B12) <input checked="" type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)	Secondary Indicators (2 or more required) <input type="checkbox"/> Water Marks (B1) (Riverine) <input type="checkbox"/> Sediment Deposits (B2) (Riverine) <input type="checkbox"/> Drift Deposits (B3) (Riverine) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5)
---	---	---

Field Observations:

Surface Water Present?	Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____
Water Table Present?	Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____ No <input checked="" type="checkbox"/>	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: _____

Remarks: *Fairy shrimp and cysts were observed in feature in 2004-2005 species could not be identified, but the cysts were identified as the genus Brachionecta*

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: CSUDH City/County: CARSON/Los Angeles Sampling Date: 4/9/2017
 Applicant/Owner: CSUDH State: CA Sampling Point: 02
 Investigator(s): Matt Schump Section, Township, Range: Sec 32, T35, R13N
 Landform (hillslope, terrace, etc.): hill slope Local relief (concave, convex, none): convex Slope (%): 2
 Subregion (LRR): LRR C Lat: 33.865470° Long: -118.2593310 Datum: NAD 83
 Soil Map Unit Name: Urban land, weathered, taceous sandstone, complex 2-4" dip NWI classification: NA
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Remarks: <u>Site is heavily altered as a result of construction activities. Area receives regular maintenance which prevents establishment of vegetation and stream is also culched</u>			

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>5</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Eucalyptus globulus</u>	<u>30</u>	<u>Yes</u>	<u>UPL</u>		Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
2. _____				Total Number of Dominant Species Across All Strata: <u>2</u> (B)
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
4. _____				
<u>30</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>5</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1. <u>Malvaceae laurina</u>	<u>1</u>	<u>Yes</u>	<u>UPL</u>		Total % Cover of: _____ Multiply by: _____
2. _____				OBL species _____ x 1 = _____
3. _____				FACW species _____ x 2 = _____
4. _____				FAC species _____ x 3 = _____
5. _____				FACU species _____ x 4 = _____
<u>1</u> = Total Cover				UPL species <u>31</u> x 5 = <u>155</u>
				Column Totals: <u>31</u> (A) <u>155</u> (B)
				Prevalence Index = B/A = <u>5</u>
Herb Stratum (Plot size: <u>5</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators:
1. _____				
2. _____				<input type="checkbox"/> Prevalence Index is ≤3.0 ¹
3. _____				<input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
4. _____				<input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
5. _____				
6. _____				
7. _____				
8. _____				
<u>0</u> = Total Cover				
Woody Vine Stratum (Plot size: <u>5</u>)	Absolute % Cover	Dominant Species?	Indicator Status	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. _____				
2. _____				
<u>31</u> = Total Cover				
% Bare Ground in Herb Stratum <u>100</u>		% Cover of Biotic Crust <u>0</u>		
Remarks: <u>Area is regularly maintained and is maintained no plants within the herb layer</u>				

SOIL

Sampling Point: _____

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-9	10YR 3/1	100					SCL	
7-24	10YR 4/3	100					SCL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	Indicators for Problematic Hydric Soils³:	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)		<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)		<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)		<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)		<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)		<input type="checkbox"/> Other (Explain in Remarks)
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)		
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)			

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes No

Remarks: *Area was graded and soils were disturbed during construction of parking lots and Extended Education center*

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required, check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water Marks (B1) (Riverine)
	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Shallow Aquitard (D3)
	<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes No Depth (inches): _____

Water Table Present? Yes No Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes No Depth (inches): _____

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: *No evidence of wetland hydrology indicators observed site is located on slight slope above depression. Hydrology has been altered by construction of parking lots and Extended Education Center.*

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: CSUDH City/County: CARSON/Los Angeles Sampling Date: 8/9/2017
 Applicant/Owner: CSUDH State: CA Sampling Point: 03
 Investigator(s): MAT Schmal Section, Township, Range: Sec 32, T 35, R 13 W
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 3
 Subregion (LRR): LRA C Lat: 33.865239° Long: -118.258170° Datum: NAD83
 Soil Map Unit Name: LARAL and ARAH that is covered with the complex 2.9% slope NWI classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Remarks: <u>Area is heavily altered as a result construction of the campus Area receives regular maintenance. Fairy shrimp identified within feature and mulching</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>5M</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
1. _____				
2. _____				
3. _____				
Sapling/Shrub Stratum (Plot size: <u>5M</u>) <u>0</u> = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>3</u> x 1 = <u>3</u> FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: <u>3</u> (A) <u>3</u> (B) Prevalence Index = B/A = <u>1</u>
1. _____				
2. _____				
3. _____				
4. _____				
Herb Stratum (Plot size: <u>5M</u>) <u>0</u> = Total Cover				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0' <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
1. <u>Elymus polystachyus</u>	<u>3</u>	<u>Yes</u>	<u>OBL</u>	
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
Woody Vine Stratum (Plot size: <u>5M</u>) <u>3</u> = Total Cover				
1. _____				
2. _____				
<u>0</u> = Total Cover				
% Bare Ground in Herb Stratum <u>97%</u>		% Cover of Biotic Crust <u>0</u>		
Remarks: <u>Problem Vegetation Maintenance crews regularly remove vegetation and mulch of the area to prevent plants establishing.</u>				

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: CSUDH City/County: CARSON/Los Angeles Sampling Date: 8/9/2017
 Applicant/Owner: CSUDH State: CA Sampling Point: 04
 Investigator(s): Matt Schnap Section, Township, Range: Sec 32, T35, R13W
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 3
 Subregion (LRR): LRR L Lat: 33.86527° Long: -118.257892° Datum: NAD 83
 Soil Map Unit Name: Urban land-Type leuorthents, Tilled and washed sandy 2.9%^{spms} NWI classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soil Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Wetland Hydrology Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Remarks: <u>Area is heavily altered from construction of the campus. Area receives regular maintenance as a result vegetation is largely absent. Fairy shrimp have been identified within the depression.</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>2M</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A) Total Number of Dominant Species Across All Strata: _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
1. _____				
2. _____				
3. _____				
Sapling/Shrub Stratum (Plot size: <u>2M</u>) <u>0</u> = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
1. _____				
2. _____				
3. _____				
4. _____				
Herb Stratum (Plot size: <u>2M</u>) <u>0</u> = Total Cover				Hydrophytic Vegetation Indicators: ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 ¹ ___ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input checked="" type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
Woody Vine Stratum (Plot size: <u>2M</u>) _____ = Total Cover				Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
1. _____				
2. _____				
% Bare Ground in Herb Stratum <u>100</u> % Cover of Biotic Crust <u>30%</u>				
Remarks: <u>Problem vegetation since maintenance crews for the campus remove vegetation and mulched the area to prevent plants establish. eg.</u>				

SOIL

Sampling Point: _____

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-3	10YR 3/1	100					CL	
3-24	10YR 4/3	90	10YR 5/2	10	D	M	CL	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1) <input type="checkbox"/> Histic Epipedon (A2) <input type="checkbox"/> Black Histic (A3) <input type="checkbox"/> Hydrogen Sulfide (A4) <input type="checkbox"/> Stratified Layers (A5) (LRR C) <input type="checkbox"/> 1 cm Muck (A9) (LRR D) <input checked="" type="checkbox"/> Depleted Below Dark Surface (A11) <input type="checkbox"/> Thick Dark Surface (A12) <input type="checkbox"/> Sandy Mucky Mineral (S1) <input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Sandy Redox (S5) <input type="checkbox"/> Stripped Matrix (S6) <input type="checkbox"/> Loamy Mucky Mineral (F1) <input type="checkbox"/> Loamy Gleyed Matrix (F2) <input type="checkbox"/> Depleted Matrix (F3) <input checked="" type="checkbox"/> Redox Dark Surface (F6) <input type="checkbox"/> Depleted Dark Surface (F7) <input type="checkbox"/> Redox Depressions (F8) <input type="checkbox"/> Vernal Pools (F9)	Indicators for Problematic Hydric Soils³: <input type="checkbox"/> 1 cm Muck (A9) (LRR C) <input type="checkbox"/> 2 cm Muck (A10) (LRR B) <input type="checkbox"/> Reduced Vertic (F18) <input type="checkbox"/> Red Parent Material (TF2) <input type="checkbox"/> Other (Explain in Remarks)
---	--	--

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):
 Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks: _____

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

<input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Water Marks (B1) (Nonriverine) <input type="checkbox"/> Sediment Deposits (B2) (Nonriverine) <input type="checkbox"/> Drift Deposits (B3) (Nonriverine) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Salt Crust (B11) <input checked="" type="checkbox"/> Biotic Crust (B12) <input checked="" type="checkbox"/> Aquatic Invertebrates (B13) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input checked="" type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Other (Explain in Remarks)	Secondary Indicators (2 or more required) <input type="checkbox"/> Water Marks (B1) (Riverine) <input type="checkbox"/> Sediment Deposits (B2) (Riverine) <input type="checkbox"/> Drift Deposits (B3) (Riverine) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> FAC-Neutral Test (D5)
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Field Observations:

Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____
Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____
Saturation Present? (includes capillary fringe) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches): _____

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: _____

Remarks: *Fairy shrimp and cysts were observed with feature during surveys in 2004-2005. Species could not be determined by cysts were Genus Branchinecta.*

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: California State University Dominguez Hills City/County: CARSON/CA Sampling Date: 8/9/2017
 Applicant/Owner: California State University Dominguez Hills State: CA Sampling Point: 05
 Investigator(s): Matt SCHAAP Section, Township, Range: See 33, T35, R13 N
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): concave Slope (%): 2
 Subregion (LRR): LRRC Lat: 33.858788° Long: -118.253417° Datum: NAD 83
 Soil Map Unit Name: URBAN LAND-TYPIC Yellowclays, Terrace-wadflucumplex NWI classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Remarks: <u>Survey location is situated near culvert in a man-made retention basin. Area is heavily disturbed. No hydric soils observed, not enough of the hydrology criteria was observed at the site.</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>5M</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
= Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species <u>50</u> x 1 = <u>50</u> FACW species _____ x 2 = _____ FAC species <u>2</u> x 3 = <u>6</u> FACU species _____ x 4 = _____ UPL species <u>10</u> x 5 = <u>50</u> Column Totals: <u>62</u> (A) <u>106</u> (B) Prevalence Index = B/A = <u>1.7</u>
= Total Cover				
= Total Cover				
= Total Cover				
= Total Cover				
= Total Cover				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
= Total Cover				
= Total Cover				
= Total Cover				
= Total Cover				
= Total Cover				Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
= Total Cover				
% Bare Ground in Herb Stratum <u>40</u> % Cover of Biotic Crust <u>0%</u>				
Remarks: <u>The area is regularly mowed. The area was recently mowed early in the year.</u>				

SOIL

Sampling Point: _____

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-16	2.5YR 5/4	100					LS	uniform, highly compacted

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	Indicators for Problematic Hydric Soils³:	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)		<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)		<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)		<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)		<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)		<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)		
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)			

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):
 Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes _____ No

Remarks: No hydric soil indicators observed within the sample plot location, soil is compacted and cannot dig deeper than 16 inches. Soil is appeared to be fill material.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)	Secondary Indicators (2 or more required)	
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)		<input type="checkbox"/> Water Marks (B1) (Riverine)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)		<input checked="" type="checkbox"/> Sediment Deposits (B2) (Riverine)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)		<input type="checkbox"/> Drift Deposits (B3) (Riverine)
<input checked="" type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)		<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)		<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)		<input type="checkbox"/> Crayfish Burrows (C8)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)		<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)		<input type="checkbox"/> Shallow Aquitard (D3)
			<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No Depth (inches): _____

Water Table Present? Yes _____ No Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No Depth (inches): _____

Wetland Hydrology Present? Yes _____ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: no primary wetland hydrology indicators observed.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: CSUDH City/County: CARSON/LOS ANGELES Sampling Date: 8/9/2017
 Applicant/Owner: CSUDH State: CA Sampling Point: 06
 Investigator(s): Matt Schumpf Section, Township, Range: Sec 32, T 35, R 13 N
 Landform (hillslope, terrace, etc.): hill slope Local relief (concave, convex, none): none Slope (%): 2
 Subregion (LRR): LRRC Lat: 33.839978° Long: -118.255046° Datum: NAD 83
 Soil Map Unit Name: URBANLAND-Typic Xerocherts, terraced-windflow complex 2-9% slope NWI classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Wetland Hydrology Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Remarks: <u>Sample location is located in mowed mustard field in a man-made detention basin. No hydrology, soils, or hydrophytic vegetation observed.</u>	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>SM</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
1. _____				
2. _____				
3. _____				
4. _____				
<u>0</u> = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species <u>78</u> x 5 = <u>390</u> Column Totals: <u>78</u> (A) <u>390</u> (B) Prevalence Index = B/A = <u>5</u>
Sapling/Shrub Stratum (Plot size: <u>SM</u>)				
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
<u>0</u> = Total Cover				
Herb Stratum (Plot size: <u>SM</u>)				Hydrophytic Vegetation Indicators: ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 ¹ ___ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Hirschfeldia incana</u>	<u>75</u>	<u>Yes</u>	<u>UPL</u>	
2. <u>Euphorbia maculata</u>	<u>3</u>		<u>UPL</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
<u>78</u> = Total Cover				
Woody Vine Stratum (Plot size: <u>SM</u>)				
1. _____				
2. _____				
<u>0</u> = Total Cover				
% Bare Ground in Herb Stratum <u>22</u> % Cover of Biotic Crust _____				
Remarks: <u>Vegetation within Detention Basin had been recently mowed vegetation data is estimated based the remains of plants that could be identified</u>				

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: CSUDH City/County: Carson/Los Angeles Sampling Date: 8/9/2017
 Applicant/Owner: CSUDH State: CA Sampling Point: 07
 Investigator(s): MATT SCHAAF Section, Township, Range: Sec 33, T2S, R13W
 Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): concave Slope (%): 2
 Subregion (LRR): LRRG Lat: 33.858843° Long: -118.253682° Datum: NAD83
 Soil Map Unit Name: URBAN land-Type Xeranthos, textured-wood-fitch complex 2:12 sil⁴ NWI classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation , Soil X, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation , Soil X, or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>	Is the Sampled Area within a Wetland? Yes <u> </u> No <u>X</u>
Hydric Soil Present? Yes <u> </u> No <u>X</u>	
Wetland Hydrology Present? Yes <u> </u> No <u>X</u>	
Remarks: <u>Sample location is located in an A-Man-made detention basin, with a culvert at ground level. no evidence hydrology, hydrophytic vegetation or soils present.</u>	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>5m</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
Sapling/Shrub Stratum (Plot size: <u>5m</u>) <u>∅</u> = Total Cover				Hydrophytic Vegetation Indicators: ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 ¹ ___ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
Herb Stratum (Plot size: <u>5m</u>) <u>∅</u> = Total Cover				Hydrophytic Vegetation Present? Yes <u> </u> No <u>X</u>
1. <u>Helianthus annuus</u>	<u>70</u>	<u>Yes</u>	<u>FACU</u>	
2. <u>Hirschfeldia incana</u>	<u>20</u>	<u>Yes</u>	<u>UPL</u>	
3. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
4. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
5. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
Woody Vine Stratum (Plot size: <u>5m</u>) <u>90</u> = Total Cover				
1. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
2. <u> </u>	<u> </u>	<u> </u>	<u> </u>	
% Bare Ground in Herb Stratum <u>10</u> % Cover of Biotic Crust <u>∅</u>				
Remarks:				

SOIL

Sampling Point: 07

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-16	2.5YR	5/4	100				LS	uniform, highly compacted

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 1 cm Muck (A9) (LRR C)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 2 cm Muck (A10) (LRR B)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Reduced Vertic (F18)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Stratified Layers (A5) (LRR C)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> 1 cm Muck (A9) (LRR D)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Depressions (F8)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Vernal Pools (F9)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)		

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):
 Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes _____ No

Remarks: *No hydric soil indicators were observed within the survey plot. Soil is highly compacted. Could not dig beyond 16 inches. Soil appears to be fill.*

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Salt Crust (B11)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Biotic Crust (B12)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Water Marks (B1) (Nonriverine)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Sediment Deposits (B2) (Nonriverine)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Drift Deposits (B3) (Nonriverine)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Thin Muck Surface (C7)
<input type="checkbox"/> Water-Stained Leaves (B9)	<input type="checkbox"/> Other (Explain in Remarks)
	<input type="checkbox"/> Water Marks (B1) (Riverine)
	<input type="checkbox"/> Sediment Deposits (B2) (Riverine)
	<input type="checkbox"/> Drift Deposits (B3) (Riverine)
	<input type="checkbox"/> Drainage Patterns (B10)
	<input type="checkbox"/> Dry-Season Water Table (C2)
	<input type="checkbox"/> Crayfish Burrows (C8)
	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
	<input type="checkbox"/> Shallow Aquitard (D3)
	<input type="checkbox"/> FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No Depth (inches): _____

Water Table Present? Yes _____ No Depth (inches): _____

Saturation Present? Yes _____ No Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes _____ No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: *No wetland hydrology indicators observed within the survey plot*

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: CSUDH City/County: CARSON/Los Angeles Sampling Date: 8/9/2017
 Applicant/Owner: CSU DM State: CA Sampling Point: 08
 Investigator(s): Matt Schnap Section, Township, Range: Sec 33, T35, R13W
 Landform (hillslope, terrace, etc.): hill slope Local relief (concave, convex, none): none Slope (%): 2
 Subregion (LRR): LRR C Lat: 33.537959° Long: -119.250728° Datum: NAD83
 Soil Map Unit Name: URBAN land-type 18107k01, terrace-wind flat complex 29% NWI classification: N/A
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.)
 Are Vegetation Soil or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No
 Are Vegetation Soil or Hydrology naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soil Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Wetland Hydrology Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Remarks: <u>Sample location is located at the end of drainage. No evidence of hydrology, soils, or hydrophytic vegetation. Area is heavily altered.</u>		

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>5M</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
1. <u>eliotiana glauca</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>		Total Number of Dominant Species Across All Strata: 3 (B)
2. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>33%</u> (A/B)
3. _____				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species <u>5</u> x 3 = <u>15</u> FACU species <u>20</u> x 4 = <u>80</u> UPL species <u>60</u> x 5 = <u>300</u> Column Totals: <u>85</u> (A) <u>395</u> (B) Prevalence Index = B/A = <u>4.64</u>
4. _____				
Sapling/Shrub Stratum (Plot size: <u>5M</u>)				
1. _____				
2. _____				
Herb Stratum (Plot size: <u>5M</u>)				
1. <u>Hirschfeldia incana</u>	<u>60%</u>	<u>YES</u>	<u>UPL</u>	
2. <u>Hellanthus annuus</u>	<u>20%</u>	<u>YES</u>	<u>FACU</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
Woody Vine Stratum (Plot size: _____)				
1. _____				
2. _____				
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>20</u> % Cover of Biotic Crust <u>0</u>				
Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>				
Remarks:				

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: <i>CSUDH SD</i> Project Number: Stream: <i>unnamed Drainage</i> Investigator(s): <i>Matt Schump</i>	Date: <i>8/4/2017</i> Town: <i>CARSON</i> Photo begin file#:	Time: <i>10:35</i> State: <i>CA</i> Photo end file#:
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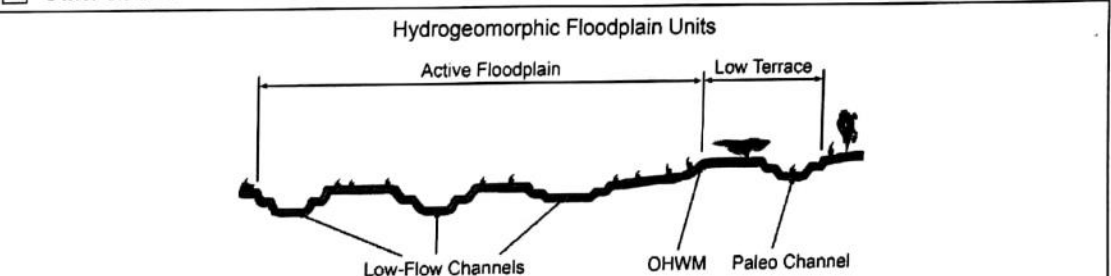
Y <input type="checkbox"/> / N <input checked="" type="checkbox"/> Do normal circumstances exist on the site? Y <input checked="" type="checkbox"/> / N <input type="checkbox"/> Is the site significantly disturbed?	Location Details: <i>Pacific View Dr.</i> <i>CSUDH CAMPUS</i> Projection: <i>LATLUNG</i> Datum: <i>NAD 83</i> Coordinates: <i>33.861485° -118.252507</i>
--	---

Potential anthropogenic influences on the channel system:
Runoff from Pacific View Drive, erosion from graded lot, wattles installed along length of drainage and installation of culverts

Brief site description:
Man-made drainage located along Pacific View Dr. Single low flow channel lacking vegetation. Approximately two feet wide. Heavily impacted by development. Fed by sheet flow from Road and adjacent lot.

Checklist of resources (if available):

<input checked="" type="checkbox"/> Aerial photography	<input type="checkbox"/> Stream gage data
Dates:	Gage number:
<input checked="" type="checkbox"/> Topographic maps	Period of record:
<input type="checkbox"/> Geologic maps	<input type="checkbox"/> History of recent effective discharges
<input checked="" type="checkbox"/> Vegetation maps	<input type="checkbox"/> Results of flood frequency analysis
<input checked="" type="checkbox"/> Soils maps	<input type="checkbox"/> Most recent shift-adjusted rating
<input type="checkbox"/> Rainfall/precipitation maps	<input type="checkbox"/> Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event
<input type="checkbox"/> Existing delineation(s) for site	
<input checked="" type="checkbox"/> Global positioning system (GPS)	
<input type="checkbox"/> Other studies	

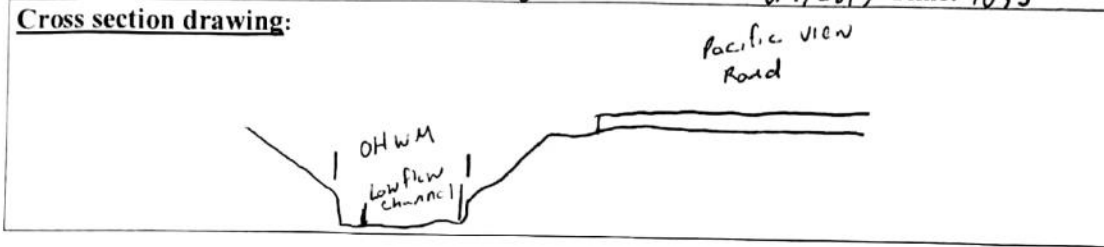


- Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:**
1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
 2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
 3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
 - a) Record the floodplain unit and GPS position.
 - b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.
 - c) Identify any indicators present at the location.
 4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.
 5. Identify the OHWM and record the indicators. Record the OHWM position via:

<input checked="" type="checkbox"/> Mapping on aerial photograph	<input checked="" type="checkbox"/> GPS
<input checked="" type="checkbox"/> Digitized on computer	<input type="checkbox"/> Other:

Project ID: _____ Cross section ID: 01 Date: 8/9/2017 Time: 1035

Cross section drawing:



OHWM

GPS point: 33.861485, -118.252507

Indicators:

- Change in average sediment texture
- Change in vegetation species
- Change in vegetation cover
- Break in bank slope
- Other: _____
- Other: _____

Comments:

Floodplain unit: Low-Flow Channel Active Floodplain Low Terrace

GPS point: 33.861432

Characteristics of the floodplain unit:
 Average sediment texture: coarse silt
 Total veg cover: 0 % Tree: _____ % Shrub: _____ % Herb: _____ %

Community successional stage:
 NA Mid (herbaceous, shrubs, saplings)
 Early (herbaceous & seedlings) Late (herbaceous, shrubs, mature trees)

Indicators:

- Mudcracks
- Ripples
- Drift and/or debris
- Presence of bed and bank
- Benches
- Soil development
- Surface relief
- Other: _____
- Other: _____
- Other: _____

Comments:

Project ID: _____ **Cross section ID:** _____ **Date:** _____ **Time:** _____

Floodplain unit: Low-Flow Channel Active Floodplain Low Terrace

GPS point: 53.861432, -114.252500

Characteristics of the floodplain unit:
 Average sediment texture: Coarse silt
 Total veg cover: 0 % Tree: _____ % Shrub: _____ % Herb: _____ %
 Community successional stage:
 NA Mid (herbaceous, shrubs, saplings)
 Early (herbaceous & seedlings) Late (herbaceous, shrubs, mature trees)

Indicators:

<input type="checkbox"/> Mudcracks	<input type="checkbox"/> Soil development
<input type="checkbox"/> Ripples	<input type="checkbox"/> Surface relief
<input checked="" type="checkbox"/> Drift and/or debris	<input type="checkbox"/> Other: _____
<input checked="" type="checkbox"/> Presence of bed and bank	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Benches	<input type="checkbox"/> Other: _____

Comments:

Floodplain unit: Low-Flow Channel Active Floodplain Low Terrace

GPS point: _____

Characteristics of the floodplain unit:
 Average sediment texture: _____
 Total veg cover: _____ % Tree: _____ % Shrub: _____ % Herb: _____ %
 Community successional stage:
 NA Mid (herbaceous, shrubs, saplings)
 Early (herbaceous & seedlings) Late (herbaceous, shrubs, mature trees)

Indicators:

<input type="checkbox"/> Mudcracks	<input type="checkbox"/> Soil development
<input type="checkbox"/> Ripples	<input type="checkbox"/> Surface relief
<input type="checkbox"/> Drift and/or debris	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Presence of bed and bank	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Benches	<input type="checkbox"/> Other: _____

Comments:

Arid West Ephemeral and Intermittent Streams OHW M Datasheet

Project: <i>CSU DH SD</i>	Date: <i>8/9/2017</i>	Time: <i>1100</i>	②
Project Number:	Town: <i>LARSO</i>	State: <i>CA</i>	
Stream: <i>unnamed drainage</i>	Photo begin file#:	Photo end file#:	
Investigator(s): <i>MATT SCHWAB</i>			

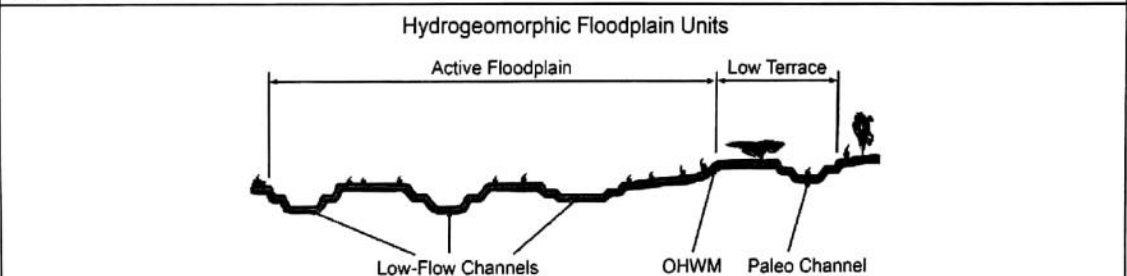
Y <input type="checkbox"/> / N <input checked="" type="checkbox"/> Do normal circumstances exist on the site?	Location Details: <i>CSU DH north of Pacific View Dr.</i>
Y <input checked="" type="checkbox"/> / N <input type="checkbox"/> Is the site significantly disturbed?	
Projection: <i>LAR Long</i> Datum: <i>NAD83</i>	
Coordinates: <i>33.861536°, -118.250770°</i>	

Potential anthropogenic influences on the channel system:
Runoff from adjacent areas. Channel was channelized, culvert located downstream

Brief site description: *Man-made drainage located on edge of lot. Narrow incised channel one foot deep by two feet wide. No riparian vegetation. Ruderal vegetation. Single low flow channel.*

Checklist of resources (if available):

<input checked="" type="checkbox"/> Aerial photography	<input type="checkbox"/> Stream gage data
Dates:	Gage number:
<input checked="" type="checkbox"/> Topographic maps	Period of record:
<input type="checkbox"/> Geologic maps	<input type="checkbox"/> History of recent effective discharges
<input type="checkbox"/> Vegetation maps	<input type="checkbox"/> Results of flood frequency analysis
<input checked="" type="checkbox"/> Soils maps	<input type="checkbox"/> Most recent shift-adjusted rating
<input type="checkbox"/> Rainfall/precipitation maps	<input type="checkbox"/> Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event
<input type="checkbox"/> Existing delineation(s) for site	
<input checked="" type="checkbox"/> Global positioning system (GPS)	
<input type="checkbox"/> Other studies	



- Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:**
- Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
 - Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
 - Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
 - Record the floodplain unit and GPS position.
 - Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.
 - Identify any indicators present at the location.
 - Repeat for other points in different hydrogeomorphic floodplain units across the cross section.
 - Identify the OHWM and record the indicators. Record the OHWM position via:

<input checked="" type="checkbox"/> Mapping on aerial photograph	<input checked="" type="checkbox"/> GPS
<input checked="" type="checkbox"/> Digitized on computer	<input type="checkbox"/> Other:

Project ID: _____ Cross section ID: _____ Date: _____ Time: _____

Cross section drawing:

OHWM

GPS point: 33.861450°, -118.2650739°

Indicators:

<input checked="" type="checkbox"/> Change in average sediment texture	<input checked="" type="checkbox"/> Break in bank slope
<input type="checkbox"/> Change in vegetation species	<input type="checkbox"/> Other: _____
<input checked="" type="checkbox"/> Change in vegetation cover	<input type="checkbox"/> Other: _____

Comments:

Floodplain unit: Low-Flow Channel Active Floodplain Low Terrace

GPS point: 33.861443°, -118.250745°

Characteristics of the floodplain unit:

Average sediment texture: Pebble

Total veg cover: 50 % Tree: _____ % Shrub: _____ % Herb: 50 %

Community successional stage:

<input type="checkbox"/> NA	<input type="checkbox"/> Mid (herbaceous, shrubs, saplings)
<input checked="" type="checkbox"/> Early (herbaceous & seedlings)	<input type="checkbox"/> Late (herbaceous, shrubs, mature trees)

Indicators:

<input type="checkbox"/> Mudcracks	<input type="checkbox"/> Soil development
<input type="checkbox"/> Ripples	<input type="checkbox"/> Surface relief
<input checked="" type="checkbox"/> Drift and/or debris	<input type="checkbox"/> Other: _____
<input checked="" type="checkbox"/> Presence of bed and bank	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Benches	<input type="checkbox"/> Other: _____

Comments:

Project ID: _____ Cross section ID: _____ Date: _____ Time: _____

Floodplain unit: Low-Flow Channel Active Floodplain Low Terrace

GPS point: 33.861445°, -118.250732°

Characteristics of the floodplain unit:
 Average sediment texture: Coarse S.H
 Total veg cover: 50 % Tree: _____ % Shrub: _____ % Herb: 50 %
 Community successional stage:
 NA Mid (herbaceous, shrubs, saplings)
 Early (herbaceous & seedlings) Late (herbaceous, shrubs, mature trees)

Indicators:
 Mudcracks Soil development
 Ripples Surface relief
 Drift and/or debris Other: _____
 Presence of bed and bank Other: _____
 Benches Other: _____

Comments:

Floodplain unit: Low-Flow Channel Active Floodplain Low Terrace

GPS point: _____

Characteristics of the floodplain unit:
 Average sediment texture: _____
 Total veg cover: _____ % Tree: _____ % Shrub: _____ % Herb: _____ %
 Community successional stage:
 NA Mid (herbaceous, shrubs, saplings)
 Early (herbaceous & seedlings) Late (herbaceous, shrubs, mature trees)

Indicators:
 Mudcracks Soil development
 Ripples Surface relief
 Drift and/or debris Other: _____
 Presence of bed and bank Other: _____
 Benches Other: _____

Comments:

Arid West Ephemeral and Intermittent Streams OHW M Datasheet

Project: <i>CSUDH JD</i> Project Number: Stream: <i>unnamed Drainage</i> Investigator(s):	Date: <i>4/9/2017</i> Time: <i>1200</i> 3 Town: <i>CARSO</i> State: <i>CA</i> Photo begin file#: Photo end file#:
Y <input type="checkbox"/> / N <input checked="" type="checkbox"/> Do normal circumstances exist on the site? Y <input checked="" type="checkbox"/> / N <input type="checkbox"/> Is the site significantly disturbed?	Location Details: <i>CSUDH Campus south of Pacific Blvd.</i> Projection: <i>LAT Long</i> Datum: <i>NAD 83</i> Coordinates: <i>33.859896, -118.252220</i>
Potential anthropogenic influences on the channel system: <i>Culvert upstream of Point. Channel filled with soil down stream Road through drainage. Runoff from maintenance facility</i>	
Brief site description: <i>Shallow single low flow vegetated by Non-NATIVE Annuals Roadside ditch.</i>	
Checklist of resources (if available): <input checked="" type="checkbox"/> Aerial photography <input type="checkbox"/> Stream gage data Dates: Gage number: <input checked="" type="checkbox"/> Topographic maps Period of record: <input type="checkbox"/> Geologic maps <input type="checkbox"/> History of recent effective discharges <input type="checkbox"/> Vegetation maps <input type="checkbox"/> Results of flood frequency analysis <input checked="" type="checkbox"/> Soils maps <input type="checkbox"/> Most recent shift-adjusted rating <input type="checkbox"/> Rainfall/precipitation maps <input type="checkbox"/> Gage heights for 2-, 5-, 10-, and 25-year events and the Existing delineation(s) for site most recent event exceeding a 5-year event <input checked="" type="checkbox"/> Global positioning system (GPS) <input type="checkbox"/> Other studies	
Hydrogeomorphic Floodplain Units	
Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM: 1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site. 2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units. 3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units. a) Record the floodplain unit and GPS position. b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit. c) Identify any indicators present at the location. 4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section. 5. Identify the OHWM and record the indicators. Record the OHWM position via: <input checked="" type="checkbox"/> Mapping on aerial photograph <input checked="" type="checkbox"/> GPS <input checked="" type="checkbox"/> Digitized on computer <input type="checkbox"/> Other:	

Project ID: _____ Cross section ID: 04 Date: 8/9/2017 Time: 1230

Cross section drawing:

OHWM

GPS point: 33.859204, -118.

Indicators:

<input checked="" type="checkbox"/> Change in average sediment texture	<input checked="" type="checkbox"/> Break in bank slope
<input type="checkbox"/> Change in vegetation species	<input type="checkbox"/> Other: _____
<input checked="" type="checkbox"/> Change in vegetation cover	<input type="checkbox"/> Other: _____

Comments:

Floodplain unit: Low-Flow Channel Active Floodplain Low Terrace

GPS point: 33.859030, -118.252240

Characteristics of the floodplain unit:
 Average sediment texture: Pebble
 Total veg cover: 20 % Tree: % Shrub: % Herb: 20 %

Community successional stage:

<input type="checkbox"/> NA	<input type="checkbox"/> Mid (herbaceous, shrubs, saplings)
<input checked="" type="checkbox"/> Early (herbaceous & seedlings)	<input type="checkbox"/> Late (herbaceous, shrubs, mature trees)

Indicators:

<input type="checkbox"/> Mudcracks	<input type="checkbox"/> Soil development
<input type="checkbox"/> Ripples	<input type="checkbox"/> Surface relief
<input checked="" type="checkbox"/> Drift and/or debris	<input type="checkbox"/> Other: _____
<input checked="" type="checkbox"/> Presence of bed and bank	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Benches	<input type="checkbox"/> Other: _____

Comments:

Project ID: _____ **Cross section ID:** _____ **Date:** _____ **Time:** _____

Floodplain unit: Low-Flow Channel Active Floodplain Low Terrace

GPS point: 33.859035°, -118.252201'

Characteristics of the floodplain unit:
 Average sediment texture: Coarse silt
 Total veg cover: 30 % Tree: _____ % Shrub: 10 % Herb: 20 %
 Community successional stage:
 NA Mid (herbaceous, shrubs, saplings)
 Early (herbaceous & seedlings) Late (herbaceous, shrubs, mature trees)

Indicators:

<input type="checkbox"/> Mudcracks	<input type="checkbox"/> Soil development
<input type="checkbox"/> Ripples	<input type="checkbox"/> Surface relief
<input checked="" type="checkbox"/> Drift and/or debris	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Presence of bed and bank	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Benches	<input type="checkbox"/> Other: _____

Comments:

Floodplain unit: Low-Flow Channel Active Floodplain Low Terrace

GPS point: _____

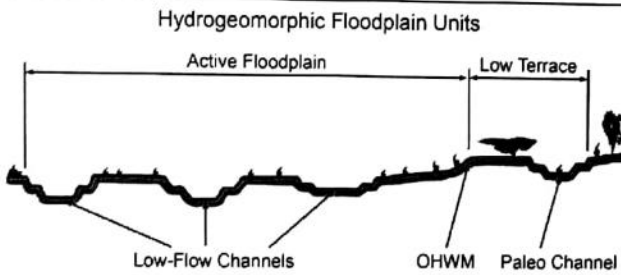
Characteristics of the floodplain unit:
 Average sediment texture: _____
 Total veg cover: _____ % Tree: _____ % Shrub: _____ % Herb: _____ %
 Community successional stage:
 NA Mid (herbaceous, shrubs, saplings)
 Early (herbaceous & seedlings) Late (herbaceous, shrubs, mature trees)

Indicators:

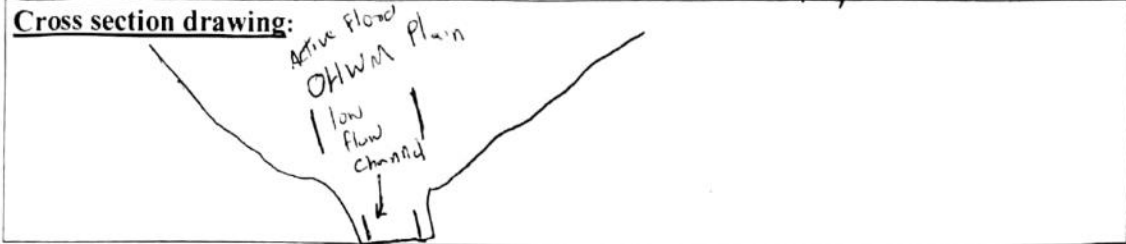
<input type="checkbox"/> Mudcracks	<input type="checkbox"/> Soil development
<input type="checkbox"/> Ripples	<input type="checkbox"/> Surface relief
<input type="checkbox"/> Drift and/or debris	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Presence of bed and bank	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Benches	<input type="checkbox"/> Other: _____

Comments:

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: <i>CSU DH JD</i> Project Number: Stream: <i>unnamed drainage</i> Investigator(s): <i>Meti Schaeff</i>	Date: <i>8/9/2017</i> Time: <i>1130</i> Town: <i>CARSON</i> State: <i>CA</i> Photo begin file#: Photo end file#:
Y <input type="checkbox"/> / N <input checked="" type="checkbox"/> Do normal circumstances exist on the site? Y <input checked="" type="checkbox"/> / N <input type="checkbox"/> Is the site significantly disturbed?	Location Details: <i>PACIFIC VIEW DR. CSU DH CAMPUS</i> Projection: <i>LAT/LONG</i> Datum: <i>NA083</i> Coordinates: <i>33.860838, -118.250792</i>
Potential anthropogenic influences on the channel system: <i>culvert feeding and on lower end of drainage, run off from development and road, channelized and routed around fields</i>	
Brief site description: <i>MAN MADE drainage deep incised channel on southern end becoming shallower upstream. no riparian vegetation present. single low flow channel 2-4 feet wide</i>	
Checklist of resources (if available): <input checked="" type="checkbox"/> Aerial photography <input type="checkbox"/> Stream gage data Dates: Gage number: <input checked="" type="checkbox"/> Topographic maps Period of record: <input type="checkbox"/> Geologic maps <input type="checkbox"/> History of recent effective discharges <input type="checkbox"/> Vegetation maps <input type="checkbox"/> Results of flood frequency analysis <input checked="" type="checkbox"/> Soils maps <input type="checkbox"/> Most recent shift-adjusted rating <input type="checkbox"/> Rainfall/precipitation maps <input type="checkbox"/> Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event <input type="checkbox"/> Existing delineation(s) for site <input checked="" type="checkbox"/> Global positioning system (GPS) <input type="checkbox"/> Other studies	
Hydrogeomorphic Floodplain Units 	
Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM: 1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site. 2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units. 3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units. a) Record the floodplain unit and GPS position. b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit. c) Identify any indicators present at the location. 4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section. 5. Identify the OHWM and record the indicators. Record the OHWM position via: <input checked="" type="checkbox"/> Mapping on aerial photograph <input checked="" type="checkbox"/> GPS <input checked="" type="checkbox"/> Digitized on computer <input type="checkbox"/> Other:	

Project ID: _____ Cross section ID: 02 Date: 8/9/17 Time: 1130



OHWM

GPS point: 33.860686, -118.251197

Indicators:

<input type="checkbox"/> Change in average sediment texture	<input checked="" type="checkbox"/> Break in bank slope
<input checked="" type="checkbox"/> Change in vegetation species	<input type="checkbox"/> Other: _____
<input checked="" type="checkbox"/> Change in vegetation cover	<input type="checkbox"/> Other: _____

Comments:

Floodplain unit: Low-Flow Channel Active Floodplain Low Terrace

GPS point: 33.860686, -118.251197

Characteristics of the floodplain unit:

Average sediment texture: Coarse silt

Total veg cover: 0 % Tree: _____ % Shrub: _____ % Herb: _____ %

Community successional stage:

<input checked="" type="checkbox"/> NA	<input type="checkbox"/> Mid (herbaceous, shrubs, saplings)
<input type="checkbox"/> Early (herbaceous & seedlings)	<input type="checkbox"/> Late (herbaceous, shrubs, mature trees)

Indicators:

<input type="checkbox"/> Mudcracks	<input type="checkbox"/> Soil development
<input type="checkbox"/> Ripples	<input type="checkbox"/> Surface relief
<input checked="" type="checkbox"/> Drift and/or debris	<input type="checkbox"/> Other: _____
<input checked="" type="checkbox"/> Presence of bed and bank	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Benches	<input type="checkbox"/> Other: _____

Comments:

Project ID: _____ **Cross section ID:** _____ **Date:** _____ **Time:** _____

Floodplain unit: Low-Flow Channel Active Floodplain Low Terrace

GPS point: 33.860695°, -118.251191°

Characteristics of the floodplain unit:
 Average sediment texture: coarse silt
 Total veg cover: 0 % Tree: _____ % Shrub: _____ % Herb: _____ %
 Community successional stage:
 NA Mid (herbaceous, shrubs, saplings)
 Early (herbaceous & seedlings) Late (herbaceous, shrubs, mature trees)

Indicators:
 Mudcracks Soil development
 Ripples Surface relief
 Drift and/or debris Other: _____
 Presence of bed and bank Other: _____
 Benches Other: _____

Comments:

Floodplain unit: Low-Flow Channel Active Floodplain Low Terrace

GPS point: _____

Characteristics of the floodplain unit:
 Average sediment texture: _____
 Total veg cover: _____ % Tree: _____ % Shrub: _____ % Herb: _____ %
 Community successional stage:
 NA Mid (herbaceous, shrubs, saplings)
 Early (herbaceous & seedlings) Late (herbaceous, shrubs, mature trees)

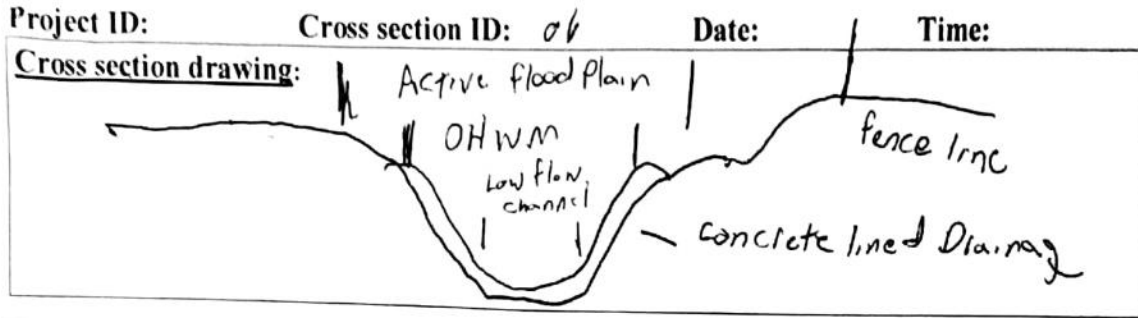
Indicators:
 Mudcracks Soil development
 Ripples Surface relief
 Drift and/or debris Other: _____
 Presence of bed and bank Other: _____
 Benches Other: _____

Comments:

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: <i>CSUDH JD</i> Project Number: Stream: <i>Unnamed Drainage</i> Investigator(s): <i>MATT SCHAAT</i>	Date: <i>8/9/2017</i> Time: <i>1300</i> Town: <i>CARSON</i> State: <i>CA</i> Photo begin file#: Photo end file#:
Y <input type="checkbox"/> / N <input checked="" type="checkbox"/> Do normal circumstances exist on the site? Y <input checked="" type="checkbox"/> / N <input type="checkbox"/> Is the site significantly disturbed?	Location Details: <i>West of Maintenance facility South of Pacific View Drive.</i> Projection: <i>LAT/LONG</i> Datum: <i>NAD 83</i> Coordinates: <i>33.860152°, -118.254531°</i>
Potential anthropogenic influences on the channel system: <i>Culvert installed up stream. Road crosses drainage. Drainage is lined with broken concrete and drains to man made basin.</i>	
Brief site description: <i>Concrete lined channel located along edge of maintenance facility. Single channel. Drains to man-made basin. Vegetation consists of non-native Russian thistle.</i>	
Checklist of resources (if available): <input checked="" type="checkbox"/> Aerial photography <input type="checkbox"/> Stream gage data Dates: Gage number: <input checked="" type="checkbox"/> Topographic maps Period of record: <input type="checkbox"/> Geologic maps <input type="checkbox"/> History of recent effective discharges <input type="checkbox"/> Vegetation maps <input type="checkbox"/> Results of flood frequency analysis <input checked="" type="checkbox"/> Soils maps <input type="checkbox"/> Most recent shift-adjusted rating <input type="checkbox"/> Rainfall/precipitation maps <input type="checkbox"/> Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event <input type="checkbox"/> Existing delineation(s) for site <input checked="" type="checkbox"/> Global positioning system (GPS) <input type="checkbox"/> Other studies	
Hydrogeomorphic Floodplain Units 	
Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM: 1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site. 2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units. 3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units. a) Record the floodplain unit and GPS position. b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit. c) Identify any indicators present at the location. 4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section. 5. Identify the OHWM and record the indicators. Record the OHWM position via: <input checked="" type="checkbox"/> Mapping on aerial photograph <input checked="" type="checkbox"/> GPS <input checked="" type="checkbox"/> Digitized on computer <input type="checkbox"/> Other:	

5



OHWM

GPS point: *33.860196, -118.254544*

Indicators:

<input type="checkbox"/> Change in average sediment texture	<input checked="" type="checkbox"/> Break in bank slope
<input type="checkbox"/> Change in vegetation species	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Change in vegetation cover	<input type="checkbox"/> Other: _____

Comments:

Floodplain unit: Low-Flow Channel Active Floodplain Low Terrace

GPS point: *33.86013, -118.254566*

Characteristics of the floodplain unit:
 Average sediment texture: *LARGE chunks of Broken concrete*
 Total veg cover: *20* % Tree: _____ % Shrub: *20* % Herb: _____ %
 Community successional stage:
 NA Mid (herbaceous, shrubs, saplings)
 Early (herbaceous & seedlings) Late (herbaceous, shrubs, mature trees)

Indicators:

<input type="checkbox"/> Mudcracks	<input type="checkbox"/> Soil development
<input type="checkbox"/> Ripples	<input type="checkbox"/> Surface relief
<input checked="" type="checkbox"/> Drift and/or debris	<input type="checkbox"/> Other: _____
<input checked="" type="checkbox"/> Presence of bed and bank	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Benches	<input type="checkbox"/> Other: _____

Comments:
Broken concrete lines the drainage and bank.

Project ID: _____ **Cross section ID:** _____ **Date:** _____ **Time:** _____

Floodplain unit: Low-Flow Channel Active Floodplain Low Terrace

GPS point: 33.860098°, -118.234514°

Characteristics of the floodplain unit:
 Average sediment texture: Broken concrete chunks
 Total veg cover: 0 % Tree: _____ % Shrub: _____ % Herb: _____ %
 Community successional stage:
 NA Mid (herbaceous, shrubs, saplings)
 Early (herbaceous & seedlings) Late (herbaceous, shrubs, mature trees)

Indicators:
 Mudcracks Soil development
 Ripples Surface relief
 Drift and/or debris Other: _____
 Presence of bed and bank Other: _____
 Benches Other: _____

Comments:
Lined within broken concrete

Floodplain unit: Low-Flow Channel Active Floodplain Low Terrace

GPS point: _____

Characteristics of the floodplain unit:
 Average sediment texture: _____
 Total veg cover: _____ % Tree: _____ % Shrub: _____ % Herb: _____ %
 Community successional stage:
 NA Mid (herbaceous, shrubs, saplings)
 Early (herbaceous & seedlings) Late (herbaceous, shrubs, mature trees)

Indicators:
 Mudcracks Soil development
 Ripples Surface relief
 Drift and/or debris Other: _____
 Presence of bed and bank Other: _____
 Benches Other: _____

Comments:

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

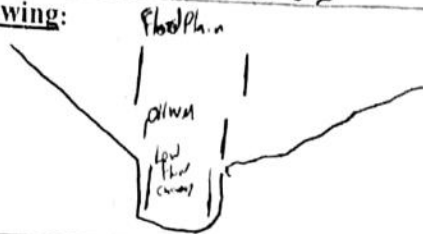
Project: <i>CSU DH JD</i> Project Number: Stream: <i>unnamed Drainage</i> Investigator(s): <i>Matt Schaefer</i>	Date: <i>8/9/2017</i> Time: <i>1300</i> Town: <i>CARSON</i> State: <i>CA</i> Photo begin file#: Photo end file#:		
Y <input type="checkbox"/> / N <input checked="" type="checkbox"/> Do normal circumstances exist on the site?	Location Details: <i>CSU DH CAMPUS SW of Perimeter Road</i>		
Y <input checked="" type="checkbox"/> / N <input type="checkbox"/> Is the site significantly disturbed?	Projection: <i>LAT/LUMB</i> Datum: <i>NAD 83</i> Coordinates: <i>33.258720, -118.230633</i>		
Potential anthropogenic influences on the channel system: <i>Drainage is channelized and has culverts on the upstream and downstream ends</i>			
Brief site description: <i>Single low flow channel with a deeply incised channel surrounded by freetobacco and Mustard.</i>			
Checklist of resources (if available): <table style="width:100%; border: none;"> <tr> <td style="width:50%; border: none;"> <input checked="" type="checkbox"/> Aerial photography <input checked="" type="checkbox"/> Dates: <input checked="" type="checkbox"/> Topographic maps <input type="checkbox"/> Geologic maps <input type="checkbox"/> Vegetation maps <input checked="" type="checkbox"/> Soils maps <input type="checkbox"/> Rainfall/precipitation maps <input type="checkbox"/> Existing delineation(s) for site <input checked="" type="checkbox"/> Global positioning system (GPS) <input type="checkbox"/> Other studies </td> <td style="width:50%; border: none;"> <input type="checkbox"/> Stream gage data Gage number: Period of record: <input type="checkbox"/> History of recent effective discharges <input type="checkbox"/> Results of flood frequency analysis <input type="checkbox"/> Most recent shift-adjusted rating <input type="checkbox"/> Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event </td> </tr> </table>		<input checked="" type="checkbox"/> Aerial photography <input checked="" type="checkbox"/> Dates: <input checked="" type="checkbox"/> Topographic maps <input type="checkbox"/> Geologic maps <input type="checkbox"/> Vegetation maps <input checked="" type="checkbox"/> Soils maps <input type="checkbox"/> Rainfall/precipitation maps <input type="checkbox"/> Existing delineation(s) for site <input checked="" type="checkbox"/> Global positioning system (GPS) <input type="checkbox"/> Other studies	<input type="checkbox"/> Stream gage data Gage number: Period of record: <input type="checkbox"/> History of recent effective discharges <input type="checkbox"/> Results of flood frequency analysis <input type="checkbox"/> Most recent shift-adjusted rating <input type="checkbox"/> Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event
<input checked="" type="checkbox"/> Aerial photography <input checked="" type="checkbox"/> Dates: <input checked="" type="checkbox"/> Topographic maps <input type="checkbox"/> Geologic maps <input type="checkbox"/> Vegetation maps <input checked="" type="checkbox"/> Soils maps <input type="checkbox"/> Rainfall/precipitation maps <input type="checkbox"/> Existing delineation(s) for site <input checked="" type="checkbox"/> Global positioning system (GPS) <input type="checkbox"/> Other studies	<input type="checkbox"/> Stream gage data Gage number: Period of record: <input type="checkbox"/> History of recent effective discharges <input type="checkbox"/> Results of flood frequency analysis <input type="checkbox"/> Most recent shift-adjusted rating <input type="checkbox"/> Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event		
Hydrogeomorphic Floodplain Units			
Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:			
1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site. 2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units. 3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units. a) Record the floodplain unit and GPS position. b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit. c) Identify any indicators present at the location. 4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section. 5. Identify the OHWM and record the indicators. Record the OHWM position via:			
<table style="width:100%; border: none;"> <tr> <td style="width:50%; border: none;"> <input checked="" type="checkbox"/> Mapping on aerial photograph <input checked="" type="checkbox"/> Digitized on computer </td> <td style="width:50%; border: none;"> <input checked="" type="checkbox"/> GPS <input type="checkbox"/> Other: </td> </tr> </table>		<input checked="" type="checkbox"/> Mapping on aerial photograph <input checked="" type="checkbox"/> Digitized on computer	<input checked="" type="checkbox"/> GPS <input type="checkbox"/> Other:
<input checked="" type="checkbox"/> Mapping on aerial photograph <input checked="" type="checkbox"/> Digitized on computer	<input checked="" type="checkbox"/> GPS <input type="checkbox"/> Other:		

Project ID:

Cross section ID: 06

Date: 8/9/2017 Time:

Cross section drawing:



OHWM

GPS point: 33.858750° , -118.250633°

Indicators:

- Change in average sediment texture
- Change in vegetation species
- Change in vegetation cover
- Break in bank slope
- Other: _____
- Other: _____

Comments:

Floodplain unit:

- Low-Flow Channel
- Active Floodplain
- Low Terrace

GPS point: 33.858774° , -118.250636°

Characteristics of the floodplain unit:

Average sediment texture: Coarse sand
 Total veg cover: 10 % Tree: _____ % Shrub: _____ % Herb: 5 %

Community successional stage:

- NA
- Early (herbaceous & seedlings)
- Mid (herbaceous, shrubs, saplings)
- Late (herbaceous, shrubs, mature trees)

Indicators:

- Mudcracks
- Ripples
- Drift and/or debris
- Presence of bed and bank
- Benches
- Soil development
- Surface relief
- Other: _____
- Other: _____
- Other: _____

Comments:

Project ID: _____ Cross section ID: _____ Date: _____ Time: _____

Floodplain unit: Low-Flow Channel Active Floodplain Low Terrace

GPS point: 33.858786°, -118.250644°

Characteristics of the floodplain unit:
 Average sediment texture: coarse sand
 Total veg cover: 0 % Tree: _____ % Shrub: _____ % Herb: _____ %
 Community successional stage:
 NA Mid (herbaceous, shrubs, saplings)
 Early (herbaceous & seedlings) Late (herbaceous, shrubs, mature trees)

Indicators:

<input type="checkbox"/> Mudcracks	<input type="checkbox"/> Soil development
<input type="checkbox"/> Ripples	<input type="checkbox"/> Surface relief
<input checked="" type="checkbox"/> Drift and/or debris	<input type="checkbox"/> Other: _____
<input checked="" type="checkbox"/> Presence of bed and bank	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Benches	<input type="checkbox"/> Other: _____

Comments:

Floodplain unit: Low-Flow Channel Active Floodplain Low Terrace

GPS point: _____

Characteristics of the floodplain unit:
 Average sediment texture: _____
 Total veg cover: _____ % Tree: _____ % Shrub: _____ % Herb: _____ %
 Community successional stage:
 NA Mid (herbaceous, shrubs, saplings)
 Early (herbaceous & seedlings) Late (herbaceous, shrubs, mature trees)

Indicators:

<input type="checkbox"/> Mudcracks	<input type="checkbox"/> Soil development
<input type="checkbox"/> Ripples	<input type="checkbox"/> Surface relief
<input type="checkbox"/> Drift and/or debris	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Presence of bed and bank	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Benches	<input type="checkbox"/> Other: _____

Comments:

Arid West Ephemeral and Intermittent Streams OTHM Datasheet

Project: *CSU DH JD*
 Project Number: _____ Date: *8/9/2017* Time: *1400*
 Stream: *unnamed drainage* Town: *CARSON* State: *CA*
 Investigator(s): *Matt Schamp* Photo begin file#: _____ Photo end file#: _____

7

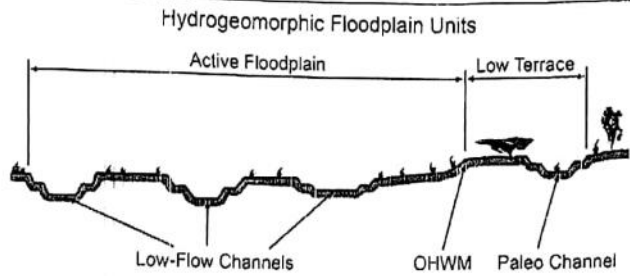
Y / N Do normal circumstances exist on the site?
 Y / N Is the site significantly disturbed?

Location Details: *South of CSU DH Perimeter Road*
 Projection: *Lat Long* Datum: *NAD 83*
 Coordinates: *33.859270, -118.255230*

Potential anthropogenic influences on the channel system:
Source of flow is sheet flow off of graded field. Cement basin located along boundary, and a culvert located in southwest portion of basin. Vegetation in area is mowed.

Brief site description:
Small, narrow single channel fed by erosional features to the north. Ending at a culvert located in the southwest portion of the drainage basin.

- Checklist of resources (if available):
- Aerial photography
 - Topographic maps
 - Geologic maps
 - Vegetation maps
 - Soils maps
 - Rainfall/precipitation maps
 - Existing delineation(s) for site
 - Global positioning system (GPS)
 - Other studies
 - Stream gage data
 - Gage number: _____
 - Period of record: _____
 - History of recent effective discharges
 - Results of flood frequency analysis
 - Most recent shift-adjusted rating
 - Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event



- Procedure for identifying and characterizing the floodplain units to assist in identifying the OTHM:**
- Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
 - Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
 - Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
 - Record the floodplain unit and GPS position.
 - Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.
 - Identify any indicators present at the location.
 - Repeat for other points in different hydrogeomorphic floodplain units across the cross section.
 - Identify the OTHM and record the indicators. Record the OTHM position via:
 - Mapping on aerial photograph
 - Digitized on computer
 - GPS
 - Other:

Project ID: _____ Cross section ID: _____ Date: _____ Time: _____

Cross section drawing:

OHWM

GPS point: 33.859270°, -118.25230°

Indicators:

<input type="checkbox"/> Change in average sediment texture	<input checked="" type="checkbox"/> Break in bank slope
<input type="checkbox"/> Change in vegetation species	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Change in vegetation cover	<input type="checkbox"/> Other: _____

Comments:

Floodplain unit: Low-Flow Channel Active Floodplain Low Terrace

GPS point: 33.859279°, -118.255234

Characteristics of the floodplain unit:

Average sediment texture: Fine sand

Total veg cover: 50 % Tree: _____ % Shrub: _____ % Herb: 50 %

Community successional stage:

<input type="checkbox"/> NA	<input type="checkbox"/> Mid (herbaceous, shrubs, saplings)
<input checked="" type="checkbox"/> Early (herbaceous & seedlings)	<input type="checkbox"/> Late (herbaceous, shrubs, mature trees)

Indicators:

<input type="checkbox"/> Mudcracks	<input type="checkbox"/> Soil development
<input type="checkbox"/> Ripples	<input type="checkbox"/> Surface relief
<input checked="" type="checkbox"/> Drift and/or debris	<input type="checkbox"/> Other: _____
<input checked="" type="checkbox"/> Presence of bed and bank	<input type="checkbox"/> Other: _____
<input type="checkbox"/> Benches	<input type="checkbox"/> Other: _____

Comments:

Project ID: _____ Cross section ID: _____ Date: _____ Time: _____

Floodplain unit: Low-Flow Channel Active Floodplain Low Terrace

GPS point: 33.959276, -118.255237

Characteristics of the floodplain unit:
 Average sediment texture: Fine Sand
 Total veg cover: 40 % Tree: _____ % Shrub: _____ % Herb: 40 %
 Community successional stage:
 NA Mid (herbaceous, shrubs, saplings)
 Early (herbaceous & seedlings) Late (herbaceous, shrubs, mature trees)

Indicators:
 Mudcracks Soil development
 Ripples Surface relief
 Drift and/or debris Other: _____
 Presence of bed and bank Other: _____
 Benches Other: _____

Comments:

Floodplain unit: Low-Flow Channel Active Floodplain Low Terrace

GPS point: _____

Characteristics of the floodplain unit:
 Average sediment texture: _____
 Total veg cover: _____ % Tree: _____ % Shrub: _____ % Herb: _____ %
 Community successional stage:
 NA Mid (herbaceous, shrubs, saplings)
 Early (herbaceous & seedlings) Late (herbaceous, shrubs, mature trees)

Indicators:
 Mudcracks Soil development
 Ripples Surface relief
 Drift and/or debris Other: _____
 Presence of bed and bank Other: _____
 Benches Other: _____

Comments:

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Appendix C: Photo Documentation

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PHOTO 1. SAMPLE LOCATION 1 FACING SOUTH AT WETLAND AREA LOCATED NEAR THE EXTENDED EDUCATION CENTER.



PHOTO 2. SOIL PIT AT SAMPLE LOCATION 1.



PHOTO 3. SAMPLE LOCATION 2 FACING WEST AT WETLAND AREA LOCATED NEAR THE EXTENDED EDUCATION CENTER.



PHOTO 4. SOIL PIT AT SAMPLE LOCATION 2.



PHOTO 5. SAMPLE LOCATION 3 FACING SOUTH AT WETLAND AREA LOCATED NEAR THE EXTENDED EDUCATION CENTER.



PHOTO 4. SOIL PIT LOCATION AT SAMPLE LOCATION 3.



PHOTO 7. SAMPLE LOCATION 4 FACING EAST AT WETLAND AREA LOCATED NEAR THE EXTENDED EDUCATION CENTER.



PHOTO 8. SOIL PIT AT SAMPLE LOCATION 4.



PHOTO 9. SAMPLE LOCATION 5 FACING NORTH AT MAN-MADE DETENTION BASIN LOCATED WEST MAINTENANCE FACILITY.



PHOTO 10. SOIL PIT AT SAMPLE LOCATION 5.



PHOTO 11. SAMPLE LOCATION FACING NORTH AT MAN-MADE DETENTION BASIN LOCATED WEST MAINTENANCE FACILITY.



PHOTO 12. SOIL PIT AT SAMPLE LOCATION 6.



PHOTO 13. SAMPLE LOCATION FACING EAST AT MAN-MADE DETENTION BASIN LOCATED SOUTH MAINTENANCE FACILITY.



PHOTO 14. SOIL PIT AT SAMPLE LOCATION 7.



PHOTO 15. SAMPLE LOCATION FACING SOUTH, SOUTH OF THE PHYSICAL PLANT.



PHOTO 16. SOIL PIT AT SAMPLE LOCATION 7.



PHOTO 17. MAN-MADE DITCH LOCATED ALONG BIRCHKNOLL ROAD, FACING SOUTH.



PHOTO 18. DRAINAGE LOCATED ALONG BIRCHKNOLL ROAD, FACING SOUTH.



PHOTO 19. DRAINAGE LOCATED ALONG PACIFIC VIEW DRIVE, FACING WEST.



PHOTO 20. CULVERTS ON DRAINAGE LOCATED SOUTH OF PACIFIC VIEW DRIVE, FACING NORTH.



PHOTO 21. DRAINAGE LOCATED ON NORTH SIDE OF MAINTENANCE FACILITY, FACING EAST.



PHOTO 22. CONCRETE LINED DRAINAGE LOCATED ON WEST SIDE OF MAINTENANCE FACILITY, FACING SOUTH.



PHOTO 23. DRAINAGE WITHIN DETENTION BASIN SOUTHWEST SIDE OF MAINTENANCE FACILITY, FACING NORTH.



PHOTO 24. DRAINAGE WITHIN DETENTION BASIN SOUTHWEST SIDE OF MAINTENANCE FACILITY, FACING SOUTH.



PHOTO 25. DRAINAGE NORTH OF THE PHYSICAL PLANT ALONG PACIFIC VIEW DRIVE, FACING EAST.



PHOTO 26. DRAINAGE WEST OF THE PHYSICAL PLANT, FACING SOUTHWEST.



PHOTO 27. ROAD ACROSS DRAINAGE WEST OF THE PHYSICAL PLANT, FACING SOUTHWEST.



PHOTO 28. FILLED DRAINAGE EAST OF THE MAINTENANCE FACILITY, FACING SOUTH.



PHOTO 29. DRAINAGE EAST OF THE MAINTENANCE FACILITY, FACING SOUTH.



PHOTO 30. DRAINAGE IN MAN-MADE DETENTION BASIN SOUTH OF THE MAINTENANCE FACILITY, FACING WEST.



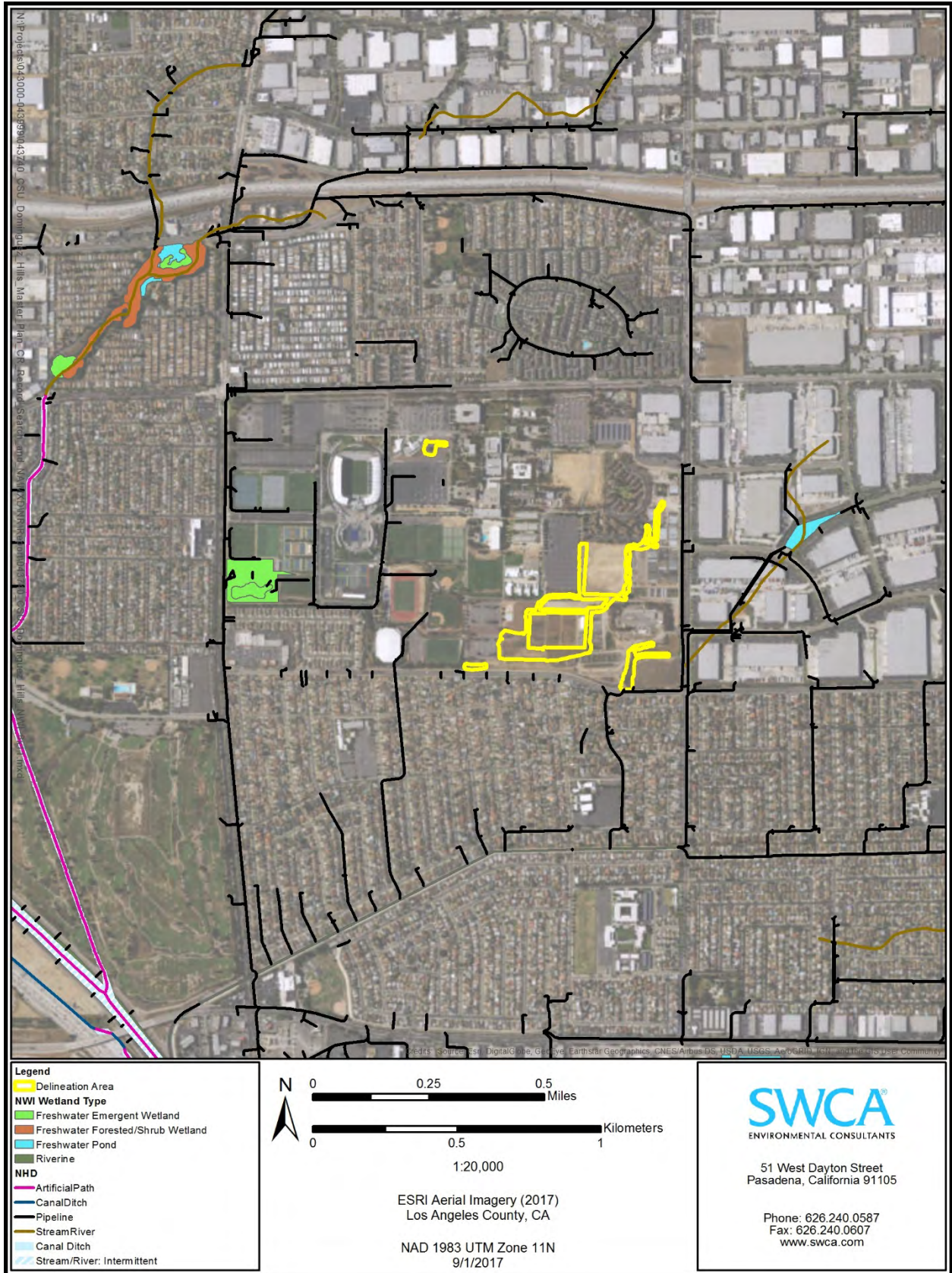
PHOTO 31. DRAINAGE SOUTH OF THE PHYSICAL PLANT, FACING WEST.



PHOTO 32. DRAINAGE SOUTH OF THE PHYSICAL PLANT, FACING SOUTH.

**Appendix D:
National Wetlands Inventory Map**

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**Appendix E:
Plant Species Observed in the Delineation Area**

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TABLE 1. PLANT SPECIES OBSERVED DURING DELINEATION.

Scientific name	Common Name	Family	Wetland Indicator Status**
<i>Arundo donax</i>	giant reed	Poaceae	FACW
<i>Avena</i> sp.	wild oats	Poaceae	None
<i>Baccharis salicifolia</i>	mule fat	Asteraceae	FAC
<i>Bromus diandrus</i>	ripgut brome	Poaceae	None
<i>Bromus madritensis</i>	foxtail brome	Poaceae	UPL
<i>Carpobrotus chilensis</i>	sea fig	Aizoaceae	FAC
<i>Centaurea melitensis</i>	toçalote	Asteraceae	None
<i>Convolvulus arvensis</i>	field bindweed	Convolvulaceae	None
<i>Crassula ovata</i>	jade plant	Crassulaceae	None
<i>Cynodon dactylon</i>	Bermuda grass	Poaceae	FACU
<i>Datura wrightii</i>	jimsonweed	Solanaceae	UPL
<i>Eleocharis palustris</i>	common spikerush	Cyperaceae	OBL
<i>Erigeron canadensis</i>	Canada horseweed	Asteraceae	FACU
<i>Eucalyptus globulus</i>	blue gum	Myrtaceae	None
<i>Euphorbia maculate</i>	spotted sandmat	Euphorbiaceae	UPL
<i>Foeniculum vulgare</i>	sweet fennel	Apiaceae	None
<i>Helianthus annuus</i>	hairy leaved sunflower	Asteraceae	FACU
<i>Helminthotheca echioides</i>	bristly ox-tongue	Asteraceae	FACU
<i>Hirschfeldia incana</i>	Short pod mustard	Brassicaceae	None
<i>Lactuca serriola</i>	prickly lettuce	Asteraceae	FACU
<i>Malosma laurina</i>	laurel sumac	Anacardiaceae	None
<i>Marrubium vulgare</i>	white horehound	Lamiaceae	FACU
<i>Melilotus albus</i>	white sweetclover	Fabaceae	None
<i>Nicotiana glauca</i>	tree tobacco	Solanaceae	FAC
<i>Opuntia ficus-indica</i>	tuna	Cactaceae	None
<i>Parkinsonia aculeata</i>	Mexican palo verde	Fabaceae	FAC
<i>Pinus canariensis</i>	Canary island pine	Pinaceae	None
<i>Pseudognaphalium canescens</i>	Wright's rabbit-tobacco	Asteraceae	FACU
<i>Ricinus communis</i>	castor bean	Euphorbiaceae	FACU
<i>Rumex crispus</i>	curly dock	Polygonaceae	FAC
<i>Salsola tragus</i>	Russian thistle	Chenopodiaceae	FACU
<i>Schoenoplectus maritimus</i>	saltmarsh club-rush	Cyperaceae	OBL
<i>Silybum marianum</i>	milk thistle	Asteraceae	None
<i>Sonchus asper</i> ssp. <i>asper</i>	sow thistle	Asteraceae	FAC
<i>Stipa miliacea</i> var. <i>miliacea</i>	smilo grass	Poaceae	None
<i>Washingtonia robusta</i>	Mexican fan palm	Arecaceae	FACW
<i>Xanthium strumarium</i>	cocklebur	Asteraceae	FAC

**Wetland Indicator Status:

OBL = occurs in aquatic resources >99% of time

FACW = occurs in aquatic resources 67-99% of time

FAC = occurs in aquatic resources 34-66% of time

FACU = occurs in aquatic resources 1-33% of time

UPL = occurs in uplands >99% of time

None = indicator status is not listed on NWPL Viewer v3.3 (Lichvar, et al. 2016)

**Appendix F:
Aquatic Resources EXCEL Spreadsheet**

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Waters_Name	State	Cowardin_Code	HGM_Code	Meas_Type	Amount	Units	Waters_Type
Freshwater Emergent Wetland	California	PEMA	DEPRESS	Area	0.24	Acres	ISOLATE
Ephemeral Drainage 1	California	R6	N/A	Area	0.078	Acres	TNWRPW
Ephemeral Drainage 2	California	R6	N/A	Area	0.427	Acres	TNWRPW
Ephemeral Drainage 3	California	R6	N/A	Area	0.477	Acres	TNWRPW
Ephemeral Drainage 4	California	R6	N/A	Area	0.216	Acres	TNWRPW

Latitude	Longitude	Local_Waterway	Similarly_Situated	Sim_Situated_Aggregated_SPOE	Adjcent_Waters_Sbjct_33USC1344	OHWM_Chg_In_Plant_Community	OHWM_Bed_And_Banks
33.865277°	118.258262°	Isolated	NO	NO	NO	NO	NO
33.861014°	118.252525°	No	NO	NO	NO	NO	YES
33.859597°	118.254535°	No	NO	NO	NO	NO	YES
33.859886°	118.252208°	No	NO	NO	NO	YES	YES
33.858467°	118.250619°	No	NO	NO	NO	YES	YES

OHWM_Break_In_Slope	OHWM_Chg_In_Character_Of_Soil	OHWM_Chg_In_Veg_Density_Maturity	OHWM_Chg_In_Sediment_Texture	OHWM_Line_Impressed_On_Bank	OHWM_Desctr_Of_Terrestrial_Veg	OHWM_Leaf_Litter_Disturbed	OHWM_Multiple_Flow_Events	OHWM_M_Scour	OHWM_Sediment_Deposition
NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
YES	NO	NO	NO	NO	NO	NO	NO	YES	YES
YES	NO	NO	NO	NO	NO	NO	NO	YES	YES
YES	YES	YES	YES	NO	NO	NO	NO	YES	YES
YES	NO	YES	NO	NO	NO	NO	NO	YES	YES

OHWM_Sediment_Sorting	OHWM_Shelving	OHWM_Litter_and_Debris_Present	OHWM_Wrack_Line_Present	OHWM_Veg_Matted_Bent_Or_Absent	OHWM_Water_Staining	OHWM_Other	OHWM_Other_Text	Func_I_Sediment_Trapping	Func_II_Nutrient_Recycling
NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
YES	NO	YES	NO	NO	NO	NO	NO	NO	NO
YES	NO	YES	NO	NO	NO	NO	NO	NO	NO
YES	NO	YES	NO	NO	NO	NO	NO	NO	NO
YES	NO	YES	NO	NO	NO	NO	NO	NO	NO

Func_III_Pollutant_Management	Func_IV_Return_Attenuation_of_Waters	Func_V_Runoff_Storage	Func_VI_Contribution_of_Flow	Func_VII_Export_of_Organic_Matter	Func_VIII_Export_of_Food_Resources	Func_IX_Provision_of_Life_Cycle_Dependent
NO	NO	NO	NO	NO	NO	NO
NO	NO	NO	YES	YES	NO	NO
NO	NO	NO	YES	YES	NO	NO
NO	NO	NO	YES	YES	NO	NO
NO	NO	NO	YES	YES	NO	NO

Appendix D. Cultural & Tribal Resources

D.1 Cultural Resources Analysis



ENVIRONMENTAL CONSULTANTS

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October 11, 2017

Irena Finkelstein, AICP
Senior Environmental Manager
WSP USA444 South Flower Street, Suite 800
Los Angeles, CA 90071

Transmitted via email to: Finkelstein@pbworld.com

**RE: Results of a Cultural Resources Analysis for the California State University
Dominguez Hills 2018 Master Plan, Los Angeles County, California.**

Dear Ms. Finkelstein:

SWCA Environmental Consultants (SWCA) was retained by WSP USA to conduct a cultural resources analysis for the proposed California State University, Dominguez Hills (CSUDH) 2018 Master Plan (Project). The CSUDH campus is located in Carson, Los Angeles County, California (Figure 1- 2). The Area of Potential Impact (API) is defined as the property within boundary of the CSUDH campus (Figure 3. The Master Plan provides for new academic administrative student housing and support facilities, market-rate apartments and business park, parking structures and improvements within the core campus area and the eastern portion of the campus.

This memorandum summarizes the results of a cultural records search and a Native American contact program completed to address the presence of any previously recorded cultural resources within the study area. All cultural resources work was conducted under the supervision of SWCA Cultural Resources Project Manager Alyssa Newcomb, M.S., Registered Professional Archaeologist (RPA). SWCA Archaeologist Erica Nicolay, M.A., conducted the records search, conducted Native American outreach, and coauthored this report. SWCA Principal Investigator Heather Gibson, Ph.D., RPA, served as quality control officer for the project. Ms. Newcomb, Ms. Nicolay, and Dr. Gibson exceed the Secretary of the Interior's Professional Qualifications Standards (PQS) in archaeology.

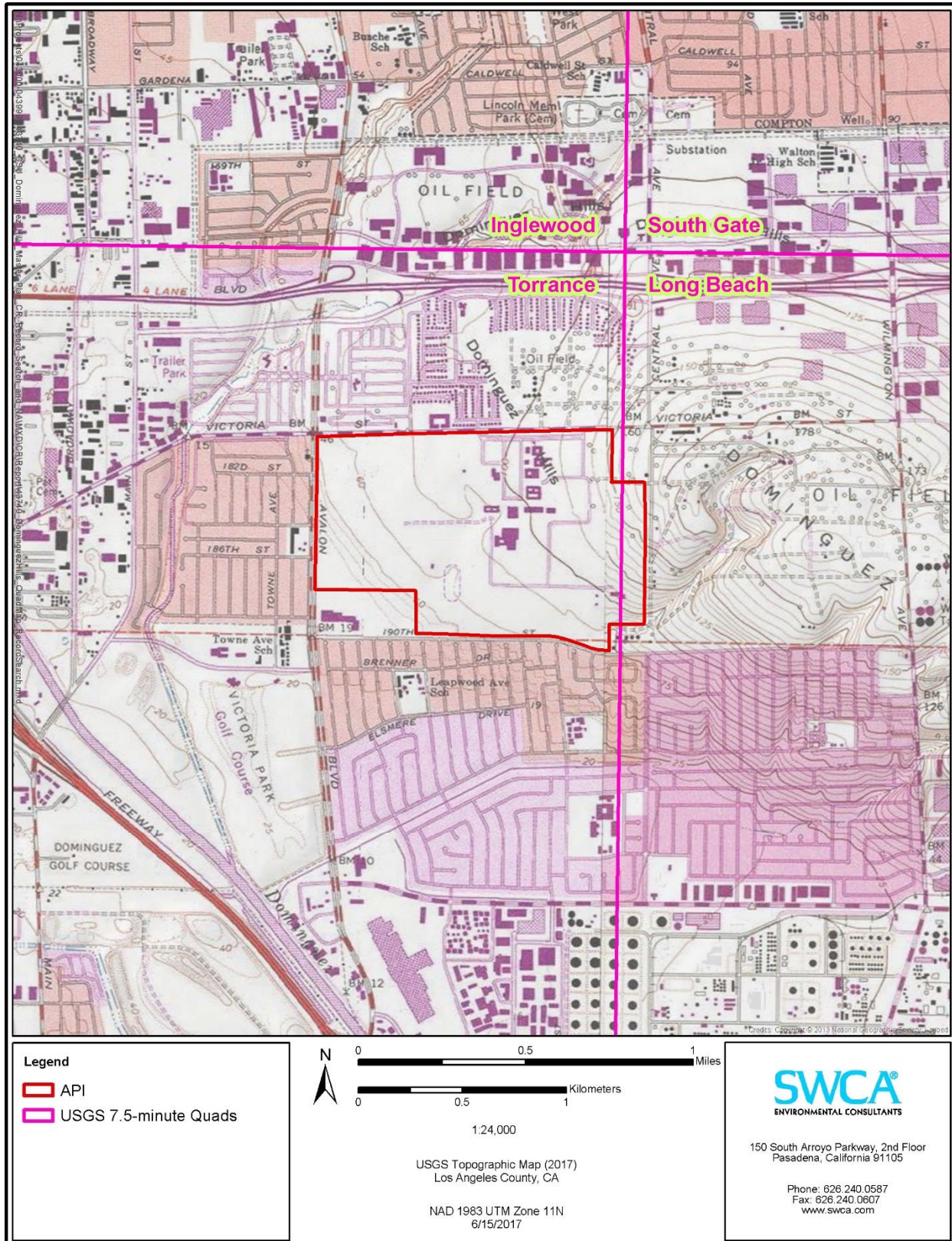


Figure 2. Project location map.

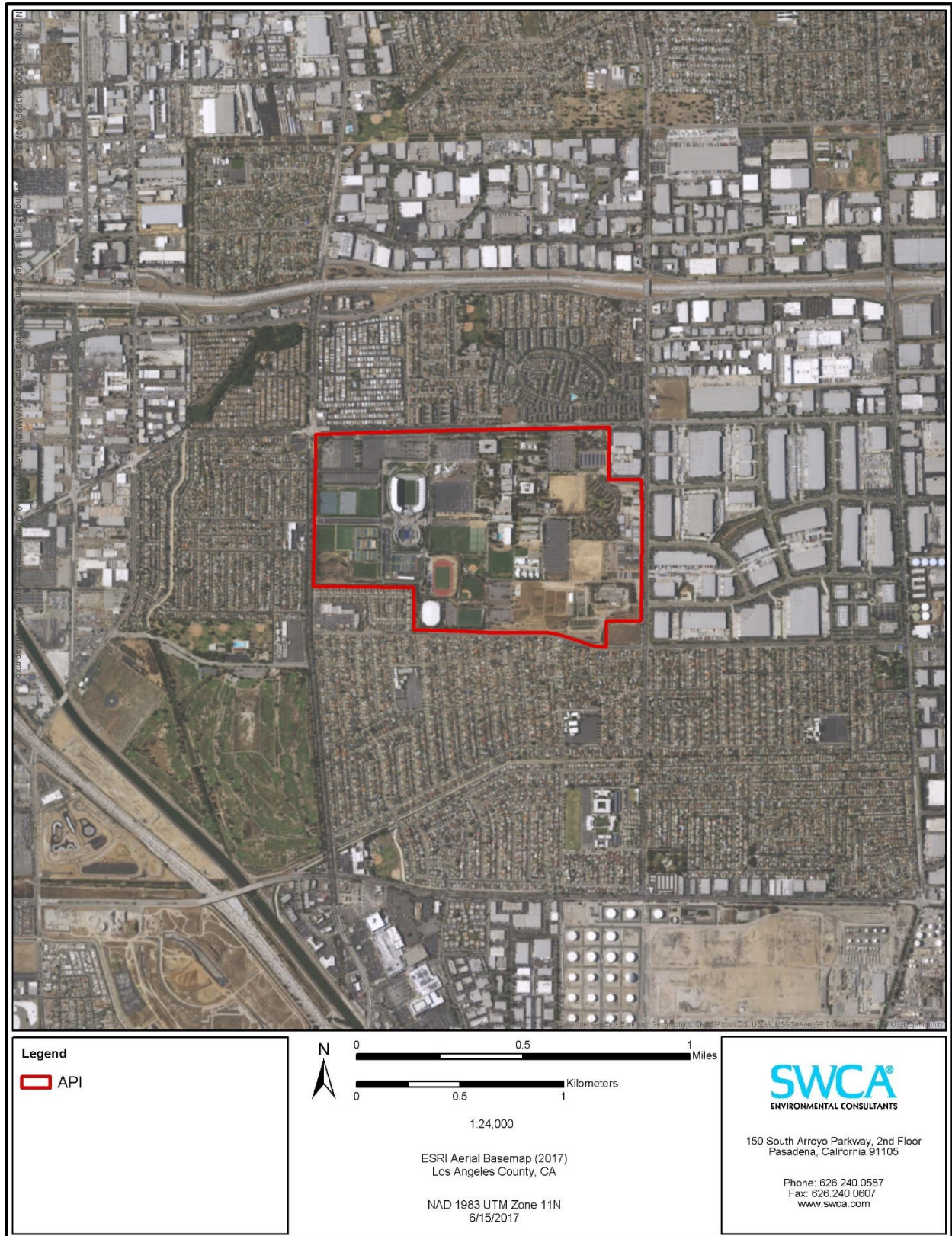


Figure 3. Project overview map.

CULTURAL RESOURCES

Records Search: On May 17, 2017, SWCA archaeologist Erica Nicolay, B.A., conducted an in-house records search of the California Historical Resources Information System (CHRIS) at the South Central Coastal Information Center (SCCIC) located on the campus of California State University, Fullerton. The search included any previously recorded cultural resources and investigations within a 0.5-mile radius of the API. The search also involved a review of the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), the California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, and the California State Historic Resources Inventory list. In addition, the search consisted of a review of all available historic U.S. Geologic Survey (USGS) 7.5- and 15-minute quadrangle maps. SWCA also reviewed property-specific historical and ethnographic context research to identify information relevant to the project site. Research focused on a variety of primary and secondary materials relating to the history and development of the project site. Sources consulted included historical maps, aerial and ground photographs, building permits, ethnographic reports, soil reports, and other environmental data.

Prior Cultural Resources Studies within 0.5-mile of the API: Results of the CHRIS records search identified 10 previous cultural resources investigations that have been conducted within 0.5-mile of the API. Of these studies, seven were conducted within the API and two were within the 0.5-mile buffer. The remaining study consisted of an overview of the general vicinity. Details pertaining to these studies are presented below in **Error! Reference source not found.** The western half of the API was previously surveyed in 2000 as part of a cultural resource inventory for the CSUDH campus (Bonner 2000). At the time of that study, much of the campus had already been developed and no prehistoric or historic cultural resources were identified during survey work. However, the study states that there was a moderate sensitivity for prehistoric sites due to the presence of documented subsurface sites in the immediate vicinity, including site P-19-000794 (Bonner 2000). Additionally, the report states that many archaeological sites in the nearby areas are not necessarily manifest on the surface and are made up exclusively of subsurface deposits. For example, then-recent construction monitoring at the nearby Arco Refinery in Carson and the Unocal Refinery in San Pedro, two locations that had been developed for over 75 years, resulted in the recovery of a prehistoric burial ground and a dense, prehistoric habitation site containing over 400 hundred stone tools, respectively (Bonner 2000:9).

Table 1. Prior Cultural Resources Studies within 0.5-miles of the API.

Report Number	Author	Year	Study Title	Relationship to API
LA-00679	Weil, Edward B.	1980	<i>Cultural Resource Evaluation of Proposed Improvements of 190th Street Carson, California</i>	Inside
LA-01899	Del Chario, Kathleen C. and Carol R. Demcak	1989	<i>Cultural Resource Assessment for a 300 Acre Parcel of Land Near Carson, Los Angeles County, California</i>	Outside (within 0.5 mile buffer)
LA-04512	Eggers, A.V.	1977	<i>Cultural Resources Inventory of the City of Carson, California</i>	Overview
LA-05699	Duke, Curt	2002	<i>Cultural Resource Assessment Cingular Wireless Facility No. SM 115-05 Los Angeles County, California</i>	Inside
LA-06187	Duke, Curt	2002	<i>Cultural Resource Assessment AT&T Wireless Services Facility No. 05233c Los Angeles County, California</i>	Inside

Report Number	Author	Year	Study Title	Relationship to API
LA-06193	Holson, John	2002	<i>Archaeological Survey and Record Search for Ospc-0036, La/Torrance, Torrance and Los Angeles, Los Angeles County, California</i>	Outside (within 0.5 mile buffer)
LA-07011	Duke, Curt	2002	<i>Cultural Resource Assessment Cingular Wireless Facility No. Sm 115-06 Los Angeles County, California</i>	Inside
LA-09132	Bonner, Wayne H.	2000	<i>Archaeological Survey California State University Dominguez Hills, City of Carson, Los Angeles County, California</i>	Inside
LA-10567	Hogan, Michael, Bai "Tom" Tang, Josh Smallwood, Laura Hensley Shaker, and Casey Tibbitt	2005	<i>Identification and Evaluation of Historic Properties – West Basin Municipal Water District Harbor- South Bay Water Recycling Project Proposed Project Laterals</i>	Inside
LA-11150	Maxwell, Pamela	2003	<i>West Basin Municipal Water District Harbor/South Bay Water Recycling Project</i>	Inside

Previously Recorded Cultural Resources within 0.5-mile of the API: The CHRIS records search also identified two previously recorded cultural resources within a 0.5-mile radius of the API. Of these resources, one is a historic built resource located within the API. The built resource is a concrete velodrome bicycle track known as the “7-Eleven Olympic Velodrome” which was recorded in 2000 and nominated for listing in the CRHR by Lawrence Fafarman. This track was used for events during the 1984 Summer Olympics and was demolished in 2003 (Harmon 2009); the current StubHub Center was built in its place. The prehistoric resource located outside the API but within 0.5 miles consists of a lithic scatter located approximately 0.25 miles northwest of the northwestern-most corner of the campus boundary. The site was initially recorded in 1977 by Rosen and at the time, the majority of the site was covered with 10 feet of fill. Archaeological testing was conducted in 1976 as part of the 1977 recording and determined to be intact, yielding 671 stone tools, projectile points, ground stone fragments, and flakes. A mobile home park was later constructed on top of the site. The site has not been updated since its initial recordation, and has not been evaluated for inclusion in the CRHR. Details pertaining to these resources are presented below in **Error! Reference source not found.**

Table 2. Previously Recorded Cultural Resources within 0.5 mile of the API

Primary Number (P-19-)	Trinomial (CA-SBR-)	Resource Type	Recorded by and Year Recorded	Resource Description	Relationship to API
P-19-000794	CA-LAN-000794	Prehistoric	Rosen 1977	Lithic Scatter	Outside (within 0.5 mile of API)
P-19-188479	CA-LAN-188476	Historic	Fafarman 2000	7-Eleven Olympic Velodrome	Within

Additional Archival Research: A review of a number of historic and ethnographic maps was conducted to further identify the archaeological sensitivity of the API. An ethnographic map depicting Native American village locations near the various course of the Los Angeles River (Gumprecht 2001:30) show that API is located adjacent to a large wetland area to the west of the

Los Angeles River and in the vicinity of, but not directly adjacent to, several mapped unnamed village locations, including one on the north side of what appears to be Dominguez Hill and south of Compton Creek (Figure 4). The closest named villages include Suangna on the western side of the Los Angeles River and Ahaungna, and Tibahangna on the eastern side. The village of Suangna, also called *Swaanga* meaning junco [rush], was a large, populous village with a described location on a plain near a marsh (McCawley 1996:66). The exact location of the village was unknown, but San Gabriel Mission records indicates that the village was occupied up to 1813 (McCawley 1996:66). The village of Ahuangna, also called *Ahwaanga*, and Tibahangna, also called *Tevaaxa'anga*, were founded by refugees from the San Gabriel area (McCawley 1996:69). An additional place name attributed to *Tevaaxa'anga* is *Tibajabit*, meaning either 'in the old house' or 'there from the house' (McCawley 1996:59). Another ethnographic map showing Native American settlements used for the recruitment of neophytes to the San Fernando and San Gabriel Missions based on King (2004:21) show the API near the village of *Amupubit* (Figure 5). The village of *Tibajabit* is mapped to the east of a river, in the similar location to Tibahangna, and the village of *Soábit* is mapped west of the river, in the similar location to Suangna. A review of the Kirkman-Harriman pictorial and historical map of Los Angeles County depict a Native American village to the northwest on the opposite side of a natural wetland area (Figure 6).

Historic maps depict the API within the San Pedro-Dominguez Land Grant (Figure 7-Figure 8) and was part of the portion of the Rancho San Pedro allocated Manuel Dominguez (Figure 9). Specifically, the API falls within the 500 acres belonging to Victoria D. De Carson and partially incorporates some of the acreage belonging to Maria De Los Reyes. On this historic map, a house is mapped within the De Carson parcel adjacent to a small lake but outside the mapped API. Historic topographic maps from 1896 do not indicate the presence of any structures within the API (Figure 10). A 1926 map of the Dominguez Oil Field show the API within boundary of the Union Oil Company of California parcel (Figure 11). Within the northeast portion of the API, several oil rigs were mapped around Dominguez Hill, including two completed, productive rigs, two uncompleted, idle rigs, and one uncompleted, abandoned rig belonging to the General Petroleum Corporation of California. Historic aerial photographs indicate that the site began to be developed between 1963 and 1972 and reached its current state by 2005.

While the review of these ethnographic and historic maps do not indicate the presence of any specific Native American cultural resources or historic structures or resources, the proximity of mapped locations of these settlements in the vicinity of the API indicate a moderate sensitivity. The presence of a lake immediately to the west as well as the presence of the API at the base of Dominguez Hill indicates that there is a moderate possibility for encountering Native American cultural resources. In addition, one previously recorded prehistoric site located within 0.5 miles of the API yielded 671 artifacts during archaeological testing. While it is unlikely that historic resources and structures related to the ranchos will be encountered within the API, historic active and inactive oil rigs dating to 1926 were mapped within the eastern portion of the API. This area has not been completely developed and historic archaeological resources related the construction, maintenance, and decommissioning of these rigs may be encountered. The previously recorded "7-Eleven Olympic Velodrome" built resource located within the API was demolished in 2003, and it is unlikely that any structural remnants related to this resource remain within the API.

Native American Contact Program: On May 10, 2017, SWCA requested a search of the Sacred Lands Files from the Native American Heritage Commission (NAHC). SWCA received a response letter via email from the NAHC on May 19, 2017, stating that the results of the Sacred Lands File

search failed to identify the presence of Native American cultural resources in the API. The NAHC also provided a list of five Native American groups and individuals who may have knowledge of cultural resources in the API. On May 19, 2017, SWCA sent a letter via mail to the contacts identifying the project location and requesting input.

On June 1, 2017, Andrew Salas contacted SWCA via email and requested to be contacted by the lead agency in order to discuss tribal cultural resources within and near the subject property.

By June 6, 2017, none of the other Native American groups and/or individuals had responded to the letter. Follow-up phone calls were made that day to the remaining four contacts provided by the NAHC.

Anthony Morales stated that there was high likelihood for cultural resources in the area, as suggested by waterways such as Compton Creek and Dominguez Creek. In addition Mr. Morales stated that human remains have been observed during construction in nearby areas such as the Arco Refinery. For these reasons, Mr. Morales requested that any future work on the campus have an archaeological monitor and a Native American monitor from his group present. Additionally, Mr. Morales requested that this be explicitly written into the Master Plan.

Robert Dorame stated that there was high likelihood for cultural resources in the area. Mr. Dorame requested that any future work on the campus have an archaeological monitor and a Native American monitor from his group present.

Mr. Goad and Ms. Candelaria did not answer and voicemails were left providing them with overall project details and contact information should they wish to reply. Supporting documentation and details of the communication of the Native American contact program is included in Attachment B.

CONCLUSION AND RECOMMENDATIONS

The CHRIS records search results indicate that one built-environment resource has previously been recorded within the API: historic built resource P-19-188476, the 7-Eleven Olympic Velodrome. The Velodrome was demolished in 2003 and is no longer present within the API. The Sacred Lands File search failed to identify the presence of Native American cultural resources in the area. The Native American contact program undertaken by SWCA resulted in two individuals indicating that the API has a high sensitivity for cultural resources. One additional Native American party contacted requested consultation with the Lead Agency and did not provide detailed comments to SWCA. The sensitivity of the API has also been noted in previous cultural resources studies (Bonner 2000).

The project area encompasses the existing CSUDH campus. A review of ethnographic and historic maps indicate a moderate sensitivity of the vicinity of the API for Native American cultural resources and moderate sensitivity for historic archaeological resources. Historic aerial photographs indicate that the site began to be developed between 1963 and 1972 and reached its current state by 2005. Prior to its development the site appeared to consist of vacant parcels likely used for agricultural and oil production purposes. Much of the currently undeveloped areas of the campus have historically been paved or developed only with landscaping. In these locations, there is no native ground surface visible, but there is a moderate possibility that archaeological resources

could be preserved beneath the surface. The most recent archaeological survey was conducted in 2000 by Bonner and includes the western half of the current API. Although no archaeological resources have been documented within the subject property, several significant subsurface prehistoric archaeological deposits have been documented in the vicinity of the project area. The presence of large subsurface archaeological deposits in nearby areas, including relatively close to subject property, indicate that there is moderate potential for subsurface deposits on the CUS Dominguez Hills campus, specifically in locations that have not previously been subject to extensive ground disturbance. In addition, the existing campus buildings built between 1963 and 1972 are now 45 years or older and should be assessed for CRHR eligibility to determine if any historical resources are present. The direct and indirect impacts to any eligible historical resources would need to be considered in any future developments of the campus.

The potential for uncovering other previously unknown significant cultural resources is considered moderate. The following avoidance and mitigation measures are recommended to ensure that impacts to previously unidentified archaeological resources are avoided or minimized:

- **CUL-1: Retain a Qualified Archaeologist.** The project shall retain a qualified archaeologist, defined as an archaeologist who meets the Secretary of the Interior's Standards for professional archaeology, to carry out all mitigation measures related to cultural resources.
- **CUL-2: Survey of Undeveloped Areas Prior to Development.** Prior to development or construction of new facilities in portions of the campus which have not previously been developed (particularly the eastern portions of campus which have not been surveyed previously and where the majority of the planned development is located), an archaeological pedestrian survey shall be conducted to identify potentially significant archaeological resources. Resources found to be not significant shall not require mitigation.

If a potentially significant site would be impacted by ground-disturbing activities, either the site should be avoided, or a Phase II investigation would be required to evaluate the site for eligibility for listing in the CRHR. After testing, it may be determined that data recovery will be needed.

- **CUL-3: Avoidance of Potentially Eligible Archaeological Sites through Project Design.** The preferred mitigation is avoidance of any potentially eligible site through project design. If direct impact to a previously unknown archaeological site, by earth-moving activities cannot be avoided, a Phase II investigation would be necessary to determine significance in accordance with the following measure.
- **CUL-4: Phase II (Evaluation) and Phase III (Data Recovery) Cultural Resources Investigations.** Ground-disturbing impacts to any potentially eligible archaeological site should be avoided to the extent feasible. If avoidance is not feasible, CSUDH shall ensure that the potentially impacted archaeological site is assessed for significance, as defined by PRC Section 21083.2 or State CEQA Guidelines Section 15064.5(a), through implementation of Phase II investigations. Should Phase II testing of any previously unknown archaeological site, exhaust the data potential of the site, impact from the

proposed project would be reduced to a less than significant level. Resources found to be not significant shall not require mitigation.

Impacts to a site found to be significant under CRHR Criterion 4 shall be mitigated through a Phase III data recovery program. For such a site, prior to any ground-disturbing activities, a detailed archaeological treatment plan shall be prepared and implemented by a qualified archaeologist. Data recovery investigations will be conducted in accordance with the archaeological treatment plan to ensure collection of sufficient information to address archaeological and historical research questions, and results will be presented in a technical report (or reports) describing field methods, materials collected, and conclusions. Additional testing and/or data recovery phases may involve additional excavation and/or more detailed recordation of resources or more comprehensive archival research. Any cultural material collected as part of an assessment or data recovery effort should be curated at a qualified facility. Field notes and other pertinent materials should be curated along with the archaeological collection. If a resource is found to be significant under CRHR Criterion 1, 2, or 3, alternative mitigation measures may be necessary to reduce the level of impact to less than significant. These measures shall be developed by the qualified archaeologist, in consultation with CSUDH and other stakeholders, as appropriate.

- **CUL-5: Construction Monitoring for Archaeological Resources.** Prior to construction, a qualified archaeological monitor shall be retained to monitor ground-disturbing activities within portions of the campus that do not currently contain structures. These include areas that are currently paved, landscaped, or undeveloped. The duration and timing of the monitoring shall be determined by the qualified archaeologist in consultation with CSUDH. The archaeological monitor will work under the supervision of the qualified archaeologist.
- **CUL-6: Inadvertent Discoveries.** If previously unknown buried cultural deposits are encountered during any phase of project construction, all construction work within 20 m (60 feet) of the deposit shall cease and the qualified archaeologist shall be consulted to assess the find. If the resources are determined to be Native American in origin, the project archaeologist will consult with CSUDH to continue Native American consultation procedures. As part of this process, it may be determined that a Native American monitor will be required. If the discovery is determined to be not significant, work will be permitted to continue in the area. If a discovery is determined to be significant, a mitigation plan should be prepared and carried out in accordance with state guidelines. If the resource cannot be avoided, a data recovery plan should be developed to ensure collection of sufficient information to address archaeological and historical research questions, with results presented in a technical report describing field methods, materials collected, and conclusions. Any cultural material collected as part of an assessment or data recovery effort should be curated at a qualified facility. Field notes and other pertinent materials should be curated along with the archaeological collection.
- **CUL-7: Discovery of Human Remains.** If human remains are discovered, State of California Health and Safety Code Section 7050.5 stipulates that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition

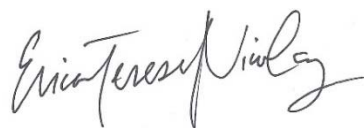
pursuant to PRC Section 5097.98. The Los Angeles County Coroner must be notified of the find immediately. If the human remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission, which will determine and notify a Most Likely Descendent (MLD). The MLD will complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

If you have any questions regarding this letter report, please do not hesitate to contact me at (626) 240-0587 ext. 6652, or anewcomb@swca.com.

Sincerely,



Alyssa Newcomb, M.S., RPA
Cultural Resources Project Manager



Erica Nicolay, M.A.
Archaeologist

References

Bonner, Wayne H.

- 2000 *Archaeological Survey California State University Dominguez Hills, City of Carson, Los Angeles County, California*. Prepared for Terry A. Hayes Associates by W.H. Bonner Associates. On file at the SCCIC, CSU Fullerton.

Gumprecht (2001:30)

- 2001 *The Los Angeles River: Its Life, Death, and Possible Rebirth*. JHU Press.

Harmon, Joanie

- 2009 A Look Back: Velodrome Built for 1984 Olympics Brought CSU Dominguez Hills Recognition as Sport and Entertainment Venue. *Dateline Dominguez* 13 August. Available at: <http://www.csudhnews.com/2009/08/velodrome/>. Accessed June 15, 2017.

King, Chester

- 2004 *Japchibit Ethnohistory*. Angeles National Forest, Topanga Anthropological Consultants, California.

McCawley, William

- 1996 *The First Angelinos: The Gabrielino Indians of Los Angeles*. Malki-Ballena Press, Banning.

Attachment A: Report Results Figures

Attachment B: Native American Coordination Documentation

Attachment A.
Report Results Figures

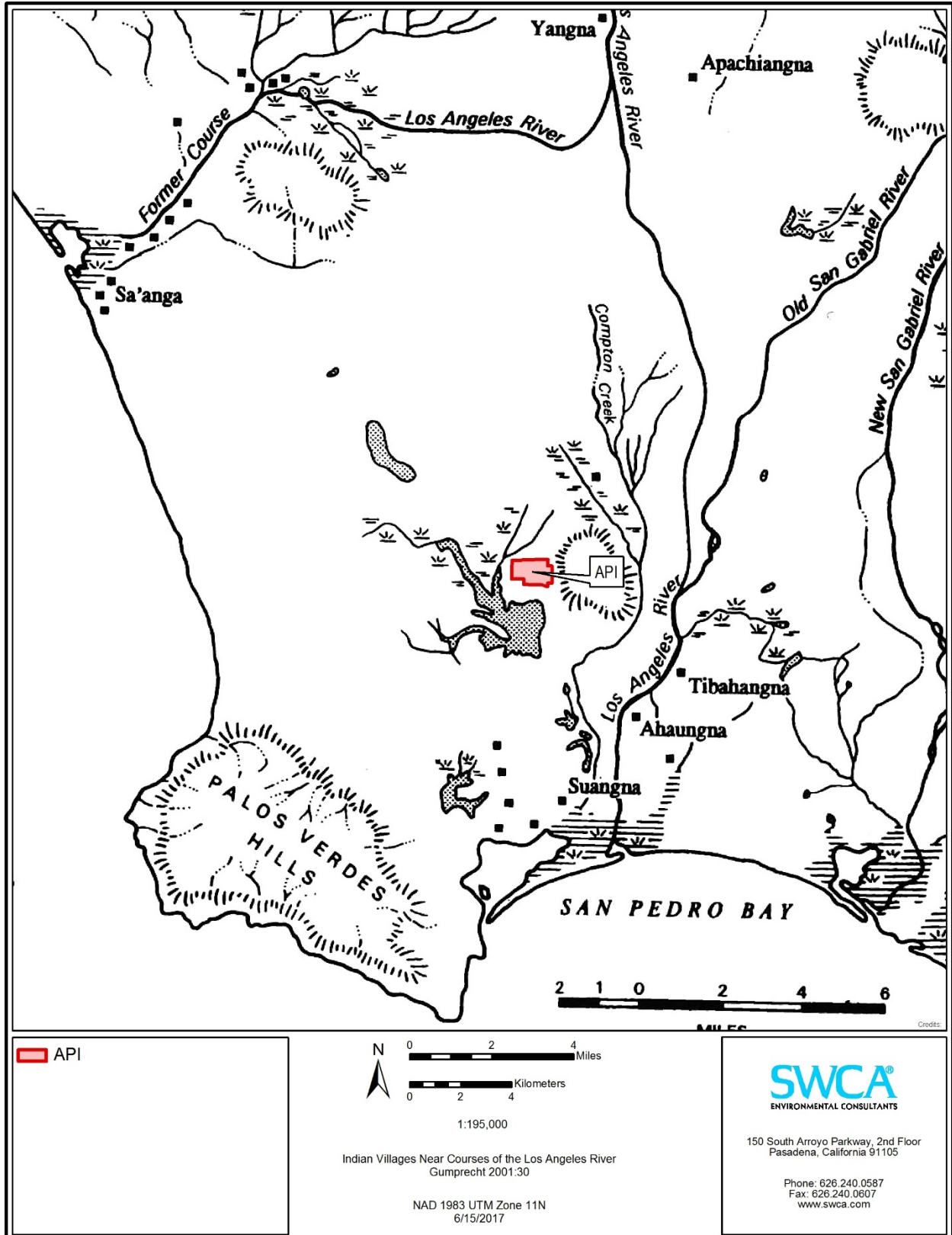


Figure 4. API plotted on Gumprecht's (2001:30) map showing the approximate locations of Native American villages.

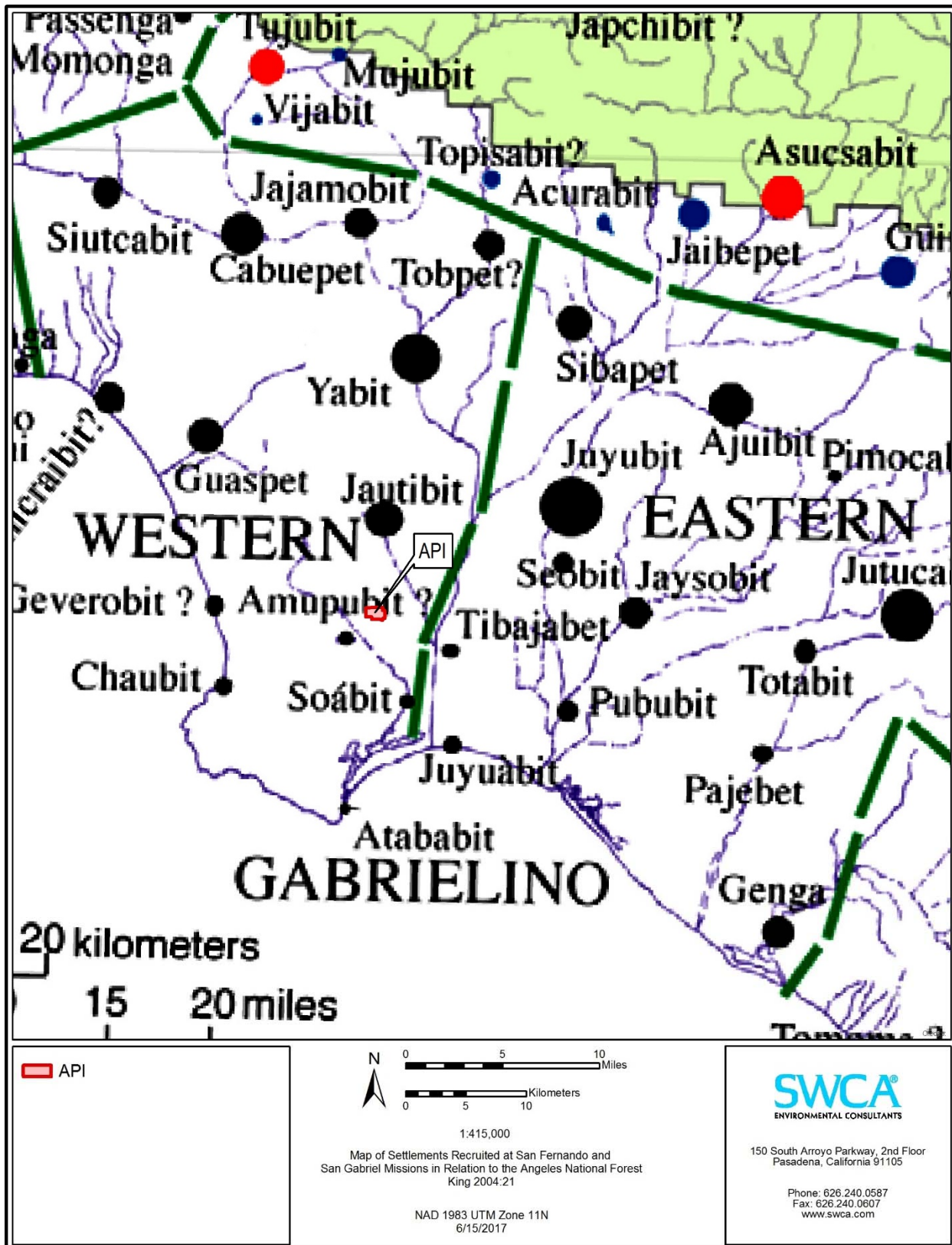


Figure 5. API plotted on King’s (2004:21) map showing approximate location of Native American villages using names listed in Mission-period registers.

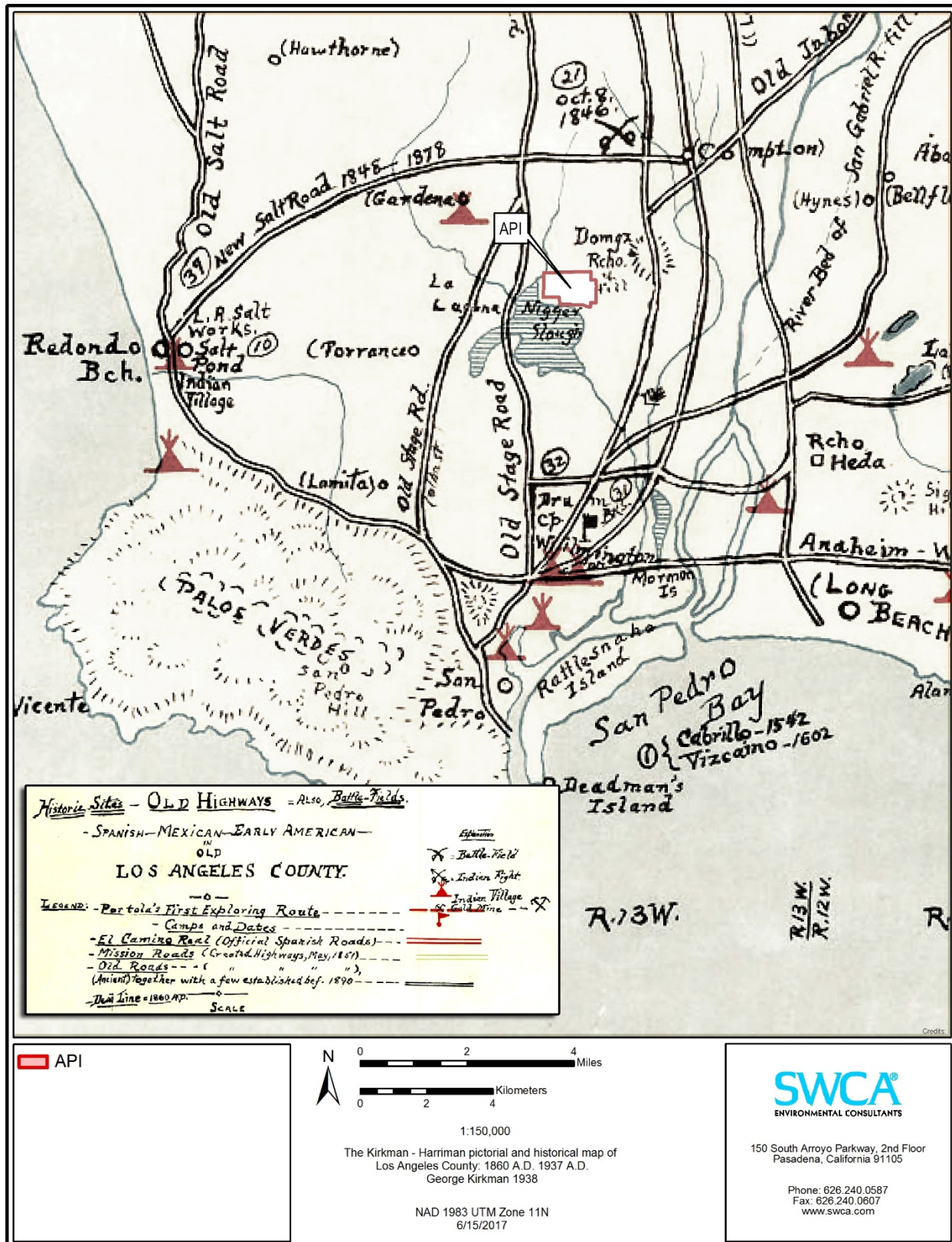


Figure 6. API plotted on Kirman-Harriman's pictorial and historical map of Los Angeles County: 1860 A.D. – 1937 A.D.

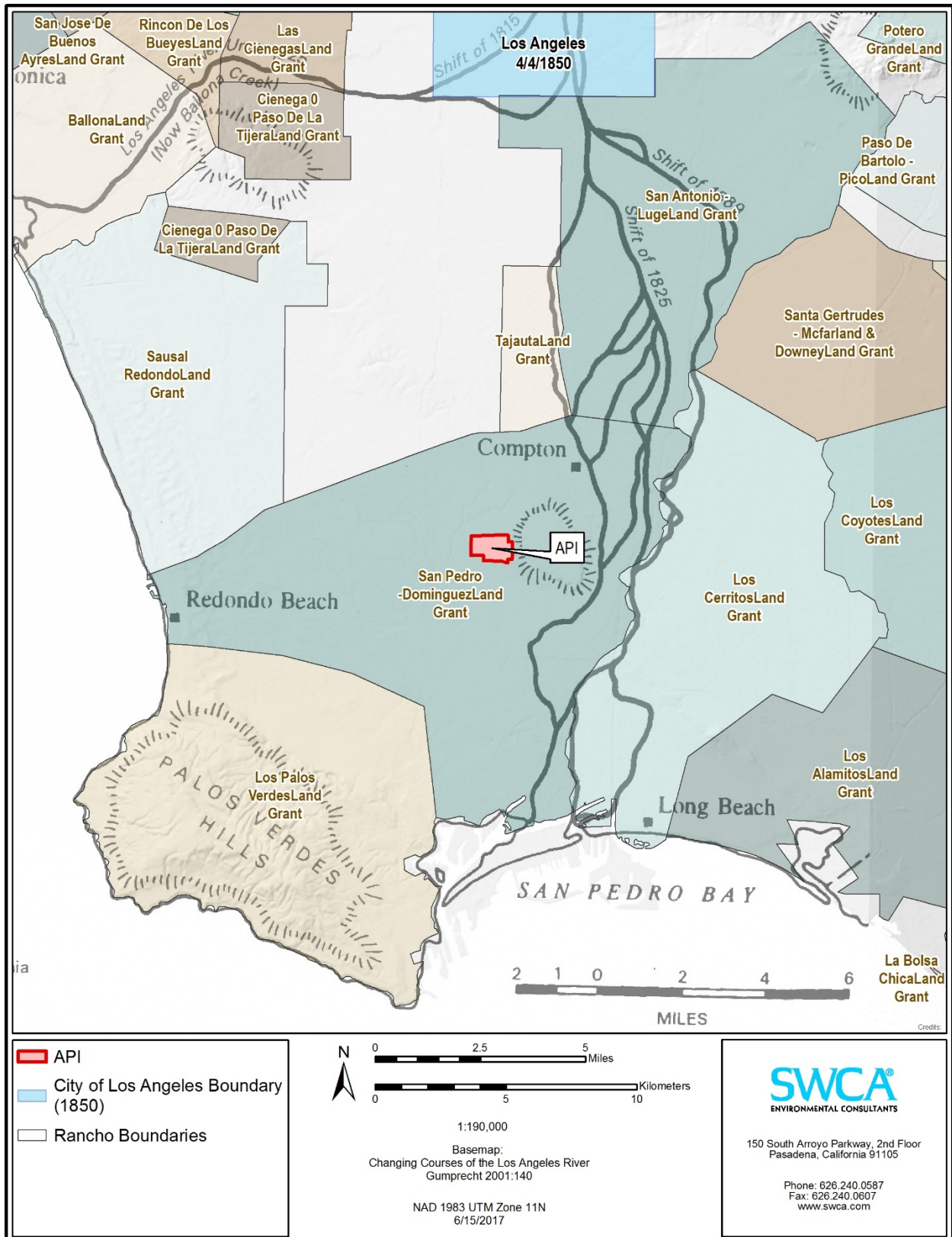


Figure 7. API shown on a map depicting historic period ranchos, land grants, and the original boundary of the Los Angeles Pueblo on a basemap by Gumprecht (2001:140) showing the changing course of the Los Angeles River.

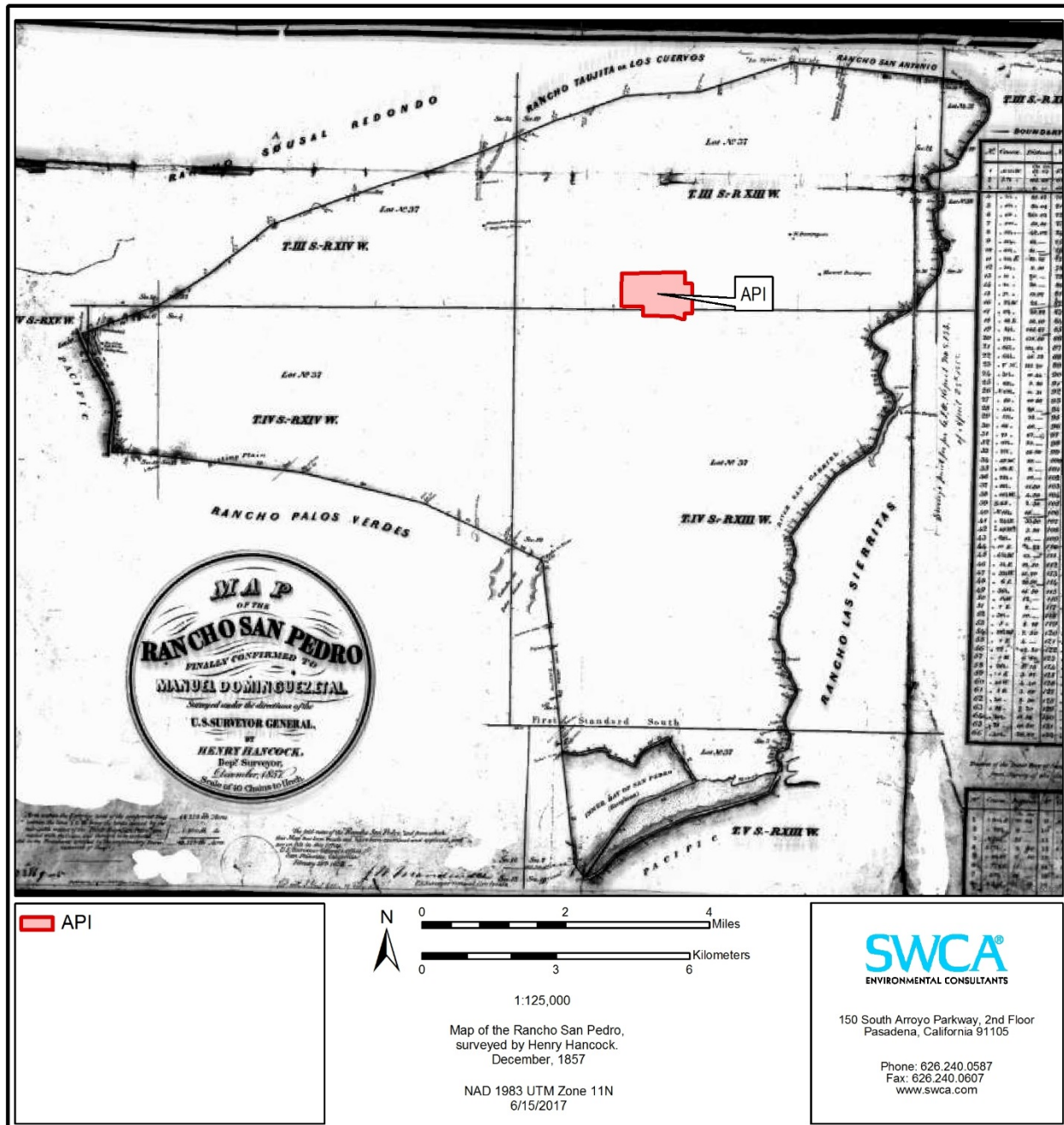


Figure 8. Plat of Rancho San Pedro Land Grant, circa 1857.

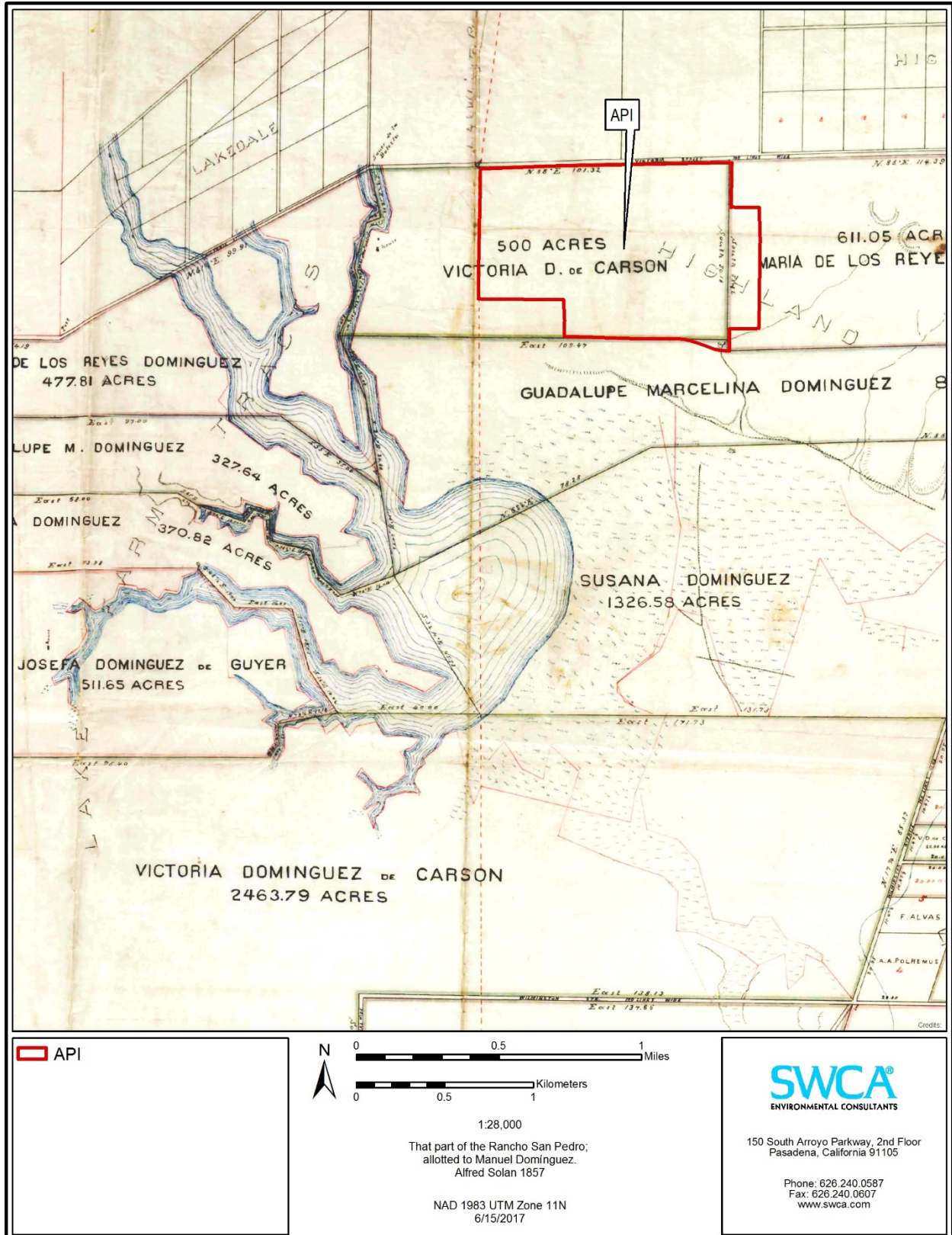


Figure 9. API plotted on plat of Rancho San Pedro Land Grant allocated to Manuel Dominguez, 1857.

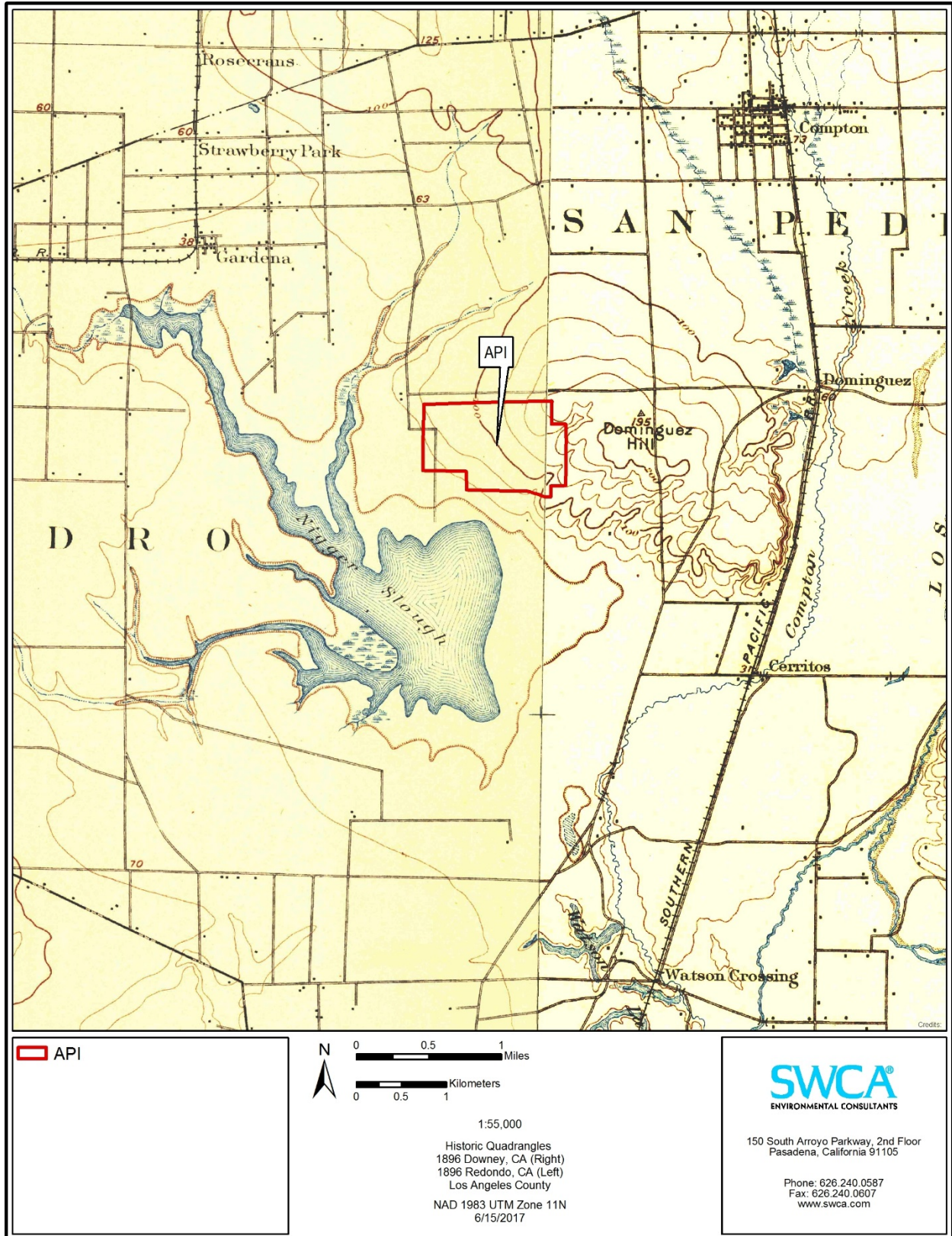


Figure 10. API plotted on historic USGS quadrangles from 1896.

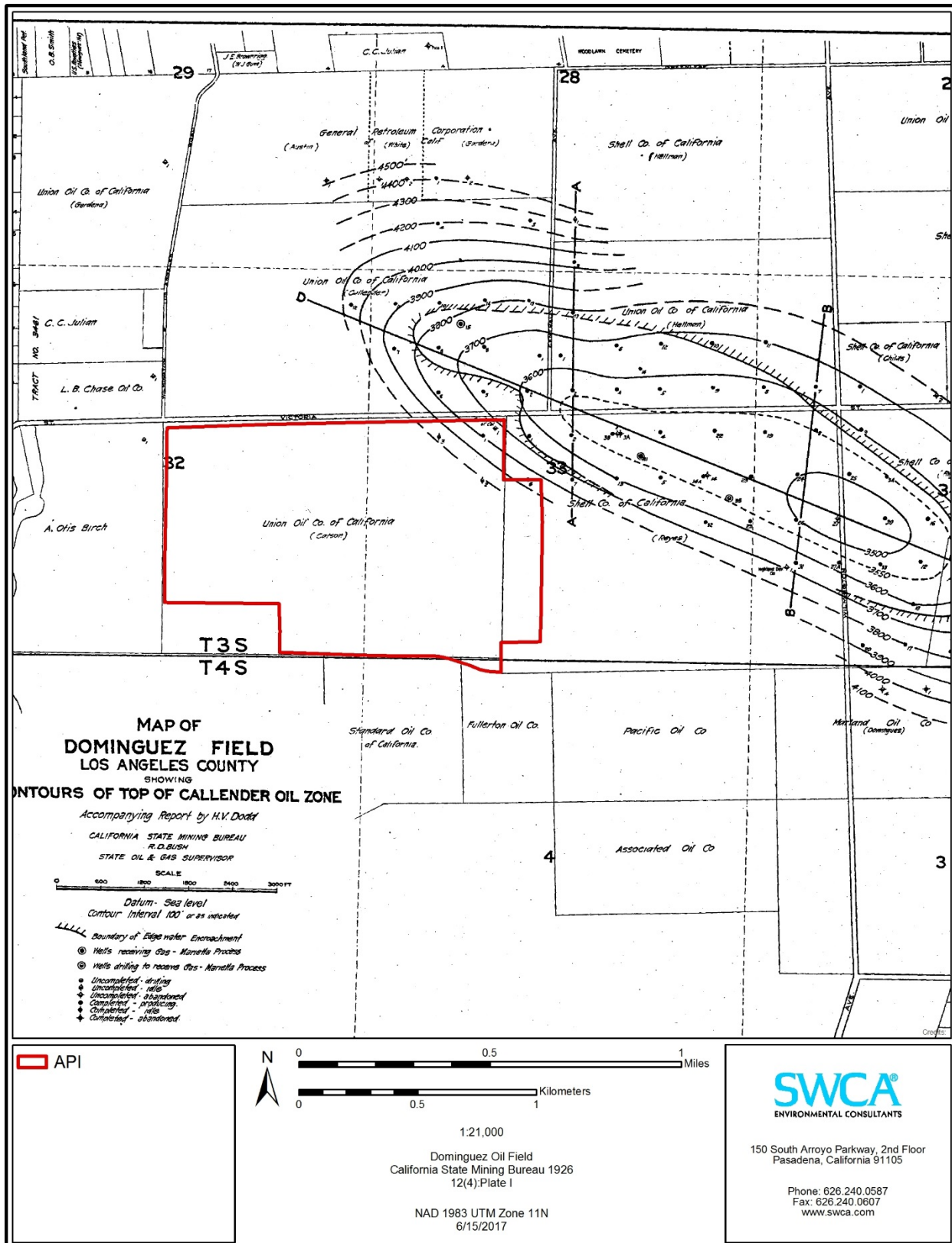


Figure 11. API plotted on map of Dominguez Oil Field 1926.

Attachment B.
Native American Coordination Documentation

Table 3. Native American Coordination Summary

Native American Contact	Letter Sent	Follow-Ups and Results
Andrew Salas Chairperson Gabrieleno Band of Mission Indians – Kizh Nation P.O. Box 393 Covina, CA 91723 (626) 926-4131 gabrielenoindians@yahoo.com	May 19, 2017	June 1, 2017: Received email from Mr. Salas. Mr. Salas requested to be contacted by the lead agency or applicant to discuss the presence of tribal cultural resources within the project area.
Anthony Morales Chairperson Gabrieleno/Tongva San Gabriel Band of Mission Indians P.O. Box 693 San Gabriel, CA 91778 (626) 483-3564 GTTribalcouncil@aol.com	May 19, 2017	June 6, 2017: Follow-up phone call made. Mr. Morales stated that there was a high possibility for cultural resources in the area. Mr. Morales requested that his group be contacted to monitor any future ground-disturbing work.
Sandone Goad Chairperson Gabrielino/Tongva Nation 106 ½ Judge John Aiso St., #231 Los Angeles, CA 90012 (951) 807-0479 sgoad@gabrielino-tongva.com	May 19, 2017	June 6, 2017: Follow-up phone call made. No answer. Left voice message.
Robert Dorame Chairperson Gabrielino Tongva Indians of California Tribal Council P.O. Box 490 Bellflower, CA 90707 (562) 761-6417 gtongval@gmail.com	May 19, 2017	June 6, 2017: Follow-up phone call made. Mr. Dorame stated that there was a high possibility for cultural resources in the area. Mr. Dorame requested that his group be contacted to monitor any future ground-disturbing work.
Linda Candelaria Co-Chairperson Gabrielino/Tongva Tribe 1999 Avenue of the Stars, Suite 1100 Los Angeles, CA 90067 (626) 676-1184	May 19, 2017	June 6, 2017: Follow-up phone call made. No answer. Left voice message.

NATIVE AMERICAN HERITAGE COMMISSION

Environmental and Cultural Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691
(916) 373-3710



May 15, 2017

Alyssa Newcomb
SWCA Environmental Consultants

Sent by E-mail: anewcomb@swca.com

RE: Proposed California State University, Dominguez Hills 2017 Master Plan Project, City of Carson; Torrance and Long Beach USGS Quadrangles, Los Angeles County, California

Dear Ms. Newcomb:

A record search of the Native American Heritage Commission (NAHC) *Sacred Lands File* was completed for the area of potential project effect (APE) referenced above with negative results. Please note that the absence of specific site information in the *Sacred Lands File* does not indicate the absence of Native American cultural resources in any APE.

Attached is a list of tribes culturally affiliated to the project area. I suggest you contact all of the listed Tribes. If they cannot supply information, they might recommend others with specific knowledge. The list should provide a starting place to locate areas of potential adverse impact within the APE. By contacting all those on the list, your organization will be better able to respond to claims of failure to consult. If a response has not been received within two weeks of notification, the NAHC requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact via email: gayle.totton@nahc.ca.gov.

Sincerely,

A handwritten signature in blue ink that reads "Gayle Totton".

Gayle Totton, M.A., PhD.
Associate Governmental Program Analyst

Native American Heritage Commission
Native American Contact List
Los Angeles County
5/15/2017

**Gabrieleno Band of Mission
Indians - Kizh Nation**

Andrew Salas, Chairperson
P.O. Box 393
Covina, CA, 91723
Phone: (626) 926 - 4131
gabrielenoindians@yahoo.com
Gabrieleno

**Gabrieleno/Tongva San Gabriel
Band of Mission Indians**

Anthony Morales, Chairperson
P.O. Box 693
San Gabriel, CA, 91778
Phone: (626) 483 - 3564
Fax: (626)286-1262
GTtribalcouncil@aol.com
Gabrieleno

Gabrielino /Tongva Nation

Sandonne Goad, Chairperson
106 1/2 Judge John Aiso St.,
#231
Los Angeles, CA, 90012
Phone: (951)807-0479
sgoad@gabrielino-tongva.com
Gabrielino

**Gabrielino Tongva Indians of
California Tribal Council**

Robert Dorame, Chairperson
P.O. Box 490
Bellflower, CA, 90707
Phone: (562) 761 - 6417
Fax: (562) 761-6417
gtongva@gmail.com
Gabrielino

Gabrielino-Tongva Tribe

Linda Candelaria, Co-Chairperson
23453 Vanowen Street
West Hills, CA, 91307
Phone: (626) 676 - 1184
palmsprings9@yahoo.com
Gabrielino

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resource Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regard to cultural resources assessment for the proposed California State University, Dominguez Hills 2017 Master Plan Project, Los Angeles County.



GABRIELEÑO BAND OF MISSION INDIANS - KIZH NATION

Historically known as The San Gabriel Band of Mission Indians
recognized by the State of California as the aboriginal tribe of the Los Angeles basin

SWCA
Environmental Consultants

June 1, 2017

Re: Archaeologist's request for tribal information for California State University, Dominguez Hills 2017 Master Plan Project City of Carson Torrance and Long Beach USGS Quadrangle Los Angeles County CA

Dear Alyssa M. Newcomb,

We have received your request for information regarding our tribal history and its relationship to the above-mentioned project. Pursuant to AB52, consultation with the lead agency or applicant is confidential (Public Resources Code 21082.3, subd. (c)(2)(A)). To minimize confusion and/or risk a breach of this confidentiality, we politely request that you contact the lead agency for the information you are looking for. Additionally, your presence at the consultation appointment is encouraged.

(21082.3.) (c) (1) Any information, including, but not limited to, the location, description, and use of the tribal cultural resources, that is submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with subdivision (r) of Section 6254, and Section 6254.10 of, the Government Code, and subdivision (d) of section 15120 of Title 14 of the California Code of Regulations, without the prior consent of the tribe that provided the information. If the lead agency publishes any information submitted by California a Native American tribe during the consultation or environmental review process, that information shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. This subdivision does not prohibit the confidential exchange of the submitted information between public agencies that have lawful jurisdiction over the preparation of the environmental document.

With Respect,

Andrew Salas, Chairman

Andrew Salas, Chairman

Nadine Salas, Vice-Chairman

Christina Swindall Martinez, secretary

Albert Perez, treasurer |

Martha Gonzalez Lemos, treasurer ||

Richard Gradias, Chairman of the Council of Elders

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D.2 Cultural Built Resources Report



MEMO

TO: Jay Bond, Steve Lohr (CSU)
FROM: Lorraine Ahlquist; WSP Cultural Resources Group (WSP)
SUBJECT: CSUDH Built Resources Report
DATE: June 18, 2018

Introduction/Executive Summary

This summary report serves to inform the content of the California State University, Dominguez Hills (CSUDH) EIR relating to built historical resources for the associated 2018 Master Plan. WSP architectural historians prepared this report in June 2018,¹ utilizing secondary resources and summarizing prior efforts by other consultants. The Draft EIR considers the impacts to built or architectural historical resources as part of its evaluation. Evaluations on archaeological, Native American, and paleontological resources are addressed in separate documentation. This report addresses built historical resources only. Because this report addresses California Environmental Quality Act (CEQA) requirements, the terminology used is consistent with CEQA. The terms used for National Register of Historic Places (NRHP) and National Historic Preservation Act of 1966 (NHPA) compliance are slightly different, but the concepts of eligibility and impact (or effect) would apply for compliance with Section 106 of the NHPA, as described in 36 CFR §800.

Under CEQA, projects that may cause a substantial adverse change in the significance of a historical resource are considered projects that may have a significant effect on the environment. (Pub. Resources Code, §21084.1.) “Historic resource” is defined in Public Resources Code section 21084.1 to include all sites listed in, or determined to be eligible for listing in, the California Register of Historical Resources. The criteria for listing on the California Register of Historical Resources are found in Public Resources Code section 5024.1 and the California Code of Regulations, title 14, section 4852. The criteria are as follows:

- (A) Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
- (B) Is associated with the lives of persons important in our past;
- (C) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic value; or
- (D) Has yielded, or may be likely to yield, information important in prehistory or history.

¹ All WSP architectural historians meet the Secretary of the Interior’s Professional Qualifications Standards.



In addition, sites officially designated as historically significant in a local register of historical resources are presumed to be historically significant. (Pub. Resources Code, §21084.1; CEQA Guidelines, §15064.5(a)(2).) Sites not listed on a register, but that have been determined to be significant or eligible for listing in accordance with an approved historical resources survey also are presumed to be significant. (*Ibid.*) Further, a lead agency has discretion to find that a site that does not meet such criteria is a historical resource for purposes of CEQA. (See Pub. Resources Code, §21084.1; CEQA Guidelines, §15064.5(a)(4).)

The proposed 2018 Master Plan for CSUDH included an assessment of the existing age, condition, and life cycle of the existing campus buildings. The conclusion reached in the 2018 Master Plan Guidelines is that several existing campus facilities no longer provide adequate modern space for the functions they are intended to serve and must be replaced or relocated within the campus. These existing campus buildings are included in Table 1. Campus Facilities Potentially Planned for Alteration, Replacement, or Relocation.

To determine the presence of historical resources on the CSUDH campus, which was the study area for these investigations, the architectural historians completed research, analyzed historic photographs and maps, and reviewed prior documentation on the campus buildings. After evaluation, only one historical resource, the Leo F. Cain Library/Educational Resource Center, was identified and effects to that resource were assessed. After analyzing potential changes, effects, and impacts, the proposed CSUDH 2018 Master Plan would have no effect on the Leo F. Cain Library/Educational Resource Center. No historical resources will be directly or indirectly affected by the proposed efforts described in the 2018 Master Plan.

Archival Research and Records Search

On May 17, 2017, SWCA staff conducted an in-house records search of the California Historical Resources Information System (CHRIS) at the South Central Coastal Information Center (SCCIC) located on the campus of California State University, Fullerton.² The search included any previously recorded cultural resources and investigations within a 0.5-mile radius of the study area, which encompassed the campus in its entirety. The search also involved a review of NRHP listings, the CRHR, the California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, and the California State Historic Resources Inventory list. In addition, the search consisted of a review of all available historic U.S. Geologic Survey (USGS) 7.5- and 15-minute quadrangle maps. SWCA reviewed property-specific historical and ethnographic context research to identify information relevant to the campus. Research focused on a variety of primary and secondary materials relating to the history and development of the campus. Sources consulted included historical maps, aerial and ground photographs, building permits, ethnographic reports, soil reports, and other environmental data.

Previously Recorded Cultural Resources on the CSUDH Campus:

In 2000, the western half of the CSUDH campus was previously surveyed as part of a cultural resource inventory for the university (Bonner 2000). The CHRIS records search identified one previously recorded on-campus built resource nominated for listing in the California Register of Historical Resources by Lawrence Fafarman. This built resource, known as the “7-Eleven Olympic Velodrome,” was demolished

² Information regarding the records search at the South Central Coastal Information Center (SCCIC) is provided by SWCA, which completed early phases of the work described in this document.



in 2003 (Harmon 2009). The velodrome was a concrete bicycle track, which was used for events during the 1984 Summer Olympics and the current StubHub Center was built in its place (Harmon 2009). Because it is no longer extant, it will not be addressed further in this study or the EIR.

Additional Archival Research:

Historic maps depict the study area within the San Pedro-Domenguez Land Grant and was part of the portion of the Rancho San Pedro allocated Manuel Dominguez. Specifically, the study area falls within the 500 acres belonging to Victoria D. De Carson and partially incorporates some of the acreage belonging to Maria De Los Reyes. On this historic map, a house is mapped within the De Carson parcel adjacent to a small lake but outside the study area. No built resources from the ranchos era remain on the campus.

Historic topographic maps from 1896 do not indicate the presence of any structures within the study area. A 1926 map of the Dominguez Oil Field shows the study area within boundary of the Union Oil Company of California parcel. Within the northeast portion of the study area, several oil rigs were mapped around Dominguez Hill, including two completed, productive rigs, two uncompleted, idle rigs, and one uncompleted, abandoned rig belonging to the General Petroleum Corporation of California. Historic aerial photographs indicate that the site began to be developed between 1963 and 1972 and reached its current state by 2005. No above-ground, built remnants of the oil field era are present on the campus.

As part of the EIR for the 2009 CSUDH Master Plan, the Leo F. Cain Library was identified as a historical resource. Although it was not fifty years of age at that time (and still has not reached that milestone, which is used to determine when enough time has passed for a built resource to be accurately evaluated for historic significance), the 2009 evaluation indicated that the library would be considered exceptionally significant and, therefore, was eligible for the CRHR. For the purposes of consistency with the 2009 Master Plan's EIR, this evaluation will perpetuate that finding.

Historical Context

California State University, Dominguez Hills

In 1960, following increasing growth in Southern California and a demand for higher education, Governor Edmund G. "Pat" Brown allocated funds to develop a state college in Los Angeles County's South Bay region. Originally called South Bay State College, the new school was planned to be located in Palos Verdes on a site overlooking the ocean. The proposed South Bay State College aimed to cater to the area's affluent and growing population, envisioning itself as a California version of an Ivy League institution.

In 1964, Southern California architect A. Quincy Jones of the firm Jones & Emmons was hired to design the proposed campus at Palos Verdes by the college's design team led by Leo F. Cain. As planning for the campus continued, Cain moved forward with plans to open the university in a temporary location, and by 1965, California State College at Palos Verdes became the eighteenth campus within the state university system despite only enrolling seventy-five students when it opened its doors that January. Enrollment fell far short of the four hundred enrollees expected. A small faculty, including Cain, taught the first classes in a Rolling Hills Estate bank building.

In the summer of 1965, the racially charged Watts riots brought to the forefront tensions over policing, segregation, transportation, jobs, and education. Meanwhile, land prices continued to rise on the Palos Verdes peninsula, leading the California State College and University Board of Trustees to choose another location for the campus rather than establishing a permanent campus in Palos Verdes. As a response to both, Governor Brown supported efforts to relocate the campus inland and nearer to minority communities comprising South Los Angeles. Ultimately, Dominguez Hills was chosen as the new location for the school, and in 1966, the school changed its name to California State College, Dominguez Hills. A 346-acre tract in Carson, surrounded at the time by oil wells, farmland, and tract housing, was chosen as the location for the new school. The slow pace of construction and lagging enrollment led Governor Ronald Reagan to recommend closure of the new school after he took office in 1967. Instead, Leo Cain was able to secure construction of the school at its current location. Cain ultimately became its first president.

Around 1964, A. Quincy Jones began drafting a master plan for the new school in Carson. The plan located academic buildings in close proximity to one another, relating the campus buildings to the library, and encouraging students to cross through buildings to reach others. In general, buildings for the campus designed during the original master plan era (1964-1979) featured similar design tenets: concrete construction with overhanging coffered ceilings, a Modernist design aesthetic with entrances at a central or mezzanine level, manipulation of the landscape to create sunken gardens and courtyard spaces at the ground floors, and use of pedestrian circulation patterns that allowed students to walk through and around campus buildings.

The first completed campus buildings, part of a group of buildings known as the Small College Complex, were constructed in 1968. (These are the only buildings that are currently fifty years of age.) The remaining Small College Complex buildings were completed in 1969. Featuring multiple one-story buildings, the Small College Complex provided classroom and college administration spaces for the over 2,600 students who enrolled at Dominguez Hills in the fall of 1970. Meanwhile, construction began in earnest for the larger campus buildings, including the Educational Resources Center (later named the Leo F. Cain Library), the Social and Behavioral Sciences building, and the Natural Sciences and Mathematics building, all of which were completed by 1973 (Figure 1). By the mid-1970s, the second phase of campus development was underway and included the student health center, Humanities and Fine Arts building (later named LaCorte Hall), the University Theatre, and the University Gymnasium.

In 1976, Leo Cain retired and was succeeded by Donald R. Gerth, who oversaw the school's transition to a university after meeting certain enrollment and degree criteria. By the end of the decade, enrollment reached over 7,000. Gerth was also instrumental in bringing the 1984 Los Angeles Summer Olympics to Dominguez Hills, which included construction of a velodrome (no longer extant) for track cycling events. Dominguez Hills has grown to become one of the most diverse universities in the state system with enrollment exceeding 12,000 students and conferring degrees to a substantial number of black and Latino students.



Figure 1. Campus Construction, c. 1970. The Small College Complex is located at the top of the photo and the Leo F. Cain Library/Educational Resource Center is under construction.

A. Quincy Jones, Architect

A. Quincy Jones (1913-1979) was born in Kansas City, Missouri, and moved to California at a young age. He studied architecture at the University of Washington, which viewed architectural design as a problem-solving activity under professor Lionel H. Pries. In 1945, Jones opened his own practice in Los Angeles and largely worked in housing design. Architect Frederick Emmons and A. Quincy Jones formed a partnership from 1951-1969.

In housing design, Jones' work included the Mutual Housing Association (1946-1950), the Case Study #24 tract home, and Eichler Homes (1951-1964). Jones' housing designs focused on incorporating the environment into his floor plans, taking site and landscape elements into consideration. A major feature of his designs included utilizing glazed curtain walls to extend a building's interior into its exterior spaces.

Leo Cain brought in A. Quincy Jones to design the campus for the planned California State College at Palos Verdes. Although the project eventually moved to Dominguez Hills, Jones' firm, Jones & Emmons, developed the master plan for what would eventually become California State University, Dominguez Hills

(Figure 2). In addition to the master plan, Jones designed the school's Small College Complex (1969) and Leo F. Cain Library/Educational Resource Center (1971). Jones stayed on as consulting architect for approximately 15 years (1964-1979) to oversee the master plan for the university. Other architects, including Daniel Dworsky and Carey K. Jenkins, designed the campus buildings.

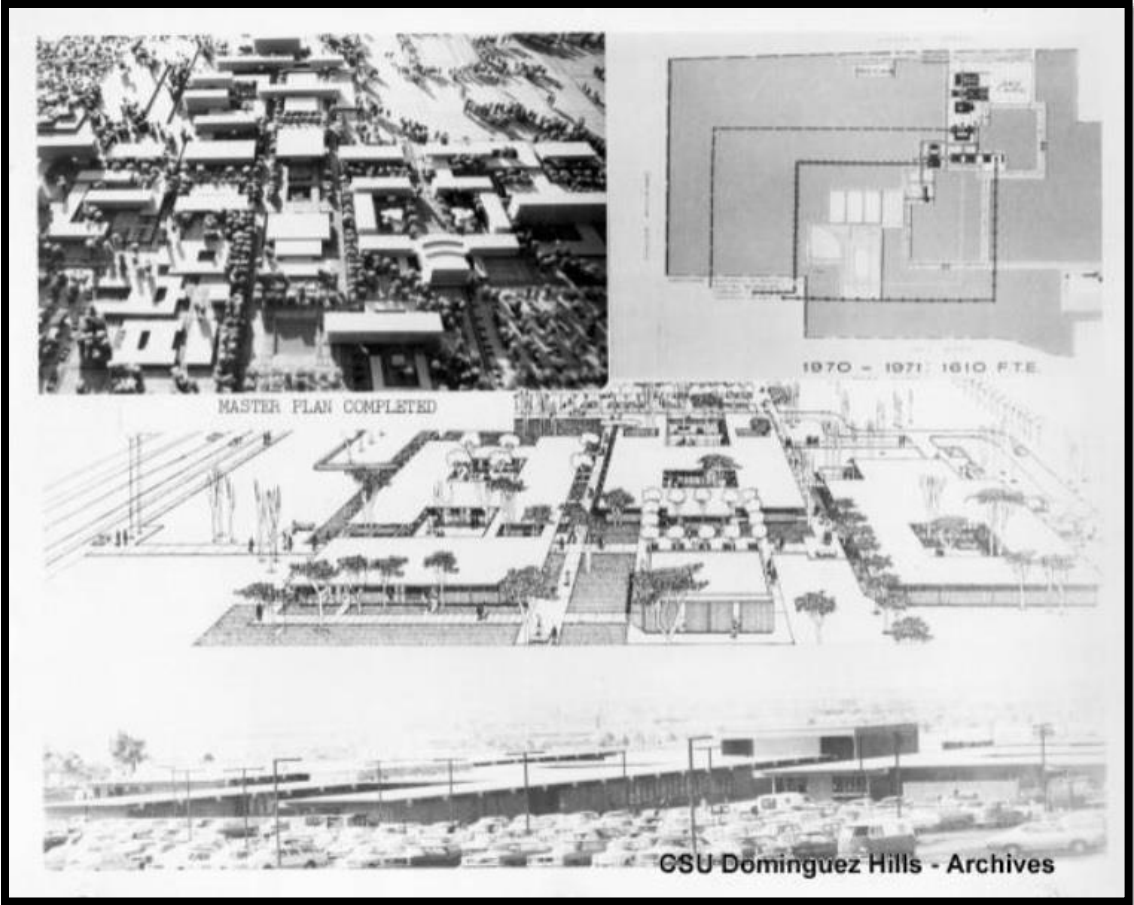


Figure 2. Campus Master Plan, c. 1970.

A. Quincy Jones taught at the University of Southern California and led the architecture school from 1975 to 1978. He designed a number of university buildings during his career in addition to those at Dominguez Hills, including a carillon tower at the University of California, Riverside and a library at the University of California, Los Angeles. In 1980, California State University, Dominguez Hills posthumously honored Jones with an exhibition of his work.

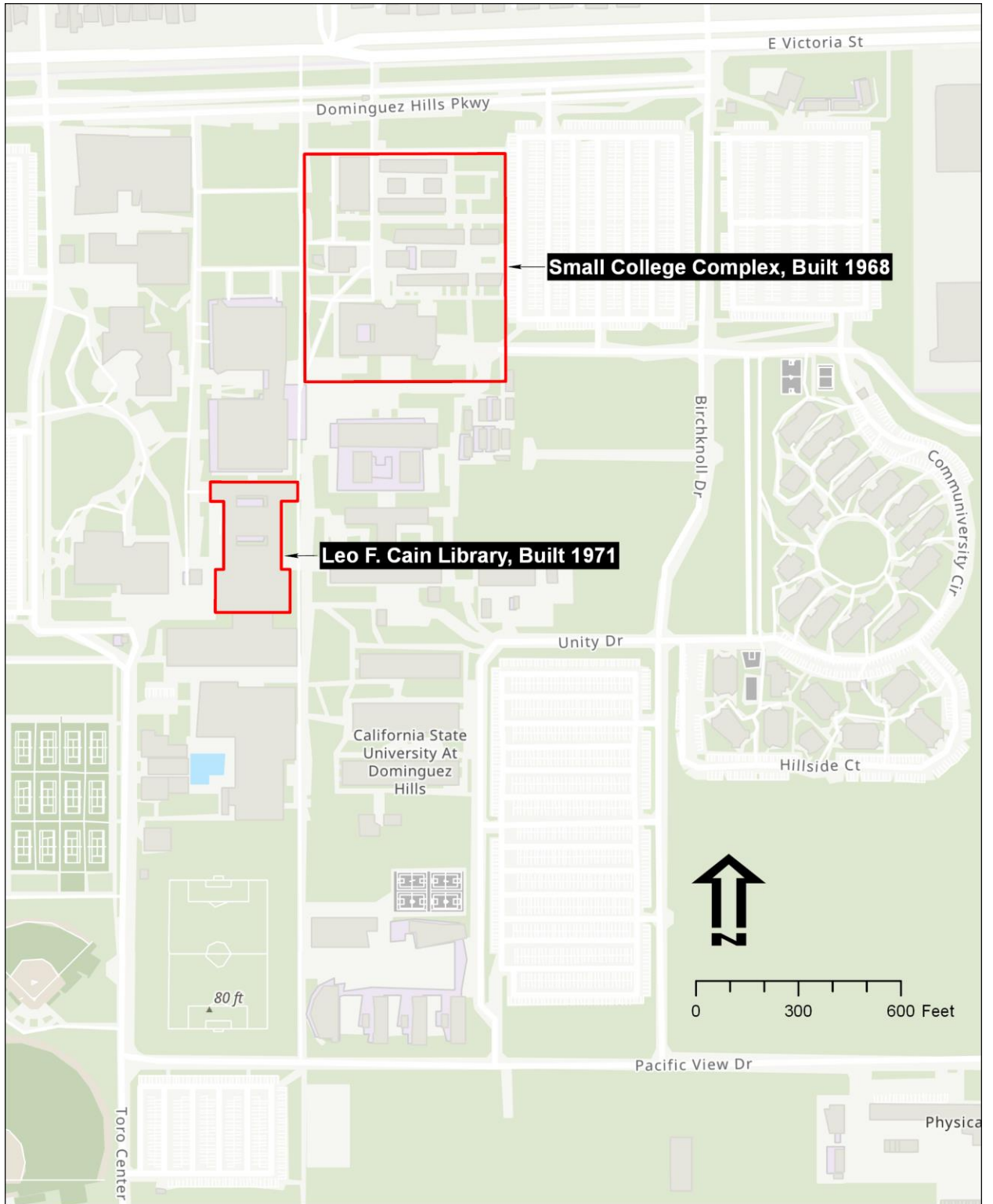


Figure 3. Campus map showing the location of the Small College Complex and the Leo F. Cain Library.



Identification of Historical Resources

The criteria for listing on the California Register of Historical Resources are found in Public Resources Code section 5024.1 and the California Code of Regulations, title 14, section 4852. The criteria are as follows:

- (A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- (B) Is associated with the lives of persons important in our past;
- (C) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic value; or
- (D) Has yielded, or may be likely to yield, information important in prehistory or history.

Note that these criteria are similar to the NRHP criteria.

Architectural historians utilized information provided from the CSUDH Space and Facilities Database Management System and the 2009 Master Plan, approved by the university trustees in 2010, to assist in identifying the year-built data for these buildings. This data indicates that only the Small College Complex is more than fifty years of age, the age threshold at which properties should be evaluated and the accepted standard at which adequate time has passed to gain the perspective needed to accurately evaluate buildings for both historic and architectural significance. Historical resources can also achieve significance within the past fifty years. A special consideration in CEQA (CCR §4852) stipulates that a resource less than fifty years old may be considered for listing in the CRHR if it can be demonstrated that sufficient time has passed to understand its historical importance and if it also meets at least one of the standard criteria listed above.

Within the CSUDH campus, two built historical resources require evaluation (Figure 3). The Small College Complex is more than fifty years of age and is evaluated within this document. The Leo F. Cain Library is approximately forty-five years of age, but was identified in the 2009 Master Plan as potentially eligible for the CRHR as a resource that has achieved significance within the past fifty years of age because of its architectural merit. The Leo F. Cain Library is also evaluated within this document to confirm that prior assessment, as CEQA requires updates on CRHR evaluations.

Small College Complex

Architectural Description

The Small College Complex (Figures 4 and 5), which includes the School of Education, is a group of fourteen single-story buildings located on the campus' northern section and constructed of steel frames with concrete masonry unit walls and flat roofs with overhanging eaves. The complex was constructed in 1968 and opened to students in early 1969. It is bound by Victoria Street and Dominguez Hills Parkway to the north, a parking lot to the east, a lawn to the west, and the Social and Behavioral Sciences building to the south. The majority of buildings that comprise the Small College Complex are oriented on an east-west axis nearly parallel to Victoria Street, and have rectangular footprints that vary in size. Several of the buildings form clusters that are contained beneath a single, expansive roof; two such clusters exist and

give the appearance of a five-building Small College Complex when viewed aerially. The complex buildings are connected by a network of sidewalks, covered walkways, patios, and courtyards.

Buildings within the Small College Complex share a similar Modernist design aesthetic common in California and represent a modest vernacular interpretation of International Style architecture that is commonly found nationwide in educational building designs of the era. Exterior walls are clad with eight-inch-by-eight-inch concrete masonry units stacked to form a grid pattern. Solid metal doors and glazed, metal-framed doors are found throughout the complex. Fenestration patterns are generally regular, with paired, metal-framed, three-light windows with horizontal muntins separated by wide vertical mullions. In some locations, glazed curtain walls with mullions form a wide grid pattern. Above the paired windows, a wide band contains projecting horizontal wood rafters that support the flat roof and its overhanging eaves. The band is replaced with clerestory windows instead of three-light windows in some locations. Each exposed rafter is generally located above a paired window mullion or used to divide clerestory windows. Because the building designs are not consistent, there is a collective lack of design harmony among the buildings.

The Small College Complex landscape includes small lawns, mature trees, and shrubbery located along building elevations. Some plantings are found along paths, and within courtyards, trees are generally planted in a grid-like pattern.



Figure 4. View within Small College Complex.



Figure 5. View of Small College Complex building.

Small College Complex Historical Context

The buildings comprising the Small College Complex were the first buildings designed by A. Quincy Jones completed at what was then California State College, Dominguez Hills. According to university archival photos, construction occurred during 1968, and the complex was open to students by 1969. The buildings, identified as the campus' initial buildings on the A. Quincy Jones campus master plan, served the students until the main campus buildings were completed beginning in 1971.

As the campus grew and additional academic and administrative buildings were constructed, the Small College housed an accelerated degree program with faculty members serving as mentors to students. The Small College curriculum featured three- or six-week courses on elementary computer programming, study skills, and writing, with concentrations in environmental, human, and civilization studies. This program was viewed as a means to serve a diverse student population by creating a more intimate learning environment. During its first decade, the Small College contained an admissions office, library, and university bookstore. Additionally, the Small College Complex served as the student union until student fees were increased in the 1980s to raise funds for a new building.

The Small College Complex features a modest design and includes courtyard and patio spaces for outdoor classes. Research has shown that A. Quincy Jones' design for the Small College Complex is nearly identical to his proposed plan for California State College at Palos Verdes developed years earlier for a different setting (Figures 6 and 7). It seems likely that Jones reused that design because of the expedited nature of the Small College Complex construction, and also because the buildings were not intended to be permanent components of the planned campus at CSUDH. Because the elements of A. Quincy Jones' Dominguez Hills campus master plan incorporated different landscape and architectural design elements, the Small College Complex was likely intended to be a temporary solution to the immediate need for campus facilities. According to the 2009 Master Plan EIR, the complex's construction utilized inexpensive materials and was likely not intended to be permanent. The buildings appear largely unchanged since their completion.



Figure 6. A. Quincy Jones Plan for California State College at Palos Verdes (1964)



Figure 7. Small College Complex, c. 1972.



California Register of Historical Resources Evaluation

The Small College Complex was evaluated for significance under CRHR Criteria A, B, and C using guidelines set forth in the CRHR (Pub. Res. Code §5024.1, Cal. Code Regs, tit. 14, section 4852).

The Small College Complex is not eligible under Criterion A. Research has not indicated that the Small College Complex is associated with events that made a significant contribution to the broad patterns of California history. The buildings were constructed quickly to accommodate arriving students and did not influence higher education trends within the CSU system.

Research did not indicate an association with persons significant in the past. Therefore, the Small College Complex is not eligible under Criterion B.

The Small College Complex is not eligible under Criterion C. Research has indicated that the complex is likely A. Quincy Jones' original design for California State College at Palos Verdes. Although the campus at Dominguez Hills is the culmination of that original project, the Small College Complex does not reflect the design characteristics ultimately chosen for the Dominguez Hills campus and incorporated into its original master plan. The Small College Complex design did not influence other campus buildings, either at Dominguez Hills or elsewhere in the CSU system. The 2009 Master Plan EIR also notes that the Small College Complex used inexpensive construction techniques and may have been built as a temporary building complex while construction ensued on the campus' major buildings over the next few years. This design approach is contradictory to the methods employed in significant Modernist buildings of the era that employed high-quality materials, albeit in a new design vocabulary. Therefore, the Small College Complex is not eligible under Criterion C.

The Small College Complex was not evaluated under Criterion D as part of this report, but was considered in archeological assessments.

Therefore, the Small College Complex is **not eligible** for listing in the CRHR.

Leo F. Cain Library/Educational Resource Center

Architectural Description

Located near the center of campus, the Leo F. Cain Library/Educational Resource Center (Figures 8 and 9) is a five-story reinforced concrete building with a smooth concrete exterior and square columns that support an overhanging upper story and flat roof. The building features Modernist architectural design tenets and is an example of the Neo-Formalist style applied to an educational building. One building story is located below grade and is exposed due to the surrounding landscape design employed by the university's original master plan, which sought to create interesting topography on the flat site. The building footprint is generally square and contains two wings that project from its east and west elevations. It is oriented with its facade facing north toward the student union; formerly, this area was a long lawn that stretched to Victoria Street.

The library contains character-defining design tenets of the Neo-Formalist style, including symmetry; flat, projecting rooflines; and columnar supports. The library's symmetrical facade contains no openings in its

second through fourth stories and comprises a vertically scored concrete wall that wraps around to the east and west elevations. Square concrete columns are evenly spaced across the elevation and continue around the entire building. These columns support an overhanging top story with a grid-like coffered ceiling. This upper story wraps around the entire building and features ribbon windows separated by projecting muntins that appear as vertical louvers. A flat roof covers the building. A wide terrace abuts the facade and is located slightly higher in elevation than the surrounding campus walkways and paths and is reached by a concrete staircase.

The east and west elevations are inverses of one another and contain an off-center concrete-faced projection at their middle floors that wraps around the south elevation. Above and below the projection are smooth, stucco-clad walls with metal-framed, vertically oriented single-light windows. Adjacent to the projection and recessed beneath the overhanging top story are a series of metal-framed curtain walls used at each story. Glazed entry doors are found in this recessed area and are located at the building's mezzanine level. The building's south (rear) elevation is generally symmetrical and features the wide concrete projection with windows located above and below the projection. Below grade, the building features concrete walls with large window openings and entry doors that open into designed sunken courtyard and patio spaces.

Elevated walkways and paths surround and abut the library, moving beneath its overhanging top story and connecting the library with its surrounding campus buildings consistent with the original master plan. Mature plantings are found along these paths and within the sunken courtyard and patio spaces.



Figure 8. View west toward library's east elevation.



Figure 9. View east toward library facade and sunken courtyard.

Leo F. Cain Library/Educational Resource Center Historical Context

Completed in 1971, the Leo F. Cain Library/Educational Resource Center, designed by A. Quincy Jones, was the first major building completed on the Dominguez Hills campus. Located in the center of campus, the building is the embodiment of Jones' design philosophy employed for the campus in his original master plan. These design elements include use of concrete for building exteriors, overhanging roofs, building entrances at a central or mezzanine level, courtyard spaces below grade, and a pedestrian circulation network of elevated walkways and paths. By altering the landscape around the library and implementing it for his original master plan, Jones provided dimension and interest to an otherwise flat setting. At the time of its construction, the library became the focal point of the new campus, with all surrounding buildings proximate to and smaller in scale than the library. The library opened to students as the Educational Resource Center on January 15, 1972 (Figure 10). Its name was changed to the Leo F. Cain Library following Cain's retirement in 1976.

Since its construction, the library's immediate setting has been altered with the construction of a student union completed in the 1980s immediately north of the library, using space formerly occupied by a long lawn. However, the location of the student union to the north of the library is consistent with the university's original master plan. South of the library and attached to it via a two-story enclosed glazed walkway is a large library addition. This addition was completed in 2010 as part of a library expansion project and is also consistent with the university's original master plan, which proposed additional buildings south of the library. In the 2009 Master Plan EIR, the library was determined to be a potentially significant historical resource under CEQA if determined eligible for the ~~CRHR~~ NRHP under Criterion G, which allows buildings less than fifty years of age to be listed. [Under the CRHR, the special consideration code also allows the a resource less than fifty years old to be considered for listing in the California Register if it can be demonstrated that sufficient time has passed to understand its historical importance.](#)



Figure 10. Leo F. Cain Library/Educational Resource Center, c. 1970s.

California Register of Historical Resources Evaluation

The Leo F. Cain Library/Educational Resource Center was evaluated for significance under Criteria A, B, and C using guidelines set forth in the CRHR (Pub. Res. Code §5024.1, Cal. Code Regs., tit. 14, section 4852).

The Leo F. Cain Library/Educational Resource Center is not eligible under Criterion A. Research has not indicated the building is associated with events that made a significant contribution to the broad patterns of California history. The building was not influential in trends associated with higher education.

Research also did not indicate an association with persons significant in the past. Therefore, the Leo F. Cain Library/Educational Resource Center is not eligible under Criterion B. Although the building is named for Leo Cain (who contributed to the establishment of CSUDH), the naming of the library is an honorary designation.

The Leo F. Cain Library/Educational Resource Center is eligible under Criterion C. Research has indicated that the complex is A. Quincy Jones' seminal work on the Dominguez Hills campus and the work of a master architect. The building was designed to seamlessly integrate surrounding campus buildings into Jones' master plan for the school, and its prominent location, originally at the end of a long lawn, demonstrated its importance to his campus master plan. Continuing Jones' efforts to design buildings that extend and integrate into their landscape, the library utilizes sunken courtyards and elevated walkways to provide dimension to its otherwise flat surroundings. The building represents the peak of A. Quincy Jones' architectural career during the last decade of his life. It is an excellent example of the Neo-Formalist style



successfully interpreted for a college library building. Therefore, the Leo F. Cain Library/Educational Resource Center is eligible under Criterion C.

The Leo F. Cain Library/Educational Resource Center was not evaluated under Criterion D as part of this report, but was considered in archeological assessments.

The Leo F. Cain Library/Educational Resource Center is largely unchanged since its construction and retains integrity of location, design, materials, workmanship, feeling, and association. The building's integrity of setting has been slightly altered due to the large contemporary library addition to its south; however, this addition is located in an area where the original campus master plan proposed construction of future buildings. The period of significance for the Leo F. Cain Library/Educational Resource Center is 1971, its year of completion, and its historical resource property boundary includes the original library building and its surrounding designed landscape that remains intact.

Therefore, the Leo F. Cain Library/Educational Resource Center is **eligible** for listing in the CRHR. The determinations of eligibility included in this report have not been submitted for review and concurrence by the California State Historic Preservation Office. These determinations are used for purposes of the 2018 Master Plan EIR only.





Additional Buildings Potentially Affected by Actions Contained in the 2018 Master Plan

Historic and archival research indicated that only the Small College Complex, which includes the School of Education, was more than fifty years of age and required a significance evaluation. Based on the analysis, the Small College Complex is not eligible for the CRHR. As stated, the Leo F. Cain Library/Educational Resource Center was previously identified as being potentially eligible before reaching fifty years of age because of its exceptional design merit. However, it is important to note that while the Leo F. Cain Library/Educational Resource Center was determined to be potentially eligible for the CRHR, it will not be directly or indirectly impacted by any proposed 2018 Master Plan activity and will not be replaced, altered, or relocated. In addition to these two assessments, qualified architectural historians examined proposed actions contained in the 2018 Master Plan and reviewed all buildings potentially impacted by proposed relocation, alteration, or replacement. These properties are included in Table 1. Campus Facilities Potentially Planned for Alteration, Replacement, or Relocation. While none of these additional buildings listed below are more than fifty years of age and were not previously determined to be a potentially significant historical resource for purposes of CEQA, the architectural historians evaluated the buildings to determine if any may also have the exceptional design merit exhibited at the library.

Table 1. Campus Facilities Potentially Planned for Alteration, Replacement, or Relocation.

Photo	CSUDH Facility Number(s)	Building Name	Year Built ³
	61	Field House	1971
	70	Pueblo Dominguez 1	1992
	71	Pueblo Dominguez 2	1982
	80	Physical Plant	1969
	81	Physical Plant Shops	1969

³ Dates may differ based on the year that construction commenced versus year of completion. For purposes of this table, all dates provided reflect information found in the CSUDH facilities database or previous CSUDH Master Plan documentation.

	82	Physical Plant Vehicle Maintenance	1969
	83	University Warehouse	1969
	84	Physical Plant Warehouse	1969
	87	Central Plant	1972
	102	South Academic Complex	1991
	103	South Academic Complex	1993

	116	East Academic Complex	2002
	120	Child Development Center	2005
	121	Infant Toddler Center	2005

A review of the potentially impacted buildings indicated that the buildings range in year built from 1969 through 2005, with buildings constructed in each decade between these dates. The buildings do not display architectural merit. They are generally utilitarian in nature and appearance and lack ornamentation. None of the older buildings display character-defining features of the Modernist movement, such as high-quality materials or references to academically accepted mid-century styles such as Neo-Formalism, Brutalism, the International Style, or Expressionism. Because of the multitude of forms and materials used, as well as the very long and drawn out development of the campus, the buildings lack an overall sense of design cohesion or architectural compatibility. A number of buildings are constructed of prefabricated materials and many were intended for temporary use. The South Academic Complex buildings (102, 103) and the East Academic Complex buildings (116) are constructed of prefabricated materials and officially designated as “temporary buildings” on the previously approved Master Plan. Similarly, the Child Development Center (120) and Infant Toddler Center (121) are constructed of prefabricated materials. These buildings were likely intended to be temporary, are easily moved, and are planned to be relocated to other areas on the campus as part of the 2018 Master Plan. The housing complexes, Pueblo Dominguez 1 (70) and Pueblo Dominguez 2 (71) lack architectural significance and appear to have been constructed to respond to a demand for housing at CSUDH.

The remaining buildings do not appear to meet CEQA special considerations for buildings less than fifty years of age. Although some of the buildings date from the first decade of CSUDH’s existence, some have been constructed as recently as thirteen years ago. A visual assessment of the buildings and archival research did not indicate these buildings have achieved significance within the last fifty years and sufficient time has not passed “to obtain a scholarly perspective on the events or individuals associated with the resource.”⁴

⁴ California Office of Historic Preservation, *Technical Assistance Series #1, California Environmental Quality Act (CEQA) and Historical Resources, “Special Considerations”* (2001), 29.



When compared to the Leo F. Cain Library/Educational Resource Center, a campus building that is less than fifty years of age and has achieved significance, these buildings are modest representations of late-1960s/early-1970s utilitarian designs. They were built quickly, economically, and efficiently with minimal design consideration in order to respond to facilities needs of the newly established campus at Dominguez Hills. The buildings are not architecturally significant and do not warrant further evaluation at this time.

Assessment of the 2018 Master Plan's Potential Effects/Impacts on Historical Resources

As described above, there is one historical resource within the project area: the Leo F. Cain Library/Educational Resource Center, which was identified as a historical resource in the EIR for the 2009 Master Plan. The previously identified 7-Eleven Olympic Velodrome is no longer extant and the Small College Complex is not eligible for the CRHR. No other built resources are fifty years of age. Therefore, the effects of the 2018 Master Plan's proposed undertakings on only the Leo F. Cain Library/Educational Resource Center will be evaluated using CEQA criteria.

The CEQA Guidelines for assessing effects are found in the California Code of Regulations, Title 14, Chapter 3. Section 15064.5 states that:

- [a] project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.
- (1) Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.
- (2) The significance of an historical resource is materially impaired when a project:
 - (A) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; or
 - (B) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to §5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of §5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
 - (C) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

In the vicinity of the Leo F. Cain Library/Educational Resource Center, the 2018 Master Plan proposes the addition of academic buildings to the southeast and southwest of the 2010 library addition. A larger student recreational center is proposed for an area to the south of the 2010 library addition. Additional buildings are proposed at locations that are a substantial distance to the northeast and northwest from the library. East of the library, the 2018 Master Plan proposes developing the currently vacant eastern section of campus into a university village with housing and parking for students and others.

There are no direct effects to the library because all proposed landscape changes and new buildings constructed as part of the 2018 Master Plan will be located outside the library’s historical resource property boundary. Indirect effects, including visual or noise effects, would be minor and located at a substantial distance from the building. Additionally, mature vegetation around the library and existing campus buildings would screen views toward the proposed new buildings. The library’s immediate setting has been altered since the time of its construction due to the construction of the student union building in the 1980s and the rear library addition completed in 2010 (Figure 11); however, these changes are consistent with the original campus master plan that proposed a number of additional campus buildings. The proposed buildings in the 2018 Master Plan are also consistent with the original master plan’s intent to provide additional campus facilities in close proximity to one another. Executing the proposed undertakings in the 2018 Master Plan would have no substantial adverse change in the significance of the library or its immediate surroundings. The library’s significance would not be materially impaired, nor would the physical characteristics of the library that convey its historical significance and that justify its eligibility for inclusion in the CRHR be diminished. The 2018 Master Plan would not change the Leo F. Cain Library’s integrity of location, design, setting, materials, workmanship, feeling, and association. Therefore, the 2018 Master Plan will have **no effect** on the Leo F. Cain Library/Educational Resource Center.

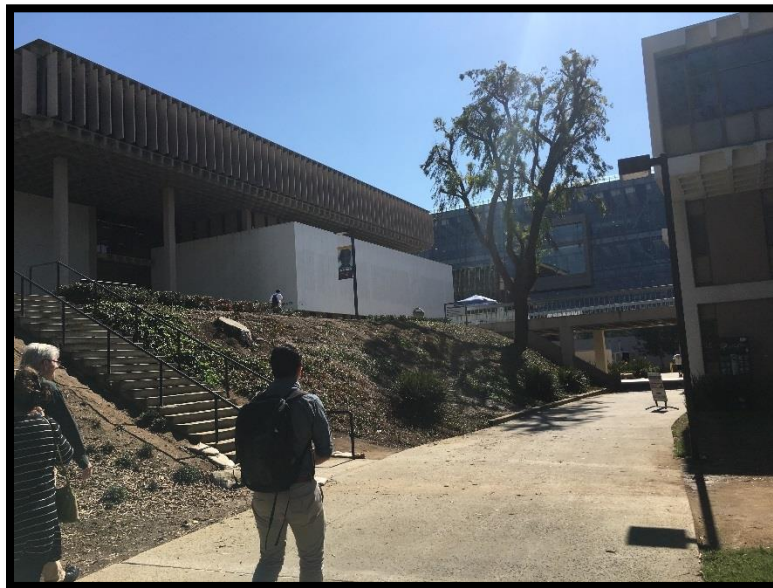


Figure 11. View south toward Leo F. Cain Library and 2010 library addition.

Effects are generally assessed only on properties that are listed in or eligible for listing in the CRHR. However, it is worth noting that the Small College Complex is proposed for replacement as part of the 2018 Master Plan. It is the only built resource more than fifty years of age that would be potentially impacted by the proposed actions in the 2018 Master Plan. Because the Small College Complex is not significant and is therefore not eligible for listing in the CRHR, its replacement would have no substantial adverse change to historic resources for the purposes of CEQA.

All other buildings potentially impacted by proposed relocation, alteration, or replacement (shown in Table 1) are less than fifty years of age, and none have been shown to demonstrate significance. Their



demolition, relocation, or alteration would have no substantial adverse change to historical resources for purposes of CEQA.

Because the 2018 Master Plan would have no effect and no substantial adverse change on the Leo F. Cain Library/Educational Resource Center, which is the only historical resource as defined by CEQA within the study area, the plan would have **no significant impact** on historical resources for purposes of CEQA.

Recommendations

Upon reaching fifty years of age, the campus buildings should be evaluated collectively to determine NRHP and CRHR eligibility. This analysis should be submitted to the California State Historic Preservation Office for concurrence.



Works Consulted

- California Office of Historic Preservation. *Technical Assistance Series #1, California Environmental Quality Act (CEQA) and Historical Resources*, "Special Considerations," 2001.
- California State University, Dominguez Hills. *Master Plan EIR*. September 2009.
- California State University, Dominguez Hills. Gerth Archives and Special Collections. Digital Collections. Accessed June 4, 2018.
- Rivera, Carla. "50 Years on, Cal State Dominguez Hills Renews Efforts to Transform an Underserved Community." *Los Angeles Times*, October 11, 2015.
- Oliver, Myrna. "Leo F. Cain; Founding President of Cal State Dominguez Hills." *Los Angeles Times*, February 14, 2001.
- Williams, Gregory L. *California State University, Dominguez Hills*. Chicago: Arcadia Publishing, 2010.

D.3 Tribal Letter to Gabrieleño Tongva



California State University
Dominguez Hills

Chris
Sent Certified
5/12/17

Vice President – Administration and Finance

1000 E. Victoria Street, WH B470 ~ Carson, California 90747 ~ 310-243-3750 ~ Fax 310-243-3869

May 12, 2017

Anthony Morales, Chief
Gabrieleno Tongva San Gabriel Band of Mission Indians
Post Office Box 693
San Gabriel, CA 91778

Subject: Formal Notification for the California State University Dominguez Hills
2018 Campus Master Plan Project

Dear Mr. Morales:

California State University Dominguez Hills (CSUDH) is undertaking an environmental review process pursuant to the California Environmental Quality Act (CEQA) for a 2018 Campus Master Plan. The main objective of the Campus Master Plan is to reaffirm the CSUDH mission by focusing on the campus facilities needed to increase access to educational opportunity, enhance campus support for student learning, and offer globally relevant academic programs supporting enrollment up to 20,000 full-time equivalent students. The 2018 Campus Master Plan also recognizes changes in public funding that have occurred in recent years and the need to grow the university's financial resources by diversifying and increasing revenue sources. To do so, the Master Plan identifies needed facilities and improvements, including student, staff, and faculty housing; academic facilities; student service and support facilities; a mixed-use University Village; parking facilities, and associated improvements as illustrated in the attached Master Plan conceptual land use map.

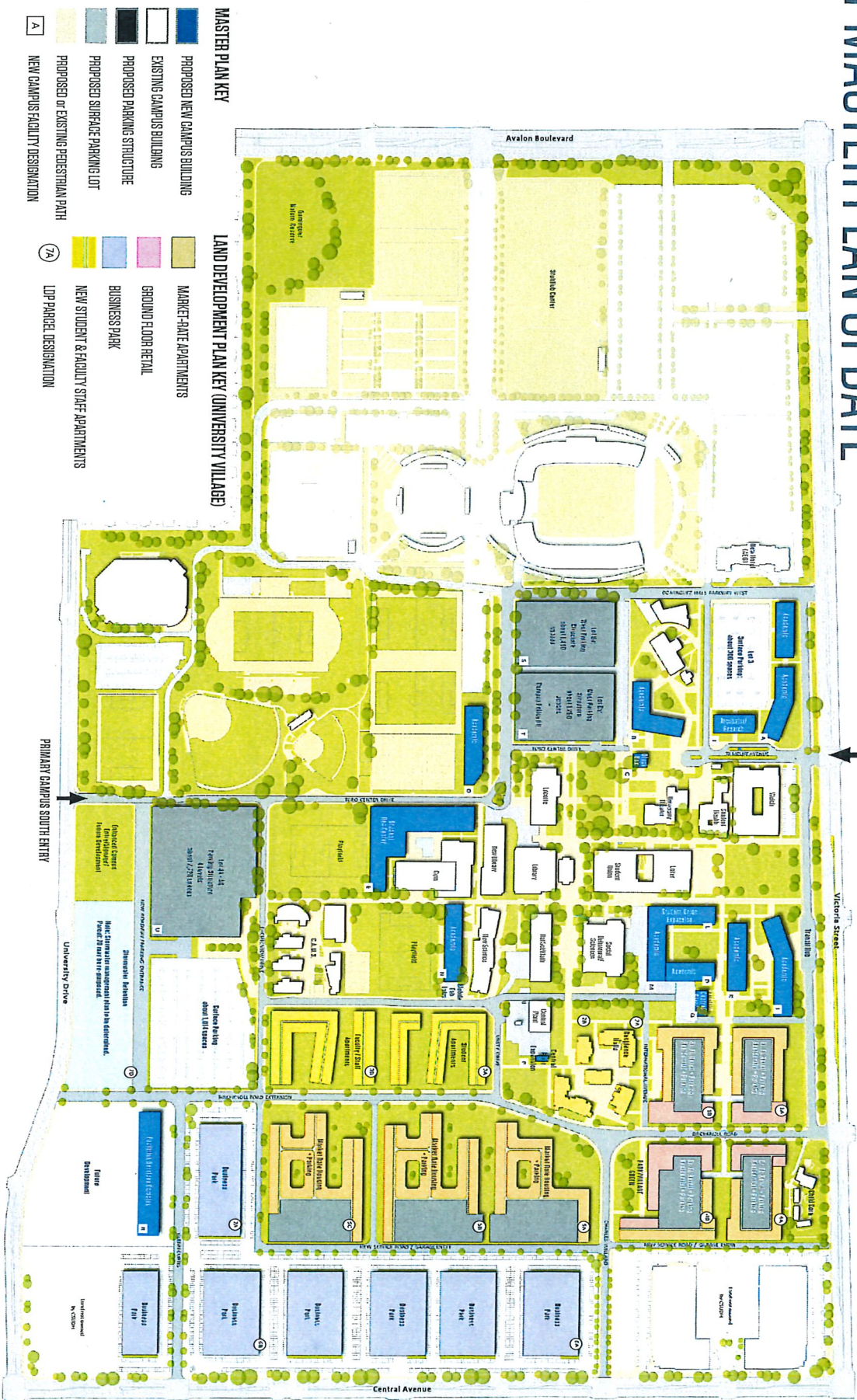
Per your request to be formally notified of proposed projects within the CSUDH jurisdiction that are traditionally and culturally affiliated with the San Gabriel Band of Mission Indians in accordance with Public Resources Code Section 21080.3.1, subd. (b), I am hereby notifying you of the opportunity to consult with the University regarding the potential this project may impact Tribal Cultural Resources, as defined in Section 21074 of the PRC. The purposes of tribal consultation under AB 52 are to determine, as part of the CEQA review process, whether or not Tribal Cultural Resources are present within the project area, and, if so, whether or not those resources will be significantly impacted by the project. If Tribal Cultural Resources may be significantly impacted, then consultation also will help determine the most appropriate way to avoid or mitigate impacts.

In accordance with Section 21080.3.1(b) of the PRC, you have thirty (30) days from date of this letter to request or decline consultation on this project in writing. Please send your written response before June 12, 2017 to Roshni Thomas, Director of Facilities Planning, Design and Construction, CSU, Dominguez Hills, Facilities Services – A058, 1000 E. Victoria Street, Carson, CA 90747. If she does not receive a response provided from you within thirty (30) days, we will proceed with EIR Process for the Campus Master Plan. Thank you and we look forward to your response.

Sincerely,

Naomi Goodwin, Interim
Vice President, Administration and Finance

DRAFT MASTER PLAN UPDATE



D.4 Tribal Letter Response Gabrieleño Tongva



GABRIELENO TONGVA
SAN GABRIEL BAND OF MISSION INDIANS

December 1, 2016

California State University, Dominguez Hills
1000 E. Victoria Street
Carson, CA 90747

RE: California Environmental Quality Act Public Resources Code section 21080.3, subd. (b) Request for Formal Notification of Proposed Projects Within the San Gabriel Band of Mission Indians Tribe's Geographic Area of Traditional and Cultural Affiliation

CC: Native American Heritage Commission

To whom it may concern:

As of the date of this letter, in accordance with Public Resources Code Section 21080.3.1, subd. (b), San Gabriel Band of Mission Indians, which is traditionally and culturally affiliated with a geographic area within your agency's geographic area of jurisdiction, requests formal notice of, and information on, proposed projects for which your agency will serve as a lead agency under the California Environmental Quality Act (CEQA), Public Resources Code section 21000 et seq. Pursuant to Public Resources Code section 21080.3.1, subd. (b), and until further notice, we hereby designate the following person as the tribe's lead contact person for purposes of receiving notices of proposed projects from your agency:

San Gabriel Band of Mission Indians
Anthony Morales, Chief
P. O. Box 693
San Gabriel, CA 91778
Fax: (626) 286-1262
Phone: (626) 483-3564
GTTribalcouncil@aol.com

We request that all notices be sent via certified U.S. Mail with return receipt. Following receipt and review of the information your agency provides, within the 30-day period prescribed by Public Resources Code section 21080.3.1, subd. (d), the San Gabriel Band of Mission Indians may request consultation, as defined by Public Resources Code section 21080.3.1, subd. (b), pursuant to Public Resources Code section 21080.3.2 to mitigate any project impacts a specific project may cause to tribal cultural resources.

If you have any questions or need additional information, please contact our lead contact person listed above.

Sincerely,

Anthony Morales
San Gabriel Band of Mission Indians
Chief



GABRIELENO TONGVA
SAN GABRIEL BAND
OF MISSION INDIANS



October 15, 2016

To Whom It May Concern,

I am sending this letter on behalf of the **Morales family of the San Gabriel Band of Mission Indians** to help facilitate communication regarding the Gabrieleno cultural resources and archaeological studies. The San Gabriel Band of Mission Indians gained recognition from the state of California in 1994 as an indigenous tribe within the Los Angeles basin (California Legislature Assembly Joint Resolution No. 96, adopted in Senate August 11, 1994). The Morales family has been an active participant in the preservation of Gabrieleno tribal resources since the early 1970s. As early as 1978, the Native American Heritage Commission identified the Morales family as important Tribal Leaders in Southern California for their tenacious efforts to preserve Gabrieleno cultural resources. Today, the Morales family continues to help preserve their culture through a new partnership with Scientific Resource Surveys, Inc (SRSINC).

SRSINC is recognized as the oldest Cultural Resource Management (CRM) firm in Southern California, if not the United States. For over 43 years, SRSINC has worked side-by-side with the Gabrieleno in the Los Angeles basin to provide support to the Southern California building industry. SRSINC was formed in 1973 (incorporated in 1977) and currently operates as a California and Alaska Small Business, UDBE, DBE, and Woman-owned Corporation out of Orange County, California. As an equal opportunity employer, SRSINC employs a diverse staff of specialists to conduct archaeological, ethnographic, historic, and paleontological studies throughout Southern California. SRSINC is more than a Cultural Resource Management firm; it is a consortium of very talented scientists, artists, and support staff who have worked for decades in the fields of **Archaeology, History, Ethnography, Genealogy, Archival Research, Museum Displays, Graphic Arts, Paleontology, Zoology, Bioarchaeology and Forensic Sciences**. Each person has his/her own exceptional skills, which together, overlap and intertwine to form a cohesive team.

The San Gabriel Band of Mission Indians have united with SRSINC to facilitate seamless interaction between developers and the tribe, as dictated by the new CRM laws. The most recent changes to state statutes were put into effect in 2015. Assembly Bill No. 52 (AB-52) was passed late-2014 to amend the current policy surrounding Native American resources. The implementation of AB-52 mandates tribal consultation and emphasizes tribal knowledge during CEQA review. Additionally, AB-52 has broadened the definition of what constitutes as a cultural resource. Previously, a cultural resource was reserved to archaeological and historical objects and buildings. AB-52 has coined a new term, Tribal Cultural Resources (TCR), to be more inclusive of culturally valued resources, whether they be tangible objects or conceptual. The enactment of AB-52 has placed a new emphasis on collaboration with tribal governments to help understand how indigenous populations used, and continue to use, local landscapes.

The San Gabriel Band of Mission Indians have requested to be consulted for all developments located within the Los Angeles Basin. As a partner and qualified expert, SRSINC can provide the required information to help save time and money. **By working together, we can help you navigate through your legal obligations and facilitate all of your cultural resource management needs for the Los Angeles basin.** Please feel free to contact SRSINC's tribal liaison, Kassie Sugimoto, for additional information or with any questions. We look forward to working with you in the near future.

Kassie Sugimoto
Tribal Liaison
Scientific Resource Surveys, Inc.
2324 N. Batavia St. Ste. 109, Orange, CA 92865
Tel: 714-685-0204
Fax: 714-685-0082

Sincerely,

Nancy "Anastasia" Wiley
Scientific Resource Surveys, Inc.

Anthony Morales
San Gabriel Band of Mission Indians

Adrian Morales
San Gabriel Band of Mission Indians

NATIVE AMERICAN HERITAGE COMMISSION

915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390



September 2, 1978

Mr. Fred Morales
Gabrieleno/Tongva Tribal Council

211 East Main Street
San Gabriel, CA 91776

Dear Mr. Morales:

As you know, the State of California Native American Heritage Commission was created by AB 4239 in 1976 and the Commission began its work January 1, 1977 with new authority codified in Public Resources Code Section 5097. 9.

You have been identified as an important Tribal Leader in Southern California. The Commission looks forward to working with you and Tribal Elders as it makes plans and services to protect California Native American burial sites and artifacts associated with burials. The Commission is also concerned about development activities that might threaten Native American sacred sites.

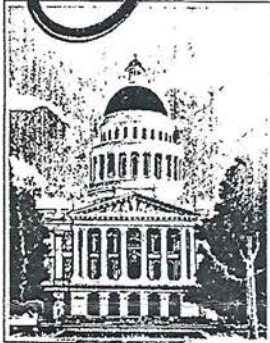
Please feel free to contact me with your concerns and your suggestions that will make the work of the Commission effective in cooperation with California Native American Tribes.

Sincerely,

A handwritten signature in cursive script that reads "Steve Rios".

Steve Rios
Executive Secretary

Assembly



RESOLUTION

By Assembly Members Diane Martinez, Barbara Alby, Doris Allen, Dede Alpert, Marguerite Archie-Hudson, Joe Baca, Julie Bornstein, Vivien Bronshvag, Valerie Brown, John Burton, Cruz M. Bustamante, Sal Cannella, Dominic L. Cortese, Denise Moreno Ducheny, Delsine Eastin, Bob Epple, Martha M. Escutia, Robert Frazier, Jerry Friedman, Jan Goldsmith, Mike Golch, Tom Hannigan, Irice Harvey, Dan Hauser, Paul V. Horcher, Betty Karnette, Richard Katz, Barbara Lee, Juanita McDonald, Gwen Moore, Bill Morrow, Richard Mountjoy, Willard Murray, Grace F. Napolitano, Richard Pelaez, Charles W. Quickerbush, James Rogan, Andrea Sraustrand, Margaret E. Snyder, Hilda L. Solis, Nao Takasugi, Tom Umberg, and Ted Weggeland; Relative to

The Gabrielinos

Whereas, Gabrielino tribal territory encompasses the entire Los Angeles Basin area and the Channel Islands of Santa Catalina, San Nicholas, and San Clemente; and

Whereas, The Gabrielino were, at one time, one of the most prosperous and generous Native American tribes of southern California. Long before European contact, the Gabrielinos already had a major society in place with a government, laws, religion, music, dance, art, a monetary system, and cultural exchange; and

Whereas, The State of California has had consistent interaction with the Gabrielinos, known originally as the San Gabriel Band of Mission Indians; and

Whereas, The State of California recognizes that the Gabrielino Indian community existed and has continued to exist without interruption to the present day; and

Whereas, The State of California recognizes that the Gabrielinos have held general membership meetings in the San Gabriel, California region for over 100 years; and

Whereas, The State of California recognizes that Gabrielino members participate consistently in tribal affairs; now, therefore, be it

Resolved by THE ASSEMBLY AND SENATE OF THE STATE OF CALIFORNIA, JOINTLY, That the State of California recognizes the Gabrielinos as the aboriginal tribe of the Los Angeles Basin and takes great pride in recognizing the Indian inhabitation of the Los Angeles Basin and the continued existence of the Indian community within our state; and be it further

Resolved, That the California Legislature respectfully memorializes the President and Congress of the United States to likewise give recognition to the Gabrielinos as the aboriginal tribe of the Los Angeles Basin; and be it further

Resolved, That the Chief Clerk of the Assembly transmit copies of this resolution to the President and Vice President of the United States, to the Speaker of the House of Representatives, to each Senator and Representative from California in the Congress of the United States.

Assembly Joint Resolution No. 96
Adopted in Assembly August 11, 1994

Signed:

Willie L. Brown, Jr.
Speaker of the Assembly

Attest:

Dotsch Wilson
Chief Clerk of the Assembly

Adopted in Senate August 31, 1994

Signed:

Leo T. McCarthy
President of the Senate

Attest:

Rick Rollens
Secretary of the Senate



Appendix E. Noise

E.1 Noise Analysis Technical Report

Noise Analysis Technical Report

Campus Master Plan 2018, California State University, Dominguez Hills, Carson California

Scope and Noise Study Methods

This section describes the analysis and change in traffic noise levels to noise sensitive land uses, around the California State University Dominguez Hills (CSUDH) campus, due to the 2018 Campus Master Plan.

Federal Highway Traffic Noise Model (TNM 2.5), which computes highway traffic noise at nearby receivers, was used to calculate the existing and future peak hour noise levels for both the AM and PM peak hours.

Noise Measurement and Reporting

Sound levels are expressed on a logarithmic scale of decibels (abbreviated as dB), in which a change of 10 units on the decibel scale reflects a 10-fold increase in sound energy. A 10-fold increase in sound energy roughly translates to a doubling of perceived loudness.

Sound occurs over a wide range of frequencies. However, not all frequencies are detectable by the human ear; therefore, an adjustment is made to the high and low frequencies to approximate the way an average person hears traffic sounds. This adjustment is called A-weighting and is expressed as “dBA.” People commonly judge the relative magnitude of sound sensation using subjective terms such as “loudness” or “noisiness.” A change in sound level of 3 dBA is considered barely perceptible, a change in sound level of 5 dBA is considered readily perceptible, and an upward change of 10 dBA is recognized as twice as loud. Examples of typical noise levels for common indoor and outdoor activities are depicted in Table 1.

Community decibel levels are reported as both Community Equivalent Noise Levels (dBA, CNEL) and Leq (h) dBA. The CNEL is a 24-hour weighted noise average with 5 dBA adjustment upward added to the sound levels that occur during evening hours and 10 dBA add to nighttime hours, the penalties are intended to account for greater sensitivity to noise during these hours. The equivalent sound level “Leq” is also referred to as the time-average sound level. Leq can be used to represent the average of equivalent sound level for noise generated by traffic given that traffic sound levels are never constant due to the changing number, type and speed of vehicles.

For the purpose of the project, analyses were conducted using both CNEL and Leq approaches. The CNEL analyses were conducted for weekday conditions because the Master Plan would generate traffic through the day. The CNEL would be an appropriate approach which would account for the overall impacts of the developments. In addition, Leq analyses were also conducted specifically for Sunday conditions to determine the noise impacts during events periods at the StubHub Center. Because sporting or entertainment events typically occur during a few hours of the day, the use of Leq would better account for the surge in traffic and the associated noise, and would thus provide a more conservative analysis in this context.

Table 1. Common Sound/Noise Levels

Common Sound/Noise Levels		
Outdoor	dB(A)	Indoor
Air horn	110	Rock/Blues Band
Jet Flyover at 1000 feet		Baby Crying
Leaf Blower	100	Subway
Gas Weed Eater	90	Fire Alarms
Riding Lawn Mower		Blender
Gas Edger		Crowded Restaurant
Police Whistle	80	Disposal at 3 feet
Air Conditioner Compressor		Shouting at 3 feet
	70	
		Normal Conversation at 3 feet
Normal Conversation at 3 feet	60	Clothes Dryer at 3 feet
Babbling Brook		Large Business Office
Quiet Urban (daytime)	50	Refrigerator
Quiet Urban (nighttime)	40	Quiet Office/Library
Wilderness	30	
	20	Recording Studio
	10	Threshold of Hearing

Noise Sensitive Receptors

Different land uses have different sensitivity to noise. Gas stations and store fronts/parking areas are not sensitive to noise as are schools and residential areas. Since schools will not be in session on Sundays, only the residential communities, which are located near the campus and on the roadway to carry the traffic to and from the games were studied for this project.

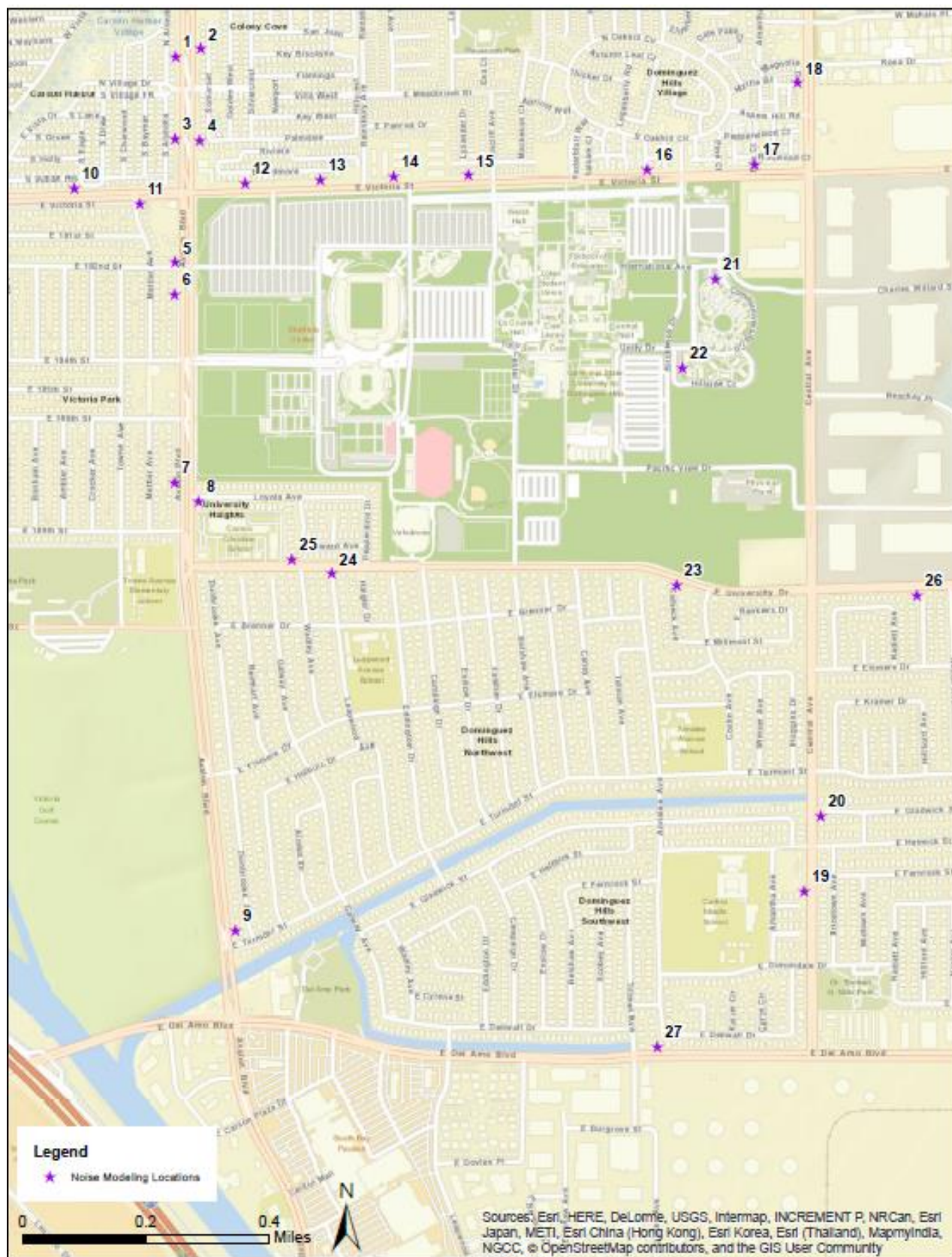
For this study, noise levels were modeled at 27 sites. The 27 receptor sites are near parking lots and along roadway links could be affected by the increase in traffic, before and after the Sunday games.

Table 2, lists the site number, roadway, side of the roadway, to and from cross streets for each receptor site. The locations are shown in Figure 1.

Table 2. Modeled Noise Sensitive Receptors

Site Number	Roadway	To	From
1	SB Avalon Blvd	SR-91	Harbor Village
2	NB Avalon Blvd	Harbor Village	SR-91
3	SB Avalon Blvd	Harbor Village	Victoria St
4	NB Avalon Blvd	Victoria St	Harbor Village
5	SB Avalon Blvd	Victoria St	182nd St/Entrance A
6	SB Avalon Blvd	182nd St/Entrance A	184th St/Entrance B
7	SB Avalon Blvd	184th St/Entrance B	University Dr
8	NB Avalon Blvd	University Dr	184th St/Entrance B
9	NB Avalon Blvd	Del Amo Blvd	University Dr
10	WB Victoria St	Avalon Blvd	Main St
11	EB Victoria St	Main St	Avalon Blvd
12	WB Victoria St	Entrance C	Avalon Blvd
13	WB Victoria St	Rainsbury Ave	Entrance C
14	WB Victoria St	Entrance D	Rainsbury Ave
15	WB Victoria St	Tamcliff Ave	Entrance D
16	WB Victoria St	Birchknoll Dr	Tamcliff Ave
17	WB Victoria St	Central Ave	Birchknoll Dr
18	SB Central Ave	SR-91	Victoria St
19	SB Central Ave	University Dr	Del Amo Blvd
20	NB Central Ave	Del Amo Blvd	University Dr
21	Basketball Court at CSUDH Housing	Parking Lot 1,2 and 8	Entrance G
22	CSUDH Housing nearest to Lot 7	Parking Lot 7 and 8	Entrance H
23	WB University Dr	Avalon Blvd	Entrance I
24	EB University Dr	Entrance I	Avalon Blvd
25	WB University Dr	Entrance I	Central Ave
26	WB University Dr	Central Ave	Wilmington Ave
27	WB Del Amo Blvd	Central Ave	Avalon Blvd

Figure 1. Modeled Noise Sensitive Receptors



Existing Noise Levels

The existing weekday peak hour noise levels were calculated in TNM 2.5 using the traffic from Exhibit 17 in the Transportation Impact Study, Campus Master Plan 2018, prepared by WSP, November 2017.

Future Traffic Noise Levels

The future 2035 No Project weekday peak hour noise levels were calculated in TNM 2.5 using the traffic from Exhibit 75 in the Transportation Impact Study, Campus Master Plan 2018, prepared by WSP, November 2017.

The future 2035 Project weekday peak hour noise levels were calculated in TNM 2.5 using the traffic from Exhibit 75 in the Transportation Impact Study, Campus Master Plan 2018, prepared by WSP, November 2017.

Criteria for Determination of a Significant Impact

The City of Carson (Chapter 3 of the General Plan) specifies that the standards for exterior noise levels at residential locations should not exceed a CNEL of 65 dBA while the interior levels should not exceed CNEL of 45 dBA. This exterior noise level also falls within the range of acceptable conditions (55 to 70 dBA) set by the California Department of Health Services. In addition, the City's Noise Ordinance provides various measures to reduce nuisance noise from construction projects, including the requirement to limit construction activities near residential units, and employing feasible and practical techniques that minimize the noise impact to adjacent uses.

The Federal Interagency Committee on Noise (FICON) had established significance criteria for noise impacts using a sliding scale based on the existing Ldn noise levels. The Ldn is a 24-hour average noise level with 10 decibel penalty added to the night period from 10:00 p.m. to 7:00 a.m. The level of significance under the criteria changes with increasing noise exposure, such that smaller changes in ambient noise levels result in significant impacts at higher existing noise levels. These criteria are shown in Table 3.

Table 3. Noise Impact Significance Criteria

Existing Ldn	Significant Impact
Below 60 dBA	+5.0 dBA or more
60 - 65 dBA	+3.0 dBA or more
Above 65 dBA	+1.5 dBA or more

Source: FICON - Federal Government's Method of Assessing Noise Impacts

For the proposed project's operational impacts, a significant noise impact would result if:

- The existing noise level is in excess of 65 dBA and the proposed project adds 1.5 dBA or more to the existing condition; or,
- The existing noise level is between 60 to 65 dBA and the proposed project adds 3.0 dBA or more to the existing condition, and thereby results in a noise level exceeding 65 dBA; or,
- The existing noise level is below 60 dBA and the proposed project adds 5.0 dBA or more to the existing condition, and thereby results in a noise level exceeding 65 dBA.

For short-term construction impacts, a significant noise impact would result if noise from construction activities associated with the proposed project resulting in noise levels in excess of 65 dBA between the hours of 7:00 a.m. and 8:00 p.m. daily (except Sundays), or if noise from construction activities exceeds 55 dBA between the hours of 8:00 p.m. and 7:00 a.m. daily (except Sundays).

Project Impact

Long-Term Operational

The weekday noise analyses were conducted using the CNEL method, and the results are summarized in Table 4, and illustrated in Figure 2 and Figure 3. As shown, under the Buildout Year 2035 With Project conditions, the project-related increase in noise levels at the receptor sites range from 0.2 to 3.0 dBA. Under the Buildout Year 2035 With Project conditions, eight receptor sites were projected to experience noise levels above 65 dBA. Analysis shows that two of the eight receptor sites would exceed the significance threshold, resulting in significant project-related noise impacts:

- Site #14 WB Victoria St – Existing noise level above 65 dBA, with project-related increase of 1.6 dBA.
- Site #23 WB University Dr – Existing noise level between 60 dBA and 65 dBA, with project-related increase of 3.0 dBA.

The remaining six of the eight receptor sites with projected noise levels of above 65 dBA would not be considered to have significant project-related impact. This is because the project-related contributions to the increases in the noise levels would not exceed the significance threshold.

Cumulative Impacts

Off-site operational noise sources would consist primarily of vehicle trips along adjacent streets. The increase in traffic volumes from other projects and overall growth was accounted for in the traffic analysis and noise analysis for Buildout Year 2035. As shown in Table 4, the proposed project, together with overall growth of the area, would contribute to the increase in noise levels at eight of the receptor sites that were projected to have noise levels beyond the 65 dBA threshold for residential homes. Analysis shows that eight receptor sites would exceed the significance threshold, resulting in significant cumulative noise impacts:

- Site #5 SB Avalon Blvd – Existing noise level above 65 dBA, with cumulative increase of 2.2 dBA.
- Site #6 SB Avalon Blvd – Existing noise level above 65 dBA, with cumulative increase of 2.2 dBA.
- Site #7 SB Avalon Blvd – Existing noise level above 65 dBA, with cumulative increase of 2.2 dBA.
- Site #8 NB Avalon Blvd – Existing noise level above 65 dBA, with cumulative increase of 2.4 dBA.
- Site #11 EB Victoria St – Existing noise level between 60 dBA and 65 dBA, with cumulative increase of 3.8 dBA.
- Site #14 WB Victoria St – Existing noise level above 65 dBA, with cumulative increase of 4.8 dBA.

- Site #19 SB Central Ave – Existing noise level above 65 dBA, with cumulative increase of 1.5 dBA.
- Site #23 WB University Dr – Existing noise level between 60 dBA and 65 dBA, with cumulative increase of 3.4 dBA.

Table 4. Weekday Project Noise Impact Buildout Year 2035

Site	CNEL dBA			Change in dBA		Significant Impact?	
	Existing	2035 No Build	2035 Build	Cumulative (Build – Existing)	Project (Build – No Build)	Cumulative	Project
1	56.1	57.6	58.4	2.3	0.8	No	No
2	57.9	59.1	60.1	2.2	1.0	No	No
3	57.0	58.8	59.7	2.7	0.9	No	No
4	61.5	63.1	63.8	2.3	0.7	No	No
5	67.7	69.5	69.9	2.2	0.4	Yes	No
6	67.3	69.1	69.5	2.2	0.4	Yes	No
7	67.5	69.3	69.7	2.2	0.4	Yes	No
8	68.6	70.1	71.0	2.4	0.9	Yes	No
9	58.2	58.6	58.8	0.6	0.2	No	No
10	58.9	60.7	62.1	3.2	1.4	No	No
11	63.5	65.9	67.3	3.8	1.4	Yes	No
12	60.4	63.3	64.9	4.5	1.6	No	No
13	60.0	63.1	64.7	4.7	1.6	No	No
14	66.3	69.5	71.1	4.8	1.6	Yes	Yes
15	60.3	63.0	64.7	4.4	1.7	No	No
16	55.3	57.5	59.4	4.1	1.9	No	No
17	59.6	61.5	63.3	3.7	1.8	No	No
18	57.5	58.4	60.6	3.1	2.2	No	No
19	67.1	67.8	68.6	1.5	0.8	Yes	No
20	60.2	60.6	61.4	1.2	0.8	No	No
21	51.4	52.9	55.9	4.5	3.0	No	No
22	53.9	55.5	56.7	2.8	1.2	No	No
23	61.8	62.2	65.2	3.4	3.0	Yes	Yes
24	59.3	59.5	61.8	2.5	2.3	No	No
25	58.2	58.5	60.4	2.2	1.9	No	No
26	54.7	55.1	56.8	2.1	1.7	No	No
27	57.9	58.3	58.7	0.8	0.4	No	No

Figure 2. Project-Related Change in Weekday Noise Levels



Figure 3. Cumulative change in Weekday Noise Level



Sunday Event Noise

The traffic-related noise analyses are based on the Transportation Impact Study which addresses the effects of the change from 27,000 spectators to 30,000 spectators attending Sunday sporting events at the stadium at the StubHub Center. As shown in Tables 5 and 6, with the implementation of temporary traffic controls described in the Transportation Impact Study, no significant traffic noise impact will result at any of the 27 receptor sites under both Existing and Year 2019 conditions. The largest increases in traffic noise levels are at the receptor site 19 with an increase of 2.3 dBA in the pre-event hour and site 20 with an increase of 1.3 dBA in the pre-event hour under Existing Conditions, and site 4 with an increase of 1.2 dBA in the pre-event hour under Year 2019 Conditions. Noise level increases at all of the other 24 sites are less than 1 dBA in both pre-game and post-game hours under Existing Conditions and under Year 2019 Conditions. Therefore, the change in noise levels between 27,000 spectators and 30,000 spectators attending Sunday events would not result in a significant traffic noise impact from the event-related traffic.

Table 5. Change in Noise Levels between 27,000 and 30,000 Spectators (Existing Sunday Pre- and Post-Event Hours)

Site Number	Pre-Event (27,000)	Pre-Event (30,000)	Change in Pre-Event Leq (h)	Post Event (27,000)	Post Event (30,000)	Change in Post Event Leq (h)	Significant Impact?
1	57.2	57.4	0.2	54.8	55.0	0.2	No
2	57.6	57.8	0.2	58.1	58.3	0.2	No
3	57.6	57.8	0.2	55.1	55.2	0.1	No
4	61.4	61.6	0.2	61.3	61.5	0.2	No
5	65.9	65.9	0.0	65.8	65.9	0.1	No
6	66.3	66.5	0.2	65.2	65.2	0.0	No
7	66.9	67.0	0.1	66.5	66.6	0.1	No
8	68.5	68.7	0.2	67.1	67.2	0.1	No
9	57.9	58.1	0.2	56.6	56.9	0.3	No
10	62.6	62.7	0.1	62.1	62.3	0.2	No
11	61.6	61.8	0.2	59.1	59.2	0.1	No
12	61.0	61.1	0.2	57.7	57.6	-0.1	No
13	60.3	60.7	0.4	57.6	57.8	0.2	No
14	66.1	66.4	0.3	63.7	63.9	0.2	No
15	56.8	57.1	0.3	59.1	59.4	0.3	No
16	49.8	49.8	0.0	54.1	54.6	0.5	No
17	53.6	53.7	0.1	58.4	58.9	0.5	No
18	54.9	55.1	0.2	53.7	54.4	0.7	No
19	63.5	65.8	2.3	63.4	63.4	0.0	No
20	56.5	57.8	1.3	56.2	56.3	0.1	No
21	51.9	51.9	0.0	56.8	56.9	0.1	No
22	55.5	55.5	0.0	53.2	53.2	0.0	No
23	57.4	57.6	0.2	57.7	57.7	0.0	No
24	57.0	57.0	0.0	56.7	56.8	0.2	No
25	55.5	55.5	0.0	57.0	57.2	0.3	No
26	54.8	54.2	-0.6	58.7	59.1	0.4	No
27	54.1	53.6	-0.5	54.1	53.7	-0.4	No

Table 6. Change in Noise Levels between 27,000 and 30,000 Spectators (2019 Sunday Pre- and Post-Event Hours)

Site Number	Pre- Event (27,000)	Pre- Event (30,000)	Change in Pre-Event Leq (h)	Post Event (27,000)	Post Event (30,000)	Change in Post Event Leq (h)	Significant Impact?
1	57.2	57.5	0.3	54.9	55.1	0.2	No
2	57.6	57.8	0.2	58.1	58.4	0.3	No
3	57.6	57.9	0.3	55.2	55.4	0.2	No
4	61.5	62.7	1.2	61.4	61.8	0.4	No
5	66.0	66.2	0.2	65.9	66.0	0.1	No
6	66.4	66.6	0.2	65.3	65.3	0.0	No
7	66.9	67.1	0.2	66.6	66.7	0.1	No
8	68.6	68.7	0.1	67.2	67.3	0.1	No
9	58.0	58.0	0.0	56.6	56.8	0.2	No
10	62.8	62.6	-0.2	62.3	62.4	0.1	No
11	61.7	61.6	-0.1	59.4	59.5	0.1	No
12	61.1	61.3	0.3	57.9	58.0	0.1	No
13	60.4	60.7	0.3	57.8	58.0	0.2	No
14	66.2	66.5	0.3	63.8	64.0	0.2	No
15	56.8	57.3	0.5	59.2	59.4	0.2	No
16	49.8	50.0	0.2	54.4	54.7	0.3	No
17	53.8	53.8	0.0	58.6	58.9	0.3	No
18	55.1	55.2	0.1	54.2	54.6	0.4	No
19	64.0	64.1	0.1	63.9	63.9	0.0	No
20	56.9	57.0	0.1	56.6	56.7	0.1	No
21	51.9	51.9	0.0	56.8	56.9	0.1	No
22	55.5	55.5	0.0	53.2	53.3	0.1	No
23	57.9	57.9	0.0	57.7	57.8	0.1	No
24	56.8	57.0	0.2	56.7	56.8	0.2	No
25	55.4	55.5	0.1	57.0	57.2	0.3	No
26	55.0	55.2	0.2	58.8	59.2	0.4	No
27	54.5	54.5	0.0	54.6	54.6	0.0	No

E.2 Noise Analysis Technical Report – Increased Student Housing Alternative

Noise Analysis Technical Report

For Increased Student Housing Alternative

Campus Master Plan 2018, California State University, Dominguez Hills, Carson, California

Scope and Noise Study Methods

This memorandum summarizes the methodology and results of the traffic noise analysis conducted for the Increased Student Housing Alternative for the California State University, Dominguez Hills (CSUDH or University) Master Plan 2018 EIR. This alternative would add 500 student beds and convert 180 market-rate apartment dwelling units to student housing units, adding another 540 beds, for a total of 1,040 additional student beds over the Proposed Project. With the conversion, the total number of market-rate apartments would be reduced by 180 dwelling units compared to the Proposed Project. All other project elements would remain the same between the Proposed Project and Increased Student Housing Alternative.

The noise analysis was conducted for both the AM and PM peak hours using the Federal Highway Administration (FHWA) Traffic Noise Model (TNM 2.5), which computes highway traffic noise at nearby receivers. This memorandum summarizes the results of the traffic noise analysis for the 2035 With Increased Student Housing Alternative.

Noise Measurement and Reporting

Sound levels are expressed on a logarithmic scale of decibels (abbreviated as dB), in which a change of 10 units on the decibel scale reflects a 10-fold increase in sound energy. A 10-fold increase in sound energy roughly translates to a doubling of perceived loudness.

Sound occurs over a wide range of frequencies. However, not all frequencies are detectable by the human ear; therefore, an adjustment is made to the high and low frequencies to approximate the way an average person hears traffic sounds. This adjustment is called A-weighting and is expressed as “dBA.” People commonly judge the relative magnitude of sound sensation using subjective terms such as “loudness” or “noisiness.” A change in sound level of 3 dBA is considered barely perceptible, a change in sound level of 5 dBA is considered readily perceptible, and an upward change of 10 dBA is recognized as twice as loud. Examples of typical noise levels for common indoor and outdoor activities are depicted in Table 1.

Community decibel levels are reported as both Community Equivalent Noise Levels (dBA, CNEL) and Leq (h) dBA. The CNEL is a 24-hour weighted noise average with 5 dBA adjustment upward added to the sound levels that occur during evening hours and 10 dBA add to nighttime hours, the penalties are intended to account for greater sensitivity to noise during these hours. The equivalent sound level “Leq” is also referred to as the time-average sound level. Leq can be used to represent the average of equivalent sound level for noise generated by traffic given that traffic sound levels are never constant due to the changing number, type and speed of vehicles.

For the purpose of analyzing this project alternative, analyses were conducted using the CNEL approach. The CNEL analyses were conducted for weekday conditions because the Master Plan would generate traffic through the day. The CNEL would be an appropriate approach, which would account for the overall impacts of project buildout.

Table 1. Common Sound/Noise Levels

Common Sound/Noise Levels		
Outdoor	dB(A)	Indoor
Air horn	110	Rock/Blues Band
Jet Flyover at 1000 feet		Baby Crying
Leaf Blower	100	Subway
Gas Weed Eater	90	Fire Alarms
Riding Lawn Mower		Blender
Gas Edger		Crowded Restaurant
Police Whistle	80	Disposal at 3 feet
Air Conditioner Compressor		Shouting at 3 feet
	70	
		Normal Conversation at 3 feet
Normal Conversation at 3 feet	60	Clothes Dryer at 3 feet
Babbling Brook		Large Business Office
Quiet Urban (daytime)	50	Refrigerator
Quiet Urban (nighttime)	40	Quiet Office/Library
Wilderness	30	
	20	Recording Studio
	10	Threshold of Hearing

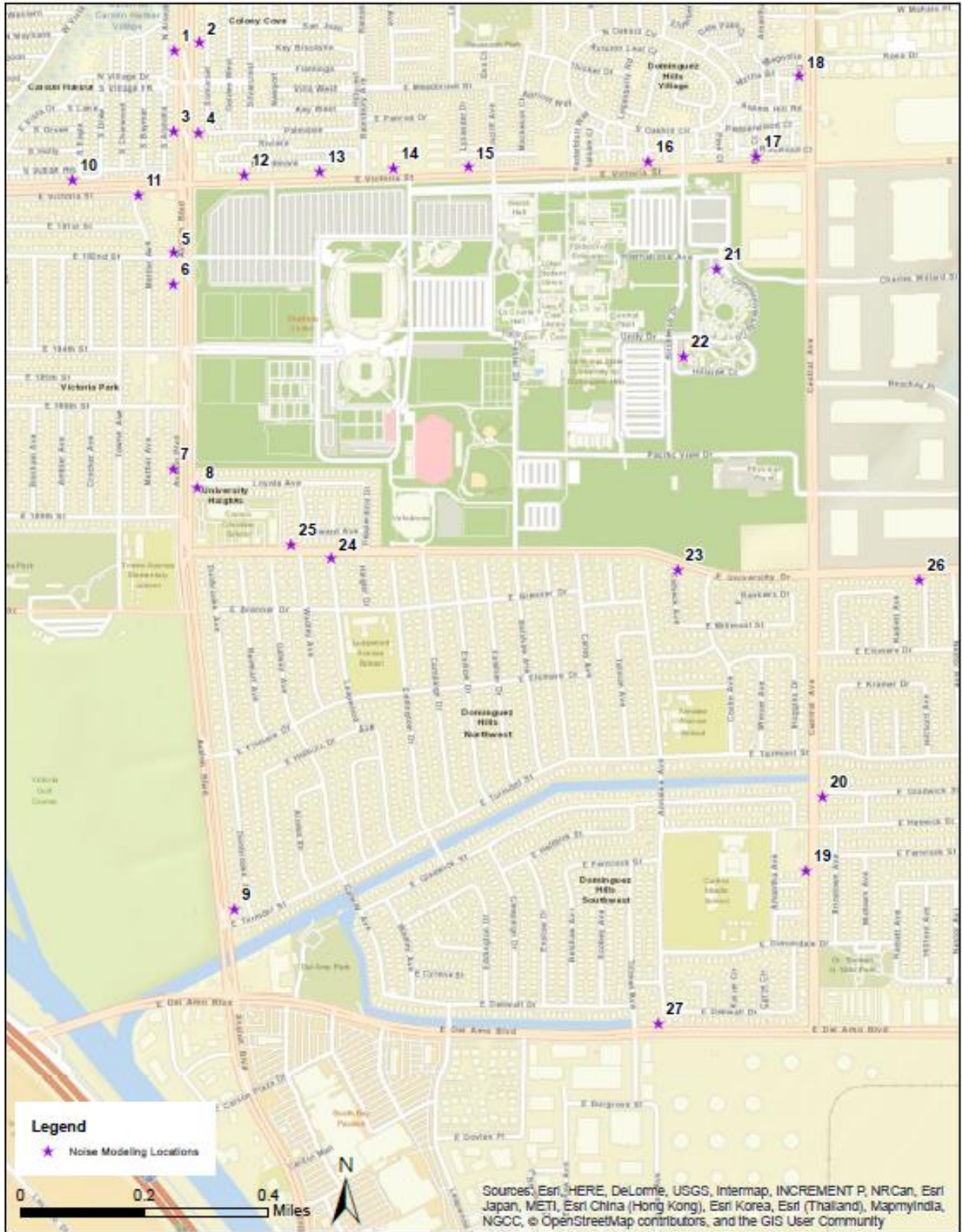
Noise Sensitive Receptors

Different land uses have different sensitivity to noise. For example, gas stations and store fronts/parking areas are not as sensitive to noise as are schools and residential areas. For this study, noise levels were modeled at 27 sites. The 27 receptor sites are near parking lots and along roadway links, which could be affected by the increase in traffic. Table 2 lists the site number, roadway, side of the roadway, to and from cross streets for each receptor site. The locations are shown in Figure 1.

Table 2. Modeled Noise Sensitive Receptors

Site Number	Roadway	To	From
1	SB Avalon Blvd	SR-91	Harbor Village
2	NB Avalon Blvd	Harbor Village	SR-91
3	SB Avalon Blvd	Harbor Village	Victoria St
4	NB Avalon Blvd	Victoria St	Harbor Village
5	SB Avalon Blvd	Victoria St	182nd St/Entrance A
6	SB Avalon Blvd	182nd St/Entrance A	184th St/Entrance B
7	SB Avalon Blvd	184th St/Entrance B	University Dr
8	NB Avalon Blvd	University Dr	184th St/Entrance B
9	NB Avalon Blvd	Del Amo Blvd	University Dr
10	WB Victoria St	Avalon Blvd	Main St
11	EB Victoria St	Main St	Avalon Blvd
12	WB Victoria St	Entrance C	Avalon Blvd
13	WB Victoria St	Rainsbury Ave	Entrance C
14	WB Victoria St	Entrance D	Rainsbury Ave
15	WB Victoria St	Tamcliff Ave	Entrance D
16	WB Victoria St	Birchknoll Dr	Tamcliff Ave
17	WB Victoria St	Central Ave	Birchknoll Dr
18	SB Central Ave	SR-91	Victoria St
19	SB Central Ave	University Dr	Del Amo Blvd
20	NB Central Ave	Del Amo Blvd	University Dr
21	Basketball Court at CSUDH Housing	Parking Lot 1,2 and 8	Entrance G
22	CSUDH Housing nearest to Lot 7	Parking Lot 7 and 8	Entrance H
23	WB University Dr	Avalon Blvd	Entrance I
24	EB University Dr	Entrance I	Avalon Blvd
25	WB University Dr	Entrance I	Central Ave
26	WB University Dr	Central Ave	Wilmington Ave
27	WB Del Amo Blvd	Central Ave	Avalon Blvd

Figure 1. Modeled Noise Sensitive Receptors



Source: ESRI, 2018; WSP, 2018

Existing Noise Levels

The existing weekday peak hour noise levels were calculated in TNM 2.5 using the traffic volumes from Exhibit 17 in the Transportation Impact Study (TIS), Campus Master Plan 2018, prepared by WSP, November 2018. The results of the noise modeling at the 27 receptor sites indicate that in the existing noise levels in the project vicinity range from 51.4 to 68.6 dBA (shown in Table 4).

Future Traffic Noise Levels

The 2035 No Build weekday peak hour noise levels were calculated in TNM 2.5 using the traffic volumes from Exhibit 75 in the TIS. As documented in the TIS, the 2035 No Build traffic volumes were derived by factoring up existing conditions traffic volumes using growth factors from the Los Angeles County Congestion Management Program (CMP), plus addition of traffic associated with development projects that are in the City of Carson's pipeline. The analysis results indicate that under the 2035 No Build scenario, noise levels in the project vicinity range from 52.9 to 70.1 dBA (shown in Table 4).

The 2035 With Increased Student Housing Alternative weekday peak hour noise levels were calculated in TNM 2.5 using the traffic volumes from Exhibit 75 in the TIS. The analysis results indicate that under the 2035 With Increased Student Housing Alternative, noise levels in the project vicinity would range from 55.5 to 71.1 dBA (shown in Table 4).

Criteria for Determination of a Significant Impact

The City of Carson (Chapter 3 of the General Plan) specifies that exterior noise levels at residential locations should not exceed a CNEL of 65 dBA, while the interior levels should not exceed CNEL of 45 dBA. This exterior noise level also falls within the range of acceptable conditions (55 to 70 dBA) set by the California Department of Health Services. In addition, the City's Noise Ordinance provides various measures to reduce nuisance noise from construction projects, including the requirement to limit construction activities near residential units, and employing feasible and practical techniques that minimize the noise impact to adjacent uses.

The Federal Interagency Committee on Noise (FICON) has established significance criteria for noise impacts using a sliding scale based on the existing Ldn noise levels. The Ldn is a 24-hour average noise level with 10 decibel penalty added to the night period from 10:00 p.m. to 7:00 a.m. The level of significance under the criteria changes with increasing noise exposure, such that smaller changes in ambient noise levels result in significant impacts at higher existing noise levels. These criteria are shown in Table 3.

Table 3. Noise Impact Significance Criteria

Existing Ldn	Significant Impact
Below 60 dBA	+5.0 dBA or more
60 - 65 dBA	+3.0 dBA or more
Above 65 dBA	+1.5 dBA or more

Source: FICON - Federal Government's Method of Assessing Noise Impacts

A significant operational noise impact would result if:

- The existing noise level is in excess of 65 dBA and the proposed project adds 1.5 dBA or more to the existing condition; or,

- The existing noise level is between 60 to 65 dBA and the proposed project adds 3.0 dBA or more to the existing condition, and thereby results in a noise level exceeding 65 dBA; or,
- The existing noise level is below 60 dBA and the proposed project adds 5.0 dBA or more to the existing condition, and thereby results in a noise level exceeding 65 dBA.

Impact Analysis

Long-Term Operational

The weekday noise analyses were conducted using the CNEL method, and the results are summarized in Table 4. As shown, under the 2035 With Increased Student Housing Alternative conditions, the increase in noise levels at the receptor sites range from 0.0 to 2.9 dBA. Under this scenario, eight receptor sites were projected to experience noise levels above 65 dBA. However, none of the eight receptor sites with projected noise levels above 65 dBA would increase the noise levels above the significance threshold. Therefore, under the Increased Student Housing Alternative, no significant long-term operational noise impact would occur.

Compare to the Proposed Project, the Increased Student Housing Alternative would significantly increase the number of student beds on campus. This would result in the increase of short distance trips generated by the alternative, but this increase is offset by the reductions in long distance student commuting trips that would have otherwise occurred without the additional student housing. As a result, the Increased Student Housing Alternative would reduce the noise impact at the two receptor locations (Sites 14 and 23) to a less than significant level.

Cumulative Impacts

Off-site operational noise sources would consist primarily of vehicle trips along adjacent streets. The increase in traffic volumes from other projects and overall growth was accounted for in the traffic analysis and noise analysis for 2035 With Increased Student Housing Alternative conditions. As shown in

Table 4, the proposed alternative, together with overall growth of the area, would contribute to the increase in noise levels at eight of the receptor sites that were projected to have noise levels beyond the 65 dBA threshold for residential homes. Similar to the conditions under the Proposed Project, analysis shows that the eight receptor sites would exceed the significance threshold, resulting in significant cumulative noise impacts:

- Site #5 SB Avalon Blvd – Existing noise level above 65 dBA, with cumulative increase of 2.6 dBA.
- Site #6 SB Avalon Blvd – Existing noise level above 65 dBA, with cumulative increase of 2.6 dBA.
- Site #7 SB Avalon Blvd – Existing noise level above 65 dBA, with cumulative increase of 2.6 dBA.
- Site #8 NB Avalon Blvd – Existing noise level above 65 dBA, with cumulative increase of 2.5 dBA.
- Site #11 EB Victoria St – Existing noise level between 60 dBA and 65 dBA, with cumulative increase of 4.1 dBA.
- Site #14 WB Victoria St – Existing noise level above 65 dBA, with cumulative increase of 3.9 dBA.
- Site #19 SB Central Ave – Existing noise level above 65 dBA, with cumulative increase of 1.5 dBA.
- Site #23 WB University Dr – Existing noise level between 60 dBA and 65 dBA, with cumulative increase of 3.3 dBA.

Table 4. 2035 Weekday Noise Impact Comparison (Proposed Project and Increased Student Housing Alternative)

Site	CNEL dBA				Change in dBA				Significant Impact?			
	Existing	2035 No Build	2035 With Proposed Project	2035 With Increased Student Housing Alternative	Proposed Project		Increased Student Housing Alternative		Proposed Project		Increased Student Housing Alternative	
					Cumulative (Buildout – Existing)	Project (Buildout – No Build)	Cumulative Buildout – Existing)	Alternative (Buildout – No Build)	Cumulative	2035 With Proposed Project	Cumulative	2035 With Increased Student Housing Alternative
1	56.1	57.6	58.4	58.4	2.3	0.8	2.3	0.8	No	No	No	No
2	57.9	59.1	60.1	60.1	2.2	1.0	2.2	1.0	No	No	No	No
3	57.0	58.8	59.7	59.6	2.7	0.9	2.6	0.8	No	No	No	No
4	61.5	63.1	63.8	63.8	2.3	0.7	2.3	0.7	No	No	No	No
5	67.7	69.5	69.9	70.3	2.2	0.4	2.6	0.8	Yes	No	Yes	No
6	67.3	69.1	69.5	69.9	2.2	0.4	2.6	0.8	Yes	No	Yes	No
7	67.5	69.3	69.7	70.1	2.2	0.4	2.6	0.8	Yes	No	Yes	No
8	68.6	70.1	71.0	71.1	2.4	0.9	2.5	1.0	Yes	No	Yes	No
9	58.2	58.6	58.8	60.8	0.6	0.2	2.6	2.2	No	No	No	No
10	58.9	60.7	62.1	62.5	3.2	1.4	3.6	1.8	No	No	No	No
11	63.5	65.9	67.3	67.6	3.8	1.4	4.1	1.7	Yes	No	Yes	No
12	60.4	63.3	64.9	64.0	4.5	1.6	3.6	0.7	No	No	No	No
13	60.0	63.1	64.7	63.8	4.7	1.6	3.8	0.7	No	No	No	No
14	66.3	69.5	71.1	70.2	4.8	1.6	3.9	0.7	Yes	Yes	Yes	No
15	60.3	63.0	64.7	64.5	4.4	1.7	4.2	1.5	No	No	No	No
16	55.3	57.5	59.4	59.3	4.1	1.9	4.0	1.8	No	No	No	No
17	59.6	61.5	63.3	63.2	3.7	1.8	3.6	1.7	No	No	No	No
18	57.5	58.4	60.6	60.5	3.1	2.2	3.0	2.1	No	No	No	No
19	67.1	67.8	68.6	68.6	1.5	0.8	1.5	0.8	Yes	No	Yes	No
20	60.2	60.6	61.4	61.4	1.2	0.8	1.2	0.8	No	No	No	No
21	51.4	52.9	55.9	55.5	4.5	3.0	4.1	2.6	No	No	No	No
22	53.9	55.5	56.7	56.8	2.8	1.2	2.9	1.3	No	No	No	No
23	61.8	62.2	65.2	65.1	3.4	3.0	3.3	2.9	Yes	Yes	Yes	No
24	59.3	59.5	61.8	60.8	2.5	2.3	1.5	1.3	No	No	No	No
25	58.2	58.5	60.4	60.4	2.2	1.9	2.2	1.9	No	No	No	No
26	54.7	55.1	56.8	56.8	2.1	1.7	2.1	1.7	No	No	No	No
27	57.9	58.3	58.7	58.3	0.8	0.4	0.4	0.0	No	No	No	No

Conclusion

Based on the analysis, the Increased Student Housing Alternative would have a positive effect on the reduction of traffic noise levels by the Project. Under the 2035 With Increased Student Housing Alternative, there would be no significant project-related noise impact. The alternative would reduce the traffic noise to a less than significant level at the two receptor locations (Sites 14 and 23) that were identified as significant under the Proposed Project.

The Increased Student Housing Alternative would, however, have identical cumulative noise impacts as compared to the Proposed Project. The alternative would contribute to significant cumulative noise impacts at the same eight receptor locations.

E.3 CNEL Cal Outputs

Existing

	AM	PM	Peak	ADT %	% Day	%Night	Daytime Level	Nighttime
1	55.4	55.4	55.4	10	0.8	0.2	-4	4
2	57.2	57.2	57.2	10	0.8	0.2	-4	4
3	56.3	56.3	56.3	10	0.8	0.2	-4	4
4	60.8	60.8	60.8	10	0.8	0.2	-4	4
5	67	67	67	10	0.8	0.2	-4	4
6	66.6	66.6	66.6	10	0.8	0.2	-4	4
7	66.8	66.8	66.8	10	0.8	0.2	-4	4
8	67.9	67.9	67.9	10	0.8	0.2	-4	4
9	56.7	57.5	57.5	10	0.8	0.2	-4	4
10	58.2	58.2	58.2	10	0.8	0.2	-4	4
11	62.8	62.8	62.8	10	0.8	0.2	-4	4
12	59.7	59.7	59.7	10	0.8	0.2	-4	4
13	59.3	59.3	59.3	10	0.8	0.2	-4	4
14	65.6	65.6	65.6	10	0.8	0.2	-4	4
15	59.6	59.6	59.6	10	0.8	0.2	-4	4
16	54.6	54.6	54.6	10	0.8	0.2	-4	4
17	58.9	58.9	58.9	10	0.8	0.2	-4	4
18	56.7	56.8	56.8	10	0.8	0.2	-4	4
19	65.8	66.4	66.4	10	0.8	0.2	-4	4
20	59.5	59.1	59.5	10	0.8	0.2	-4	4
21	50.7	50.6	50.7	10	0.8	0.2	-4	4
22	53.2	52.8	53.2	10	0.8	0.2	-4	4
23	60.8	61.1	61.1	10	0.8	0.2	-4	4
24	58.2	58.6	58.6	10	0.8	0.2	-4	4
25	56.8	57.5	57.5	10	0.8	0.2	-4	4
26	54	53.8	54	10	0.8	0.2	-4	4
27	56.6	57.2	57.2	10	0.8	0.2	-4	4

CNEL

56	1
58	1
57	1
61	1
68	1
67	1
67	1
69	1
58	1
59	1
63	1
60	1
60	1
66	1
60	1
55	1
60	1
57	1
67	1
60	1
51	1
54	1
62	1
59	1
58	1
55	1
58	1

Future No Project

Site Number	Without Project AM	Without Project PM	Peak	ADT %	% Day	%Night	Daytime	Le Nighttime
1	55.9	56.9	56.9	10	0.8	0.2	-4	4
2	57.9	58.4	58.4	10	0.8	0.2	-4	4
3	56.9	58.1	58.1	10	0.8	0.2	-4	4
4	61.5	62.4	62.4	10	0.8	0.2	-4	4
5	67.4	68.8	68.8	10	0.8	0.2	-4	4
6	67	68.4	68.4	10	0.8	0.2	-4	4
7	67.2	68.6	68.6	10	0.8	0.2	-4	4
8	68.3	69.4	69.4	10	0.8	0.2	-4	4
9	57.5	57.9	57.9	10	0.8	0.2	-4	4
10	58.8	60	60	10	0.8	0.2	-4	4
11	63.7	65.2	65.2	10	0.8	0.2	-4	4
12	60.7	62.6	62.6	10	0.8	0.2	-4	4
13	60.4	62.4	62.4	10	0.8	0.2	-4	4
14	66.6	68.8	68.8	10	0.8	0.2	-4	4
15	60.1	62.3	62.3	10	0.8	0.2	-4	4
16	55	56.8	56.8	10	0.8	0.2	-4	4
17	59.2	60.8	60.8	10	0.8	0.2	-4	4
18	57.7	57.4	57.7	10	0.8	0.2	-4	4
19	66.2	67.1	67.1	10	0.8	0.2	-4	4
20	59.9	59.8	59.9	10	0.8	0.2	-4	4
21	51.1	52.2	52.2	10	0.8	0.2	-4	4
22	53.5	54.8	54.8	10	0.8	0.2	-4	4
23	61.1	61.5	61.5	10	0.8	0.2	-4	4
24	58.3	58.8	58.8	10	0.8	0.2	-4	4
25	57.1	57.8	57.8	10	0.8	0.2	-4	4
26	54.2	54.4	54.4	10	0.8	0.2	-4	4
27	56.8	57.6	57.6	10	0.8	0.2	-4	4

CNEL	Change	form Existing
57.6	0.7	2
59.1	0.7	1
58.8	0.7	2
63.1	0.7	2
69.5	0.7	2
69.1	0.7	2
69.3	0.7	2
70.1	0.7	2
58.6	0.7	0
60.7	0.7	2
65.9	0.7	2
63.3	0.7	3
63.1	0.7	3
69.5	0.7	3
63.0	0.7	3
57.5	0.7	2
61.5	0.7	2
58.4	1.0	1
67.8	0.7	1
60.6	0.8	0
52.9	0.7	2
55.5	0.7	2
62.2	0.7	0
59.5	0.7	0
58.5	0.7	0
55.1	0.7	0
58.3	0.7	0

Future with Project

Site Number	With Project AM	With Project PM	Peak	ADT %	% Day	%Night	Daytime Le	Nighttime
1	56.9	57.7	57.7	10	0.8	0.2	-4	4
2	58.4	59.4	59.4	10	0.8	0.2	-4	4
3	58.3	59	59	10	0.8	0.2	-4	4
4	62.1	63.1	63.1	10	0.8	0.2	-4	4
5	67.9	69.2	69.2	10	0.8	0.2	-4	4
6	67.5	68.8	68.8	10	0.8	0.2	-4	4
7	67.6	69	69	10	0.8	0.2	-4	4
8	68.7	70.3	70.3	10	0.8	0.2	-4	4
9	57.5	58.1	58.1	10	0.8	0.2	-4	4
10	61.4	60.9	61.4	10	0.8	0.2	-4	4
11	66.2	66.6	66.6	10	0.8	0.2	-4	4
12	63	64.2	64.2	10	0.8	0.2	-4	4
13	62.8	64	64	10	0.8	0.2	-4	4
14	69.1	70.4	70.4	10	0.8	0.2	-4	4
15	63.1	64	64	10	0.8	0.2	-4	4
16	57.8	58.7	58.7	10	0.8	0.2	-4	4
17	61.4	62.6	62.6	10	0.8	0.2	-4	4
18	59.9	59.8	59.9	10	0.8	0.2	-4	4
19	67.1	67.9	67.9	10	0.8	0.2	-4	4
20	60.7	60.5	60.7	10	0.8	0.2	-4	4
21	54.6	55.2	55.2	10	0.8	0.2	-4	4
22	55.7	56	56	10	0.8	0.2	-4	4
23	64.3	64.5	64.5	10	0.8	0.2	-4	4
24	59.3	61.1	61.1	10	0.8	0.2	-4	4
25	58.2	59.7	59.7	10	0.8	0.2	-4	4
26	55.9	56.1	56.1	10	0.8	0.2	-4	4
27	57.2	58	58	10	0.8	0.2	-4	4

CNEL		Change form Existing	Change from No Build
58.4	1	2.3	0.8
60.1	1	2.2	1.0
59.7	1	2.7	0.9
63.8	1	2.3	0.7
69.9	1	2.2	0.4
69.5	1	2.2	0.4
69.7	1	2.2	0.4
71.0	1	2.4	0.9
58.8	1	0.6	0.2
62.1	1	3.2	1.4
67.3	1	3.8	1.4
64.9	1	4.5	1.6
64.7	1	4.7	1.6
71.1	1	4.8	1.6
64.7	1	4.4	1.7
59.4	1	4.1	1.9
63.3	1	3.7	1.8
60.6	1	3.1	2.2
68.6	1	1.5	0.8
61.4	1	1.2	0.8
55.9	1	4.5	3.0
56.7	1	2.8	1.2
65.2	1	3.4	3.0
61.8	1	2.5	2.3
60.4	1	2.2	1.9
56.8	1	2.1	1.7
58.7	1	0.8	0.4

Alternative 1 Impact

Name	Existing	2035 No Build	2035 Build	Cumulative	Project		
				(Build – Existing)	(Build – No Build)	Cumulative	Project
1	56.1	57.6	58.4	2.3	0.8	No	No
2	57.9	59.1	60.1	2.2	1	No	No
3	57	58.8	59.7	2.7	0.9	No	No
4	61.5	63.1	63.8	2.3	0.7	No	No
5	67.7	69.5	69.9	2.2	0.4	Yes	No
6	67.3	69.1	69.5	2.2	0.4	Yes	No
7	67.5	69.3	69.7	2.2	0.4	Yes	No
8	68.6	70.1	71	2.4	0.9	Yes	No
9	58.2	58.6	58.8	0.6	0.2	No	No
10	58.9	60.7	62.1	3.2	1.4	No	No
11	63.5	65.9	67.3	3.8	1.4	Yes	No
12	60.4	63.3	64.9	4.5	1.6	No	No
13	60	63.1	64.7	4.7	1.6	No	No
14	66.3	69.5	71.1	4.8	1.6	Yes	Yes
15	60.3	63	64.7	4.4	1.7	No	No
16	55.3	57.5	59.4	4.1	1.9	No	No
17	59.6	61.5	63.3	3.7	1.8	No	No
18	57.5	58.4	60.6	3.1	2.2	No	No
19	67.1	67.8	68.6	1.5	0.8	Yes	No
20	60.2	60.6	61.4	1.2	0.8	No	No
21	51.4	52.9	55.9	4.5	3	No	No
22	53.9	55.5	56.7	2.8	1.2	No	No
23	63	62.2	65.2	3.4	3	Yes	Yes
24	59.3	59.5	61.8	2.5	2.3	No	No
25	58.2	58.5	60.4	2.2	1.9	No	No
26	54.7	55.1	56.8	2.1	1.7	No	No
27	57.9	58.3	58.7	0.8	0.4	No	No
						Total Cumulative Impacts	Total Project Impacts
						8	2

E.4 StubHub Noise Calculations

2017 Post Game Results

Site	Roadway	Name	Existing_Pre_NG	Existing_Post_HG	Pre_Game (27k)	2017 Post_Game	Pre Game Lot Level	Post Game Lot Levels	2017 Total Pre Game (27k)	2017 Total Post Game (27k)	Change_Pre_Game	Change_2017 Post_Game
1	SB Avalon Blvd	SB Avalon Section 2 to 28	54	53.5	57.2	54.8			57.2	54.8	3.2	1.3
2	NB Avalon Blvd	NB Avalon Section 28 to 2	55.7	55.7	57.6	58.1			57.6	58.1	1.9	2.4
3	SB Avalon Blvd	SB Avalon Section 28 to 3	54.5	53.9	57.6	55.1			57.6	55.1	3.1	1.2
4	NB Avalon Blvd	NB Avalon Section 3 to 28	59.3	59.1	61.4	61.3			61.4	61.3	2.1	2.2
5	SB Avalon Blvd	SB Avalon 3 to 31	65.3	64.3	65.9	65.8			65.9	65.8	0.6	1.5
6	SB Avalon Blvd	SB Avalon 31 to 30	65.8	63.7	66.3	65.2	43	44	66.3	65.2	0.5	1.5
7	SB Avalon Blvd	SB Avalon 30 to 4	66.2	65.7	66.9	66.5			66.9	66.5	0.7	0.8
8	NB Avalon Blvd	NB Avalon 4 to 30	66.8	66.9	68.5	67.1			68.5	67.1	1.7	0.2
9	NB Avalon Blvd	NB Avalon 5 to 4	55.7	55.6	57.9	56.6			57.9	56.6	2.2	1.0
10	WB Victoria Street	WB Victoria St 3 to 9	61.7	61.3	62.6	62.1			62.6	62.1	0.9	0.8
11	EB Victoria Street	EB Victoria St 9 to 3	59.2	58.9	61.6	59.1			61.6	59.1	2.4	0.2
12	WB Victoria Street	WB 32 to 3	56.7	56.4	60.6	56.6	50	51	61.0	57.7	4.3	1.3
13	WB Victoria Street	WB 24 to 32	55.9	55.6	60.1	57.1	47	48	60.3	57.6	4.4	2.0
14	WB Victoria Street	WB 33 to 24	61.1	61	66	63.5	50	51	66.1	63.7	5.0	2.7
15	WB Victoria Street	WB 25 to 33	55.2	55.2	56.7	59.0	42	43	56.8	59.1	1.6	3.9
16	WB Victoria Street	WB 26 to 25	49.4	49.6	49.8	54.1			49.8	54.1	0.4	4.5
17	WB Victoria Street	WB 13 to 26	53.7	55	53.6	58.4			53.6	58.4	-0.1	3.4
18	SB Central Avenue	SB 12 to 13	53.2	53.1	54.9	53.7			54.9	53.7	1.7	0.6
19	SB Central Avenue	SB Central 14 to 15	63.4	62.9	63.5	63.4			63.5	63.4	0.1	0.5
20	NB Central Avenue	NB Central 15 to 14	56.1	55.8	56.5	56.2			56.5	56.2	0.4	0.4
21	Basketball Court at CSUDH Housing	WB to G	48	48.4	47.3	55.5	50	51	51.9	56.8	3.9	8.4
22	CSUDH Housing nearest to Lot 7	Parking Lot 7	49.9	50.4	55.5	53.2			55.5	53.2	5.6	2.8
23	WB University Drive	EB 27 to 14	57.3	57	57.4	57.7			57.4	57.7	0.1	0.7
24	EB University Drive	EB 4 to 27	53.9	52.7	56.9	56.5	41	42	57.0	56.7	3.1	4.0
25	WB University Drive	WB 27 to 4	53	51.8	55	56.6	46	46	55.5	57.0	2.5	5.2
26	WB University Drive	EB 14 to 19	48.9	49.2	54.8	58.7			54.8	58.7	5.9	9.5
27	WB Del Amo Blvd	WB Del Amo 15 to 5	53.9	53.9	54.1	54.1			54.1	54.1	0.2	0.2

2019 Post Game Results

Pre Game Lot Level	Post Game Lot Levels	2019 Total Pre Game (30k)	2019 Total Post Game (30k)	Change_Pre_Game	Change_2019 Post_Game
		57.5	55.1	3.5	1.6
		57.8	58.4	2.1	2.7
		57.9	55.4	3.4	1.5
		62.7	61.8	3.4	2.7
		66.2	66.0	0.9	1.7
43	44	66.6	65.3	0.8	1.6
		67.1	66.7	0.9	1.0
		68.7	67.3	1.9	0.4
		58.0	56.8	2.3	1.2
		62.6	62.4	0.9	1.1
		61.6	59.5	2.4	0.6
50	51	61.3	58.0	4.6	1.6
47	48	60.7	58.0	4.8	2.4
50	51	66.5	64.0	5.4	3.0
42	43	57.3	59.4	2.1	4.2
		50.0	54.7	0.6	5.1
		53.8	58.9	0.1	3.9
		55.2	54.6	2.0	1.5
		64.1	63.9	0.7	1.0
		57.0	56.7	0.9	0.9
50	51	51.9	56.9	3.9	8.5
		55.5	53.3	5.6	2.9
		57.9	57.8	0.6	0.8
41	42	57.0	56.8	3.1	4.1
46	46	55.5	57.2	2.5	5.4
		55.2	59.2	6.3	10.0
		54.5	54.6	0.6	0.7

Differences between 30k to 27k

Receptor	Total 2017 Pre Game (27K)	Total 2019 Pre Game (27K)	Total Pre Game 2017 (30 K)	Total Pre Game 2019 (30 K)	Pre 2017 Dif	Pre Game 2019 Change	Total 2017 Post Game (27K)	Total 2019 Post Game (27K)	Total Post Game 2017 (30K)	Total Post Game 2019(30K)	2017 Dif	2019 Dif
SB Avalon Section 2 to 28	57.2	57.2	57.4	57.5	0.2	0.3	54.8	54.9	55.0	55.1	0.2	0.2
NB Avalon Section 28 to 2	57.6	57.6	57.8	57.8	0.2	0.2	58.1	58.1	58.3	58.4	0.2	0.3
SB Avalon Section 28 to 3	57.6	57.6	57.8	57.9	0.2	0.3	55.1	55.2	55.2	55.4	0.1	0.2
NB Avalon Section 3 to 28	61.4	61.5	61.6	62.7	0.2	1.2	61.3	61.4	61.5	61.8	0.2	0.4
SB Avalon 3 to 31	65.9	66.0	65.9	66.2	0.0	0.2	65.8	65.9	65.9	66.0	0.1	0.1
SB Avalon 31 to 30	66.3	66.4	66.5	66.6	0.2	0.2	65.2	65.3	65.2	65.3	0.0	0.0
SB Avalon 30 to 4	66.9	66.9	67.0	67.1	0.1	0.2	66.5	66.6	66.6	66.7	0.1	0.1
NB Avalon 4 to 30	68.5	68.6	68.7	68.7	0.2	0.1	67.1	67.2	67.2	67.3	0.1	0.1
NB Avalon 5 to 4	57.9	58.0	58.1	58.0	0.2	0.0	56.6	56.6	56.9	56.8	0.3	0.2
WB Victoria St 3 to 9	62.6	62.8	62.7	62.6	0.1	-0.2	62.1	62.3	62.3	62.4	0.2	0.1
EB Victoria St 9 to 3	61.6	61.7	61.8	61.6	0.2	-0.1	59.1	59.4	59.2	59.5	0.1	0.1
WB 32 to 3	61.0	61.1	61.1	61.3	0.2	0.3	57.7	57.9	57.6	58.0	-0.1	0.1
WB 24 to 32	60.3	60.4	60.7	60.7	0.4	0.3	57.6	57.8	57.8	58.0	0.2	0.2
WB 33 to 24	66.1	66.2	66.4	66.5	0.3	0.3	63.7	63.8	63.9	64.0	0.2	0.2
WB 25 to 33	56.8	56.8	57.1	57.3	0.3	0.5	59.1	59.2	59.4	59.4	0.3	0.2
WB 26 to 25	49.8	49.8	49.8	50.0	0.0	0.2	54.1	54.4	54.6	54.7	0.5	0.3
WB 13 to 26	53.6	53.8	53.7	53.8	0.1	0.0	58.4	58.6	58.9	58.9	0.5	0.3
SB 12 to 13	54.9	55.1	55.1	55.2	0.2	0.1	53.7	54.2	54.4	54.6	0.7	0.4
SB Central 14 to 15	63.5	64.0	65.8	64.1	2.3	0.1	63.4	63.9	63.4	63.9	0.0	0.0
NB Central 15 to 14	56.5	56.9	57.8	57.0	1.3	0.1	56.2	56.6	56.3	56.7	0.1	0.1
WB to G	51.9	51.9	51.9	51.9	0.0	0.0	56.8	56.8	56.9	56.9	0.1	0.1
Parking Lot 7	55.5	55.5	55.5	55.5	0.0	0.0	53.2	53.2	53.2	53.3	0.0	0.1
EB 27 to 14	57.4	57.9	57.6	57.9	0.2	0.0	57.7	57.7	57.7	57.8	0.0	0.1
EB 4 to 27	57.0	56.8	57.0	57.0	0.0	0.2	56.7	56.7	56.8	56.8	0.2	0.2
WB 27 to 4	55.5	55.4	55.5	55.5	0.0	0.1	57.0	57.0	57.2	57.2	0.3	0.3
EB 14 to 19	54.8	55.0	54.2	55.2	-0.6	0.2	58.7	58.8	59.1	59.2	0.4	0.4
WB Del Amo 15 to 5	54.1	54.5	53.6	54.5	-0.5	0.0	54.1	54.6	53.7	54.6	-0.4	0.0

Noise Increase due to Parking Lot

Lot Number	Model Site Number	Dist to Lot	Spectator Vehicles	Per Game	Post Game	Ambient Noise Level	Pre Game Noise Level from Traffic	Pre Game Parking Lot Noise	Post Game Traffic Noise	Post Game Parking Lot Noise
10	6	272	607	395	455	62	63	43	62	44
11	12	170	939	610	704	57	61	50	59	51
12	13	190	664	432	498	56	61	47	57	48
14	13	1200	32	21	24	56	61	14	57	15
6	14	950	333	216	250	61	66	27	64	27
13	14	150	698	454	524	61	66	50	64	51
3	15	250	455	296	341	55	57	42	59	43
1	21	150	536	348	402	50	48	49	56	50
2	21	250	561	365	421	50	48	44	56	44
8	21	200	243	158	182	50	48	42	57	43
7	23	150	939	610	704	50	56	51	53	52
4	24	230	393	255	295	53	57	43	57	44
16	24	200	183	119	137	53	57	41	57	42
15	25	246	261	170	196	53	57	40	58	41
18	25	120	120	78	90	53	57	45	58	45

Appendix F. Traffic and Circulation

F.1 Transportation Impact Study

Transportation Impact Study

2018 Campus Master Plan

California State University, Dominguez Hills



February 2019



Executive Summary

This report describes the analysis of the transportation effects of the 2018 Master Plan for California State University Dominguez Hills (CSUDH). The Project consists of three major components¹ (in planned order of completion): 1) An additional 3,000 seats for StubHub Center to be completed by 2018 for use for Sunday afternoon events, 2) a University Village consisting of business park, retail, and market-rate apartment uses to be partially completed by 2025, and 3) upgrading the academic buildings to accommodate up to 20,000 full-time equivalent students and build-out of the University Village to be completed by 2035. The analyses found that:

- In 2019 the Project, consisting at that point of the additional 3,000 seats at StubHub Center, would have no significant traffic impacts on study intersections, freeways, pedestrians, bicyclists, or transit. The roadways have sufficient unused capacity on Sunday afternoons to accommodate the Project traffic provided that temporary traffic controls are in place as planned.
- In 2025 the Project, consisting of a part of the University Village and an increase to 13,287 full-time equivalent students, would have significant traffic impacts on 6 study intersections during weekday AM peak hours and on 9 study intersections during weekday PM peak hours. The project would have one freeway impact on the segment of SR-91 east of Alameda St./Santa Fe Ave. The Project would have no significant impacts on pedestrians, bicyclists, or transit.
- Upon full build-out of the Project in 2035, it would have significant traffic impacts on 12 study intersections during weekday AM peak hours, and on 16 study intersections during weekday PM peak hours. In addition, the Project would have 3 significant traffic impacts on study freeway segments during weekday AM peak hours, and 9 significant impacts during weekday PM peak hours. The Project would have no significant impacts on pedestrians, bicyclists, or transit.

On Sundays, the Project would have significant traffic impacts on 3 study intersections during the Sunday pre-game and 1 intersection during the post-game peak hour. The Project would have no significant traffic impacts on freeways, pedestrians, bicyclists, or transit on Sunday afternoons.

The impacts described above were found using intentionally conservative assumptions², so the actual impacts of the Project may be less than those described in this report.

The final chapter of this report identifies measure that would mitigate the traffic impacts to less-than-significant.

¹ See Chapter 5 for a more complete description of the Project.

² “Conservative” in the sense that the assumptions are more likely to overestimate impacts rather than under-estimate them.

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1 Introduction

1.1 Background

CSUDH, founded in 1960 as South Bay State College, moved to its current campus in Carson in 1966, the same year that the school was incorporated into the CSU system. The first Campus Master Plan for the University was completed in 1967. The plan envisioned 20,000 FTE student enrollments on the 344-acre campus, with build-out envisioned by 2002. In terms of transportation, the key features of the plan were:

- A cruciform academic core with major north-south and east-west pedestrian corridors
- Multi-level pedestrian paths as a way to deal with the sloping site of the campus
- On-campus housing for 5,000 students to be located as extensions to the east, west, and south axes and connected to the academic core via major walkways
- 10,000 parking spaces situated in 10 surface lots along the periphery of the campus with multiple access points to city streets
- An internal ring road connecting the parking lots
- To maintain pedestrian friendliness, no vehicular paths were to cross the core, even for service vehicles. Cul-du-sac service roads extending from the ring road to provide load access to buildings in the core.

As of 2016, the 1967 master plan is about half built out, with current enrollment at about 11,100 FTEs. The north-south axes of the academic core have been developed but not the east-west axes. Student housing has been developed on the east side only. Two of the 10 originally-planned parking lots have been built, along with 5 lots on sites originally planned for other uses, for a combined total of 4,533 parking spaces. The original ring road was not completed, but there are internal roads that make a complete circuit around the academic core without crossing it as envisaged in the 1967 Master Plan.

In 2002 the campus signed a long-term land lease with the Anschutz Development Company to develop StubHub Center national soccer training facility on 85 acres of land on the western side of campus. Under the current cooperative arrangement StubHub Center is both a user and supplier of CSUDH parking spaces, with some spaces shared depending on what activities are taking place on a given day.

With the passage of time and the re-purposing of the western portion of the campus, the 1967 Campus Master Plan has become seriously outdated. In 2009 a new Campus Master Plan was completed that kept the goal of accommodating 20,000 FTE students while changing the original plan in several important ways, including:

- Densifying the academic core by using 4-to-5 story buildings instead of the 2-to-3 story buildings originally envisaged
- Extending the academic core eastward by building three new quadrangles on what are currently Parking Lots 2 and 5, and on the vacant area between the academic core and student housing
- Locating new student housing on the east side of campus south and east of the existing residence halls on sites originally planned for surface parking lots
- Providing faculty/staff housing on the south side of campus on a site originally planned for student housing
- Serving most campus parking needs through three parking structures rather than surface lots

- Extending the pedestrian paths for better coverage outside of the academic core

Further evolution of the University's operating environment is prompting an update of the 2009 Master Plan.

1.2 Purpose and Scope of this Study

The purpose of this Transportation Impact Study (TIS) is to evaluate potential off-site traffic and transportation impacts associated with the implementation of the 2018 California State University Dominguez Hills Campus Master Plan "the Project" (a more detailed description is provided in Section 5.1 "Project Description").

This TIS focuses on the area in the vicinity of the university campus and on the routes that vehicles going to or from the site will take on the City of Carson public street network and on the regional freeway system. Forty-two (42) study intersections were selected based on the projected distribution of university- and StubHub center-related traffic. They are shown in Exhibit 1 and listed in Exhibit 2.

The intersections selected for the weekday analysis were:

- Access points to the campus
- Along major routes between the campus and nearby freeway ramps
- Where cross roads have a functional classification of collector or higher
- Congestion Management Plan (CMP) Arterial monitoring stations (Exhibit 3) that may be affected by Project traffic.

For Sunday Analysis selection criteria includes:

- Access point to the parking lots used by StubHub Center
- Along major routes between the campus parking lots used by StubHub Center and nearby freeway ramps
- Entry points to nearby neighborhoods that could be impacted by a Sunday game

In addition, 8 CMP freeway monitoring segments were selected for study based on the expected distribution of Project traffic (See Exhibit 3).

The potential impacts of the Project on public transit system, and bikeway and pedestrian facilities were also analyzed.

1.3 Scenarios Considered

This TIS analyzes the following scenarios:

- Existing (2017) No Project Conditions (weekday AM Peak-Hour and PM Peak Hour)
- Existing (2017) Sunday No Project (27,000 Seats) (pre-game peak hour and post-game peak hour)
- Existing (2017) Plus Project Alternative 1 (weekday AM Peak-Hour and PM Peak Hour)
- Existing (2017) Plus Project Alternative 2 (weekday AM Peak-Hour and PM Peak Hour)
- Existing (2017) Sunday Plus Project 30,000-Seat Event (pre-game peak hour and post-game peak hour)
- Near-Term (2019) Sunday No Project (27,000 Seats) (pre-game peak hour and post-game peak hour)

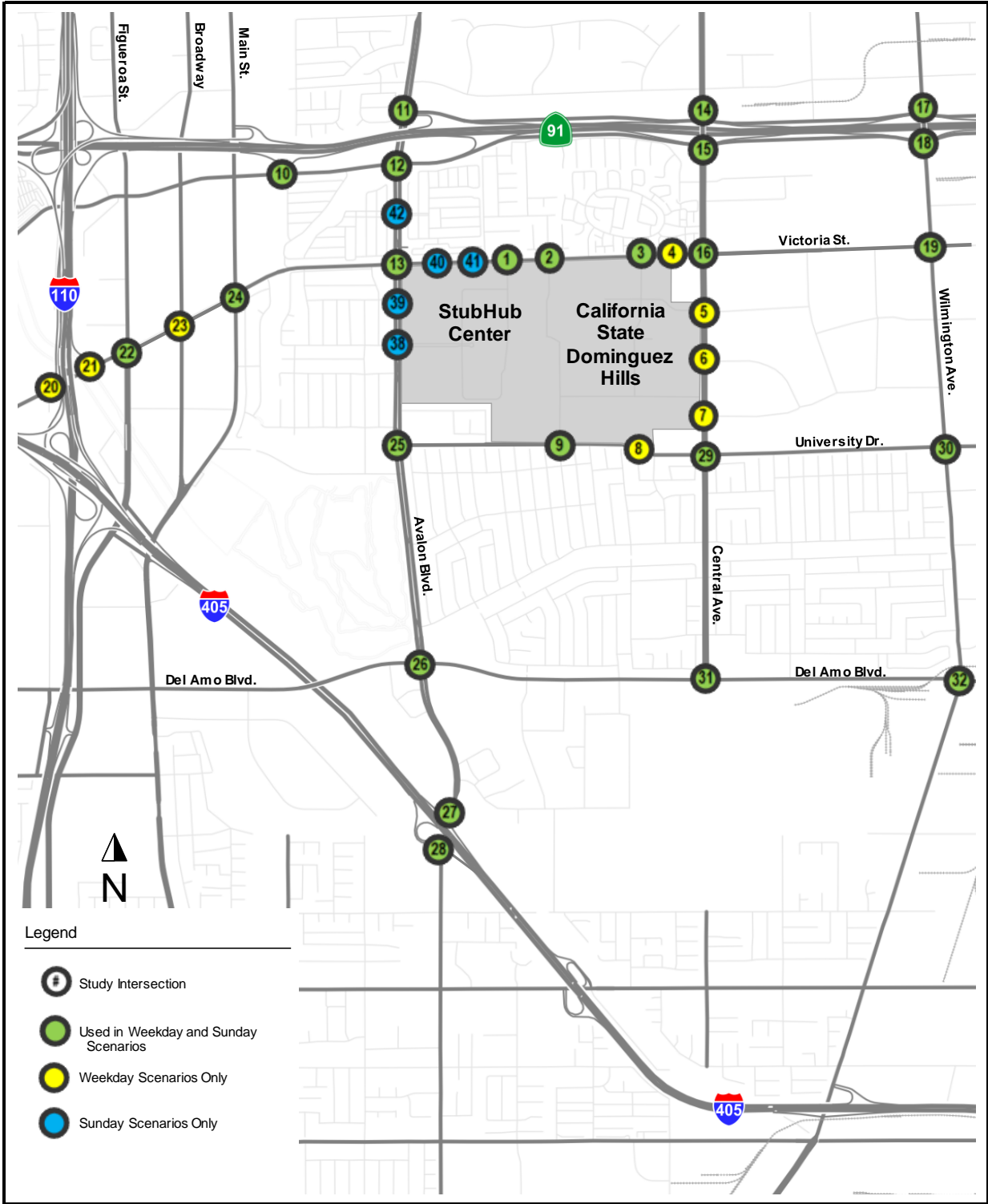


Exhibit 1: Study Intersections (map)

#	Location	Jurisdiction	CMP Intersection	Which scenarios
1	Victoria St./Drive D	City of Carson		All
2	Victoria St./Tamcliff Ave.	City of Carson		All
3	Victoria St./Birchknoll Dr.	City of Carson		All
4	Victoria St./Project Service Rd.	City of Carson		Weekday Only
5	Central Ave./Charles Willard St.	City of Carson		Weekday Only
6	Central Ave./Project Driveway/Beachey Pl.	City of Carson		Weekday Only
7	Central Ave./Glenn Curtiss St.	City of Carson		Weekday Only
8	University Dr./Birchknoll Dr. Extension	City of Carson		Weekday Only
9	University Dr./Toro Center Dr.	City of Carson		All
10	Albertoni St./SR 91 EB Ramps	City of Carson		All
11	Avalon Blvd./SR 91 WB On-Ramp	City of Carson		All
12	Avalon Blvd./Albertoni St.	City of Carson		All
13	Avalon Blvd./Victoria St.	City of Carson		All
14	Central Ave./Artesia Blvd. WB	City of Compton		All
15	Central Ave./Albertoni St./Artesia Blvd. EB	City of Compton		All
16	Central Ave./Victoria St.	City of Carson		All
17	Wilmington Ave./Artesia Blvd. WB	City of Compton		All
18	Wilmington Ave./Artesia Blvd. EB	City of Compton		All
19	Wilmington Ave./Victoria St.	City of Compton		All
20	I-110 SB Off-Ramp/190th St.	Caltrans		Weekday Only
21	I-110 NB On-Ramp/190th St.	Caltrans		Weekday Only
22	Figuroa St./190th St./Victoria St.	City of Carson		All
23	Broadway/Victoria St.	City of Carson		Weekday Only
24	Main St./Victoria St.	City of Carson		All
25	Avalon Blvd./University Dr.	City of Carson		All
26	Avalon Blvd./Del Amo Blvd.	City of Carson		All
27	Avalon Blvd./I-405 NB Ramps	Caltrans		All
28	Avalon Blvd./I-405 SB Ramps	Caltrans		All
29	Central Ave./University Dr.	City of Carson		All
30	Wilmington Ave./University Dr.	Los Angeles County		All
31	Central Ave./Del Amo Blvd.	City of Carson		All
32	Wilmington Ave./Del Amo Blvd.	Los Angeles County		All
33	W. Artesia Blvd./Crenshaw Blvd.	Los Angeles County	X	Weekday Only
34	W. 190th St./S. Western Ave.	Los Angeles County	X	Weekday Only
35	W. Artesia Blvd./Vermont Ave.	Los Angeles County	X	Weekday Only
36	Alameda St./Compton Blvd.	City of Compton	X	Weekday Only
37	Alameda St./SR 91 EB Ramps	Caltrans	X	Weekday Only
38	Avalon Blvd./184th St.	City of Carson		Sunday Only
39	Avalon Blvd./182nd St.	City of Carson		Sunday Only
40	Victoria St./Drive C	City of Carson		Sunday Only
41	Victoria St./Rainsbury Ave.	City of Carson		Sunday Only
42	Avalon Blvd./Harbor Village/Colony Cove	City of Carson		Sunday Only

Exhibit 2: Study Intersections (List)

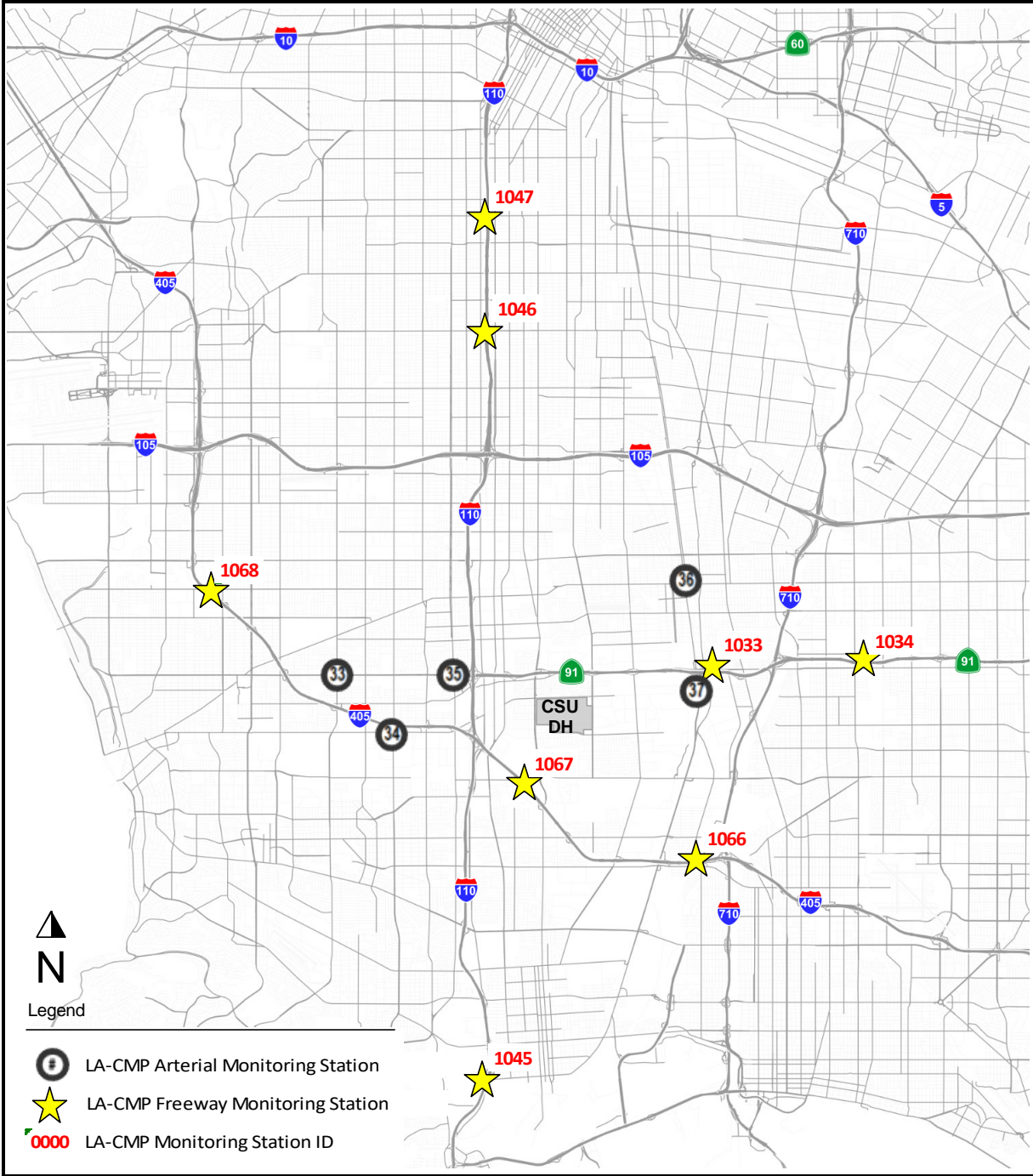


Exhibit 3: LA-CMP Arterial and Freeway Monitoring Stations Analyzed (map)

- Near-Term (2019) Sunday Plus Project 30,000-Seat Event (pre-game peak hour and post-game peak hour)
- Interim Year (2025) No Project Conditions (weekday AM Peak-Hour and PM Peak Hour)
- Interim Year (2025) Plus Project Alternative 1 Conditions (weekday AM Peak-Hour and PM Peak Hour)
- Interim Year (2025) Plus Project Alternative 2 Conditions (weekday AM Peak-Hour and PM Peak Hour)
- Horizon Year (2035) No Project Conditions (weekday AM Peak-Hour and PM Peak Hour)
- Horizon Year (2035) Sunday No Project (27,000 Seat) (pre-game peak hour and post-game peak hour)
- Horizon Year (2035) Plus Project Alternative 1 Conditions (weekday AM Peak-Hour and PM Peak Hour)
- Horizon Year (2035) Plus Project Alternative 2 Conditions (weekday AM Peak-Hour and PM Peak Hour)
- Horizon Year (2035) Sunday Plus Project 30,000-Seat Event (pre-game peak hour and post-game peak hour)

The scenarios were based on the following data and assumptions:

- Traffic conditions at study intersections for Existing scenarios were based on traffic counts taken in Spring 2017 when CSUDH was in normal session. Existing (2017) traffic volumes on the study freeway sections came from the 2009 CMP data factored up via a growth rate to 2017³.
- Traffic volumes for Near-Term (2019) No Project scenarios were developed by factoring up the Existing (2017) background traffic to account for increases due to the growth of the region. The growth factors used were based on guidance in the Los Angeles County Congestion Management Plan (LA-CMP). The traffic associated with development projects that have already been approved by the City of Carson were then added to complete the Near-Term background traffic. Also, transportation projects in the study area that are included in SCAG's 2016 Regional Transportation Plan and scheduled for completion by 2019 were added to the assumed roadway network.
- The Near-Term (2019) No Project scenario added the traffic associated with a 27,000-seat event to the 2019 background traffic. StubHub Center obtained environmental clearance for 27,000-seat events in an EIR certified in 2001⁴ and has held large sports events many times since, so these events constitute the existing conditions (CEQA guidelines state that existing developments should form the basis for No Project scenarios). The Near-Term (2019) Plus Project with 30,000-Seats Event scenario added the traffic associated with 3,000 additional seats for a total of 30,000 seats. No other projects associated with the Master Plan are expected to be completed by 2019, so the additional 3,000 seats and the associated traffic management plan constitute "the Project" for 2019.

³ The study team checked the 2017 volumes in the PeMS system of embedded loop detectors and found that they were lower than the 2009 volumes factored up 8 years. The latter was used to produce an intentionally conservative forecast of traffic conditions.

⁴ National Training Center California State University Dominguez Hills – Final Environmental Impact Report, Terry A. Hayes Associates, April 2001

- Traffic volumes for the Interim Year (2025) scenarios were developed through a similar process as was used for 2019. Traffic volumes for the 2025 No Project condition were developed by factoring up the existing weekday traffic counts using the growth factor from the LA CMP and then adding in the traffic for other development projects that may appreciably affect traffic volumes near the campus⁵. Transportation projects in the study area that are included in SCAG's 2016 Regional Transportation Plan and scheduled for completion by 2025 were added to the assumed roadway network.
- The Interim Year (2025) Plus Project Alternative 1 scenario analyzes weekday conditions with the addition of the University Village component of the CMP. In addition, full-time equivalent students were assumed to increase by 2% per year. It was assumed that any buildings that are demolished to make room for the University Village would be replaced by functionally equivalent facilities elsewhere to maintain student growth and number of students residing on campus.
- The Interim Year (2025) Plus Project Alternative 2 scenario is the same as the above 2025 Plus Project Alternative 1 scenario with the addition of 1,100 on-campus student beds.
- Traffic volumes for the Horizon Year (2035) scenarios were developed through a similar process as was used for 2025. Background traffic was factored up using growth factors from LA-CMP. The traffic associated with development projects that are in the City of Carson pipeline were then added to complete the Horizon Year No Project traffic. For Sunday scenarios, a 27,000-seat event was included as part of the No Project Conditions. Transportation projects in the study area that are included in SCAG's 2016 Regional Transportation Plan and scheduled for completion by 2035 were added to the assumed roadway network.
- The Plus Project Alternative 1 scenario for 2035 adds all of the developments from the Master Plan, including (for Sundays) an increase of 3,000 seats to StubHub Center to 30,000 total seats.
- . The Plus Project Alternative 2 scenario for 2035 is the same as the 2035 Plus Project Alternative 1 scenario with a the addition of 1,040 on-campus student beds, 80 fewer market rate housing units.

⁵ Development projects listed in the City of Carson's Development Status Report as of August 28, 2017 at <http://ci.carson.ca.us/communitydevelopment/devstatusreport.aspx>

2 Methodology and Regulatory Policies

2.1 Intersection Analysis

Traffic operational conditions at intersections are described in terms of traffic Level of Service (LOS) which ranges from LOS A, which indicates that vehicles experience little delay in passing through the intersection, to LOS F, which indicates that vehicles are likely to encounter long queues and stop-and-go conditions. The LOS thresholds are shown in Exhibit 4. In Los Angeles County, the Intersection Capacity Utilization (ICU) method is typically used to determine LOS⁶. The ICU method compares the volumes in the critical conflicting movements to the intersection capacity (a function of the number of lanes provided) to produce a volume-to-capacity ratio.

Level of Service	Description	Volume to Capacity (V/C) Ratio
A	Volume-to-capacity ratio is low and either the progression is exceptionally favorable or the cycle length is short. If due to favourable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.	≤ 0.600
B	Volume-to-capacity ratio is low and either the progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.	0.601-to-0.700
C	Progression is favorable or the cycle length is moderate. Individual cycle failures (i.e. one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle) may begin to appear at this level. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.	0.701-to-0.800
D	Volume-to-capacity ratio is high and either progression is ineffective or cycle length is long. Most vehicles stop and individual cycle failures are noticeable.	0.801-to-0.900
E	Volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long. Individual cycle failures are frequent.	0.901-to-1.000
F	Volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.	> 1.000
Sources: LOS descriptions, <i>Highway Capacity Manual 2010</i> , Transportation Research Board V/C Ratios, <i>Highway Capacity Manual 1985</i> , Transportation Research Board		

Exhibit 4: Intersection Level of Service Thresholds

⁶ See *Traffic Impact Analysis Report Guidelines*, County of Los Angeles Department of Public Works, January 1997

The ICU method usually cannot be applied to two-way stop controlled (TWSC) intersections. For that reason, the HCM 2000 methodology was used to determine the LOS for intersections of this type. For the Sunday scenarios, there are some TWSC intersections that will be under the supervision of traffic officers and so would function like signalized intersections (right-turning vehicles might not be required to stop, for example). They were therefore analyzed using the ICU methodology for signalized intersections.

2.1.1 CSU Significance Thresholds for Roads and Intersections

The Transportation Impact Study Manual⁷ of the California State University system defines the significance criteria for the transportation-related impacts of the proposed project. For off-site roadways and intersections, a significant traffic impact would occur if:

- A roadway segment or intersection operates at LOS D or better under the no project scenario and the addition of project trips causes overall traffic operations on the facility to operate at LOS E or F.
- A roadway segment or intersection operates at LOS E or F under the no project scenario and the project adds both 10 or more peak hour trips and 5 seconds or more of peak hour delay, during the same peak hour.
- If an intersection operates at a very poor LOS (LOS F with an average control delay of 120 seconds or more), the significance criterion is an increase in V/C ratio of 0.02 or more.

2.1.2 Other Agencies' Significance Thresholds for Roads and Intersections

The significance thresholds from other agencies (i.e. besides those found in the CSU Transportation Impact Study Manual) are outlined below for informational purposes only. These include the Cities of Carson and Compton, and the County of Los Angeles.

City of Carson

The City of Carson has the following policy regarding intersection impacts:

Policy: TI-2.1 Require that new projects not cause the Level of Service for intersections to drop more than one level if it is at Level A, B or C, and not drop at all if it is at D or below, except when necessary to achieve substantial City development goals.

City of Compton

The City of Compton has established LOS "D" as a target LOS standard, and LOS "E" as a threshold standard. The City recognizes that not all intersections within the City can meet the target LOS D. In these instances, the City Council must find that the improvements necessary to meet the target LOS D are not feasible because of one or more of the following reasons:

- The cost of the necessary improvements exceeds available funding sources;
- The design of the necessary improvements is not compatible with the surrounding land uses; or,
- The design of the necessary improvements is contrary to other established City policies.

Los Angeles County

The Traffic Impact Analysis Report Guidelines for Los Angeles County defines thresholds based on the volume-to-capacity (V/C) ratio. The County thresholds as shown in Exhibit 5.

⁷ California State University Transportation Impact Study Manual, November 2012

Pre-Project Condition		Increase in V/C from Project
LOS	V/C Ratio	
C	0.71 to 0.80	0.04 or more
D	0.81 to 0.90	0.02 or more
E/F	0.91 or more	0.01 or more

Exhibit 5: LA County Intersection Impact Thresholds

2.2 Freeway Analysis

Caltrans has established guidelines⁸ for analyzing impacts on the state highway system. These guidelines require that a project's impacts be analyzed when a project:

- Generates over 100 peak hour trips assigned to a State highway facility
- Generates 50 to 100 peak hour trips assigned to a State highway facility – and, affected State highway facilities are experiencing noticeable delay; approaching unstable traffic flow conditions (LOS “C” or “D”).
- Generates 1 to 49 peak hour trips assigned to a State highway facility – the following are examples that may require a full TIS or some lesser analysis:
- Affected State highway facilities experiencing significant delay; unstable or forced traffic flow conditions (LOS “E” or “F”).
- The potential risk for a traffic incident is significantly increased (i.e., congestion related collisions, non-standard sight distance considerations, increase in traffic conflict points, etc.).

Caltrans' traffic analysis guidelines focus on weekday peak hours as the critical time periods for impact analysis. To supplement the analysis called for in the guidelines, an additional analysis was done to show that the Project would not have a significant impact on freeways on Sundays. This analysis can be found in Section 6.3.3.

In Los Angeles County, freeway mainline LOS is estimated through the calculation of demand to capacity (D/C) ratio. LOS ranges from LOS A, which indicates that vehicles experience very little traffic, to LOS F, which indicate that the freeway is severely congested. LOS F(1) through F(3) designations are assigned for facilities with speeds less than 25 mph for more than one hour. The associated LOS is shown in Exhibit 6. The calculation based on D/C is a surrogate for the speed-based LOS used by Caltrans for traffic operational conditions.

⁸ Caltrans Guide for the Preparation of Traffic Impact Studies, December 2002

D/C Ratio	LOS
0.00 - 0.35	A
> 0.35 - 0.54	B
> 0.54 - 0.77	C
> 0.77 - 0.93	D
> 0.93 - 1.00	E
> 1.00 - 1.25	F(0)
> 1.25 - 1.35	F(1)
> 1.35 - 1.45	F(2)
> 1.45	F(3)

Exhibit 6: Freeway Level of Service Threshold

The LA CMP establishes guidelines for significant impact of projects. Significant impact occurs when the project increase the traffic demand by 2% of capacity ($D/C \geq 0.02$) causing an LOS F ($D/C > 1.00$). If the facility is already at LOS F, significant impact occurs when the proposed project increases the traffic demand by 2% of capacity ($D/C \geq 0.02$).

2.3 Congestion Management Plan (CMP) Analysis

The LA-CMP establishes guidelines for analyzing impacts on the transportation system. These guidelines require that a project's impacts be analyzed for:

- All CMP arterial monitoring intersections, including monitored freeway on- or off-ramp intersections, where the proposed project will add 50 or more trips during either the AM or PM weekday peak hours.
- If CMP arterial segments are being analyzed rather than intersections, the study area must include all segments where the proposed project will add 50 or more peak hour trips (total of both directions).
- Mainline freeway monitoring locations where the project will add 150 or more trips, in either direction, during either the AM or PM weekday peak hours.

CMP monitoring intersections and roadways meeting these criteria were identified and are included in the study facilities described in Section 1.2 and shown in Exhibit 3.

2.4 Bicycle and Pedestrian Analysis

The CSU Transportation Impact Study Manual specifies that the TIS should provide the following information regarding potential for bicycle and pedestrian impacts:

- A qualitative description of existing bicycle and pedestrian facilities in the project vicinity, including identifying the location and type of bicycle facilities, presence of sidewalks, and the level of usage.
- A summary of policies from area general plans or master plan related to bicycle and pedestrian travel
- Evaluation of how the project affects the current and planned bicycle and pedestrian facilities in the study area, and whether the project creates any significant conflicts with applicable bicycle and pedestrian policies.
- A map showing existing and planned bicycle facilities in the study area.

The manual also defines the significance thresholds for bicycle and pedestrian impacts. A significant impact would occur if:

- A project significantly disrupts existing or planned bicycle facilities or significantly conflicts with applicable non-automotive transportation plans, guidelines, policies, or standards, or
- A project significantly disrupts existing or planned pedestrian facilities or significantly conflicts with applicable non-automotive transportation plans, guidelines, policies, or standards.

2.5 Transit Analysis

Similarly, the Manual specifies that the TIS should provide the following information regarding the potential for transit impacts:

- A qualitative description of transit service and route connectivity in the project area, including campus shuttle service, local bus service, and regional bus or rail service
- Evaluation of the project's consistency with applicable transit policies and identification of conflicts with existing and planned routes and level of services. Examples of conflicts include a project transit demand that will exceed the existing or planned service capacity or a required change in bus routing due to the physical or operational requirements of the project that lengthens transit trip times or headways.
- A map showing transit routes within two miles of the project site.

The manual also defines the significance thresholds for transit impacts. A significant impact would occur if:

- A project significantly disrupts existing or planned transit facilities and services or significantly conflicts with applicable transit plans, guidelines, policies, or standards.

3 Transportation Setting

3.1 Existing Land Use

CSUDH was incorporated into the California State University system in 1966 as one of California State University's 23 campuses. CSUDH offers 43 undergraduate majors, 19 master's degrees and a number of certificate and credential programs. The 4-year university is accredited by the Accrediting Commission for Secondary Colleges and Universities of the Western Association of Schools and Colleges (WASC), the Association of Collegiate Business Schools and Programs (ACBSP), and the National Association of Schools of Public Affairs and Administration (NASPAA).

The CSUDH campus is located southwest of Central Avenue and Victoria Street in the City of Carson, in southern Los Angeles County, and is situated near the top of the Dominguez Hills (see Exhibit 7 and Exhibit 8). The campus consists of 346 acres. In 2002, 85 acres on the west end of campus was leased for the development of a soccer stadium, velodrome, tennis stadium and training facilities. The remaining 261 acres of campus contains existing campus facilities, along with undeveloped land. In addition to the classrooms for CSUDH, the California Academy of Mathematics and Sciences (CAMS), a specialized public magnet high school, is located on the campus.

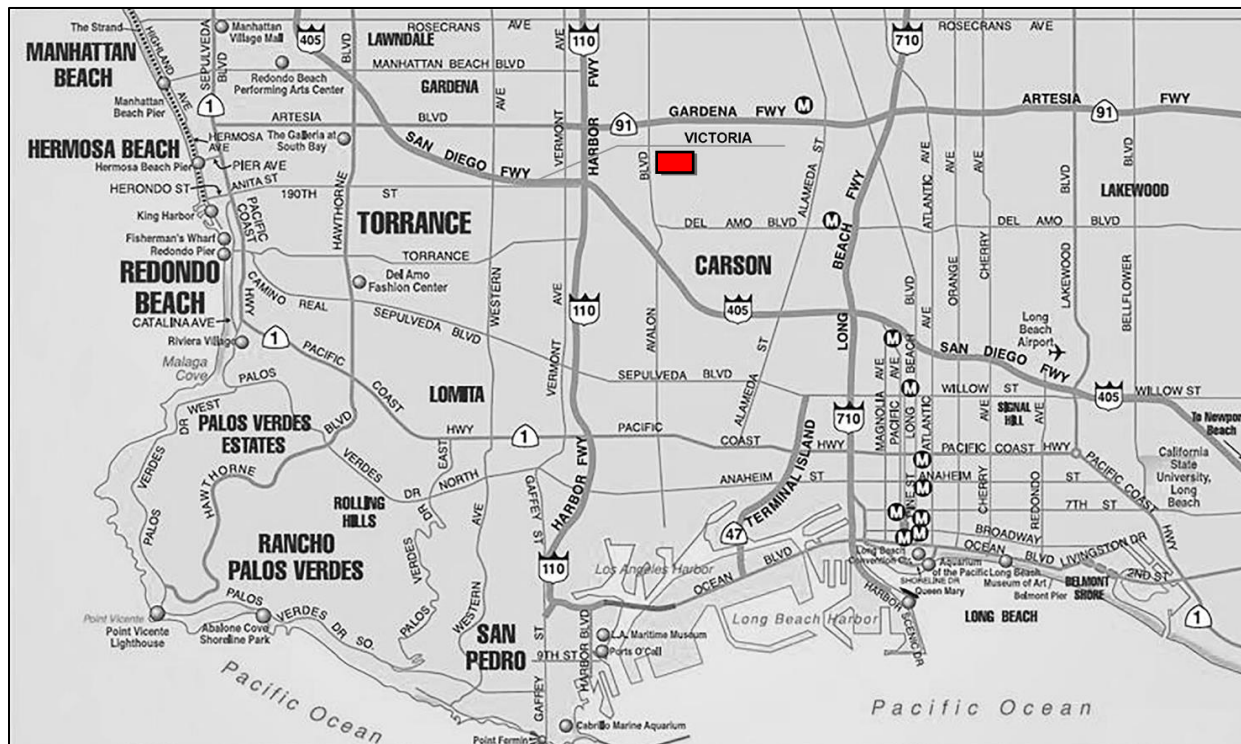


Exhibit 7: CSUDH Location and Regional Setting



Exhibit 8: Aerial Photograph of CSU Dominguez Hills Campus, 2016

The academic core of the campus is located in the north central portion of the campus site (see Exhibit 10). Surface parking facilities are distributed around the periphery of the core while support facilities are located near the center of campus. Athletic Facilities are located on the southwestern portion of campus and in the south-central portion of campus along with CAMS. The southern and southeastern portions of the campus are currently undeveloped and are being used as a commercial nursery.

The current users of the campus are summarized in Exhibit 9 as:

Person Type	Number of People
Students	
On-Campus Students	649
Online only Students	600
Off-Campus Students	12,822
Total Student (head count)	14,071
Total Student (FTEs)	11,118
Non-Students	
Faculty/Staff	1,052
High School Students	676
Child/Infant Care Center Students	92

Exhibit 9: Existing Campus Users

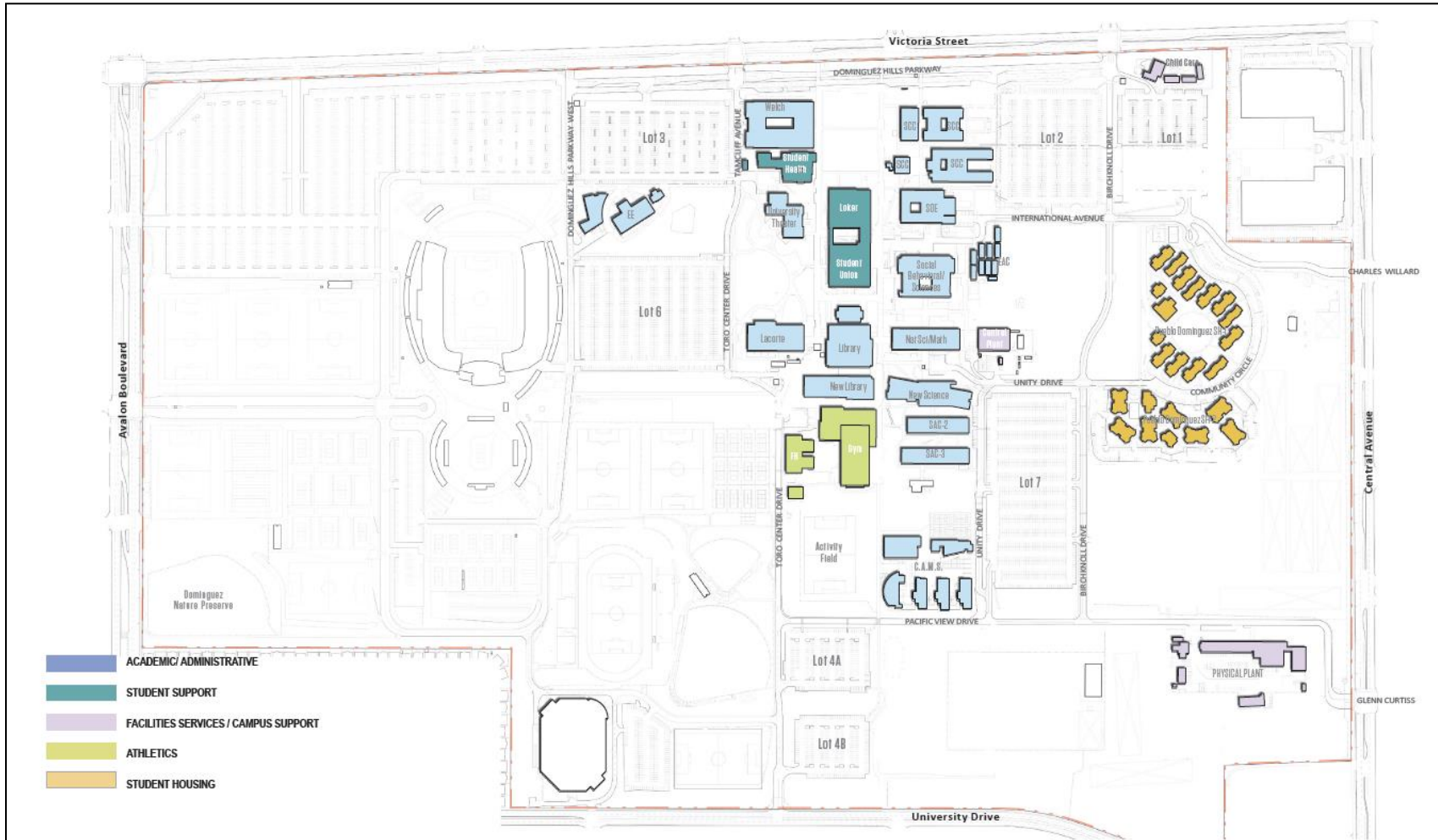


Exhibit 10: Map of Existing CSUDH Campus

3.1.1 Existing Uses at the StubHub Center

StubHub Center is a sports complex used as a practice and event venue for soccer, tennis, track & field, baseball, and cycling. Exhibit 11 shows the layout of the various facilities at StubHub Center. These include a 2,450-seat velodrome, an 8,000-seat tennis stadium that is expandable to 13,000 by adding bleachers, and an outdoor track & field facility that is authorized for 20,000 spectators.

The proposed Project would expand the seating of the soccer stadium when used for Sunday afternoon events. The stadium has seating for 27,000 spectators when configured for Major League Soccer (MLS) games and the proposed Project is to seat 30,000 spectators when configured for Sunday afternoon events. The stadium is the home field of the LA Galaxy MLS franchise and the LA Chargers NFL franchise starting at the beginning of the 2017 season. In addition to regular use for LA Galaxy games, the stadium has been used for many other Level 3⁹ (20,000+ spectators) sporting events including:

- 2003 Fédération Internationale de Football (FIFA) Women's World Cup
- 2003 MLS All-Star Game
- 2003 MLS Cup
- 2004 MLS Cup
- 2005 Confederation of North, Central American and Caribbean Association Football (CONCACAF) Gold Cup matches
- 2007 CONCACAF Gold Cup matches
- 2008 MLS Cup
- 2009 CONCACAF Gold Cup matches
- 2011 CONCACAF Gold Cup matches
- 2012 MLS Cup
- 2014 MLS Cup

The proposed Project is thus an extension of a long history of major sporting events held at this venue. These events provide the operators of StubHub Center with substantial experience in dealing with the parking and transportation issues arising from such events.

3.1.2 Surrounding Land Uses and Setting

The CSU Dominguez Hills campus is located in the City of Carson, in Los Angeles County (see Exhibit 12). The campus is separated from the residential development to the north by Victoria Street, to the south by Avalon Boulevard and on the east by Central Avenue. Central Avenue abuts a series of industrial park buildings and provides access to the campus from State Route (SR) -91 freeway.

⁹ The Joint Use Agreement between ASC and CSU describes three types of events at StubHub Center, namely Level 1 with up to 12,500 patrons, Level 2 with up to 20,000 patrons, and Level 3 with up to 27,000 patrons.

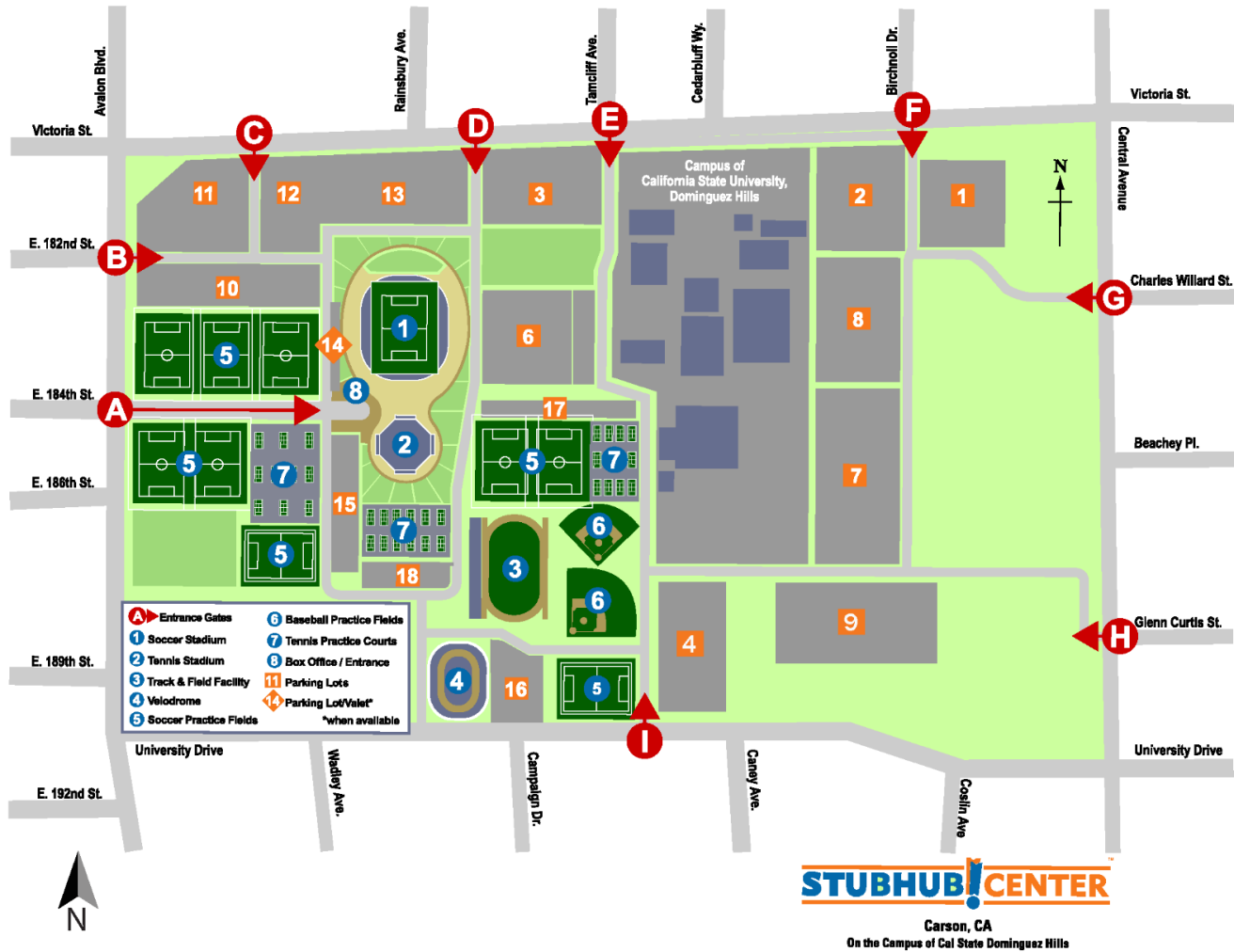


Exhibit 11: StubHub Center and Associated Parking

3.2 Existing and Planned Roadway System

Important roadways in the vicinity of the CSUDH Campus and StubHub Center include (see Exhibit 12):

Freeways:

- **California State Route 91 (SR-91)** is a major east-west freeway through Los Angeles. In the vicinity of the Project it has four lanes in each direction with two frontage roads. The Project can be accessed from SR-91 via Central Avenue and Avalon Boulevard.
- **Interstate 110 (I-110)** is a north-south freeway to the west of the study area with four lanes in each direction. The Project can be accessed from I-110 via 190th Street, which turns into Victoria Street in the vicinity of StubHub Center.
- **Interstate 405 (I-405)** is a north-south freeway with four lanes in each direction. The Project can be accessed from I-405 via 190th street, Main Street, Del Amo Boulevard, and Wilmington Ave.
- **Interstate 710 (I-710)** is a nine lane north-south freeway to the east of the study area. The Project can be accessed from I-710 via Del Amo Blvd.

Principal Surface Streets:

- **Avalon Boulevard** is a north-south street classified as a major highway. The street connects the west side of the campus to SR-91 in the north and I-405 in the south. This is a six-lane street with three lanes in each direction. The street includes a landscaped median which incorporates left turn lanes at major intersections and high tension power lines. No parking is allowed on the street however there is access to StubHub Center lots.
- **Victoria Street** is a four-lane east-west street with two lanes in each direction. It is classified as a major highway. The street connects the north side of the campus to/from I-110 and I-405. East of Central Avenue and west of the university campus, Victoria Street includes a middle central left turn lane. By the university campus, the central left turn lane becomes a landscaped median with left turn lanes at all intersections. Victoria Street has access to many parking lots along the north side of campus.
- **University Drive** runs east-west and provides access to the south side of the complex and extends from Avalon Boulevard in the west to just east Wilmington Street. It is classified as a secondary highway with two lanes in each direction. The street includes a central left turn lane in the vicinity of the university campus and a median with turn lanes through the rest of the study area. University Drive offers access to the campus' southern parking lots.
- **Central Avenue** is a street on the east side of campus that runs north-south. It is classified as a major highway with two lanes in each direction. It connects the east side of campus to SR-91 to the north and extends to Del Amo Boulevard to the south. Parking lots in the west of campus can be accessed via Glenn Curtis Street or Charles Willard Street.
- **Wilmington Avenue** is a north-south street east of the Project that is classified as a secondary highway. It has three lanes in each direction and connects to SR-91 to the north and I-405 to the south.
- **Del Amo Boulevard** is an east-west running secondary highway south of University Drive. The street connects to I-405 to the west and I-710 to the east

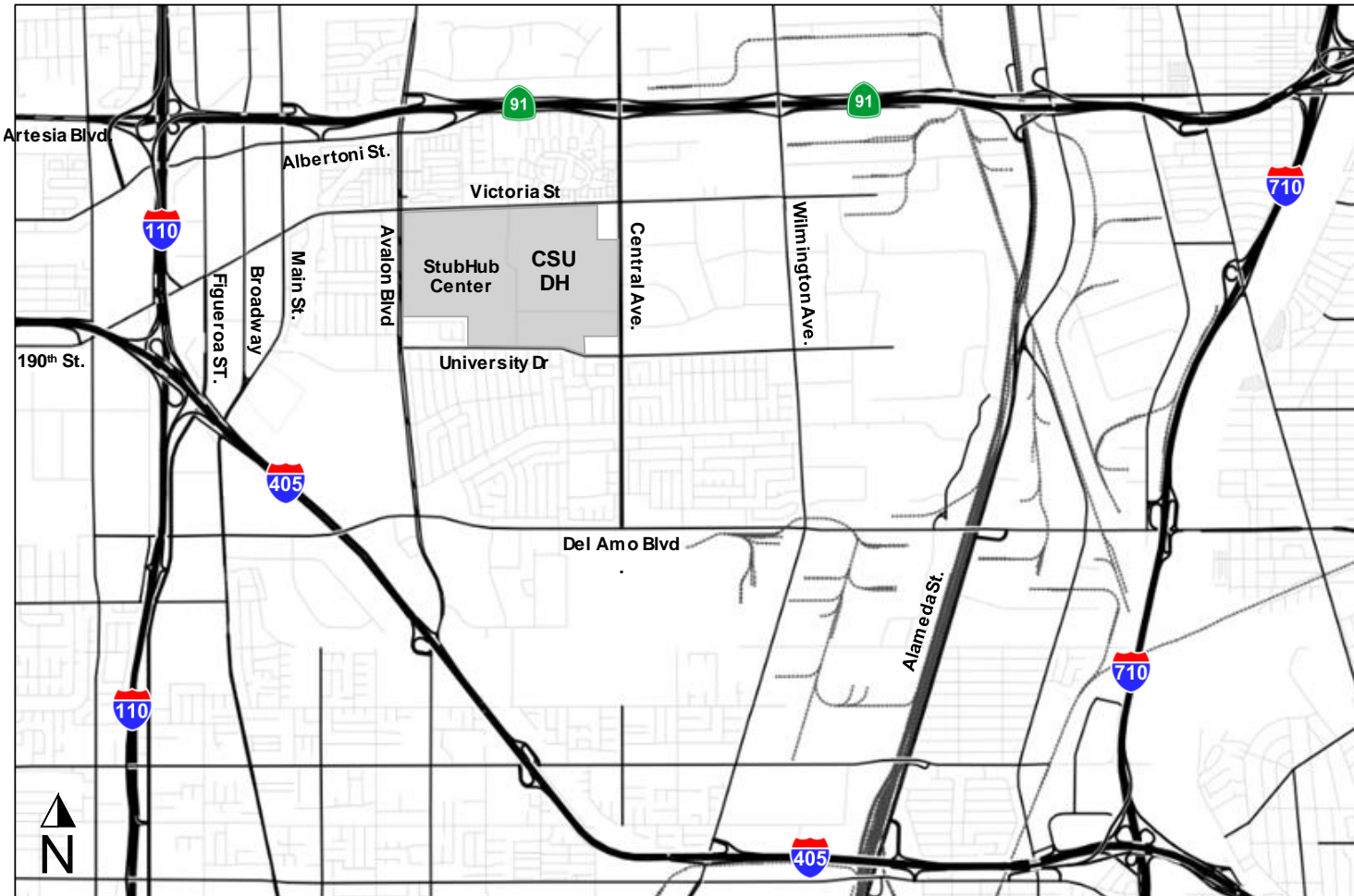


Exhibit 12: Existing Roadway Network

- **Artesia Boulevard** and **Albertoni Street** are frontage roads for SR-91 that run in an east west direction. In Carson, Artesia Boulevard runs to the north of SR-91 and Albertoni Street runs south of SR-91. West of Carson, Artesia Blvd functions as a western arterial extension of SR-91. In the vicinity of the university it is classified as a collector with two lanes in each direction.
- **Main Street** is a four-lane north-south street with two lanes in each direction one half-mile west of the CSUDH campus. It is classified as a major highway.
- **Figueroa Street** is a four-lane north-south street with two lanes in each direction 0.9 miles west of the CSUDH campus. It is classified as a major highway.

Based on information received from the County, the following roadway improvements were assumed for year 2025 and 2035 Future Conditions without Project:

- On **Vermont Avenue** right turn pockets are being added at **West Artesia Boulevard**

3.3 Existing Pedestrian Facilities

The major streets near StubHub Center, including Avalon Boulevard to the west of the stadium, Victoria Street to the north, Central Avenue to the east, and University Avenue to the south, all have sidewalks on both sides. Crosswalks and pedestrian signals are provided at the major intersections.

3.4 Existing and Planned Bicycle Facilities

The existing and planned bicycle facilities in the vicinity of StubHub Center are shown in Exhibit 14. Existing facilities near the CSUDH campus and StubHub Center include Class 1 (bicycle paths), Class 2 (bicycle lanes), and Class 3 (bicycle routes) facilities.

3.5 Existing and Planned Transit Facilities

The study area is served by several transit agencies. These include 3 Carson Circuit routes, 5 Metro bus routes, the Metro Blue line, Compton Renaissance Transit Systems, Long Beach Transit, and Torrance Transit. Exhibit 13 shows the routes that serve the project area and their weekday operating hours and the peak headways. Exhibit 15 is a map showing the portion of the routes that lies in the study area.

Transit route	Weekday Operating Hours	Peak Headways
Carson Circuit Route A	5:20 am to 6:40 am	40 minutes
Carson Circuit Route E	5:20 am to 6:40 am	40 minutes
Carson Circuit Route H	5:20 am to 6:40 am	40 minutes
Compton Renaissance Route 5	7:30 am to 3:30 pm	1 hour
Long Beach Route 1	5:00 am to 10:30 pm	5 minutes
LA Metro Blue Line	3:30 am to 2:30 pm	12 minutes
Metro Route 52	4:00 am to 1:00 am	10 minutes
Metro Route 53	4:00 am to 1:00 am	10 minutes
Metro Route 130	5:00 am to 10:00 pm	20 minutes
Metro Route 205	4:00 am to 11:30 pm	30 minutes
Metro Route 246	4:00 am to 2:30 am	30 minutes
Torrance Transit Bus Lines Route 6	5:20 am to 8:30 pm	40 minutes

Exhibit 13: Weekday Transit Services in the Study Area



Source: Carson Master Plan of Bikeways, Ryan Snyder Associates, August 2013

Exhibit 14: Existing Bicycle Facilities in the Study Area

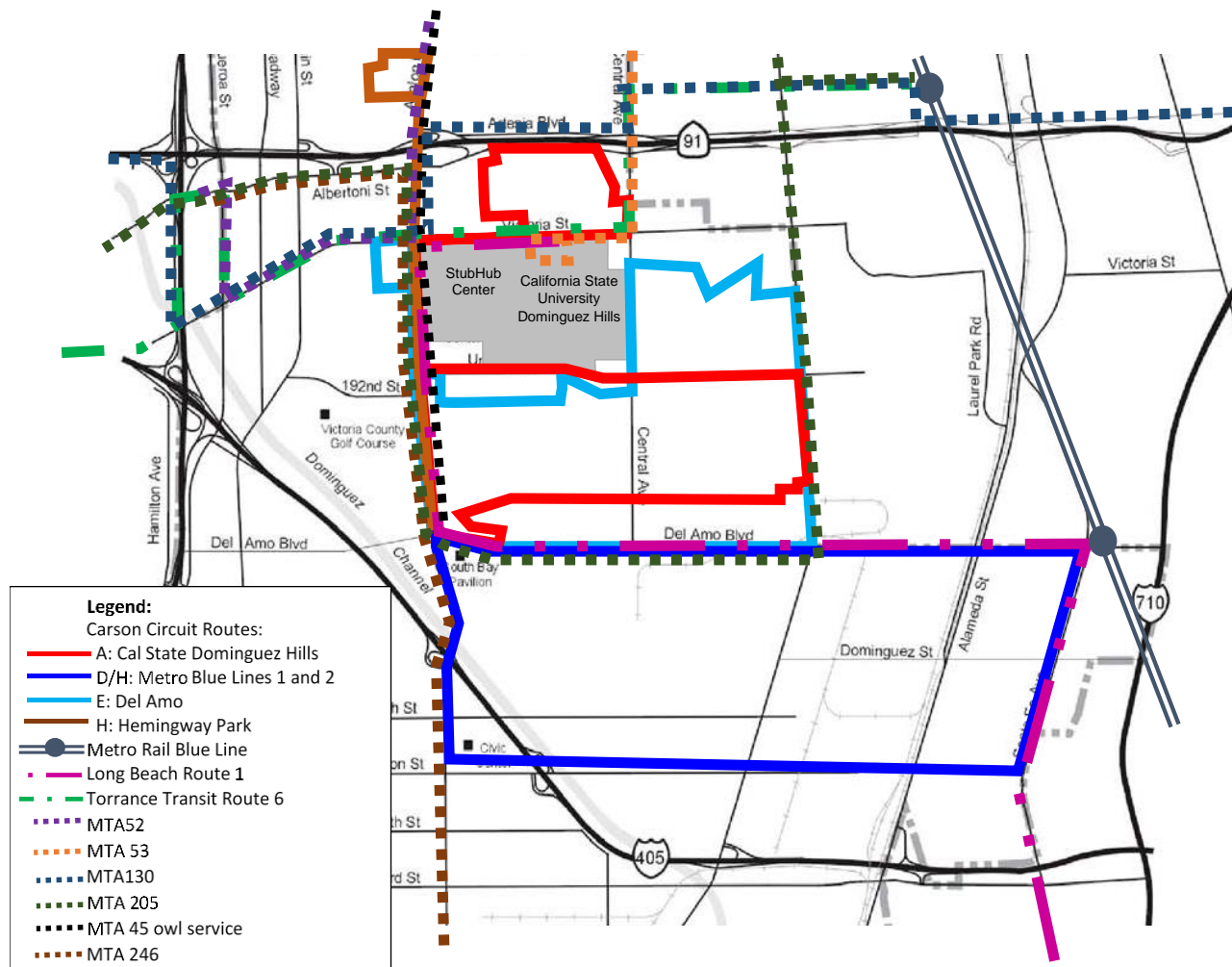


Exhibit 15: Weekday Transit Service in the Study Area (map)

4 Existing Conditions

4.1 Existing Weekday Conditions

The existing conditions at study intersections were determined using traffic counts collected on a typical weekday in April 2017 in the peak AM period (7:00AM to 9:00AM) and peak PM period (4:00PM to 6:00PM) periods (see Appendix B). Exhibit 17 shows the AM and PM peak hour traffic volumes by turning movement at each study intersection, along with the existing lane configurations (see Exhibit 1 for a key map of study intersection locations).

4.1.1 Existing Weekday Intersection Level of Service

Exhibit 16 shows in tabular format the level of service (LOS) based on the traffic volumes shown in Exhibit 17 (also see Appendix C). The LOS is also shown on maps in Exhibit 18 (for the AM peak hour condition) and Exhibit 19 (for the PM peak hour condition). Four intersections do not meet the target LOS of D or better under existing conditions, namely:

- Intersection #1, Victoria Ave./Drive D, during the PM peak hour
- Intersection #20, I-110 SB Off-Ramp/190th St., during both peak hours
- Intersection #33, W. Artesia Blvd./Crenshaw Blvd., during both peak hours
- Intersection #35, W. Artesia Blvd./Vermont Ave., during the PM peak hour

4.1.2 Existing Weekday Freeway Level of Service

The existing LOS for the study freeway segments are shown in Exhibit 20. All CMP locations were analyzed using the Demand to Capacity ratio (D/C) as required by the Los Angeles County CMP. As shown, seven CMP monitoring locations do not meet the target LOS of D or better under existing conditions, namely:

- CMP Station #1033, SR-91 East of Alameda St./Santa Fe Ave., Northbound, during PM peak hour
- CMP Station #1034, SR-91 East of Cherry Ave., Northbound, during the PM peak hour
- CMP Station #1046, I-110 at Manchester Blvd., Northbound, during both peak hours and Southbound, during both peak hours
- CMP Station #1047, I-110 at Slauson Ave., Northbound, during both peak hours and Southbound, during both peak hours
- CMP Station #1066, I-405 at Santa Fe Ave., Northbound, during both peak hours, and Southbound, during the PM peak hour
- CMP Station #1067, I-405 South of I-110 at the Carson Scales, Northbound, during both peak hours and Southbound, during both peak hours
- CMP Station #1068, I-405 North of Inglewood Ave. at Compton Blvd., Northbound, during both peak hours and Southbound, during the PM peak hour

Altogether 85 freeway segments are forecast to have an LOS worse than D, including those that are not CMP monitoring stations. These additional locations are:

- SR-91 eastbound, Jct. Rte. 110 to Avalon Blvd., during the PM peak hour
- SR-91 eastbound, Avalon Blvd. to Central Ave., during the PM peak hour

- SR-91 eastbound, Central Ave. to Wilmington Ave., during the PM peak hour
- SR-91 eastbound, Wilmington Ave. to Alameda St., during the PM peak hour
- SR-91 eastbound, Alameda St. to Alameda St./Santa Fe Ave., during the PM peak hour
- SR-91 eastbound, Long Beach Blvd. to Jct. Rte. 710, during the PM peak hour
- SR-91 eastbound, Jct. Rte. 710 to Cherry Ave., during the PM peak hour
- SR-91 eastbound, Paramount Blvd. to Downey Ave., during the PM peak hour
- SR-91 eastbound, Jct. Rte. 19 to Clark Ave., during the PM peak hour
- I-110 northbound, Sepulveda Blvd. to Carson St., during the AM peak hour
- I-110 northbound, Carson St. to Torrance/Del Amo Blvd., during the AM peak hour
- I-110 northbound, Torrance/Del Amo Blvd. to Jct. Rte. 405, during the both peak hours
- I-110 northbound, Jct. Rte. 405 to Jct. Rte. 91, during the AM peak hour
- I-110 northbound, Century Blvd. to Manchester Ave., during the both peak hours
- I-110 northbound, Florence Ave. to Gage Ave., during the both peak hours
- I-110 northbound, Slauson Ave. to 51st St., during the both peak hours
- I-110 northbound, 51st St. to Vernon Ave., during the both peak hours
- I-110 northbound, Vernon Ave. to Martin Luther King Jr. Blvd., during the both peak hours
- I-405 northbound, Lakewood Blvd. to Cherry Ave., during the both peak hours
- I-405 northbound, Cherry Ave. to Orange Ave., during the both peak hours
- I-405 northbound, Orange Ave. to Atlantic Ave., during the both peak hours
- I-405 northbound, Atlantic Ave. to Long Beach Blvd, during the both peak hours
- I-405 northbound, Long Beach Blvd to Jct. Rte. 710, during the AM peak hour
- I-405 northbound, Alameda St. to Wilmington Ave., during the both peak hours
- I-405 northbound, Wilmington Ave. to Carson St., during the both peak hours
- I-405 northbound, Carson St. to Avalon Blvd., during the both peak hours
- I-405 northbound, Avalon Blvd. to Jct. Rte. 110, during the both peak hours
- I-405 northbound, Jct. Rte. 110 to Vermont Ave., during the both peak hours
- I-405 northbound, Vermont Ave. to Normandie Ave., during the AM peak hour
- I-405 northbound, Normandie Ave. to Western Ave., during the both peak hours
- I-405 northbound, Western Ave. to Crenshaw Blvd., during the both peak hours
- I-405 northbound, Crenshaw Blvd. to Artesia Blvd., during the both peak hours
- I-405 northbound, Artesia Blvd. to Hawthorne Blvd., during the AM peak hour
- I-405 northbound, Hawthorne Blvd. to Inglewood Ave., during the both peak hours
- I-405 northbound, Inglewood Ave. to Rosecrans Ave., during the both peak hours
- I-710 northbound, Jct. Rte. 91 to Alondra Blvd., during the PM peak hour
- I-710 northbound, Alondra Blvd. to Jct. Rte. 105, during the PM peak hour

- SR-91 westbound, Jct. Rte. 110 to Avalon Blvd., during the both peak hours
- SR-91 westbound, Central Ave. to Wilmington Ave., during the AM peak hour
- SR-91 westbound, Wilmington Ave. to Alameda St., during the AM peak hour
- SR-91 westbound, Alameda St. to Alameda St./Santa Fe Ave., during the AM peak hour
- SR-91 westbound, Long Beach Blvd. to Jct. Rte. 710, during the AM peak hour
- SR-91 westbound, Jct. Rte. 710 to Cherry Ave., during the AM peak hour
- SR-91 westbound, Paramount Blvd. to Downey Ave., during the AM peak hour
- SR-91 westbound, Downey Ave. to Jct. Rte. 19, during the AM peak hour
- SR-91 westbound, Jct. Rte. 19 to Clark Ave., during the both peak hours
- SR-91 westbound, Clark Ave. to Bellflower Blvd., during the AM peak hour
- SR-91 westbound, Bellflower Blvd. to Jct. Rte. 605, during the AM peak hour
- I-110 southbound, Sepulveda Blvd. to Carson St., during the PM peak hour
- I-110 southbound, Carson St. to Torrance/Del Amo Blvd., during the both peak hours
- I-110 southbound, Torrance/Del Amo Blvd. to Jct. Rte. 405, during the both peak hours
- I-110 southbound, Jct. Rte. 405 to Jct. Rte. 91, during the both peak hours
- I-110 southbound, Rosecrans Ave. to El Segundo Blvd., during the AM peak hour
- I-110 southbound, Century Blvd. to Manchester Ave., during the both peak hours
- I-110 southbound, Florence Ave. to Gage Ave., during the both peak hours
- I-110 southbound, Slauson Ave. to 51st St., during the both peak hours
- I-110 southbound, 51st St. to Vernon Ave., during the both peak hours
- I-110 southbound, Vernon Ave. to Martin Luther King Jr. Blvd., during the both peak hours
- I-110 southbound, Martin Luther King Jr. Blvd. to Exposition Blvd., during the both peak hours
- I-405 southbound, Lakewood Blvd. to Cherry Ave., during the PM peak hour
- I-405 southbound, Cherry Ave. to Orange Ave., during the both peak hours
- I-405 southbound, Orange Ave. to Atlantic Ave., during the both peak hours
- I-405 southbound, Atlantic Ave. to Long Beach Blvd, during the PM peak hour
- I-405 southbound, Long Beach Blvd to Jct. Rte. 710, during the PM peak hour
- I-405 southbound, Alameda St. to Wilmington Ave., during the PM peak hour
- I-405 southbound, Wilmington Ave. to Carson St., during the both peak hours
- I-405 southbound, Carson St. to Avalon Blvd., during the both peak hours
- I-405 southbound, Avalon Blvd. to Jct. Rte. 110, during the both peak hours
- I-405 southbound, Jct. Rte. 110 to Vermont Ave., during the both peak hours
- I-405 southbound, Vermont Ave. to Normandie Ave., during the PM peak hour
- I-405 southbound, Normandie Ave. to Western Ave., during the both peak hours
- I-405 southbound, Western Ave. to Crenshaw Blvd., during the both peak hours

- I-405 southbound, Crenshaw Blvd. to Artesia Blvd., during the both peak hours
- I-405 southbound, Artesia Blvd. to Hawthorne Blvd., during the both peak hours
- I-405 southbound, Hawthorne Blvd. to Inglewood Ave., during the both peak hours
- I-405 southbound, Inglewood Ave. to Rosecrans Ave., during the PM peak hour

Study ID	Intersection Name	Control Type	AM Peak Hour		PM Peak Hour	
			V/C Ratio or Delay	LOS (ICU or HCM)	V/C Ratio or Delay	LOS (ICU or HCM)
1	Victoria St./Drive D	TWSC	15.8	C	143.6	F
2	Victoria St./Tamcliff Ave.	Signalized	0.405	A	0.556	A
3	Victoria St./Birchknoll Dr.	Signalized	0.528	A	0.648	B
4	Victoria St./Project Service Rd.	N/A	N/A	N/A	N/A	N/A
5	Central Ave./Charles Willard St.	TWSC	19.4	C	19.3	C
6	Central Ave./Beachey Pl.	TWSC	15.7	C	16.8	C
7	Central Ave./Glenn Curtiss St.	Signalized	0.42	A	0.445	A
8	University Dr./Birchknoll Dr. Ext.	N/A	N/A	N/A	N/A	N/A
9	University Dr./Toro Center Dr.	TWSC	12.3	B	13.8	B
10	Albertoni St./SR 91 EB Ramps	Signalized	0.527	A	0.763	C
11	Avalon Blvd./SR 91 WB On-Ramp	Signalized	0.5	A	0.499	A
12	Avalon Blvd./Albertoni St.	Signalized	0.589	A	0.77	C
13	Avalon Blvd./Victoria St.	Signalized	0.531	A	0.804	D
14	Central Ave./Artesia Blvd. WB	Signalized	0.757	C	0.714	C
15	Central Ave./Albertoni St./Artesia Blvd. EB	Signalized	0.76	C	0.737	C
16	Central Ave./Victoria St.	Signalized	0.541	A	0.63	B
17	Wilmington Ave./Artesia Blvd. WB	Signalized	0.696	B	0.703	C
18	Wilmington Ave./Artesia Blvd. EB	Signalized	0.685	B	0.71	C
19	Wilmington Ave./Victoria St.	Signalized	0.51	A	0.546	A
20	I-110 SB Off-Ramp/190th St.	Signalized	0.987	E	1.038	F
21	I-110 NB On-Ramp/190th St.	Signalized	0.437	A	0.673	B
22	Figueroa St./190th St./Victoria St.	Signalized	0.782	C	0.83	D
23	Broadway/Victoria St.	Signalized	0.554	A	0.704	C
24	Main St./Victoria St.	Signalized	0.606	B	0.81	D
25	Avalon Blvd./University Dr.	Signalized	0.434	A	0.626	B
26	Avalon Blvd./Del Amo Blvd.	Signalized	0.825	D	0.882	D
27	Avalon Blvd./I-405 NB Ramps	Signalized	0.476	A	0.467	A
28	Avalon Blvd./I-405 SB Ramps	Signalized	0.535	A	0.512	A
29	Central Ave./University Dr.	Signalized	0.549	A	0.477	A
30	Wilmington Ave./University Dr.	Signalized	0.471	A	0.52	A
31	Central Ave./Del Amo Blvd.	Signalized	0.703	C	0.673	B
32	Wilmington Ave./Del Amo Blvd.	Signalized	0.639	B	0.662	B
33	W. Artesia Blvd./Crenshaw Blvd.	Signalized	0.916	E	0.981	E
34	W. 190th St./S. Western Ave.	Signalized	0.818	D	0.759	C
35	W. Artesia Blvd./Vermont Ave.	Signalized	0.859	D	1.024	F
36	Alameda St./Compton Blvd.	Signalized	0.662	B	0.714	C
37	Alameda St./SR 91 EB Ramps	Signalized	0.567	A	0.766	C

*Intersection LOS was calculated using HCM 2000 Delay Method, because ICU cannot be calculated for TWSC intersections.

Exhibit 16: Existing Weekday Level of Service (LOS) at Study Intersections

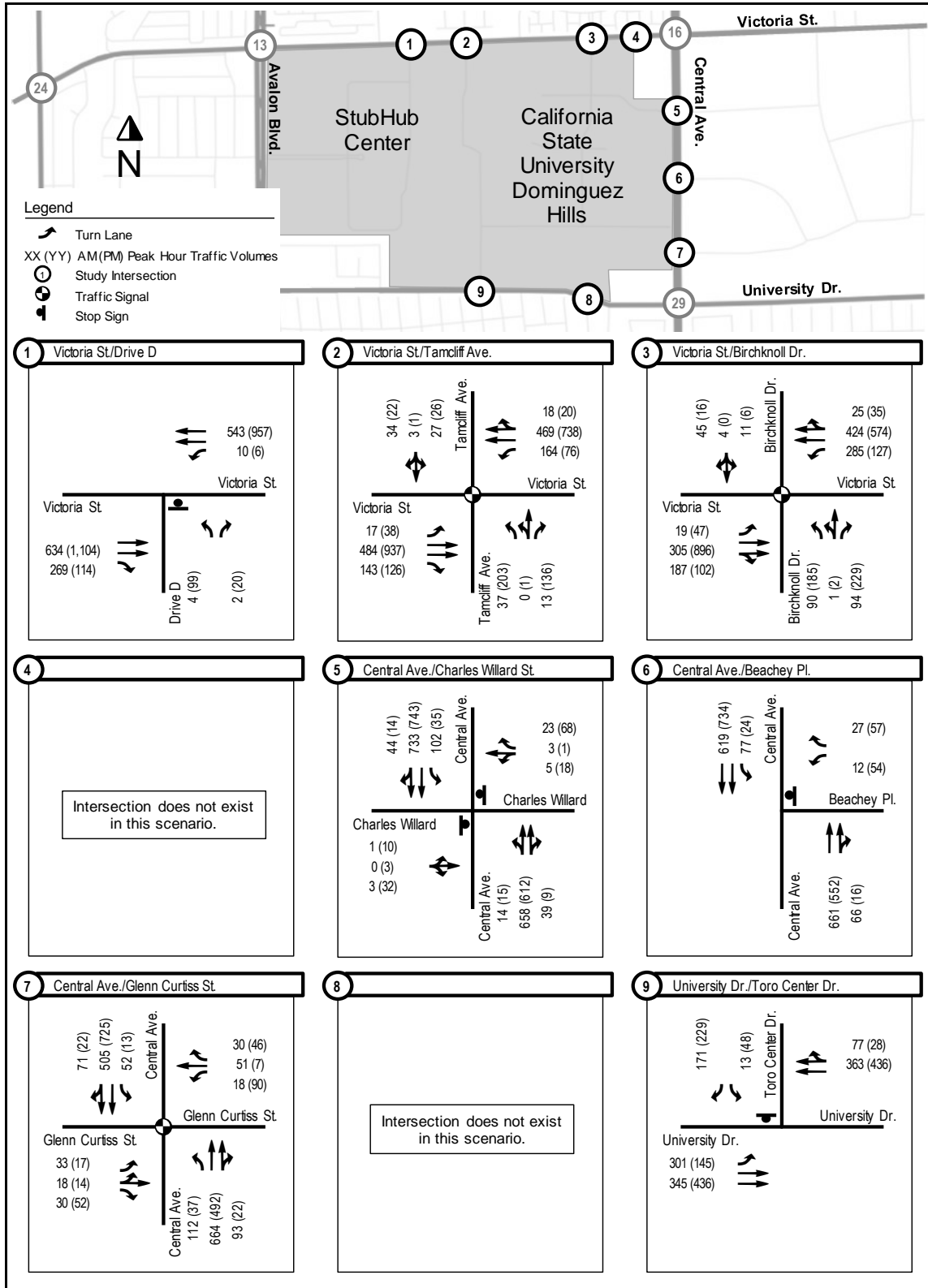


Exhibit 17: Existing Weekday Traffic Volumes and Lane Configurations

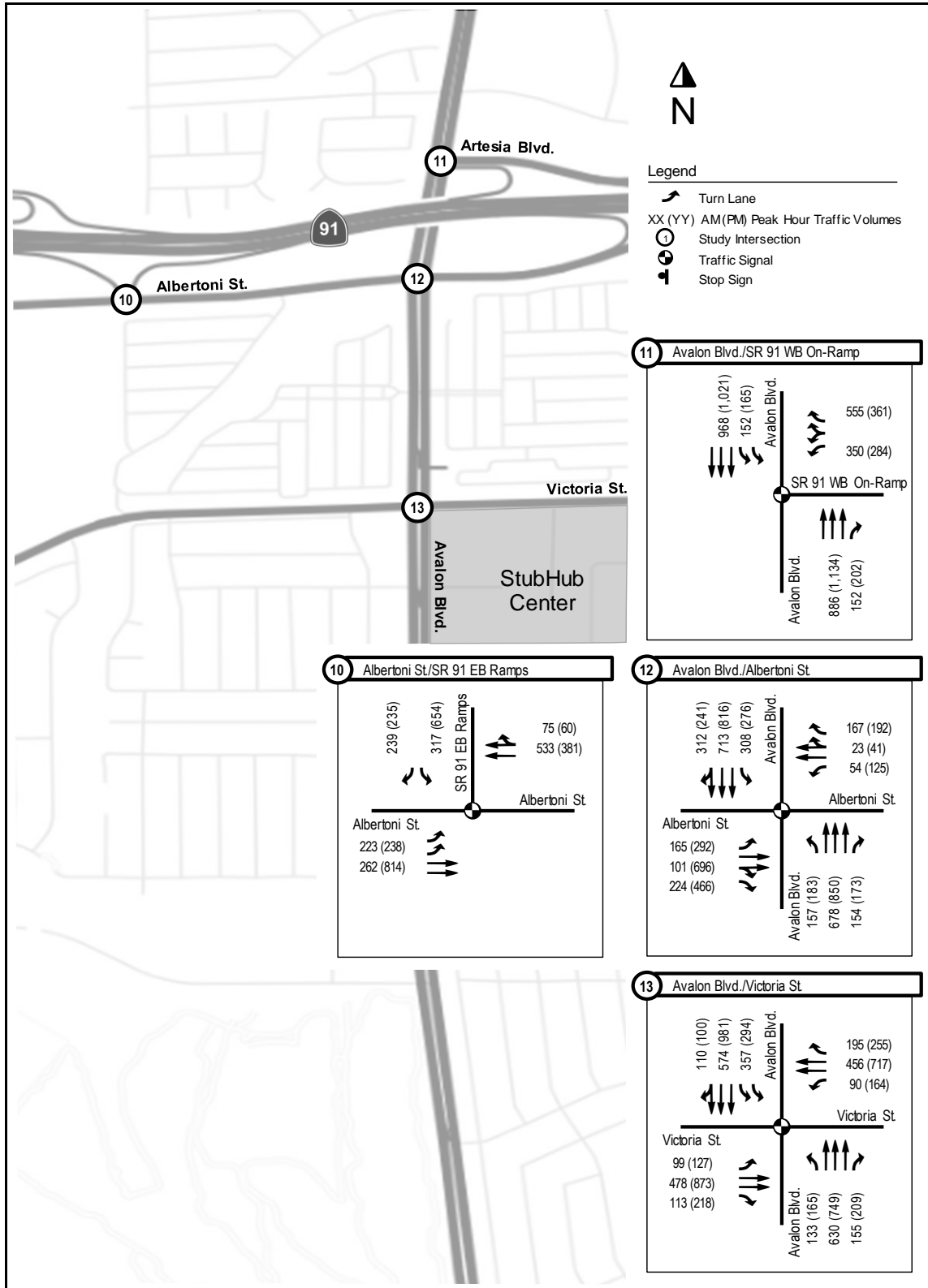


Exhibit 17: Existing Weekday Traffic Volumes and Lane Configurations (Map B)

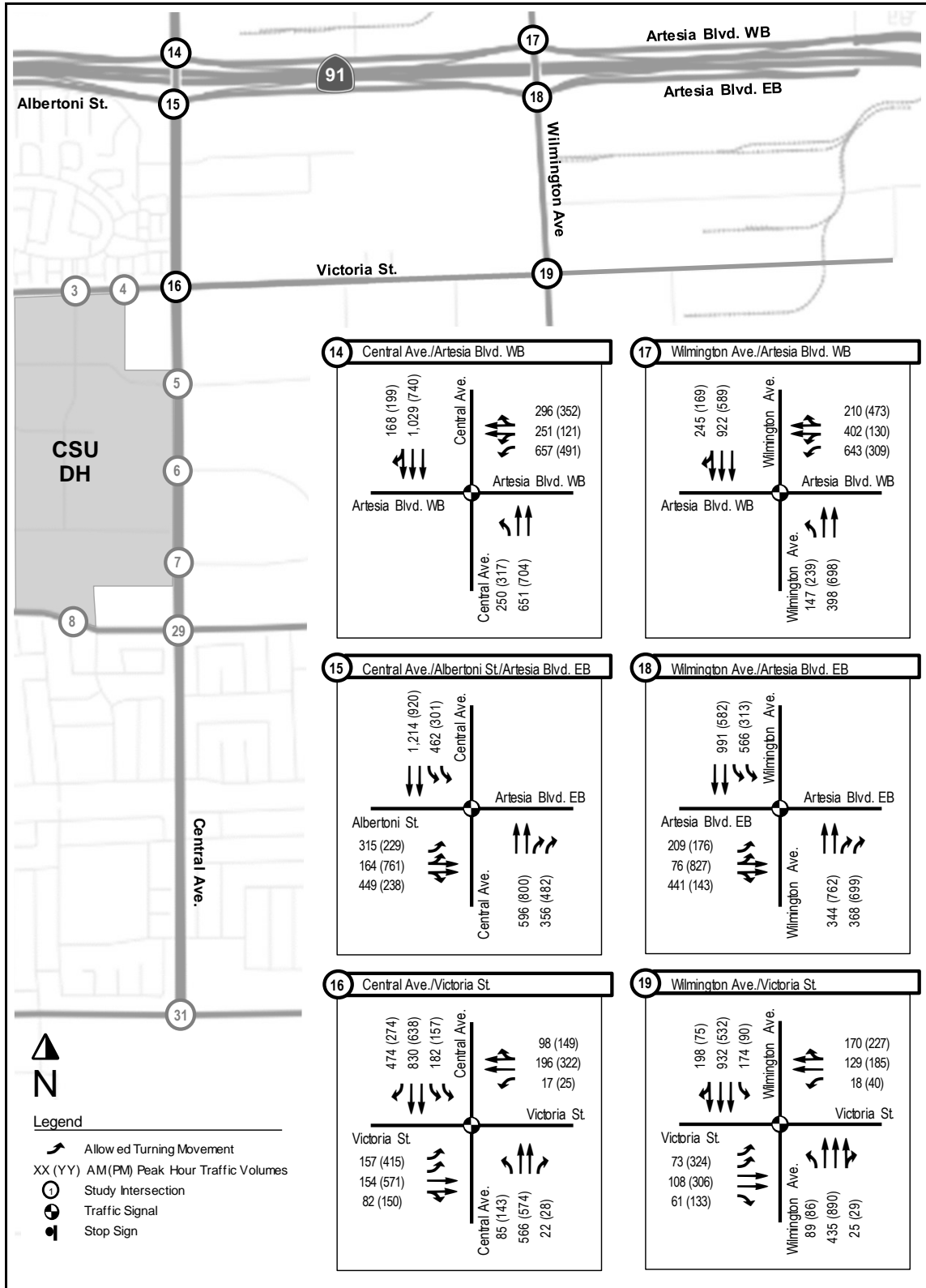


Exhibit 17: Existing Weekday Traffic Volumes and Lane Configurations (Map C)

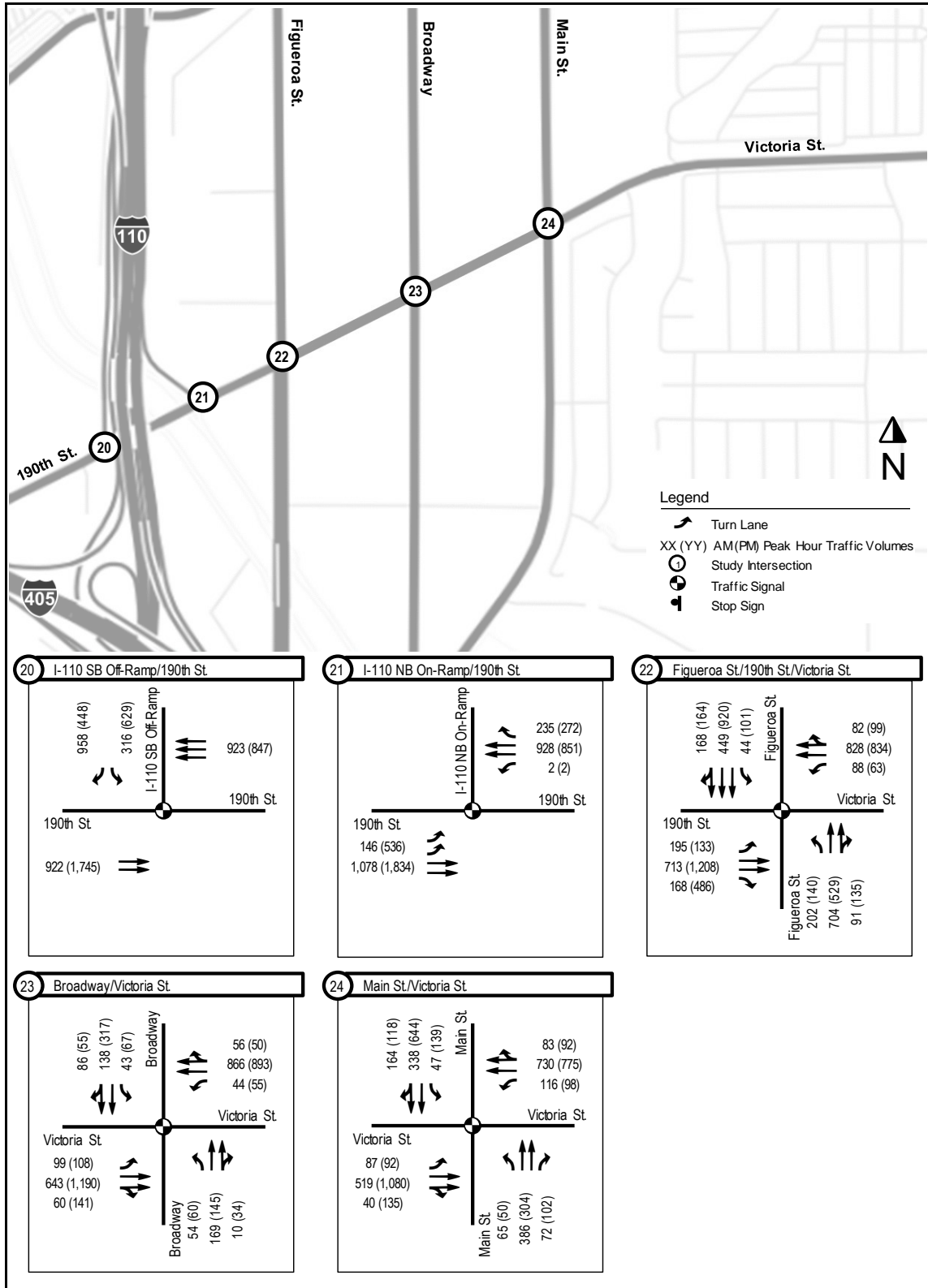


Exhibit 17: Existing Weekday Traffic Volumes and Lane Configurations (Map D)

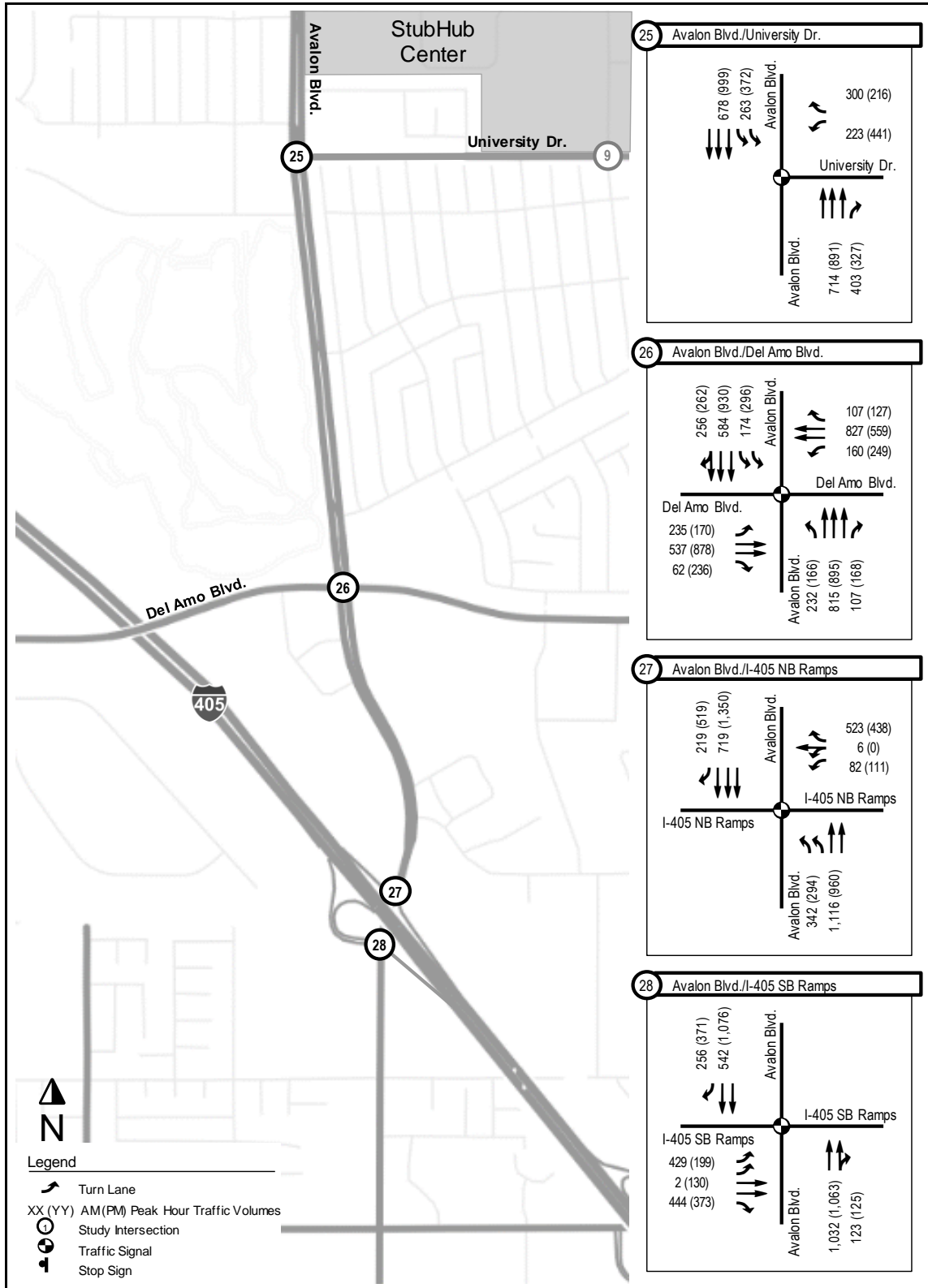


Exhibit 17: Existing Weekday Traffic Volumes and Lane Configurations (Map E)

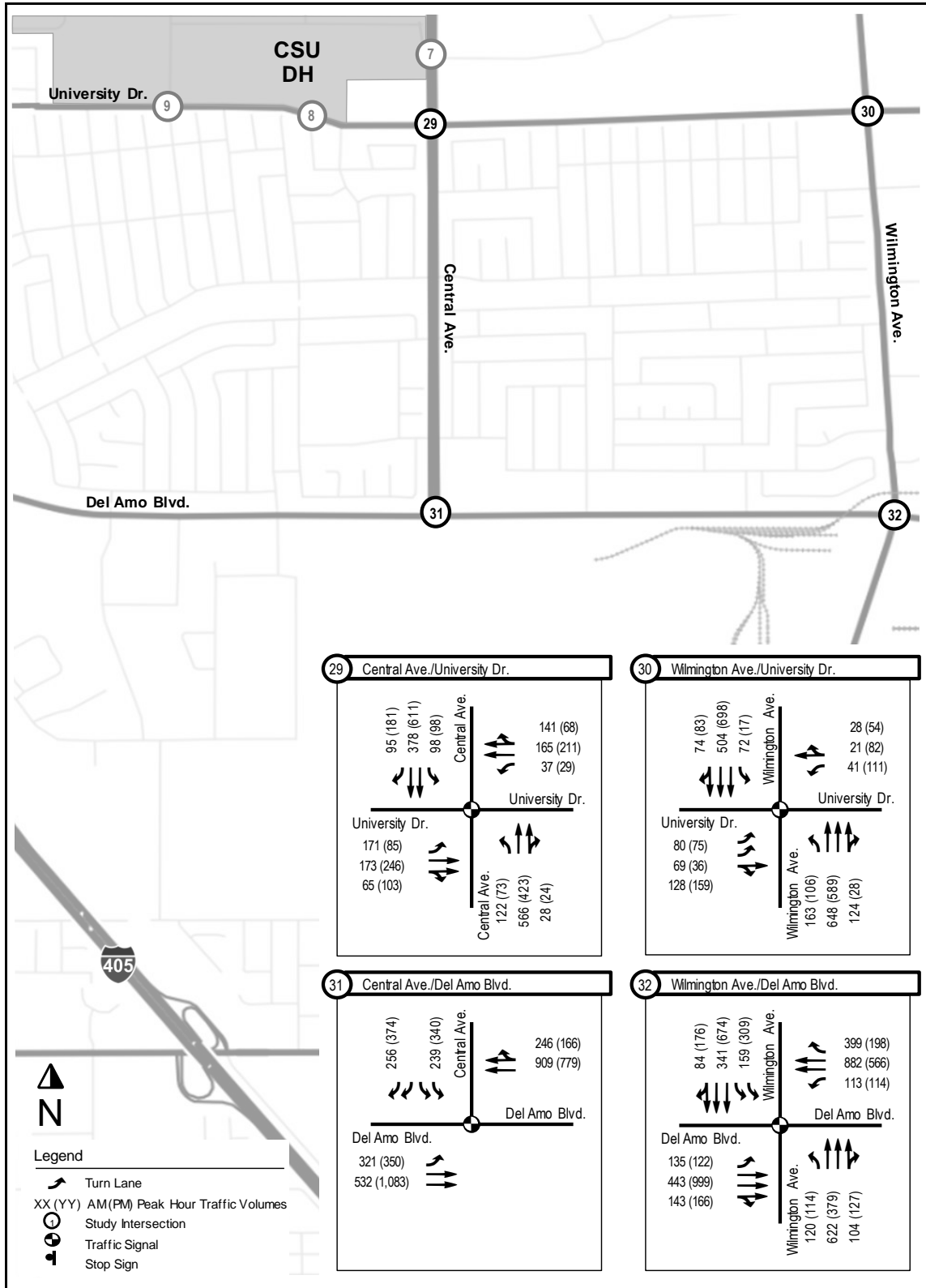


Exhibit 17: Existing Weekday Traffic Volumes and Lane Configurations (Map F)

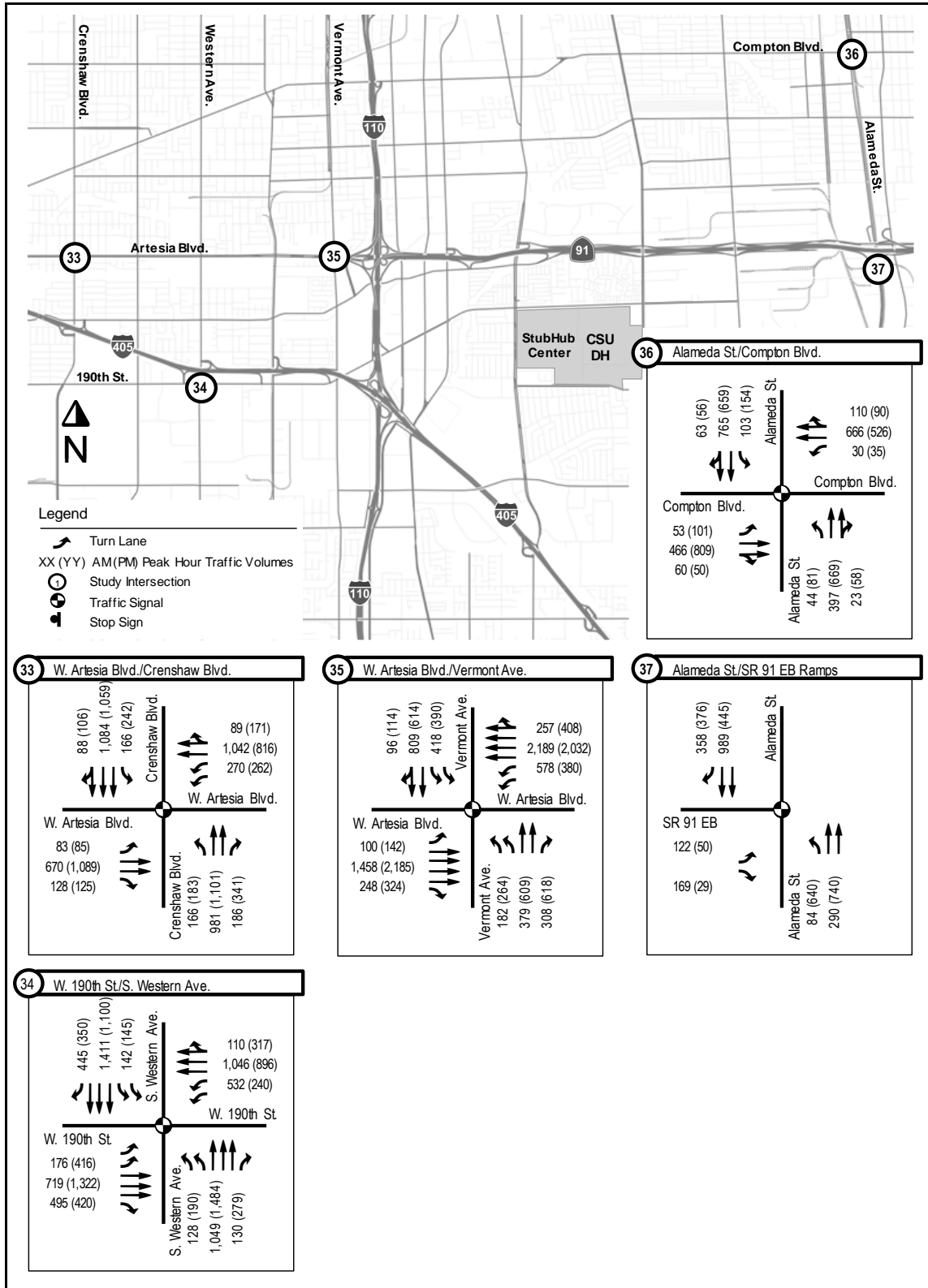


Exhibit 17: Existing Weekday Traffic Volumes and Lane Configurations (Map G)

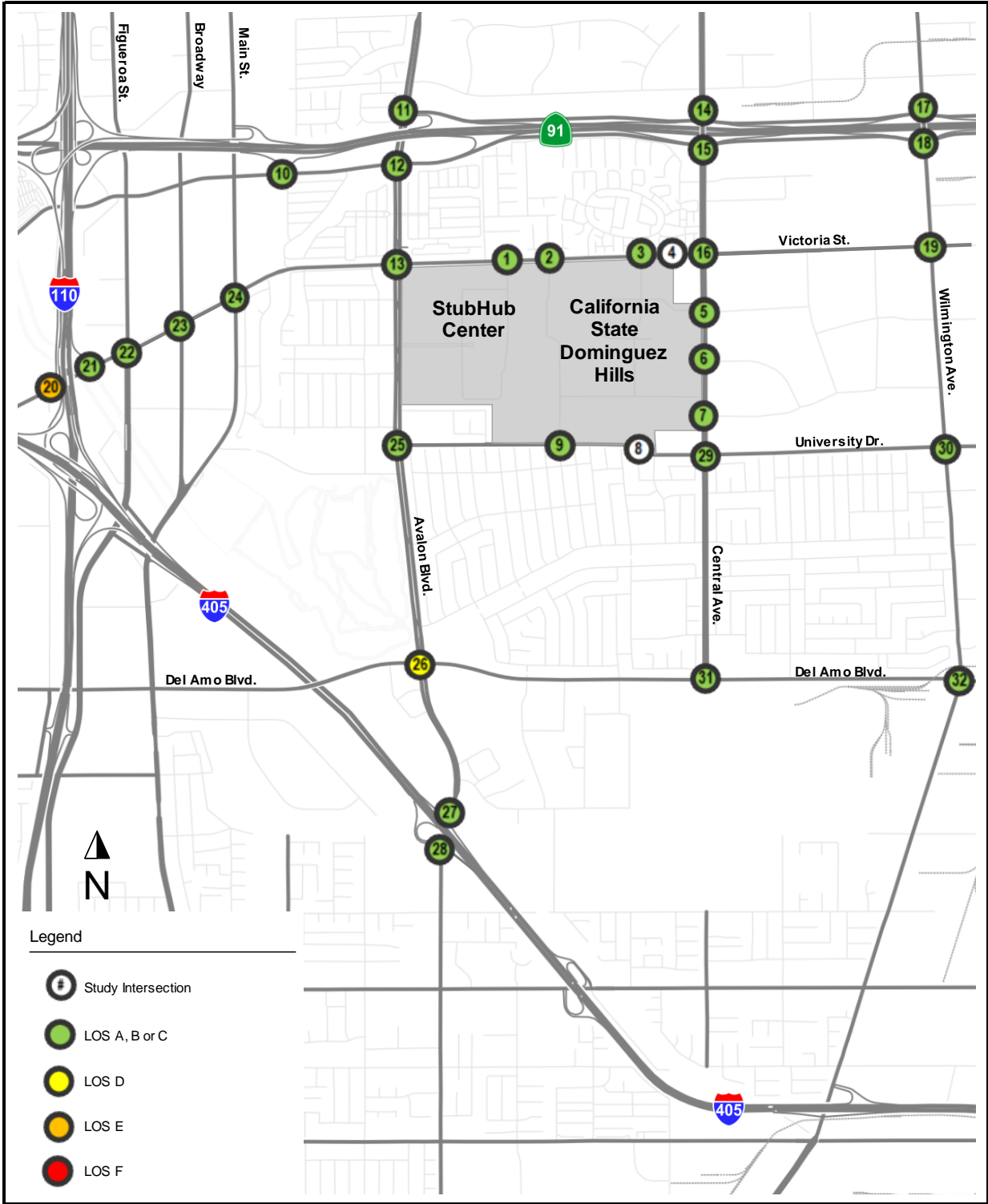


Exhibit 18: Existing Weekday AM Peak Hour LOS (Map)

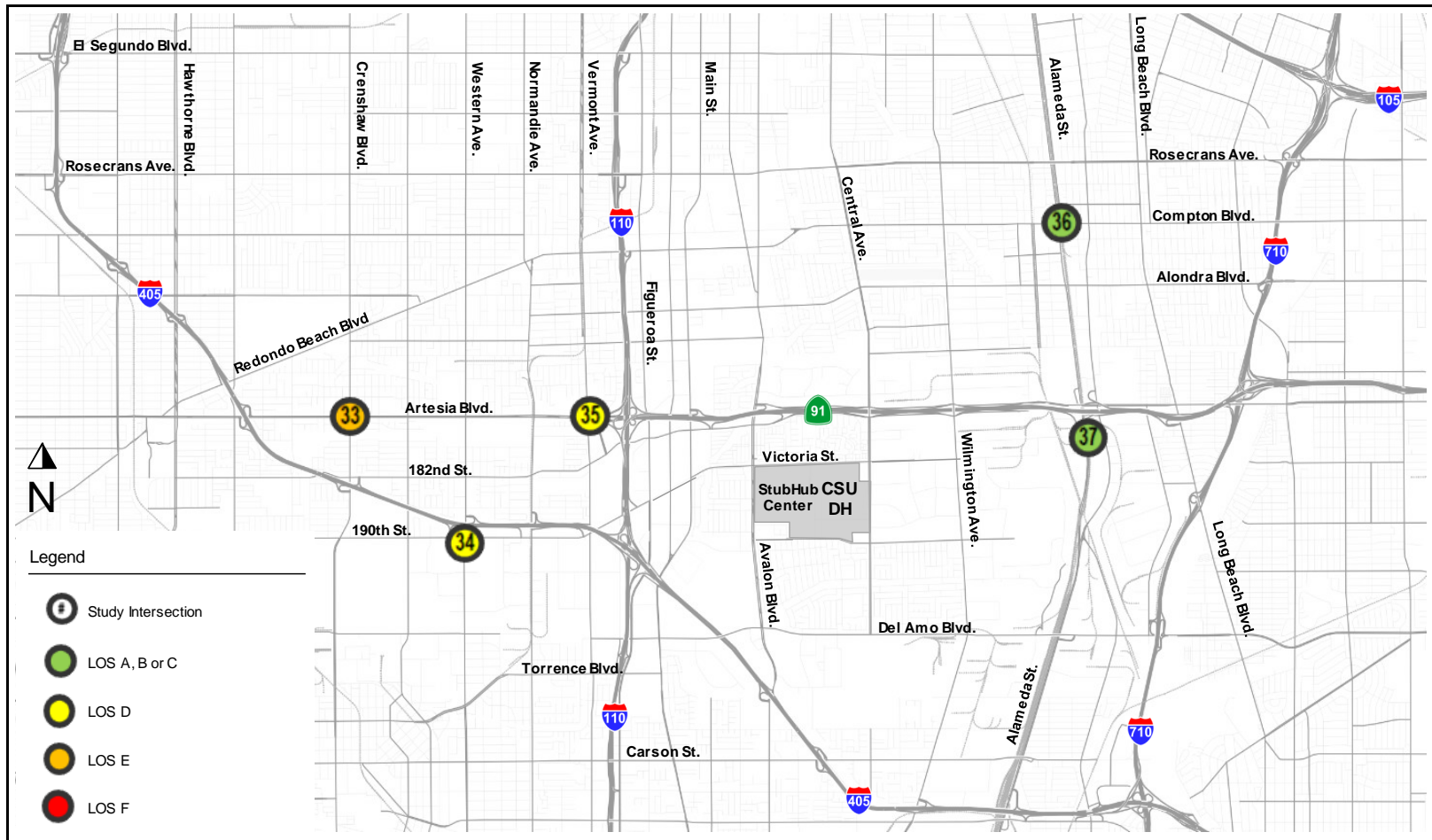


Exhibit 18: Existing Weekday AM Peak Hour LOS (Map)

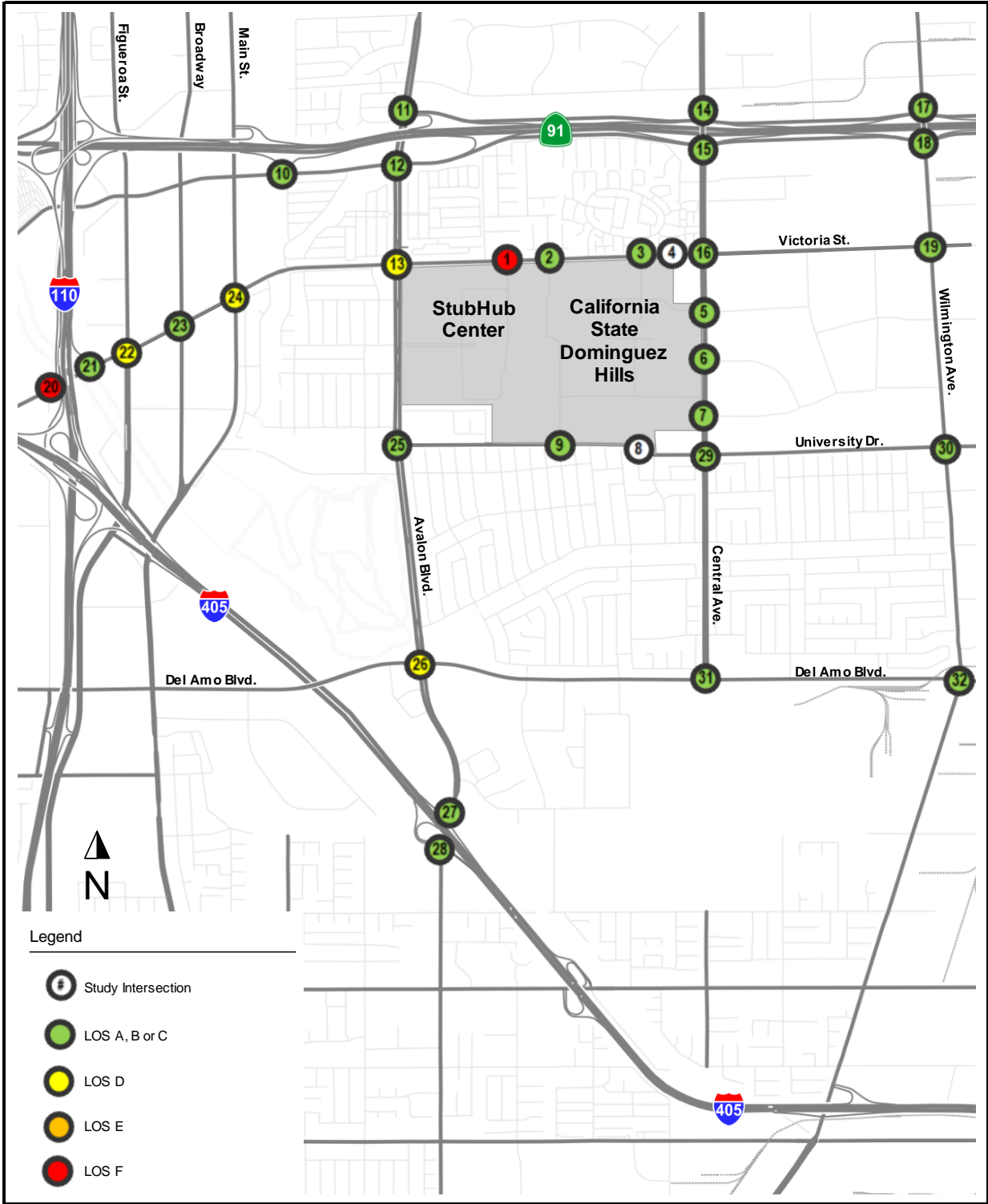


Exhibit 19: Existing Weekday PM Peak Hour LOS (Map)

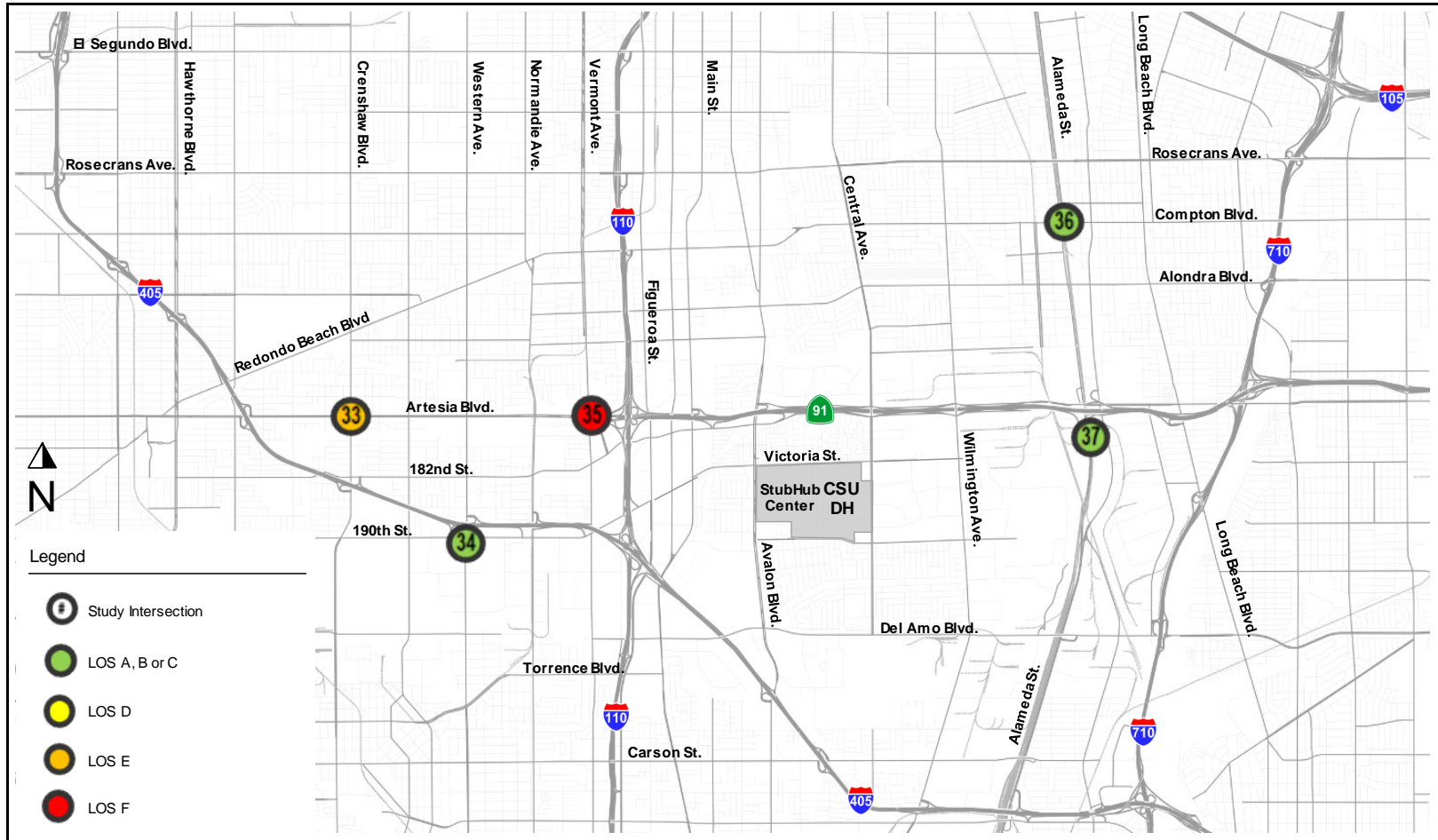


Exhibit 19: Existing Weekday PM Peak Hour LOS (Map)

ID	CMP Station	Fwy Rte	Post Mile	Location	Northbound/Eastbound								Southbound/Westbound							
					AM Peak Hour				PM Peak Hour				AM Peak Hour				PM Peak Hour			
					Demand	Capacity	D/C	LOS	Demand	Capacity	D/C	LOS	Demand	Capacity	D/C	LOS	Demand	Capacity	D/C	LOS
91-1		91	6.344	Jct. Rte. 110 to Avalon Blvd.	6,770	12,000	0.56	C	13,900	12,000	1.16	F(0)	9,000	4,000	2.25	F(3)	6,120	4,000	1.53	F(3)
91-2		91	7.426	Avalon Blvd. to Central Ave.	6,940	10,000	0.69	C	14,240	10,000	1.42	F(2)	9,220	10,000	0.92	D	6,270	10,000	0.63	C
91-3		91	8.435	Central Ave. to Wilmington Ave.	7,040	10,000	0.70	C	14,440	10,000	1.44	F(2)	9,350	10,000	0.94	E	6,360	10,000	0.64	C
91-4		91	9.162	Wilmington Ave. to Alameda St.	7,300	10,000	0.73	C	14,990	10,000	1.50	F(3)	9,700	10,000	0.97	E	6,600	10,000	0.66	C
91-5		91	10.271	Alameda St. to Alameda St./Santa Fe Ave.	7,300	8,000	0.91	D	14,990	8,000	1.87	F(3)	9,700	8,000	1.21	F(0)	6,600	8,000	0.83	D
91-6	1033	91	10.41	Alameda St./Santa Fe Ave. to Long Beach Blvd.	7,600	12,000	0.63	C	15,600	12,000	1.30	F(1)	10,100	12,000	0.84	D	6,870	12,000	0.57	C
91-7		91	11.096	Long Beach Blvd. to Jct. Rte. 710	7,600	12,000	0.63	C	15,600	12,000	1.30	F(1)	10,100	10,000	1.01	F(0)	6,870	10,000	0.69	D
91-8		91	11.681	Jct. Rte. 710 to Cherry Ave.	7,780	10,000	0.78	D	11,110	10,000	1.11	F(0)	12,490	10,000	1.25	F(0)	8,790	10,000	0.88	D
91-9	1034	91	13.094	Cherry Ave. to Paramount Blvd.	7,910	10,000	0.79	D	11,300	10,000	1.13	F(0)	12,700	12,000	1.06	F(0)	8,940	12,000	0.75	C
91-10		91	13.594	Paramount Blvd. to Downey Ave.	7,810	10,000	0.78	D	11,150	10,000	1.12	F(0)	12,530	10,000	1.25	F(0)	8,820	10,000	0.88	D
91-11		91	14.103	Downey Ave. to Jct. Rte. 19	7,780	12,000	0.65	C	11,110	12,000	0.93	D	12,490	10,000	1.25	F(0)	8,790	10,000	0.88	D
91-12		91	14.618	Jct. Rte. 19 to Clark Ave.	7,200	10,000	0.72	C	10,280	10,000	1.03	F(0)	11,550	8,000	1.44	F(2)	8,130	8,000	1.02	F(0)
91-13		91	15.105	Clark Ave. to Bellflower Blvd.	7,590	12,000	0.63	C	10,840	12,000	0.90	D	12,190	10,000	1.22	F(0)	8,580	10,000	0.86	D
91-14		91	15.614	Bellflower Blvd. to Jct. Rte. 605	7,510	12,000	0.63	C	10,730	12,000	0.89	D	12,060	10,000	1.21	F(0)	8,490	10,000	0.85	D
110-1	1045	110	1.23	Channel St. to C St.	4,300	8,000	0.54	B	3,100	8,000	0.39	B	3,470	8,000	0.43	B	4,200	8,000	0.53	B
110-2		110	2.771	C St. to Anaheim St.	4,500	10,000	0.45	B	3,240	10,000	0.32	A	3,630	8,000	0.45	B	4,390	8,000	0.55	C
110-3		110	3.264	Anaheim St. to Jct. Rte. 1	4,890	10,000	0.49	B	3,520	10,000	0.35	A	3,940	10,000	0.39	B	4,770	10,000	0.48	B
110-4		110	4.061	Jct. Rte. 1 to Sepulveda Blvd.	6,840	8,000	0.86	D	4,930	8,000	0.62	C	5,520	8,000	0.69	C	6,680	8,000	0.84	D
110-5		110	5.451	Sepulveda Blvd. to Carson St.	8,890	8,000	1.11	F(0)	6,410	8,000	0.80	D	7,180	8,000	0.90	D	8,690	8,000	1.09	F(0)
110-6		110	7.016	Carson St. to Torrance/Del Amo Blvd.	10,260	8,000	1.28	F(1)	7,400	8,000	0.93	D	8,280	8,000	1.04	F(0)	10,020	8,000	1.25	F(0)
110-7		110	8.028	Torrance/Del Amo Blvd. to Jct. Rte. 405	10,850	8,000	1.36	F(2)	7,820	8,000	0.98	E	8,750	8,000	1.09	F(0)	10,600	8,000	1.33	F(1)
110-8		110	8.775	Jct. Rte. 405 to Jct. Rte. 91	13,490	12,000	1.12	F(0)	9,720	12,000	0.81	D	10,880	8,000	1.36	F(2)	13,170	10,000	1.65	F(3)
110-9		110	9.87	Jct. Rte. 91 to Redondo Beach Blvd.	8,870	12,000	0.74	C	9,020	12,000	0.75	C	9,700	12,000	0.81	D	9,350	12,000	0.78	D
110-10		110	11.239	Redondo Beach Blvd. to Rosecrans Ave.	9,230	11,000	0.84	D	9,390	11,000	0.85	D	10,090	11,000	0.92	D	9,730	11,000	0.88	D
110-11		110	11.891	Rosecrans Ave. to El Segundo Blvd.	9,630	11,000	0.88	D	9,790	11,000	0.89	D	10,530	11,000	0.96	E	10,140	11,000	0.92	D
110-12		110	12.898	El Segundo Blvd. to Jct. Rte. 105	9,810	11,000	0.89	D	9,980	11,000	0.91	D	10,720	13,000	0.82	D	10,330	13,000	0.79	D
110-13		110	13.82	Jct. Rte. 105 to Century Blvd.	11,000	14,000	0.79	D	11,190	14,000	0.80	D	12,020	14,000	0.86	D	11,590	14,000	0.83	D
110-14		110	14.967	Century Blvd. to Manchester Ave.	11,820	12,000	0.99	E	12,030	12,000	1.00	E	12,930	12,000	1.08	F(0)	12,460	12,000	1.04	F(0)
110-15	1046	110	15.976	Manchester Ave. to Florence Ave.	11,500	12,000	0.96	E	11,700	12,000	0.98	E	12,580	12,000	1.05	F(0)	12,120	12,000	1.01	F(0)
110-16		110	16.981	Florence Ave. to Gage Ave.	11,870	12,000	0.99	E	12,070	12,000	1.01	F(0)	12,730	12,000	1.06	F(0)	12,280	12,000	1.02	F(0)
110-17	1047	110	17.514	Gage Ave. to Slauson Ave.	11,800	12,000	0.98	E	12,000	12,000	1.00	E	12,660	12,000	1.06	F(0)	12,200	12,000	1.02	F(0)
110-18		110	17.98	Slauson Ave. to 51st St.	11,360	10,000	1.14	F(0)	11,550	10,000	1.16	F(0)	12,180	10,000	1.22	F(0)	11,740	10,000	1.17	F(0)
110-19		110	18.495	51st St. to Vernon Ave.	11,580	10,000	1.16	F(0)	11,780	10,000	1.18	F(0)	12,420	12,000	1.04	F(0)	11,970	12,000	1.00	E
110-20		110	18.998	Vernon Ave. to Martin Luther King Jr. Blvd.	11,580	12,000	0.97	E	11,780	12,000	0.98	E	12,420	12,000	1.04	F(0)	11,970	12,000	1.00	E
110-21		110	19.502	Martin Luther King Jr. Blvd. to Exposition Blvd.	10,480	12,000	0.87	D	10,650	12,000	0.89	D	11,240	10,000	1.12	F(0)	10,830	10,000	1.08	F(0)
110-22		110	19.996	Exposition Blvd. to Jct. Rte. 10	10,150	12,000	0.85	D	10,320	12,000	0.86	D	10,880	12,000	0.91	D	10,490	12,000	0.87	D
405-1		405	3.324	Lakewood Blvd. to Cherry Ave.	11,640	10,000	1.16	F(0)	9,890	10,000	0.99	E	8,680	10,000	0.87	D	10,850	10,000	1.09	F(0)
405-2		405	4.879	Cherry Ave. to Orange Ave.	12,210	10,000	1.22	F(0)	10,370	10,000	1.04	F(0)	9,100	8,000	1.14	F(0)	11,380	8,000	1.42	F(2)
405-3		405	5.388	Orange Ave. to Atlantic Ave.	12,740	8,000	1.59	F(3)	10,820	8,000	1.35	F(1)	9,500	8,000	1.19	F(0)	11,870	8,000	1.48	F(3)
405-4		405	6.076	Atlantic Ave. to Long Beach Blvd	12,530	8,000	1.57	F(3)	10,650	8,000	1.33	F(1)	9,350	12,000	0.78	D	11,680	12,000	0.97	E
405-5		405	6.34	Long Beach Blvd to Jct. Rte. 710	12,450	12,000	1.04	F(0)	10,580	12,000	0.88	D	9,290	10,000	0.93	D	11,610	10,000	1.16	F(0)
405-6	1066	405	7.596	Jct. Rte. 710 to Alameda St.	11,800	10,000	1.18	F(0)	10,020	10,000	1.00	E	8,800	10,000	0.88	D	11,000	10,000	1.10	F(0)
405-7		405	8.784	Alameda St. to Wilmington Ave.	11,390	10,000	1.14	F(0)	9,680	10,000	0.97	E	8,500	10,000	0.85	D	10,620	10,000	1.06	F(0)
405-8		405	9.556	Wilmington Ave. to Carson St.	10,600	8,000	1.33	F(1)	9,160	8,000	1.15	F(0)	9,090	8,000	1.14	F(0)	10,980	8,000	1.37	F(2)
405-9		405	10.541	Carson St. to Avalon Blvd.	10,440	8,000	1.31	F(1)	9,020	8,000	1.13	F(0)	8,950	8,000	1.12	F(0)	10,810	8,000	1.35	F(1)
405-10	1067	405	11.224	Avalon Blvd. to Jct. Rte. 110	11,200	10,000	1.12	F(0)	9,680	10,000	0.97	E	9,600	10,000	0.96	E	11,600	10,000	1.16	F(0)
405-11		405	12.97	Jct. Rte. 110 to Vermont Ave.	11,200	10,000	1.12	F(0)	9,730	10,000	0.97	E	8,350	8,000	1.04	F(0)	10,320	8,000	1.29	F(1)
405-12		405	13.28	Vermont Ave. to Normandie Ave.	11,680	12,000	0.97	E	10,140	12,000	0.85	D	8,710	10,000	0.87	D	10,750	10,000	1.08	F(0)
405-13		405	13.826	Normandie Ave. to Western Ave.	10,930	10,000	1.09	F(0)	9,490	10,000	0.95	E	8,150	8,000	1.02	F(0)	10,070	8,000	1.26	F(1)
405-14		405	14.398	Western Ave. to Crenshaw Blvd.	10,500	8,000	1.31	F(1)	9,110	8,000	1.14	F(0)	7,830	8,000	0.98	E	9,670	8,000	1.21	F(0)
405-15		405	15.447	Crenshaw Blvd. to Artesia Blvd.	10,260	8,000	1.28	F(1)	8,910	8,000	1.11	F(0)	7,650	8,000	0.96	E	9,450	8,000	1.18	F(0)
405-16		405	16.573	Artesia Blvd. to Hawthorne Blvd.	10,380	10,000	1.04	F(0)	9,010	10,000	0.90	D	7,740	8,000	0.97	E	9,560	8,000	1.20	F(0)
405-17		405	17.589	Hawthorne Blvd. to Inglewood Ave.	10,890	10,000	1.09	F(0)	9,450	10,000	0.95	E	8,120	8,000	1.02	F(0)	10,030	8,000	1.25	F(0)
405-18	1068	405	18.233	Inglewood Ave. to Rosecrans Ave.	11,400	10,000	1.14	F(0)	9,900	10,000	0.99	E	8,500	10,000	0.85	D	10,500	10,000	1.05	F(0)
710-1		710	12.97	Jct. Rte. 91 to Alondra Blvd.	10,580	12,000	0.88	D	16,390	12,000	1.37	F(2)	10,290	12,000	0.86	D	8,280	12,000	0.69	C
710-2		710	13.945	Alondra Blvd. to Jct. Rte. 105	10,940	12,000	0.91	D	16,940	12,000	1.41	F(2)	10,630	12,000	0.89	D	8,560	12,000	0.71	C

Note: D/C is demand-to-capacity ratio.

Exhibit 20: Existing Weekday Level of Service (LOS) for Study Freeway Locations

4.2 Existing Sunday (27,000 Seats) Conditions

The existing conditions at study intersections was determined using traffic counts collected on a Sunday in February 2017 in the peak pre-event period (12:00PM to 2:00PM) and peak post-game period (4:00PM to 6:00PM) (see Appendix D). The trips for the 27,000-seat event were taken from the 2001 EIR and added to these counts for the Existing Sunday (27,000-Seats) traffic volumes¹⁰. Exhibit 21 shows the pre-game and Exhibit 22 shows the post-game peak hour traffic volumes by turning movement at each study intersection, along with the existing lane configurations (see Exhibit 1 for a key map of study intersection locations).

4.2.1 Existing Sunday (27,000 Seats) Intersection Level of Service

Exhibit 23 shows in tabular format the Existing Sunday level of service (LOS) based on the traffic volumes shown in Exhibit 21 and Exhibit 22 (also see Appendix E). The LOS is also shown on maps in Exhibit 24, for the pre-game peak hour condition, and Exhibit 25 for the post-game peak hour condition. As shown, all intersections have an LOS of D or better.

¹⁰ National Training Center California State University Dominguez Hills – Final Environmental Impact Report, Terry A. Hayes Associates, April 2001

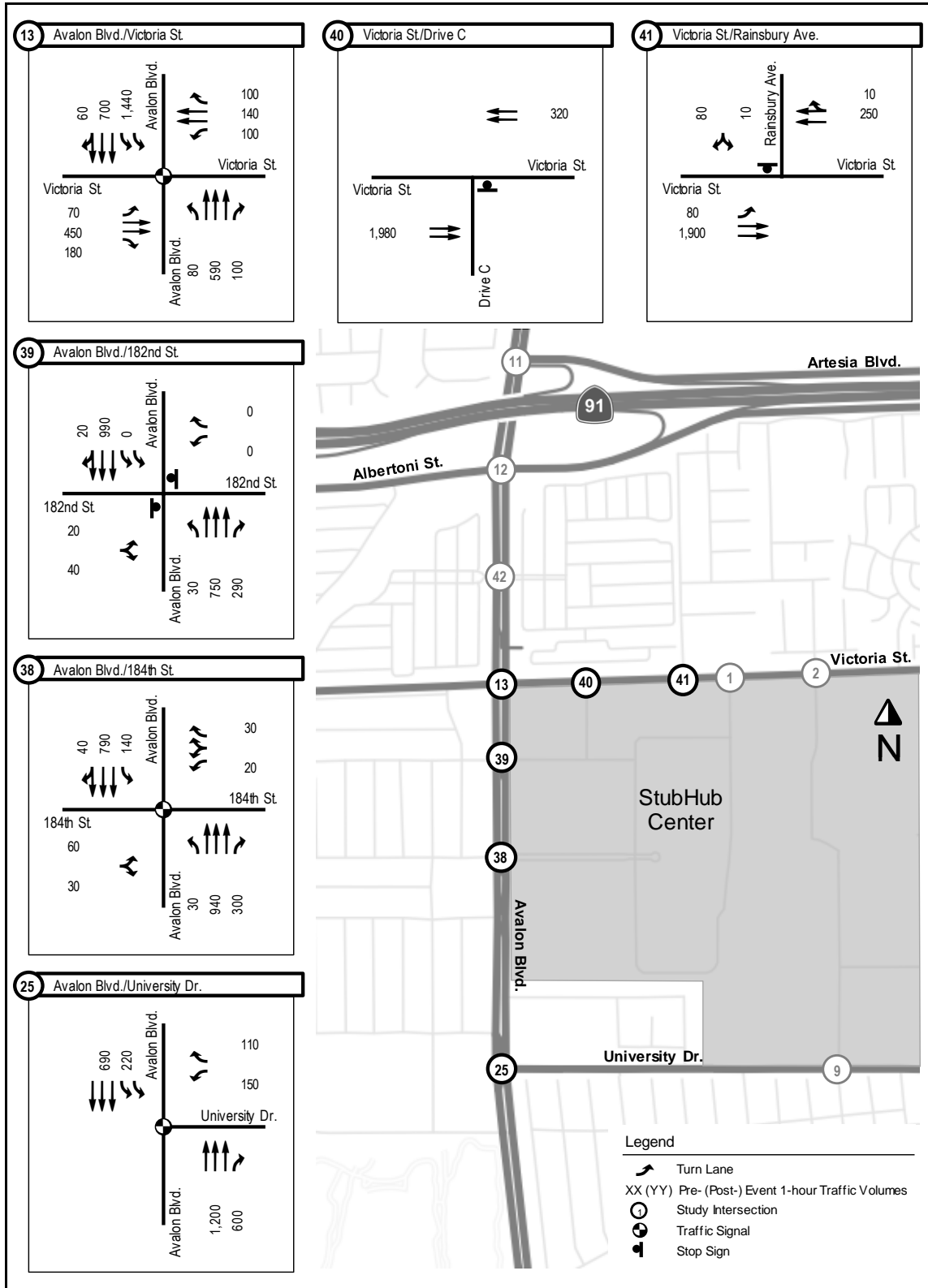


Exhibit 21: Existing Sunday Pre-Game Volumes and Lane Configurations

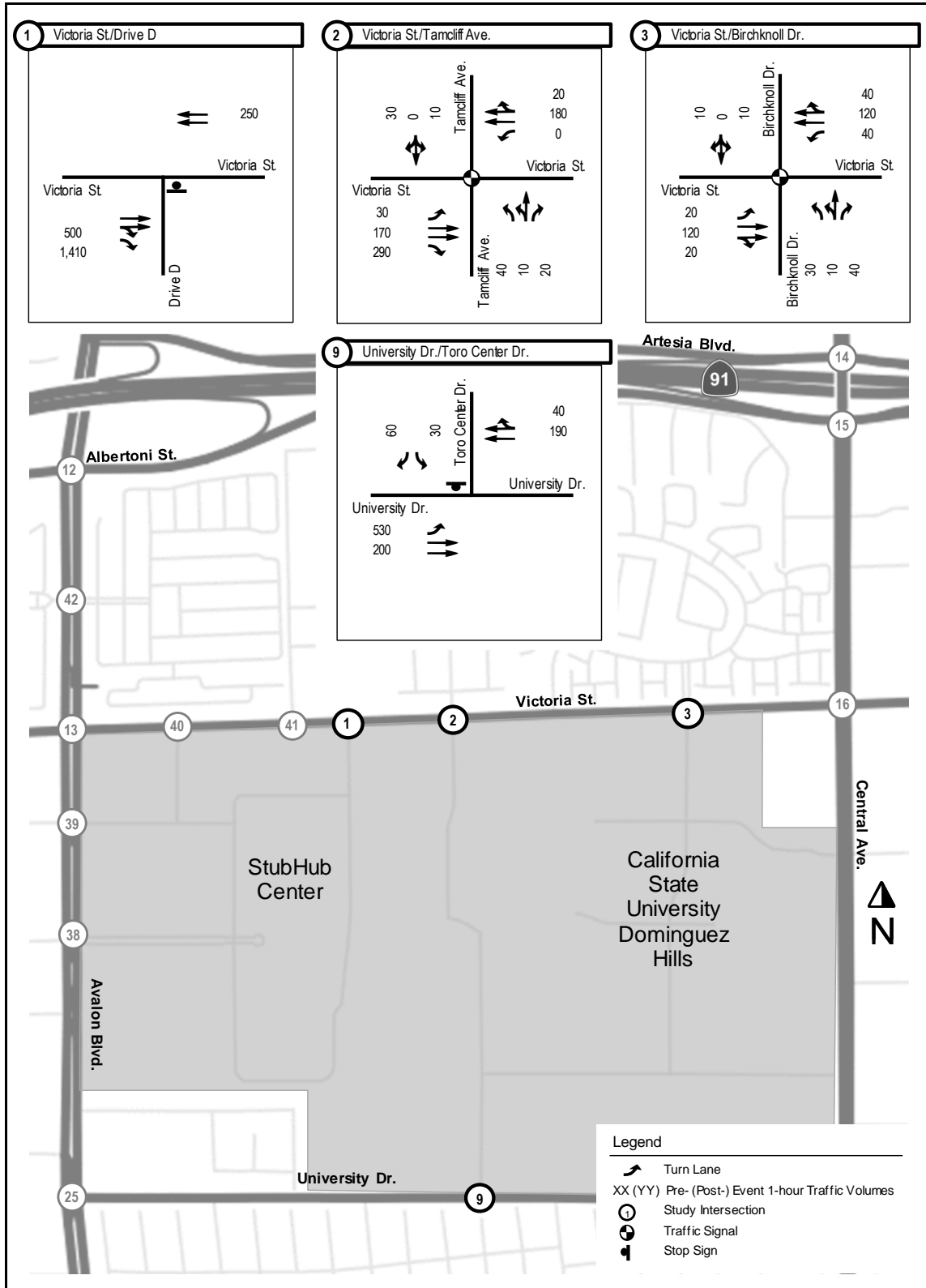


Exhibit 21: Existing Sunday Pre-Game Volumes and Lane Configurations (Map B)

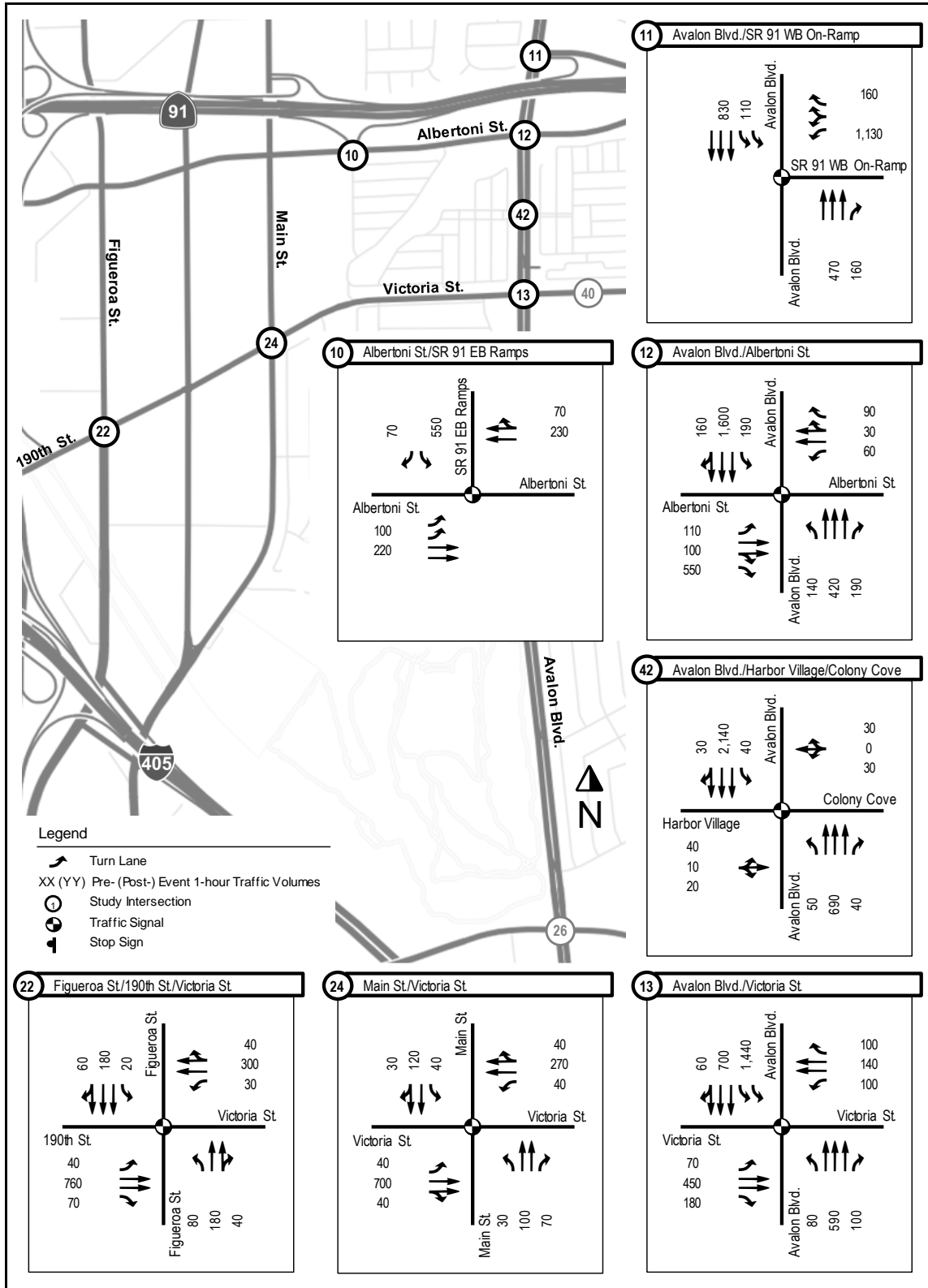


Exhibit 21: Existing Sunday Pre-Game Volumes and Lane Configurations (Map C)

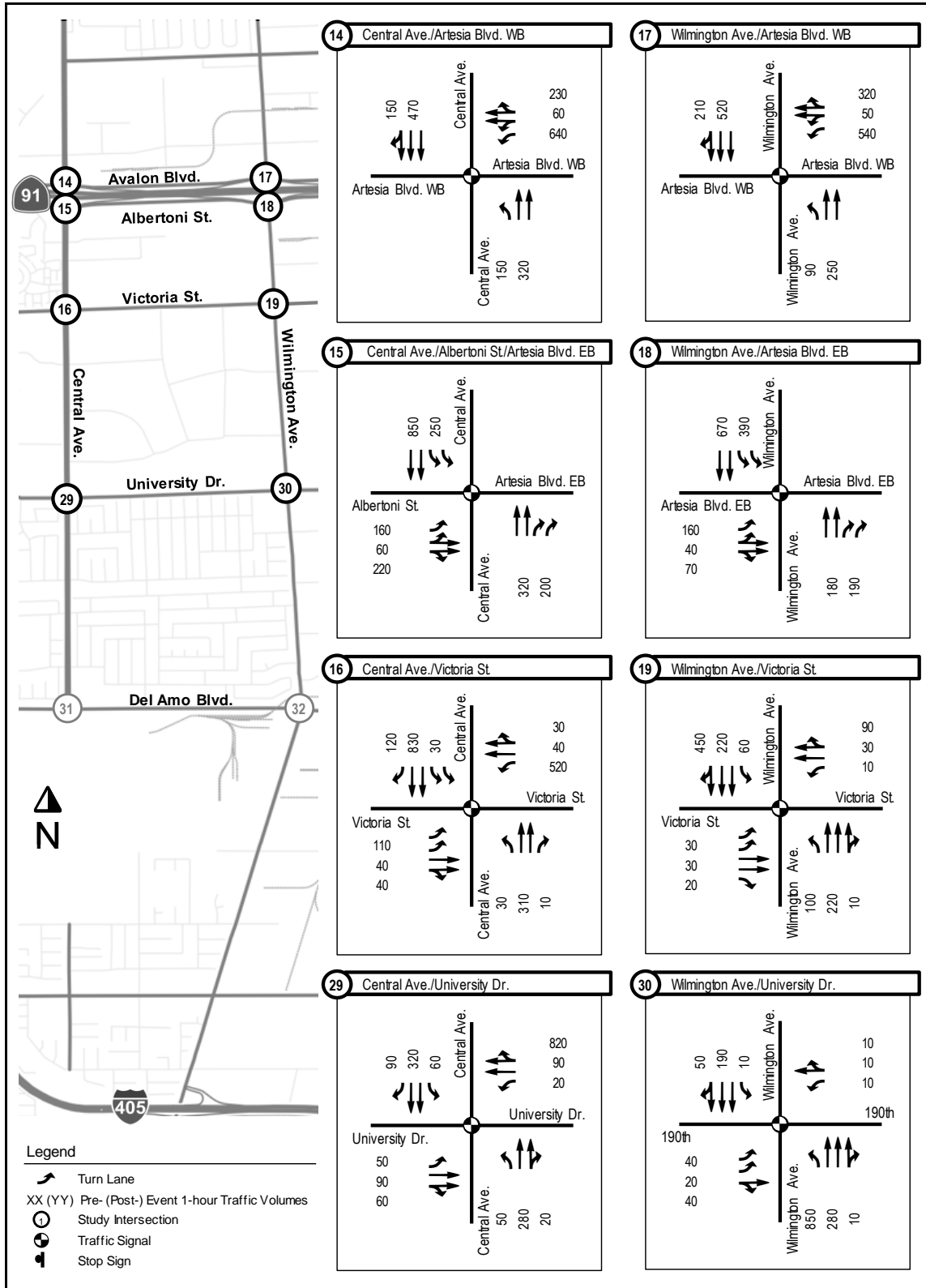


Exhibit 21: Existing Sunday Pre-Game Volumes and Lane Configurations (Map D)

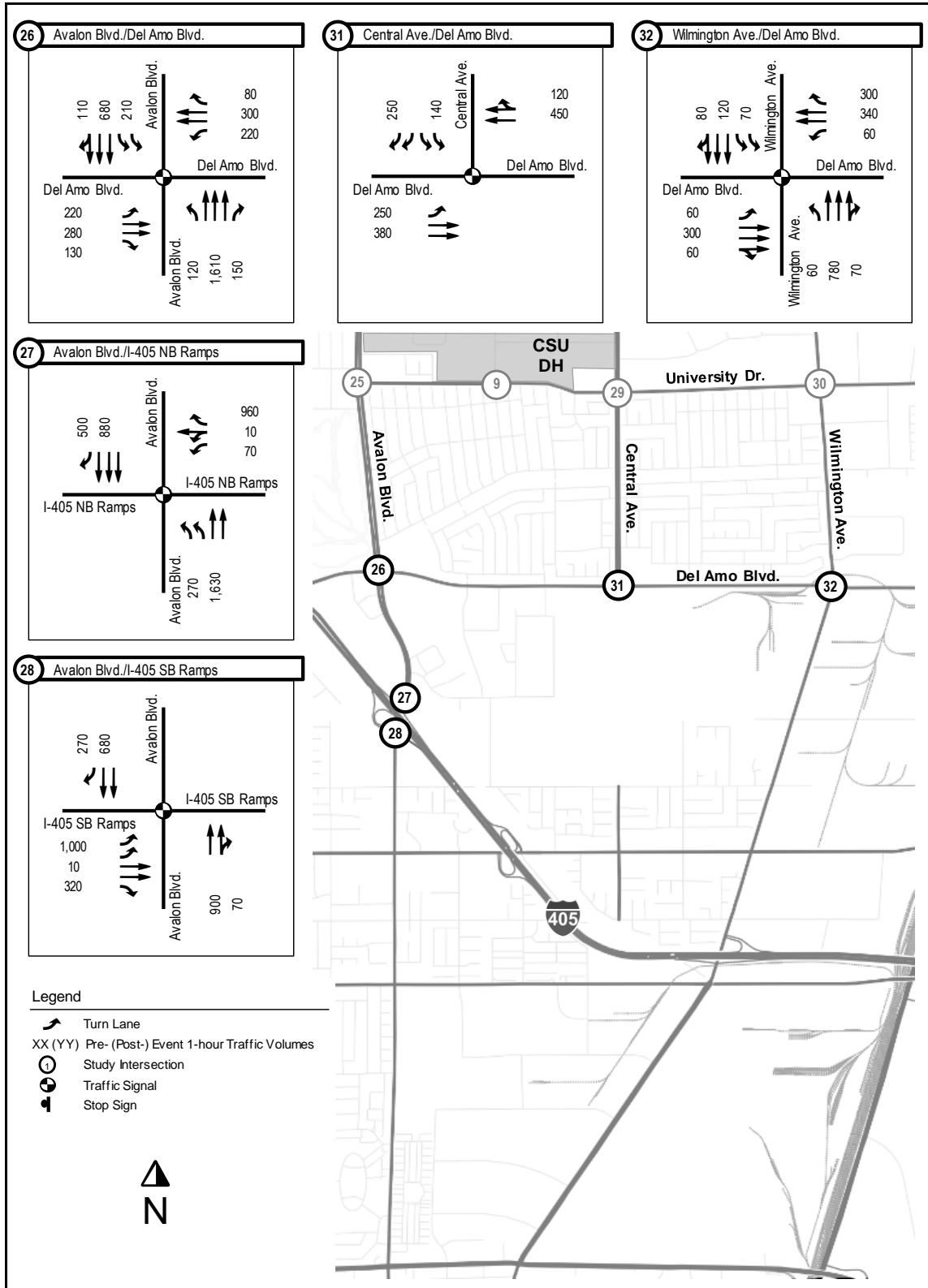


Exhibit 21: Existing Sunday Pre-Game Volumes and Lane Configurations (Map E)

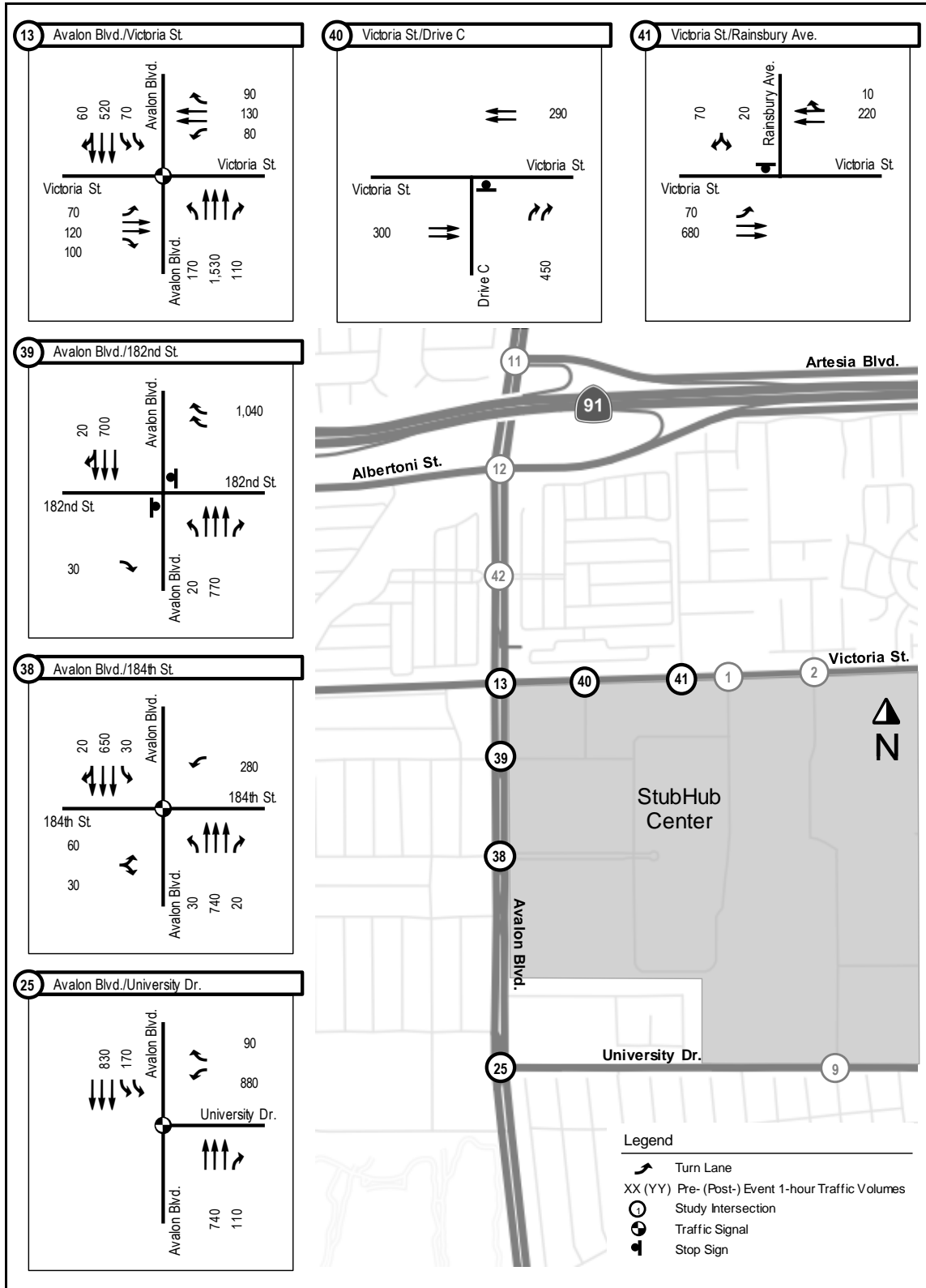


Exhibit 22: Existing Sunday (27,000-Seats) Post-Game Volumes and Lane Configurations

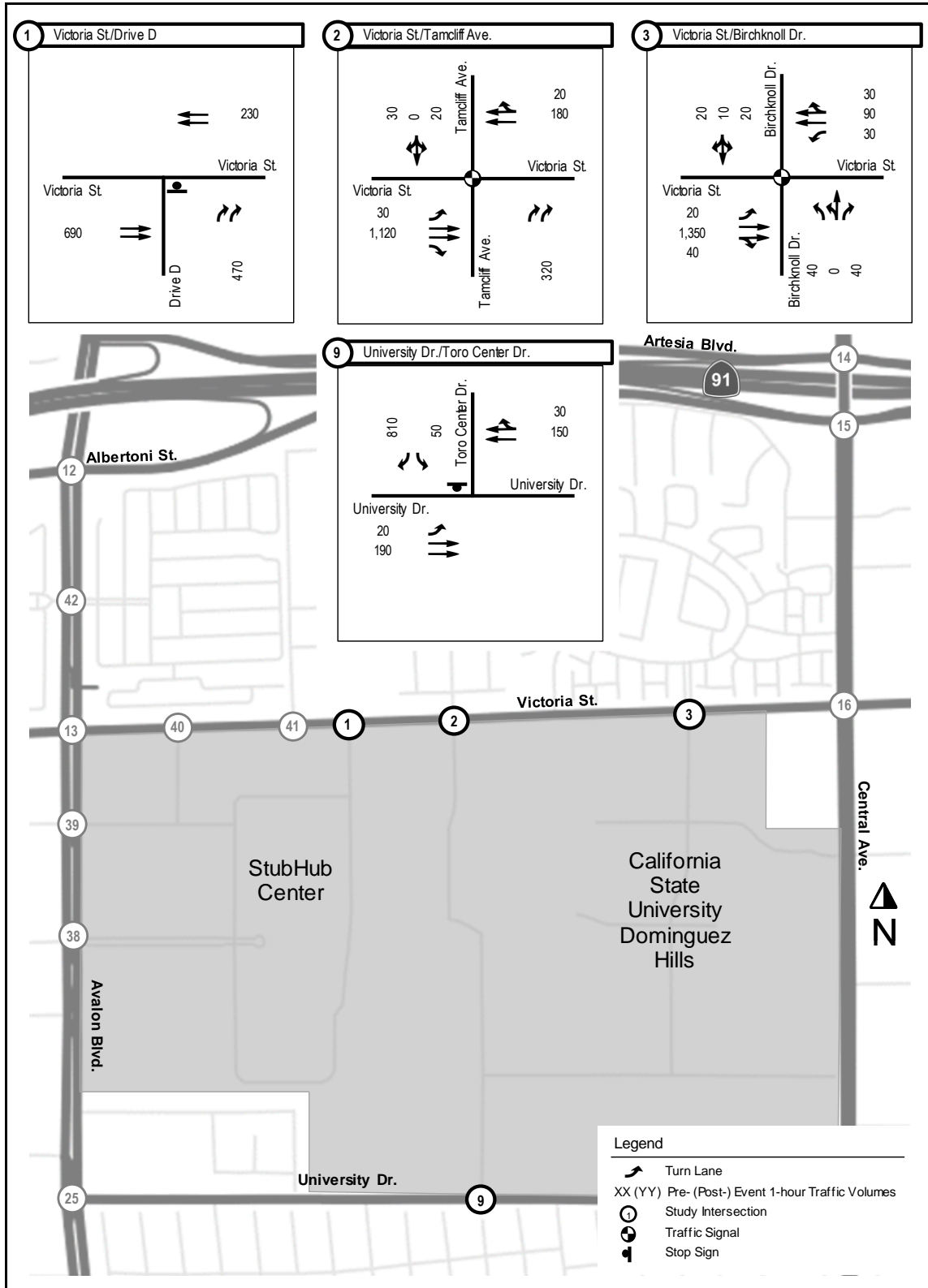


Exhibit 22: Existing Sunday (27,000-Seats) Post-Game Volumes and Lane Configurations (Map B)

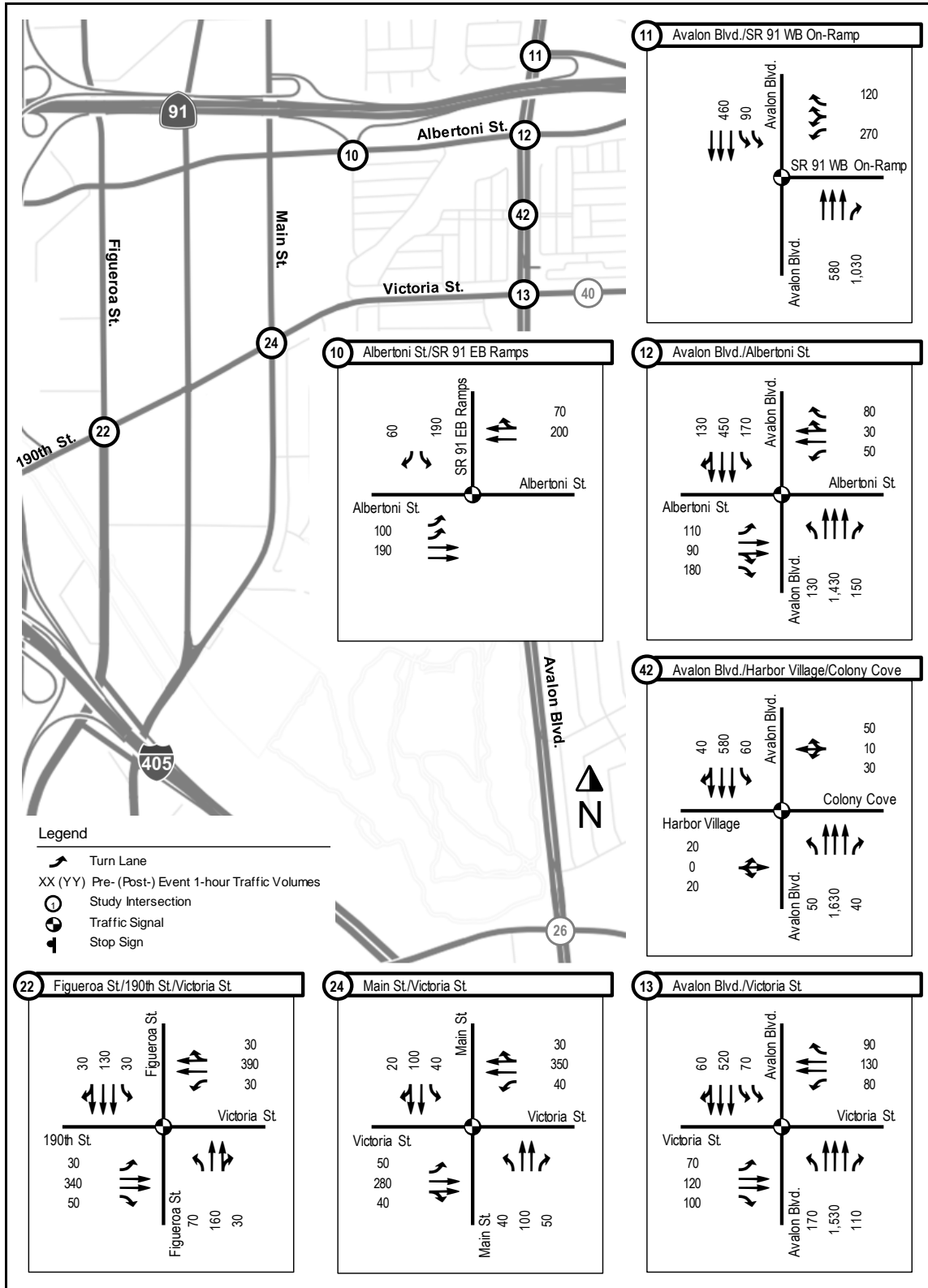


Exhibit 22: Existing Sunday (27,000-Seats) Post-Game Volumes and Lane Configurations (Map C)

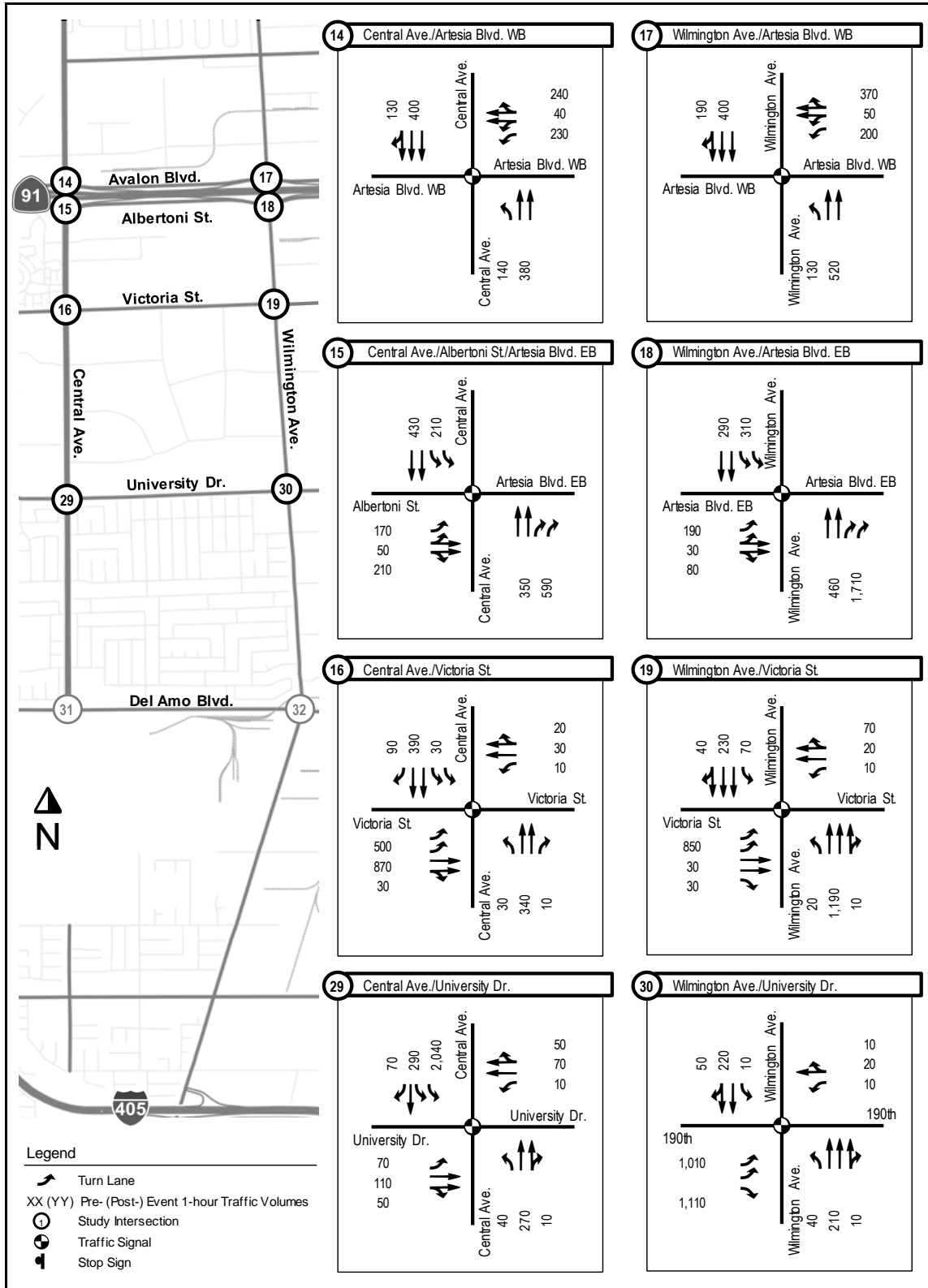


Exhibit 22: Existing Sunday (27,000-Seats) Post-Game Volumes and Lane Configurations (Map D)

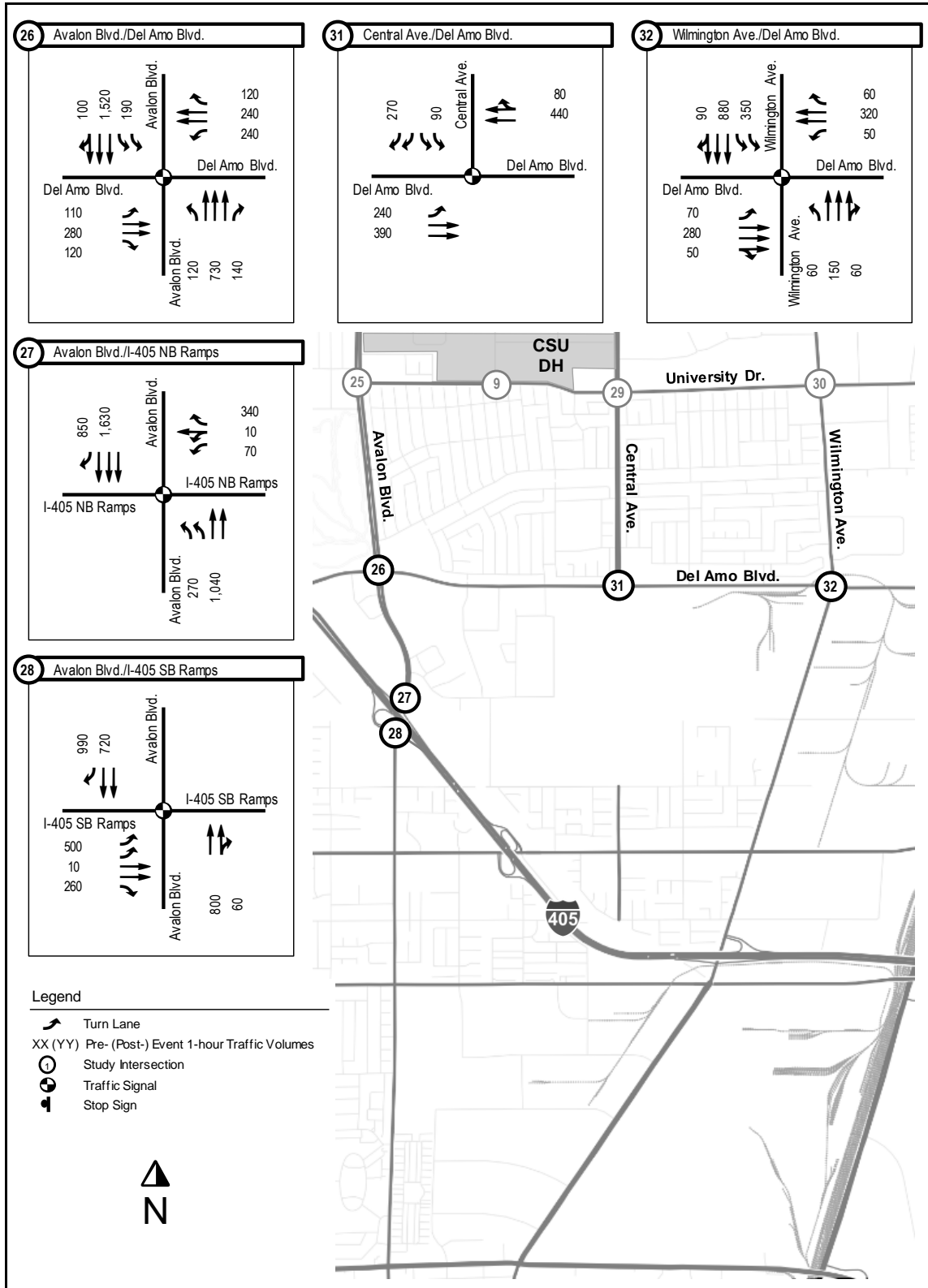


Exhibit 22: Existing Sunday (27,000-Seats) Post-Game Volumes and Lane Configurations (Map E)

Study ID	Intersection Name	Control Type	Pre-Game Peak Hour		Post-Game Peak Hour	
			V/C Ratio	ICU LOS	V/C Ratio	ICU LOS
1	Victoria St./Drive D	TWSC	0.541	A	0.463	A
2	Victoria St./Tamcliff Ave.	Signalized	0.322	A	0.563	A
3	Victoria St./Birchknoll Dr.	Signalized	0.200	A	0.609	B
9	University Dr./Toro Center Dr.	TWSC	0.541	A	0.675	B
10	Albertoni St./SR 91 EB Ramps	Signalized	0.555	A	0.320	A
11	Avalon Blvd./SR 91 WB On-Ramp	Signalized	0.626	B	0.759	C
12	Avalon Blvd./Albertoni St.	Signalized	0.764	C	0.592	A
13	Avalon Blvd./Victoria St.	Signalized	0.676	B	0.543	A
14	Central Ave./Artesia Blvd. WB	Signalized	0.523	A	0.448	A
15	Central Ave./Albertoni St./Artesia Blvd. EB	Signalized	0.503	A	0.452	A
16	Central Ave./Victoria St.	Signalized	0.728	C	0.528	A
17	Wilmington Ave./Artesia Blvd. WB	Signalized	0.508	A	0.535	A
18	Wilmington Ave./Artesia Blvd. EB	Signalized	0.366	A	0.751	C
19	Wilmington Ave./Victoria St.	Signalized	0.505	A	0.585	A
22	Figuroa St./190th St./Victoria St.	Signalized	0.456	A	0.328	A
24	Main St./Victoria St.	Signalized	0.422	A	0.312	A
25	Avalon Blvd./University Dr.	Signalized	0.607	B	0.834	D
26	Avalon Blvd./Del Amo Blvd.	Signalized	0.703	C	0.750	C
27	Avalon Blvd./I-405 NB Ramps	Signalized	0.634	B	0.511	A
28	Avalon Blvd./I-405 SB Ramps	Signalized	0.577	A	0.456	A
29	Central Ave./University Dr.	Signalized	0.775	C	0.629	B
30	Wilmington Ave./University Dr.	Signalized	0.725	C	0.403	A
31	Central Ave./Del Amo Blvd.	Signalized	0.459	A	0.428	A
32	Wilmington Ave./Del Amo Blvd.	Signalized	0.502	A	0.483	A
38	Avalon Blvd./184th St.	Signalized	0.450	A	0.378	A
39	Avalon Blvd./182nd St.	TWSC	0.367	A	0.606	B
40	Victoria St./Drive C	TWSC	0.619	B	0.331	A
41	Victoria St./Rainsbury Ave.	TWSC	0.750	C	0.369	A
42	Avalon Blvd./Harbor Village/Colony Cove	Signalized	0.646	B	0.546	A

Exhibit 23: Existing Sunday (27,000-Seats) Level of Service (LOS) at Study Intersections (Table)

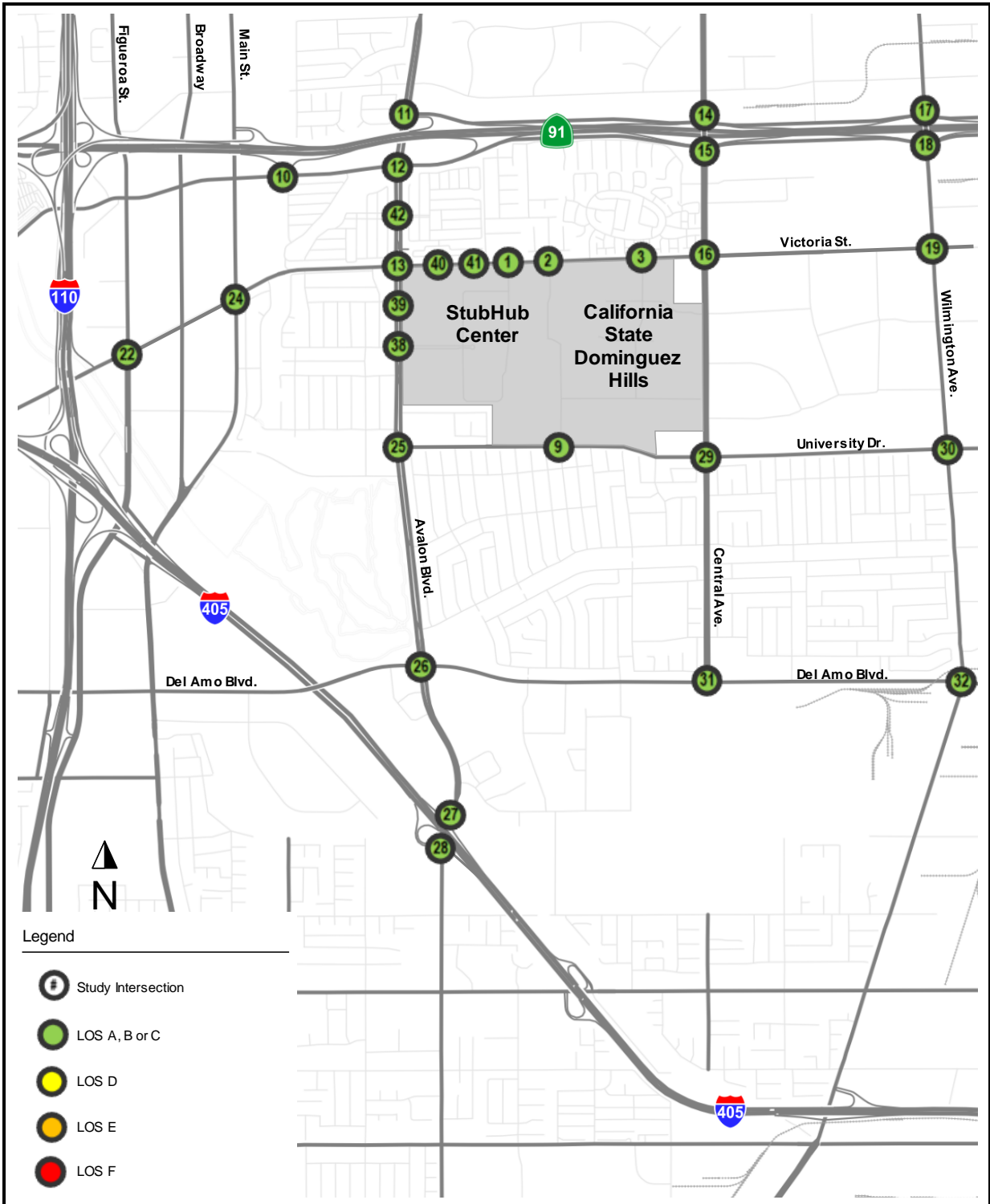


Exhibit 24: Existing Sunday (27,000-Seats) Pre-Game Peak Hour LOS (Map)

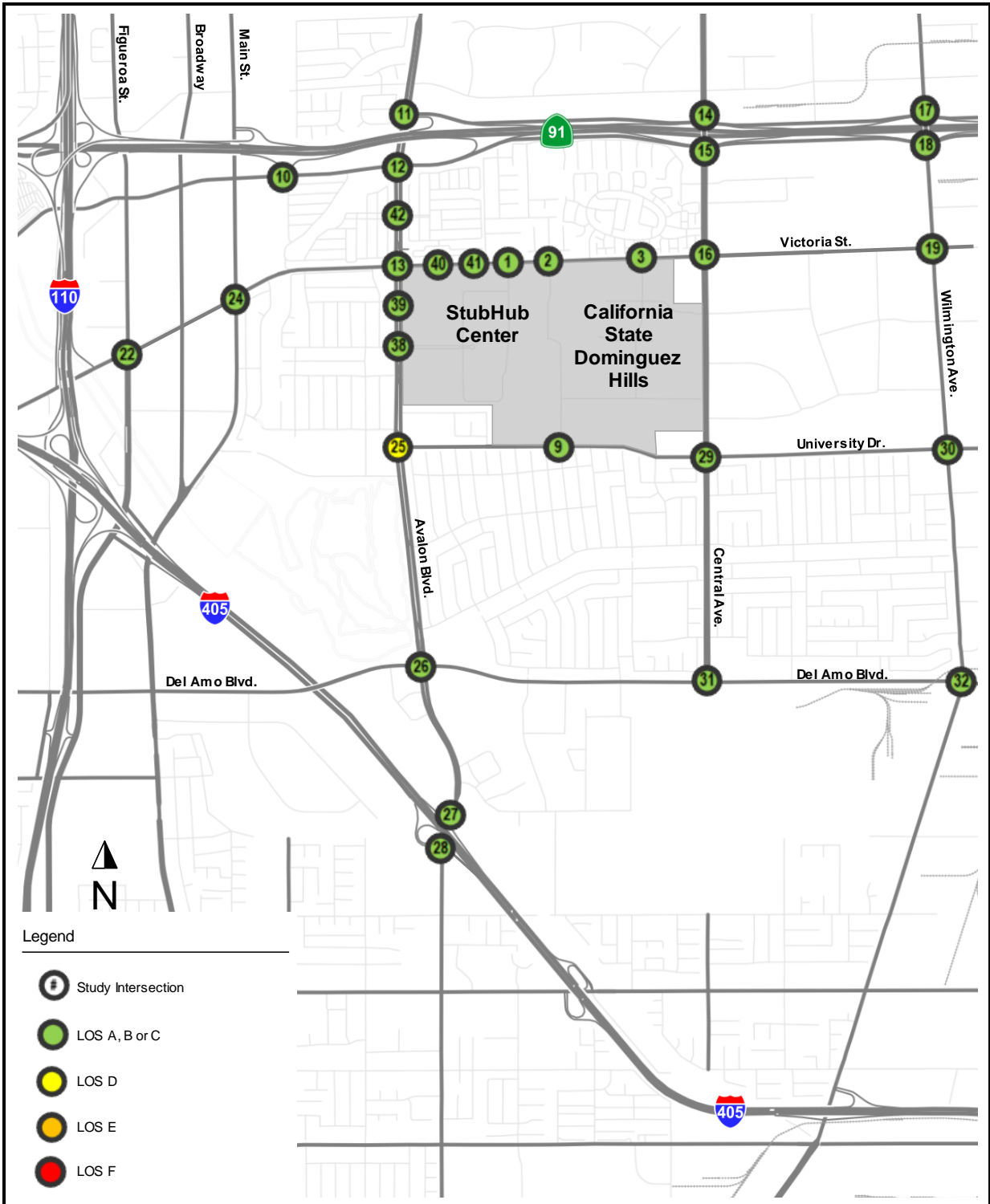


Exhibit 25: Existing Sunday (27,000-Seats) Post-Game Hour LOS (Map)

5 Proposed Project

5.1 Project Alternative 1 Description

Exhibit 26 shows the framework for campus development with academic functions and facilities, student housing and student support, mixed use, residential, and business park. Recreation and athletics locations and major natural and open spaces are also indicated. The map illustrates location, adjacency, and scale of future facilities and improvements that are planned to be developed over the next 20 years.

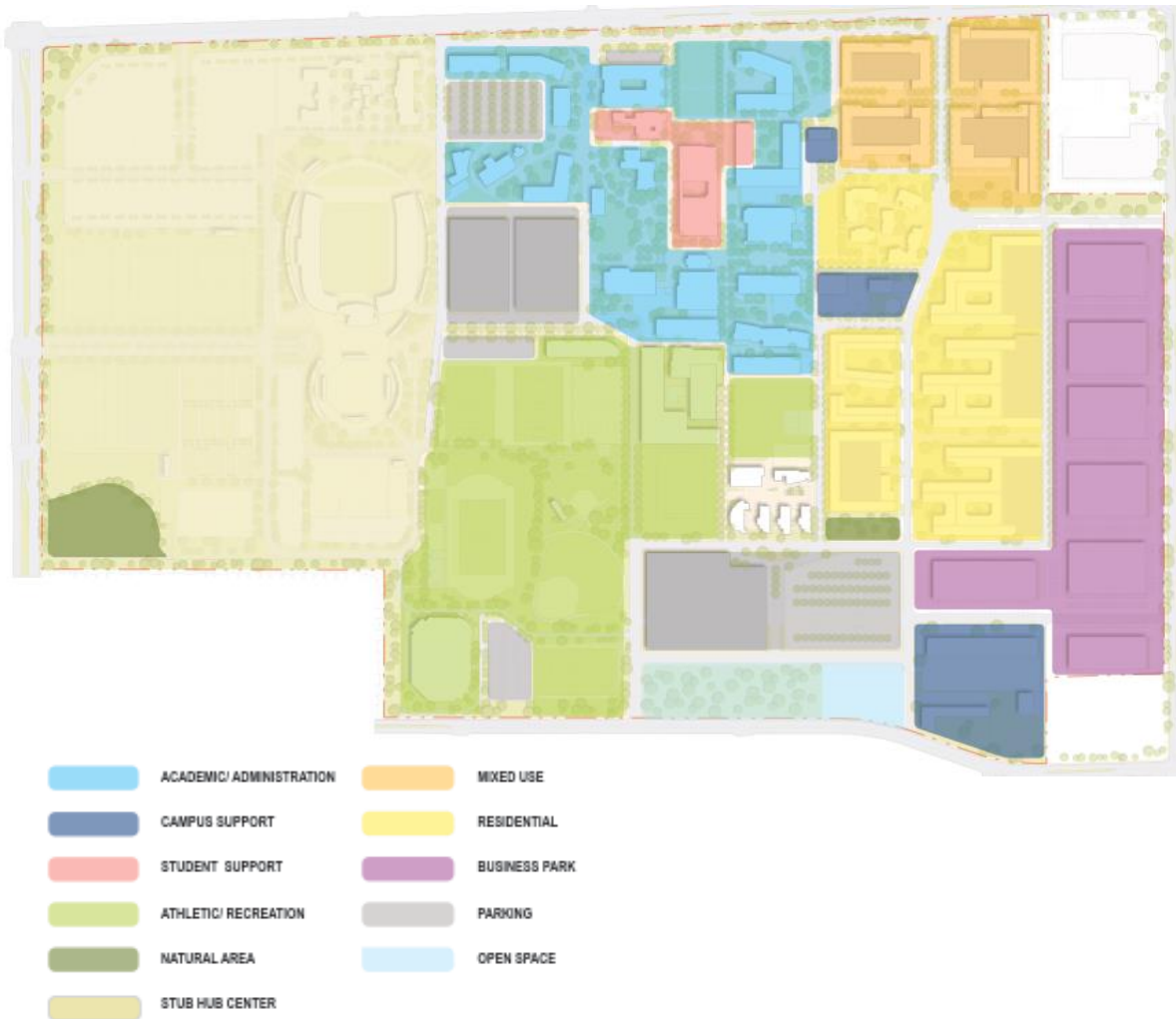


Exhibit 26: Master Plan Development Framework

The 346-acre campus is comprised of three major areas (see Exhibit 27): the Core Campus with academic facilities, a planned new University Village, and the StubHub Center. The Master Plan provides for new facilities and features within these areas. These facilities and features were formulated and designed in response to the Master Plan objectives and specific needs identified throughout a comprehensive Master Plan development process guided by a Master Plan Steering Committee representing faculty, administration, students and staff, and by input from the campus community and stakeholders through a comprehensive public outreach process of community meetings.

Core Campus: The Core Campus comprises the central portion of the campus, extending from Victoria Street to University Avenue. The Master Plan provides for the best use of the existing facilities and for new, appropriately situated facilities and features, including:

- 12 new academic and administrative facilities, providing classrooms, laboratories, faculty and administrative offices, new performing arts facilities; a new incubator/research facility; and facilities for accommodating CSUDH's mobile Fabricator Lab vehicles
- Student support facilities, including an expansion of the Loker Student Union, new student residence halls and a new student recreation center
- Athletic facilities including a remodeled Gymnasium and existing and new playfields;
- Campus support facilities, including a new, expanded Child Care Center; new Facilities Services offices and yards; an expansion of the existing Central Plant; and a satellite central plant
- Parking facilities to accommodate 20,000 FTEs, including reconfigured surface lots and new parking structures
- Reconfigured north campus entry at Tamcliff Drive and Victoria Street; a reinforced campus entry at Toro Center Drive and University Avenue; and reconfigured vehicle access to parking facilities (see Exhibit 29)
- Open space areas for campus activities, programmed and informal gathering and recreation.

University Village: The University Village comprises the most eastern campus area, extending from Victoria Street to south of Glenn Curtis Drive. As illustrated in Exhibit 27, the Master Plan provides for a new mixed use development of this area that includes:

- Retail uses to support both the Core Campus and the University Village, including some on-street parking and parking in structures
- Market-rate housing and parking, including housing for faculty and staff and apartment style housing for students
- Business park development targeted to uses compatible with and supportive of the University's educational mission
- Open space areas for informal activities, leisure, gathering and recreation
- University Avenue, and reconfigured vehicle access from Central Avenue via Charles Willard Drive and Glenn Curtis Drive (see Exhibit 29)
- Vehicle circulation improvements including an extension of Birchknoll Drive from Victoria Street to University Drive.

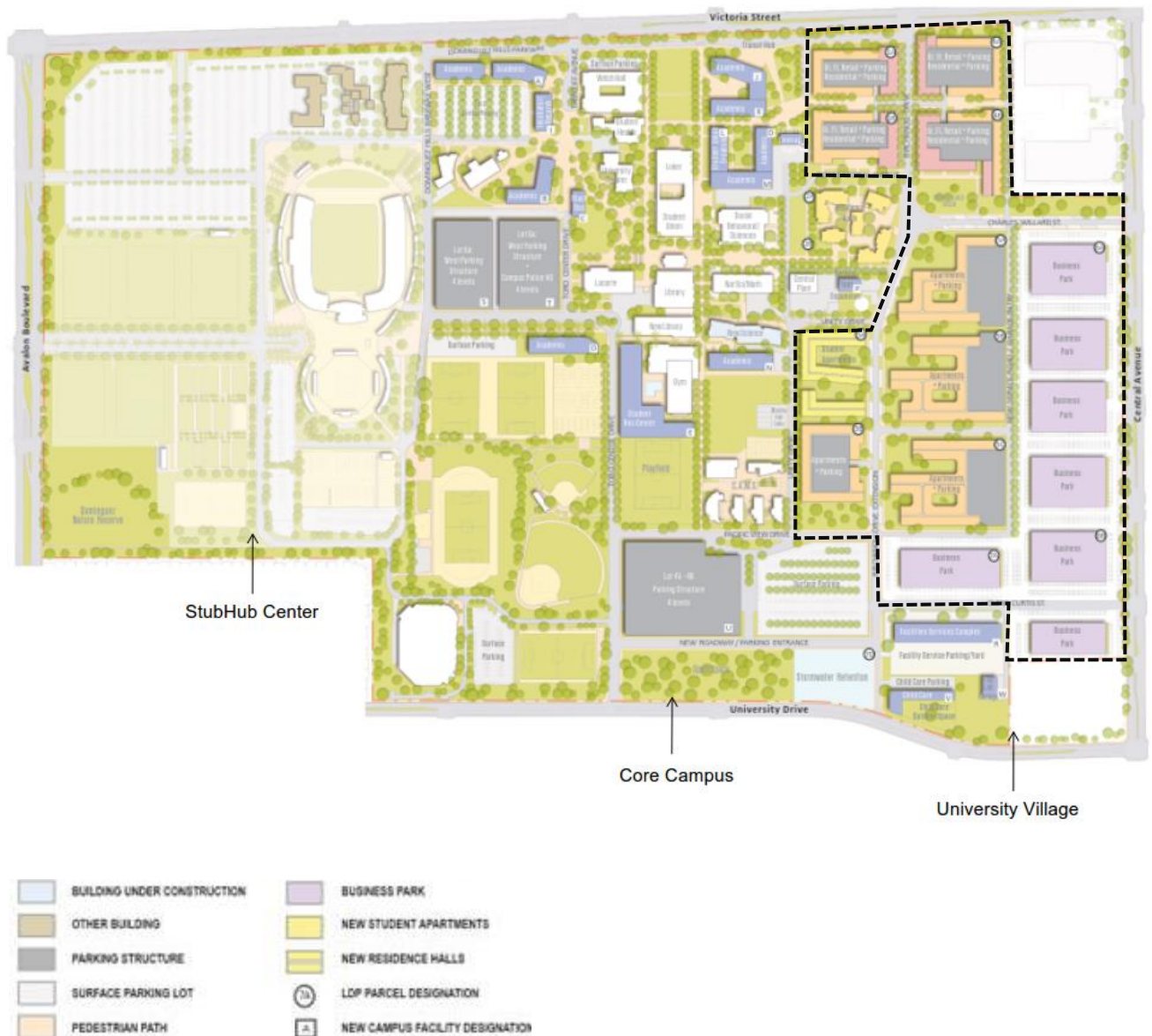


Exhibit 27: Master Plan Facilities Map

StubHub Center: The existing StubHub Center is located the western-most area, east of Avalon Boulevard. The Center’s facilities include an existing stadium with seating for 27,000 spectators. The Master Plan includes the expansion of StubHub Center to seating for 30,000 spectators. Expansion would increase capacity for Sunday afternoon events only. Events are assumed to be on Sundays, with a start time between 1:00 and 2:00 PM and a typical duration of three hours. When 30,000-seat events are taking place no other activities that might attract additional spectators to the site (tennis or bicycling events, for example) would occur at times that would overlap with the larger 30,000-seat events. The 30,000-seat events at StubHub Center that are proposed as part of the Project would involve off-site parking at several locations (see Exhibit 30) and temporary traffic controls both before and after the events (see Exhibit 31 and Exhibit 32).

Housing: Providing appropriate opportunities for students to live on campus is an important component of the Master Plan. The Master Plan provides for replacement of older student housing facilities and for new student residence halls and student apartments within both the Core Campus and the University Village, providing approximately 940 new additional student beds on campus.

The Master Plan also provides for new housing with up to 2,150 apartment units within the University Village that will be made available for faculty, staff, graduate students, and the general public.

Mixed Use Development: In addition to housing, the University Village will include up to 721,000 square feet of business park facilities, and up to 96,000 square feet of retail uses serving the Village residents and employees.

For the purposes of traffic analysis, the key changes to the campus that will be brought about by the Project can be summarized as shown in Exhibit 28¹¹.

5.2 2025 Interim Year Project Alternative 1

As shown in Exhibit 28, the 2025 Plus Project scenario represents the portion of the CMP buildout that may occur before 2025, namely:

- The mixed-use development portion of University Village. This will include up to 1,070 apartments and up to 96,000 square feet of retail.
- The business park portion of University Village, which will include up to 721,000 square feet of business park facilities.
- An increase of university enrollment equal to 2% per year for a total student population of 13,287 FTEs.
- No change in on-campus students. The number of beds available is assumed to be maintained through 2025.
- Increasing off-campus enrollment by 2,628 students to maintain the ratio of the total student head count to the total student FTEs.
- Increasing faculty and staff by 205 persons to maintain the faculty-to-student ratio
- An Increase in the child/infant care center students by 18 students. This increase is assumed to increase at the same rate as university enrollment, 2% per year.

¹¹ Note that Exhibit 28 shows changes in the number of students but not in the floor space of academic buildings. That is because when a student drives to campus and enters an academic building the trip can be attributed to either the student or to the building, but not both. Attributing it to both would result in double-counting of the trip. Traffic studies for universities have found that attributing traffic to students rather than buildings is more reliable since the student's trip to the campus is not a function of how many buildings a student will enter or how much floor space they will use.

Trip Generator	Units Used	Existing	Master Plan Near-Term (2019)		Master Plan Interim Year (2025)		Master Plan Horizon Year (2035)	
			Number of Units	Change from Existing	Number of Units	Change from Existing	Number of Units	Change from Existing
CSUDH Students								
On-Campus Students	Students							
Existing Residence Halls	Students	649	649	0	649	0	0	-649
Residence Halls Under Construction	Students	0	0	0	0	0	516	516
Residence Halls Not Under Construction	Students	0	0	0	0	0	84	84
Residence Halls Not Under Construction	Students	0	0	0	0	0	0	0
Student Apartments 3A	Students	0	0	0	0	0	732	732
Student Apartments 3A (Extra units)	Students	0	0	0	0	0	256	256
Student Apartments 3B	Students	0	0	0	0	0	0	0
						0		
Online only Students	Students	600	637	37	717	117	1,079	479
Off-Campus Students	Students	12,822	13,647	825	15,450	2,628	22,645	9,823
Total Students (head count)	Students	14,071	14,933	862	16,816	2,745	25,312	11,241
Total Students (FTEs)	Students	11,118	11,799	681	13,287	2,169	20,000	8,882
Non-Students								
Faculty/Staff	Persons	1,052	1,116	64	1,257	205	1,892	840
High School Students	Students	676	676	0	676	0	676	0
Child/Infant Care Center Students	Persons	92	98	6	110	18	184	92
Market Rate Housing	Dwelling Units	0	0	0	1,063	1,063	2,149	2,149
Market Rate Housing (Fac/Staff)	Dwelling Units	0	0	0	0	0	0	0
Retail	sq. ft.	0	0	0	96,085	96,085	96,085	96,085
Business Park	sq. ft.	0	0	0	720,918	720,918	720,918	720,918
StubHub Main Stadium	Seats	27,000	30,000	3,000	30,000	3,000	30,000	3,000

Exhibit 28: Key Project Elements of Alternative 1 by Year

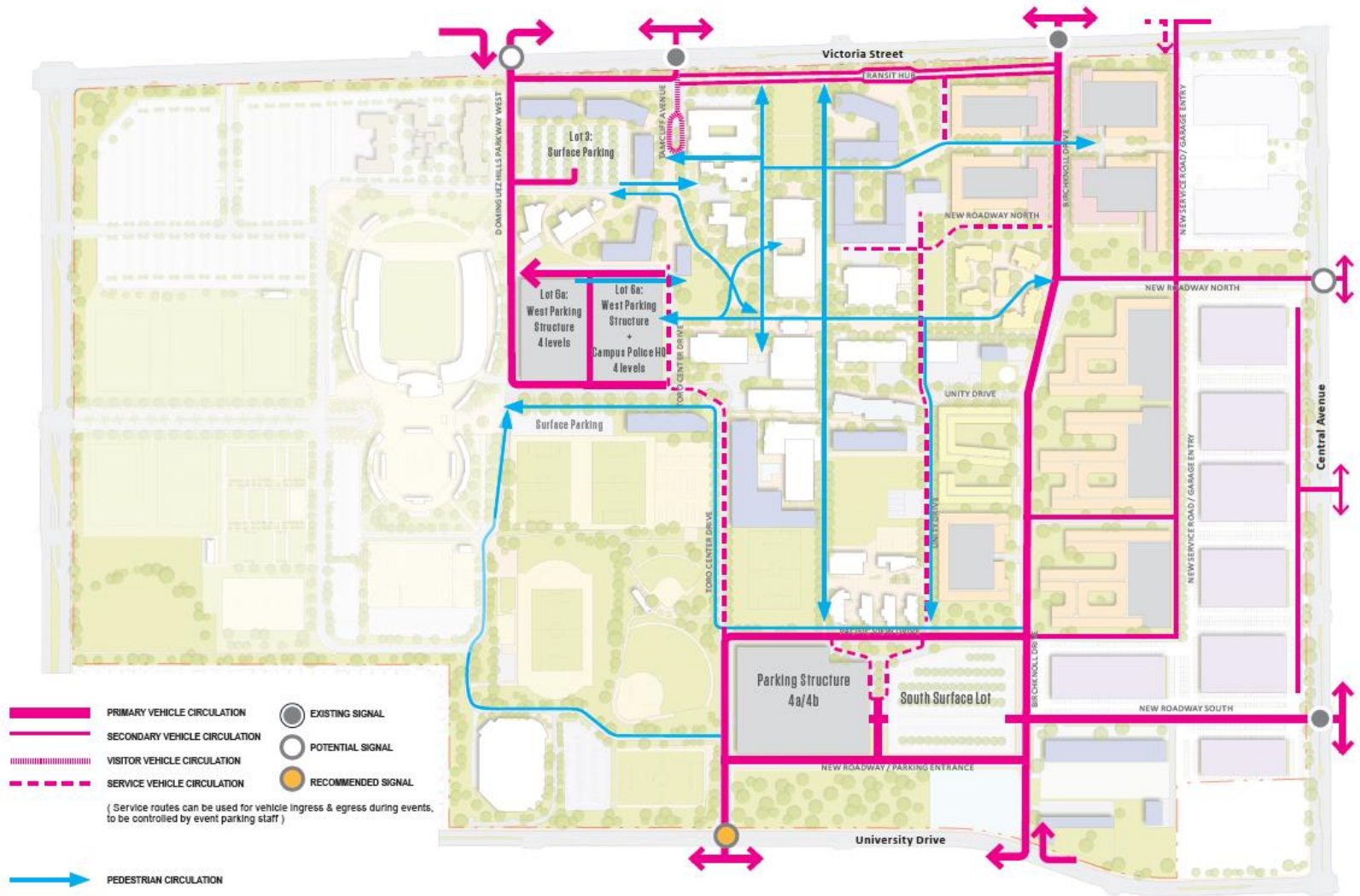


Exhibit 29: 2017 Master Plan Vehicle Circulation and Parking Plan

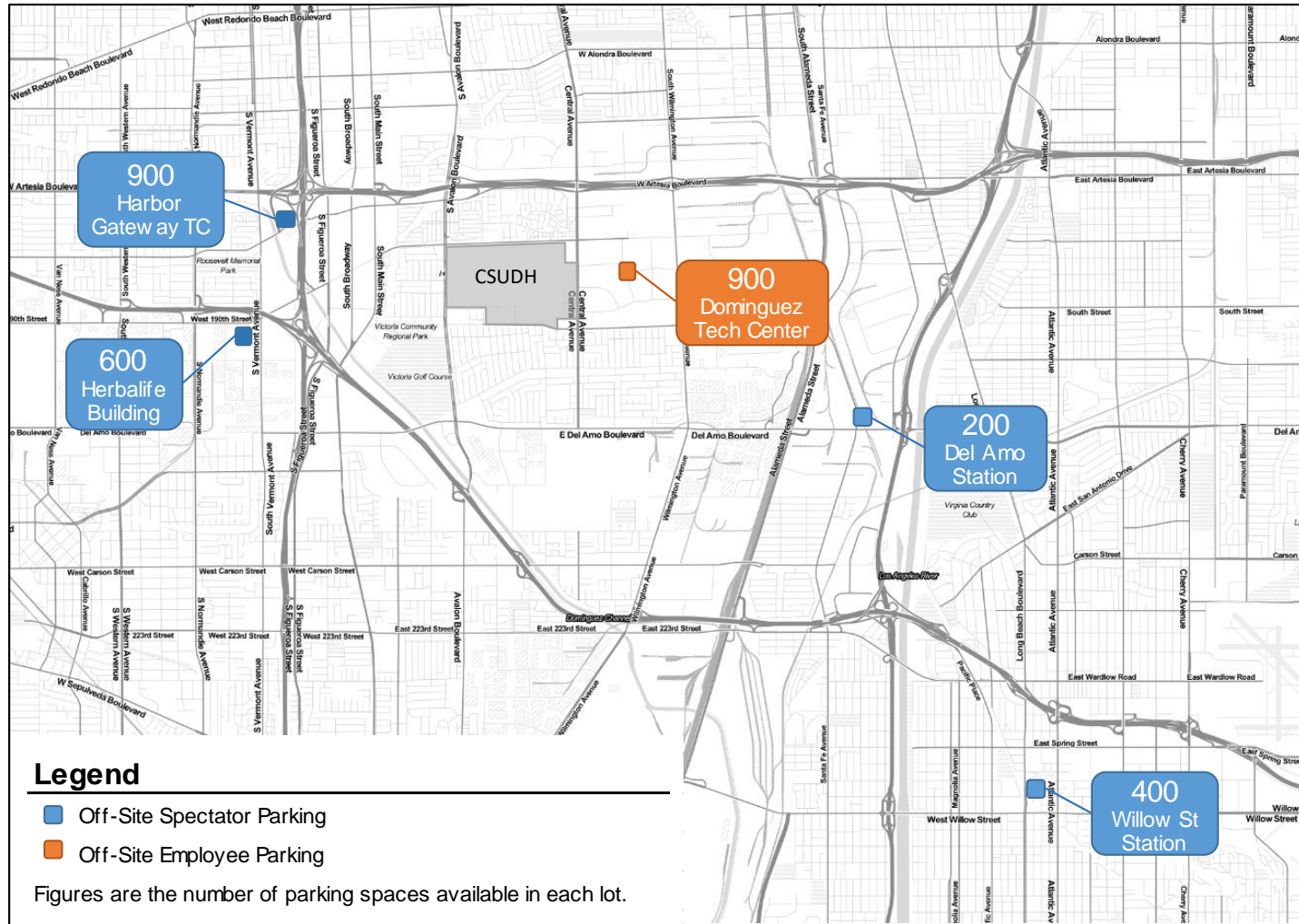


Exhibit 30: Off-Site Parking Lot Locations for 30,000-Seat Events

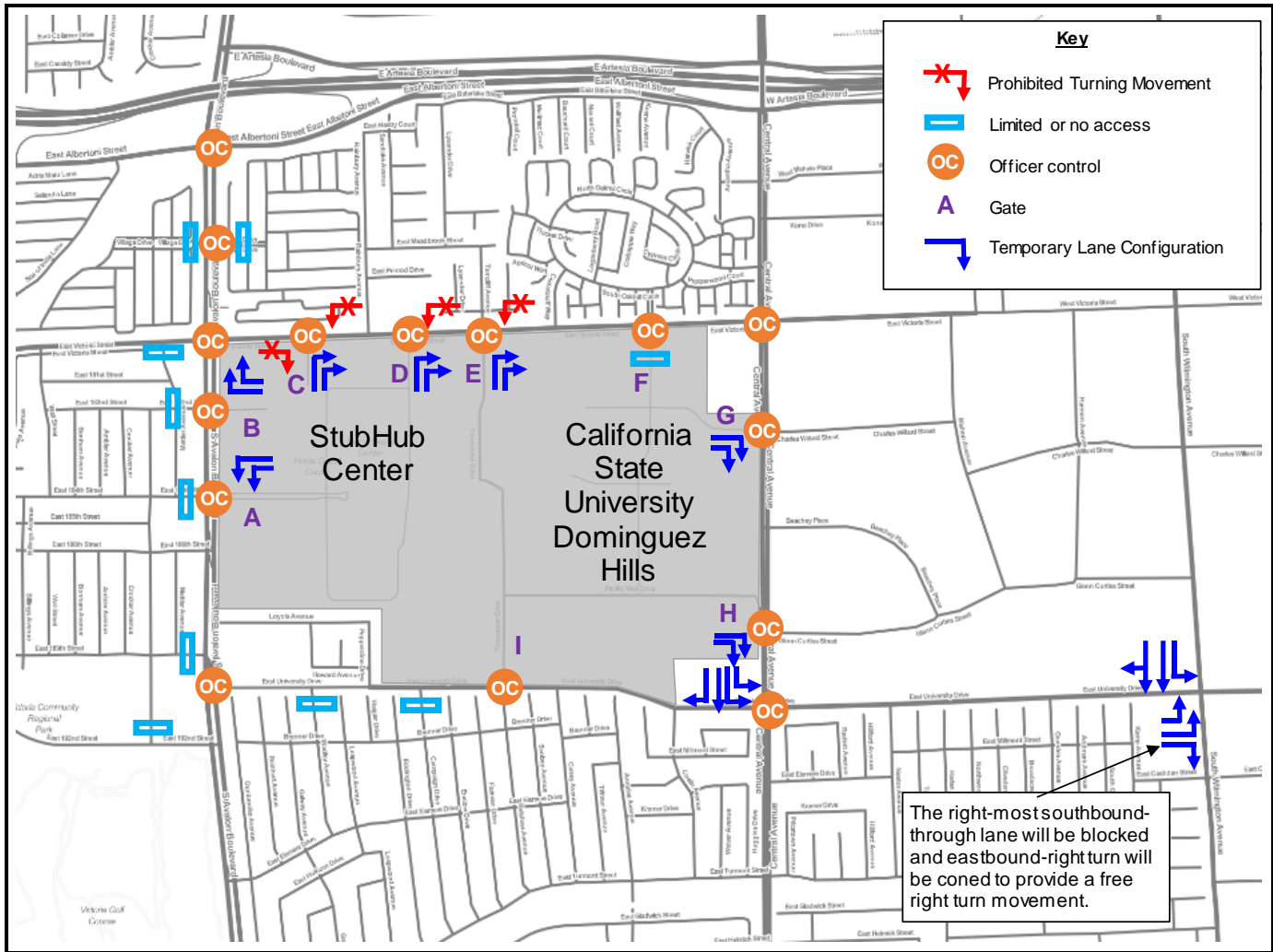


Exhibit 32: Temporary Traffic Controls, Post-Game

5.3 Project Alternative 2 Description

Project Alternative 2 is the same as the Master Plan in Project Alternative 1 described above with the following changes to the housing component.

Housing: Providing appropriate opportunities for students to live on campus is an important component of the Master Plan. The Master Plan provides for replacement of older student housing facilities and for new student residence halls and student apartments within both the Core Campus and the University Village. Alternative 2 provides approximately 1,980 new additional student beds which is 1,040 new beds more than Alternative 1.

Project Alternative 2 also provides for new housing with up to 2,070 apartment units (compared to 2,150 units in Alternative 1) within the University Village that will be made available for faculty, staff, graduate students, and the public.

For the purposes of traffic analysis, the key changes to the campus that will be brought about by Project Alternative 2 can be summarized as shown Exhibit 33.

5.4 2025 Interim Year Project Alternative 2

As shown in Exhibit 33, the 2025 Plus Project scenario represents the portion of the CMP buildout that may occur before 2025, namely:

- The mixed-use development portion of University Village. This will include up to 1,070 apartments and up to 96,000 square feet of retail.
- The business park portion of University Village, which will include up to 721,000 square feet of business park facilities.
- An increase of university enrollment equal to 2% per year for a total student population of 13,287 FTEs.
- An increase in on-campus students with the number of beds available is assumed to be increased by 1,100 beds through 2025. The existing 650 beds will remain in 2025.
- Increasing off-campus enrollment by 1,528 students to maintain the ratio of the total student head count to the total student FTEs.
- Increasing faculty and staff by 205 persons to maintain the faculty-to-student ratio
- An Increase in the child/infant care center students by 18 students. This increase is assumed to increase at the same rate as university enrollment, 2% per year.

Trip Generator	Units Used	Existing	Master Plan Near-Term (2019)		Master Plan Interim Year (2025)		Master Plan Horizon Year (2035)	
			Number of Units	Change from Existing	Number of Units	Change from Existing	Number of Units	Change from Existing
CSUDH Students								
On-Campus Students	Students							
Existing Residence Halls	Students	649	649	0	649	0	0	-649
Residence Halls Under Construction	Students	0	0	0	516	516	516	516
Residence Halls Not Under Construction	Students	0	0	0	84	84	84	84
Residence Halls Not Under Construction	Students	0	0	0	500	500	500	500
Student Apartments 3A	Students	0	0	0	0	0	732	732
Student Apartments 3A (Extra units)	Students	0	0	0	0	0	256	256
Student Apartments 3B	Students	0	0	0	0	0	540	540
Online only Students	Students	600	637	37	717	117	1,079	479
Off-Campus Students	Students	12,822	13,647	825	14,350	1,528	21,605	8,783
Total Students (head count)	Students	14,071	14,933	862	16,816	2,745	25,312	11,241
Total Students (FTEs)	Students	11,118	11,799	681	13,287			
Non-Students								
Faculty/Staff	Persons	1,052	1,116	64	1,257	205	1,892	840
High School Students	Students	676	676	0	676	0	676	0
Child/Infant Care Center Students	Persons	92	98	6	110	18	184	92
Market Rate Housing	Dwelling Units	0	0	0	1,063	1,063	1,969	1,969
Market Rate Housing (Fac/Staff)	Dwelling Units	0	0	0	0	0	100	100
Retail	sq. ft.	0	0	0	96,085	96,085	96,085	96,085
Business Park	sq. ft.	0	0	0	720,918	720,918	720,918	720,918
StubHub Main Stadium	Seats	27,000	30,000	3,000	30,000	3,000	30,000	3,000

Exhibit 33: Key Project Elements of Alternative 2 by Year

5.5 Overview of Project Vehicle Trip Generation and Distribution

Vehicular traffic from the Master Plan projects was forecast in a multi-step process shown in Exhibit 34 and described below:

Trip Generation for Existing Campus Land Uses

The traffic generated by the existing land uses all share the same driveways and parking lots, so it is not possible to determine from the entering and exiting traffic how much traffic is being generated by each type of user. This must be done indirectly, and described below and shown in Exhibit 35 for the Alternative 1 interim year (2025), Exhibit 36 for Alternative 1 build out year (2035), Exhibit 37 for Alternative 2 interim year (2025), and Exhibit 38 for Alternative 2 build out year (2035):

- 1) The staff of the CSUDH Child Care Center, Infant/Toddler Center, and the California Academy of Math and Science (CAMS) were contacted by phone and provided information on the percentage of their staff and students that arrived by car and parked, the percentage being dropped off by car, and those arriving by other modes. They also provided information on typical arrival and departure schedules. This information was used to estimate the trips from each of these institutions.
- 2) Because the 9th Edition of the ITE *Trip Generation Manual* does not include trip generation rates for dormitories or on-campus housing, survey data for similar facilities were needed to estimate these trip generation rates. Therefore, trip generation survey data collected at CSU Sacramento

and Cal Poly, San Luis Obispo, were used to estimate on-campus student trip generation rates for CSUDH. (see Appendix F for the original calculations)

- 3) Peak-hour trips for faculty and staff were taken from occupancy surveys at faculty/staff parking lots.
- 4) Weekday AM and PM peak-hour traffic counts were conducted at the gateways to the campus (see Intersections 1 through 9 in Exhibit 1).
- 5) The traffic from the Child Care Center, Infant/Toddler Center, CAMS, faculty & staff, and on-campus students was subtracted from the gateway counts. The residual was assumed to be the trips from off-campus students.

The imputed trips per off-campus student was compared to the trips per off-campus student from other campuses as a reasonableness check. The check showed that the results were comparable to rates measured on other campuses.

- 6) The trip generation rates from Steps 1 through 5 were then ready to be used as inputs into the forecast of traffic from these uses in the future study years.
- 7) The 2017 Master Plan was then used to determine the number of staff and students for each user group (Child Care Center, Infant/Toddler Center, CAMS, faculty & staff, and on- and off-campus CSUDH students).
- 8) The trip generation rates from Step 6 were then multiplied by the respective size of each group from Step 7 to estimate the future AM and PM trips entering and leaving the campus from user groups that already exist on campus, taking into account the anticipated change in the size of each group.

The result of Steps 1 through 8 was a forecast for future trips from existing uses that is consistent with the counts of existing traffic and with data from external sources.

Trip Generation for Proposed New Campus Land Uses

As shown in Exhibit 35 through Exhibit 38, the traffic generated by proposed new land uses cannot be based on data from the existing campus. Instead, the trips were estimated using survey data from similar land uses that already exist:

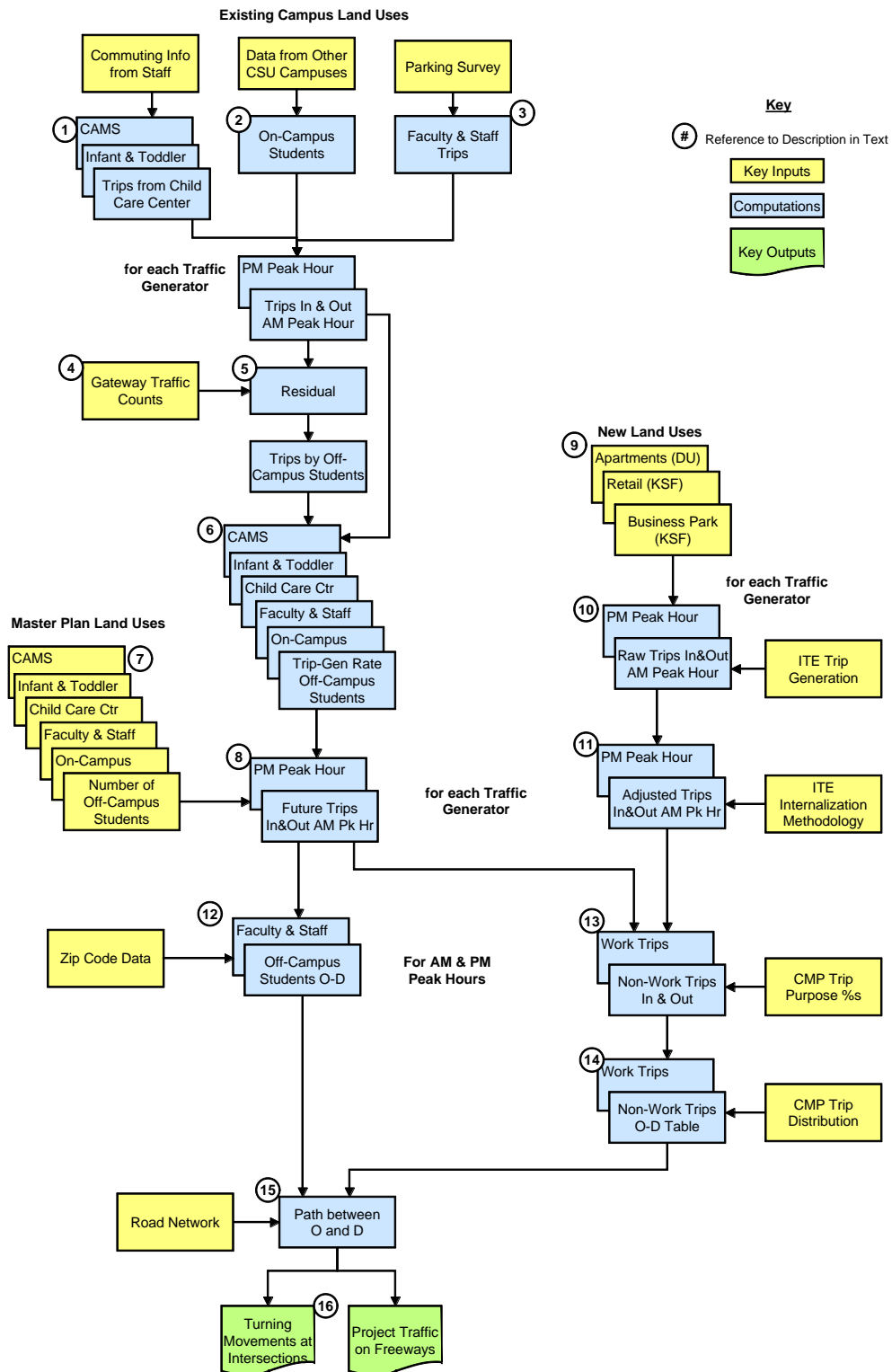


Exhibit 34: Methodology for Forecasting Project Traffic

- 9) The Master Plan contains details of the number of market-rate apartments to be developed, and the floor area of the proposed retail and business park developments.
- 10) The trips generated by the proposed new uses was estimated by multiplying the trip generation rates from the 9th Edition of the ITE *Trip Generation Manual* by the size of the proposed developments, in accordance with generally accepted traffic engineering practice.
- 11) The proposed apartments, retail, and business park uses will be within easy walking distance of each other and it can be reasonably expected that there will be trips between these uses. For example, people living in the apartments might seek jobs at the retail shops or business park, or people with jobs in the business park might self-select to live in the new nearby apartments, people in the apartments or business park may shop at the nearby retail establishments, etc. These interactions will reduce the vehicular trips generated by both the trip origin and the destination.

The unconstrained internal person trip capture rates from mixed use development from ITE¹² was used to take these trips into account. The factors applied reduced trips based on the size and type of land uses that are interacting.

Although it is likely that some CSUDH students, faculty, and staff will self-select to live in the Project market-rate apartments, there are no plans to have a formal policy or program to encourage that to happen. In the absence of such a program, the worst-case scenario was assumed, which is that no CSUDH students, faculty, and staff would live in the market-rate apartments.

Land Use (ITE Code)	Size	Unit	AM Peak Hour			PM Peak Hour		
			Rate	Trip		Rate	Trip	
				In	Out		In	Out
On-Campus Student	649	Students	0.033	12	10	0.093	28	32
Off-Campus Student	15,450	Students	0.151	1,744	582	0.161	1,044	1,448
Faculty and Staff	1,257	Employee	0.067	85	0	0.013	0	17
High School (530)	676	Students	0.430	198	93	0.130	41	47
Child Care Centers	110	Students	0.962	71	35	0.962	35	71
Subtotal for Campus Trips				2,110	720		1,148	1,615
Market Rate Housing (220)	1,063	DU	0.51	108	434	0.62	428	231
Retail (820)	96,085	sq. ft.	1.58	94	58	6.07	280	303
Business Park (770)	720,918	sq. ft.	1.34	821	145	1.21	227	646
Subtotal				1,023	637		935	1,180
Internal Capture %				6%	10%		17%	13%
Internal Trips				62	62		157	157
University Village Net Total				961	575		778	1,023
Weekday Peak Hour Total				3,071	1,295		1,926	2,638

Exhibit 35: Trip Generation Rates and Total Weekday Trips for 2025 with Alternative 1

¹² ITE *Trip Generation Handbook*, 3rd Edition, 2014

Land Use (ITE Code)	Size	Unit	AM Peak Hour			PM Peak Hour		
			Rate	Trip		Rate	Trip	
				In	Out		In	Out
On-Campus Student	1,588	Students	0.033	28	24	0.093	69	78
Off-Campus Student	22,645	Students	0.151	2,556	854	0.161	1,530	2,123
Faculty and Staff	1,892	Employee	0.067	128	0	0.013	0	25
High School (530)	676	Students	0.430	198	93	0.130	41	47
Child Care Centers	184	Students	0.962	119	58	0.962	58	119
Subtotal for Campus Trips				3,029	1,029		1,698	2,392
Market Rate Housing (220)	2,149	DU	0.51	219	877	0.62	866	466
Retail (820)	96,085	sq. ft.	1.58	94	58	6.07	280	303
Business Park (770)	720,918	sq. ft.	1.34	821	145	1.21	227	646
Subtotal				1,134	1,080		1,373	1,415
Internal Capture %				7%	7%		12%	12%
Internal Trips				78	78		167	167
University Village Net Total				1,056	1,002		1,206	1,248
Weekday Peak Hour Total				4,085	2,031		2,904	3,640

Exhibit 36: Trip Generation Rates and Total Weekday Trips for 2035 with Alternative 1

Land Use (ITE Code)	Size	Unit	AM Peak Hour			PM Peak Hour		
			Rate	Trip		Rate	Trip	
				In	Out		In	Out
On-Campus Student	1,749	Students	0.033	31	26	0.093	76	86
Off-Campus Student	14,350	Students	0.151	1,620	541	0.161	970	1,345
Faculty and Staff	1,257	Employee	0.067	85	0	0.013	0	17
High School (530)	676	Students	0.430	198	93	0.130	41	47
Child Care Centers	110	Students	0.962	71	35	0.962	35	71
Subtotal for Campus Trips				2,005	695		1,122	1,566
Market Rate Housing (220)	1,063	DU	0.51	108	434	0.62	428	231
Retail (820)	96,085	sq. ft.	1.58	94	58	6.07	280	303
Business Park (770)	720,918	sq. ft.	1.34	821	145	1.21	227	646
Subtotal				1,023	637		935	1,180
Internal Capture %				6%	10%		17%	13%
Internal Trips				62	62		157	157
University Village Net Total				961	575		778	1,023
Weekday Peak Hour Total				2,966	1,270		1,900	2,589

Exhibit 37: Trip Generation Rates and Total Weekday Trips for 2025 with Alternative 2

Land Use (ITE Code)	Size	Unit	AM Peak Hour			PM Peak Hour		
			Rate	Trip		Rate	Trip	
				In	Out		In	Out
On-Campus Student	2,628	Students	0.033	47	39	0.093	115	129
Off-Campus Student	21,605	Students	0.151	2,439	814	0.161	1,460	2,025
Faculty and Staff	1,892	Employee	0.067	128	0	0.013	0	25
High School (530)	676	Students	0.430	198	93	0.130	41	47
Child Care Centers	184	Students	0.962	119	58	0.962	58	119
Subtotal for Campus Trips				2,931	1,004		1,674	2,345
Market Rate Housing (220)	1,969	DU	0.51	201	803	0.62	794	427
Retail (820)	96,085	sq. ft.	1.58	94	58	6.07	280	303
Business Park (770)	720,918	sq. ft.	1.34	821	145	1.21	227	646
Subtotal				1,116	1,006		1,301	1,376
Internal Capture %				7%	7%		13%	12%
Internal Trips				75	75		165	165
University Village Net Total				1,041	931		1,136	1,211
Weekday Peak Hour Total				3,972	1,935		2,810	3,556

Exhibit 38: Trip Generation Rates and Total Weekday Trips for 2035 with Alternative 2

Trip Distribution and Routing

The results of Steps 8 and 11 are the total number of trips entering and leaving the campus in the AM and PM peak hour for each user group. The remaining steps were to determine the location of the non-campus end of the trip and the route taken between the trip origin and destination.

- 12) The University provided the study team with information on the addresses of off-campus students, faculty, and staff, aggregated to zip code level to maintain privacy (see Exhibit 39, Exhibit 40, and Exhibit 41 respectively). This was used to create an origin-destination matrix of their trips to and from campus.
- 13) For the other user groups, such as the residents of the proposed market-rate apartments, the Los Angeles County Congestion Management Plan (CMP) reference tables stating the percentage of trips for each land use type are work trips and non-work trips were used. For example, the CMP says that 30% of the trips generated by multi-family dwellings are work trip and the remainder are non-work trips.
- 14) The CMP also contains a trip distribution matrix for use in determining the likely distribution of trip destinations for any given trip origin, depending on the trip purpose (residential or non-residential and work or non-work). For example, the CMP estimates that 3.1% of the work commute trips generated by the proposed new apartments will go to downtown Los Angeles. Applying this matrix to the work and non-work trips resulted in an origin-destination table showing the location of the non-campus-end of each trip.
- 15) Trips from all user groups were then assigned to the most likely path from their origin on campus to their destination. For many trips this route used surface streets to get to or from nearby freeway ramps.
- 16) The trips using each path were then aggregated to find the Project-related turning movements at each study intersection. The Project-related volumes were added to the background (non-Project) traffic to determine the total volume for each turning movement at each study intersection.

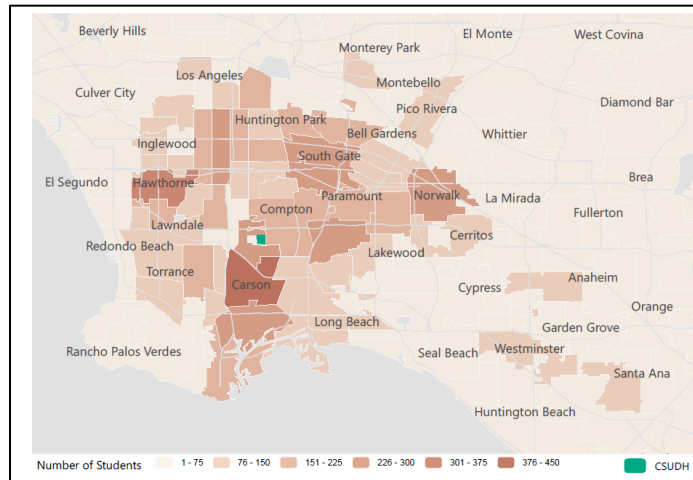


Exhibit 39: Zip Codes for Current CSUDH Students

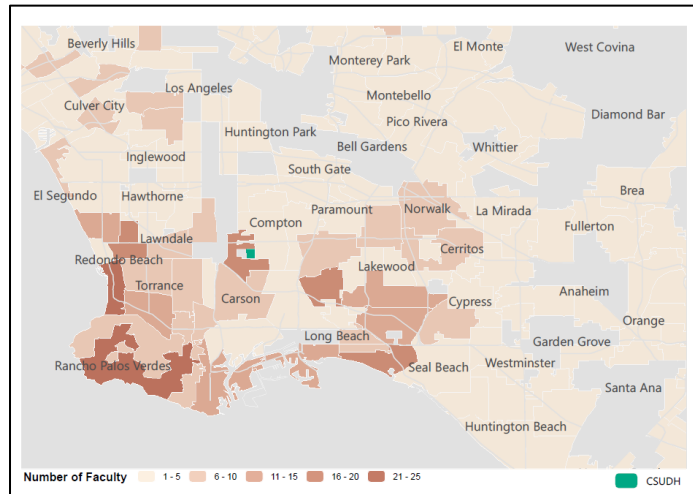


Exhibit 40: Zip Codes for Current CSUDH Faculty

campus build out parking lots in 2035). As shown, there are a total of 7,914 parking spaces in the near-term and 7,924 for 2035 that are available for spectators in on-site lots. Note that the parking requirements of the University, sports teams, the media, and stadium employees are also fully accounted for in Exhibit 43 and Exhibit 44. When reallocating parking spaces minimum parking requirements were proportionally increased with the increasing FTEs then spectator, team and media parking spots were allocated. Additional spaces to cover a similar number of spectator spaces on campus and near the StubHub Center were allocated from the business park. However, since these groups arrive before the pre-game peak hour and depart after the post-game peak hour they do not affect the analysis of peak-hour traffic conditions. Note also that part of parking lot 13 is expected to be unusable for Project parking due to hotel construction that is expected to take place on the site¹⁴.

As can be seen in Exhibit 43, and Exhibit 44, the remaining spectator parking spaces will be located off-site as shown in Exhibit 30. Approximately 2,100 spectator cars, or 21% of all spectator cars, would be assigned to off-site parking lots. ASCSC will be providing a fleet of shuttle buses from these lots to the bus drop-off area in Parking Lot 7.

Besides the park-and-ride lots, ASCSC is conducting a two-year trial of a shuttle bus system run by Long Beach Transit that would take passengers from the Blue Line and Harbor Gateway transit stations to the stadium for LA Galaxy games. This shuttle could possibly also be used for events. However, it is not certain that the system will be in place in 2019 or 2035, so for the purposes of the impact analysis no spectators were assumed to use this system.

Tickets for events at StubHub Center will be for sale on-line only. Ticket purchasers will be advised that no parking permits will be available on-site on the day of the event, and will be offered an opportunity to purchase parking passes for one of the on- or off-site parking lots. The assigned space will include directions about freeway exits (if applicable) and streets to use to get to the assigned parking space. Patrons without a pass to the specific parking lot or a valid CSU parking permit will be turned away at the parking lot entrance. This system is used with success in many sports venues in the U.S., most recently in the Golden 1 Center in Sacramento that opened in September 2016, to promote the orderly flow of traffic to and from the venue.

The temporary traffic control plans for the pre-game and post-game for the expansion are shown in Exhibit 31 and Exhibit 32, respectively.

¹⁴ This was the subject of the Home Depot Center Hotel and Training Facility Final Supplemental EIR dated in May 2005.

Parking Lot		Total Space	University Use ¹	Spaces Lost for Hotel Construction	Spectator Vehicles	Employee Vehicles	Teams & Media
1	CSUDH	536	0		536		
2	CSUDH	636	75		561		
3	CSUDH	655	200		455		
4	CSUDH	493	100		393		
5	CSUDH ²	342	342				
6	CSUDH	958	0		333		625
7	CSUDH	1,039	100		939		
7 south	CSUDH	150	0		150		
8	CSUDH	600	357		243		
9	CSUDH	800	300		500		
17	StubHub	350	175		0		175
CSUDH Total		6,559	1,649	0	4,110	0	800
10	StubHub	607	0		607		
11	StubHub	939	0		939		
12	StubHub	664	0		664		
13	StubHub	956	0	-258	698		
14	StubHub	32	0		32		
15	StubHub	261	0		261		
16	StubHub	183	0		183		
18	StubHub	120	0		120		
Turf Field #7		300	0		300		
StubHub Total		4,062	0	-258	3,804	0	0
On-Site Subtotal		10,621	1,649	-258	7,914	0	800
Harbor Gateway		900			900		
Herbalife Building		600			600		
Del Amo		200			200		
Willow		400			400		
Dominguez Tech Center		860				860	
Off-Site Total		2,960	0		2,100	860	0
Total, All Lots		13,581	1,649		10,014	860	800
Parking Demand			650		9,900	860	800
Shortfall			0		0	0	0

Notes:

- 1) Spaces reserved for University activities unrelated to Chargers game
- 2) Spaces used for residence halls

Exhibit 43: Allocation of Parking Spaces for 30,000-Seat Event in 2017 and 2019

Parking Lot		Total Spaces	University Use ¹	University Village Use	Spectator Vehicle Spaces	Employee Vehicle Spaces	Teams & Media Spaces
3	CSUDH	323	323		0		
6a	CSUDH	1,557	427		330		800
6b	CSUDH	1,557	427		1,130		
6 surface strip	CSUDH	55	55		0		
4a/4b	CSUDH	3,677	1,006		2,671		
South Surface	CSUDH ²	683	683		0		
North of Welch Hall	CSUDH	45	45		0		
CSUDH Total		7,897	2,966	0	4,131	0	800
10	StubHub	607	0		607		
11	StubHub	939	0		939		
12	StubHub	664	0		664		
14	StubHub	32	0		32		
15	StubHub	261	0		261		
16	StubHub	183	0		183		
18	StubHub	120	0		120		
Turf Field #7		300	0		300		
StubHub Total		3,106	0	0	3,106	0	0
Parcel 1A	mixed-use retail + residential	638	0	638	0		
Parcel 1B	mixed-use retail + residential	638	0	638	0		
Parcel 3B	residential	555	0	555	0		
Parcel 4A	mixed-use retail + residential	975	0	975	0		
Parcel 4B	mixed-use retail + residential	895	0	895	0		
Parcel 5A	residential	732	0	732	0		
Parcel 5B	residential	732	0	732	0		
Parcel 5C	residential	704	0	704	0		
University Village Residential		5,869	0	5,869	0	0	0
Parcel 6A	business park	691	0	276	415		
Parcel 6B	business park	281	0	112	169		
Parcel 7	business park	173	0	69	104		
University Village Business park		1,145	0	458	687	0	0
On-Site Subtotal		18,017	2,966	6,327	7,924	0	800
Harbor Gateway		900			900		
Herbalife Building		600			600		
Del Amo		200			200		
Willow		400			400		
Dominguez Tech Center		860				860	
Off-Site Total		2,960	0		2,100	860	0
Total, All Lots		20,977	2,966	6,327	10,024	860	800
Parking Demand			650		9,900	860	800
Shortfall			0		0	0	0

Notes:

- 1) Spaces reserved for University activities unrelated to Chargers game
- 2) Spaces used for residence halls

Exhibit 44: Allocation of Parking Spaces for 30,000-Seat Event in 2035

The number of vehicle trips generated by the Project during the peak pre-game and post-game hours are shown in Exhibit 45. For the purposes of impact analysis, it was assumed that all games would draw maximum-capacity attendance. As in the 2001 FEIR, it was assumed that 65% of the spectators at sporting events would arrive during the peak hour before the game and that 75% would depart during the peak hour after the game. This is considered a very conservative assumption, since tailgating will be permitted in the circulation aisles of some parking lots (once the parking spaces in the aisle have been filled) which will tend to cause earlier arrivals and later departures for some spectators. Tailgating is a much larger feature of NFL games than MSL games. Traffic counts taken at the Chargers game at the main entrance to Qualcomm Stadium in 2015 showed that 51% of pre-game inbound traffic occurred during the peak hour of pre-game arrivals, and 59% left during the peak hour for post-game departures¹⁵. This data supports the fact that the 65% (pre-game) and 75% (post-game) assumptions used in this study uses very conservative assumptions.

On Sundays in 2035, the Project will also generate non-game trips from on-campus students, market rate housing, retail and the business park as seen in Exhibit 46. For on-campus students, the trip rates were assumed to be the same as the week AM and PM peak hour for the pre- and post-game, respectively. For the University Village land uses, the ITE Trip Generation rates were used. For residential and retail the Sunday “Peak Hour of Generator” was used. With no better information, a 50/50 directional split was assumed for residential and retail. For the business park, the ITE 770, Business Park category did not include Sunday peak hour rates, therefore General Office category (710) for the “Peak Hour of Generator” was used with the directional split from ITE. Post-Game trips for individual land uses were assumed to be reversed from the pre-game. Finally, The Internalization factors in ITE Trip Generation Handbook, 3rd Edition, are meant for Weekday, but, internalization will still happen on Sunday and no better information was available. Therefore, the weekday internalization factors were used for Sunday.

Note that stadium employees, team personnel, and media staff arrive well before the pre-game peak hour and depart well after the post-game peak hour, so their vehicles are not included in peak-hour traffic. Note also that a small number of vehicles may be travelling in the off-peak direction, which was estimated at 1.5% of spectator car trips. This covers passenger drop-offs, including those by ride-hailing services such as Uber or Lyft.

Traffic Flow	Spectator Vehicles	Employee Vehicles	Teams & Media	Total
Pre-Game Peak Hour				
% Arriving	65%	0%	0%	
Vehicles Arriving	5,144	0	0	5,144
% Departing	1.5%	0%	0%	
Vehicles Departing	119	0	0	119
Post-Game Peak Hour				
% Arriving	1.5%	0%	0%	
Vehicles Arriving	119	0	0	119
% Departing	75%	0%	0%	
Vehicles Departing	5,936	0	0	5,936

Exhibit 45: Peak-Hour Car Trip Generation for 30,000-Seat Event

¹⁵ Traffic counts performed on 9/13/2015 by Gibson Traffic Consulting, Inc.

Land Use (ITE Code)	Size	Unit	Pre-Game			Post-Game		
			Rate	Trip		Rate	Trip	
				In	Out		In	Out
On-Campus Student (Incremental)	939	Students	0.033	17	14	0.093	41	46
Market Rate Housing (220)	2,149	DU	0.51	548	548		548	548
Retail (820)	96,085	sq. ft.	3.12	150	150		150	150
Business Park (710)	720,918	sq. ft.	0.16	67	48		48	67
Subtotal				765	746		746	765
Internal Capture %				4%	5%		12%	12%
Internal Trips				34	34		92	92
University Village Net Total				731	712		654	673
SubHub Center (30,000-Seat)				5,144	119		119	5,936
Weekend Total				5,892	845		814	6,655

Exhibit 46: Total Car Trip Generation for Sunday Peak Hours in 2035

Besides car trips, the Project will generate shuttle bus trips from the park and ride lots. The peak hour bus trips from each lot are shown in Exhibit 47. Unlike the cars trips, which are one-way in each peak hour, the shuttle buses will be making round trips to and from the park and ride lots. Their trips were therefore counted in both directions.

Spectator Park and Ride Lot	Parking Spaces	Spectators	Shuttle Buses Capacity	Shuttle Buses Trips
	(A)	(B)=(A)*3	(C)	(D)=(B)/(C)
Harbor Gateway*	900	2,700	100 seats @ 80% occupancy = 80	34
Herbalife Building	600	1,800	76 seats @ 80% occupancy = 60	30
Del Amo Station	200	600	76 seats @ 80% occupancy = 60	10
Willow Station	400	1,200	76 seats @ 80% occupancy = 60	20
Total	2,100	6,300		94

* Articulated buses will serve this location. Other locations will be served by regular buses

Exhibit 47: Project Shuttle Bus Trip Generation for 30,000 Seat Event

6 Existing Plus Project Conditions

6.1 Existing Plus Project Alternative 1 Weekday Conditions

6.1.1 Forecasting Existing Plus Project Alternative 1 Weekday Traffic

Traffic volumes for the Existing Plus Project condition were developed by adding the trips generated by full buildout of the Master Plan to the existing traffic volumes. The resulting Existing Plus Project traffic volumes are shown in Exhibit 49.

6.1.2 Existing Plus Project Alternative 1 Intersection Level of Service

Exhibit 48 shows in tabular format the Existing Plus Project weekday level of service (LOS) based on the traffic volumes shown in Exhibit 49 (also see Appendix G). The LOS is also shown on maps in Exhibit 50 for the AM peak hour condition, and Exhibit 51 for the PM peak hour condition. Exhibit 52 shows the intersection impacts of the Project. As shown, the Project would have significant impacts at 14 intersections, namely

- Intersection #1, Victoria St./Drive D, during both peak hours
- Intersection #3, Victoria St./Birchknoll Dr., during PM peak hour
- Intersection #5, Central Ave./Charles Willard St., during both peak hours
- Intersection #6, Central Ave./Project Driveway/Beachey Pl., during both peak hours
- Intersection #9, University Dr./Toro Center Dr., during both peak hours
- Intersection #13, Avalon Blvd./Victoria St., during PM peak hour
- Intersection #14, Central Ave./Artesia Blvd. WB, during both peak hours
- Intersection #15, Central Ave./Albertoni St./Artesia Blvd. EB, during both peak hours
- Intersection #16, Central Ave./Victoria St., during PM peak hour
- Intersection #20, I-110 SB Off-Ramp/190th St., during both peak hours
- Intersection #22, Figueroa St./190th St./Victoria St., during both peak hours
- Intersection #24, Main St./Victoria St., during PM peak hour
- Intersection #26, Avalon Blvd./Del Amo Blvd., during PM peak hour
- Intersection #29, Central Ave./University Dr., during both peak hours

These are direct (as opposed to cumulative) impacts. The distinction between direct and cumulative impacts is discussed further in Chapter 14.

Study ID	Intersection Name	Control Type	AM Peak Hour		PM Peak Hour	
			V/C Ratio or Delay	LOS (ICU or HCM)	V/C Ratio or Delay	LOS (ICU or HCM)
1	Victoria St./Drive D	TWSC	>180	F	>180	F
2	Victoria St./Tamcliff Ave.	Signalized	0.566	A	0.759	C
3	Victoria St./Birchknoll Dr.	Signalized	0.659	B	0.956	E
4	Victoria St./Project Service Rd.	TWSC	12	B	12.1	B
5	Central Ave./Charles Willard St.	TWSC	>180	F	>180	F
6	Central Ave./Beachey Pl.	TWSC	>180	F	>180	F
7	Central Ave./Glenn Curtiss St.	Signalized	0.834	D	0.822	D
8	University Dr./Birchknoll Dr. Ext.	TWSC	15.8	C	12.4	B
9	University Dr./Toro Center Dr.	TWSC	>180	F	>180	F
10	Albertoni St./SR 91 EB Ramps	Signalized	0.696	B	0.881	D
11	Avalon Blvd./SR 91 WB On-Ramp	Signalized	0.503	A	0.507	A
12	Avalon Blvd./Albertoni St.	Signalized	0.643	B	0.85	D
13	Avalon Blvd./Victoria St.	Signalized	0.856	D	1.118	F
14	Central Ave./Artesia Blvd. WB	Signalized	1.009	F	0.968	E
15	Central Ave./Albertoni St./Artesia Blvd. EB	Signalized	1.153	F	0.991	E
16	Central Ave./Victoria St.	Signalized	1.113	F	0.903	E
17	Wilmington Ave./Artesia Blvd. WB	Signalized	0.704	C	0.708	C
18	Wilmington Ave./Artesia Blvd. EB	Signalized	0.694	B	0.718	C
19	Wilmington Ave./Victoria St.	Signalized	0.514	A	0.549	A
20	I-110 SB Off-Ramp/190th St.	Signalized	1.144	F	1.191	F
21	I-110 NB On-Ramp/190th St.	Signalized	0.591	A	0.825	D
22	Figueroa St./190th St./Victoria St.	Signalized	0.909	E	1.068	F
23	Broadway/Victoria St.	Signalized	0.719	C	0.872	D
24	Main St./Victoria St.	Signalized	0.775	C	1.031	F
25	Avalon Blvd./University Dr.	Signalized	0.517	A	0.758	C
26	Avalon Blvd./Del Amo Blvd.	Signalized	0.873	D	0.958	E
27	Avalon Blvd./I-405 NB Ramps	Signalized	0.484	A	0.485	A
28	Avalon Blvd./I-405 SB Ramps	Signalized	0.542	A	0.511	A
29	Central Ave./University Dr.	Signalized	1.275	F	1.122	F
30	Wilmington Ave./University Dr.	Signalized	0.654	B	0.733	C
31	Central Ave./Del Amo Blvd.	Signalized	0.824	D	0.748	C
32	Wilmington Ave./Del Amo Blvd.	Signalized	0.687	B	0.717	C
33	W. Artesia Blvd./Crenshaw Blvd.	Signalized	0.928	E	0.997	E
34	W. 190th St./S. Western Ave.	Signalized	0.825	D	0.824	D
35	W. Artesia Blvd./Vermont Ave.	Signalized	0.864	D	1.035	F
36	Alameda St./Compton Blvd.	Signalized	0.675	B	0.722	C
37	Alameda St./SR 91 EB Ramps	Signalized	0.572	A	0.769	C

*Intersection LOS was calculated using HCM 2000 Delay Method, because ICU cannot be calculated for TWSC intersections.

Exhibit 48: Existing Plus Project Alternative 1 Weekday Level of Service (LOS) at Study Intersections (Table)

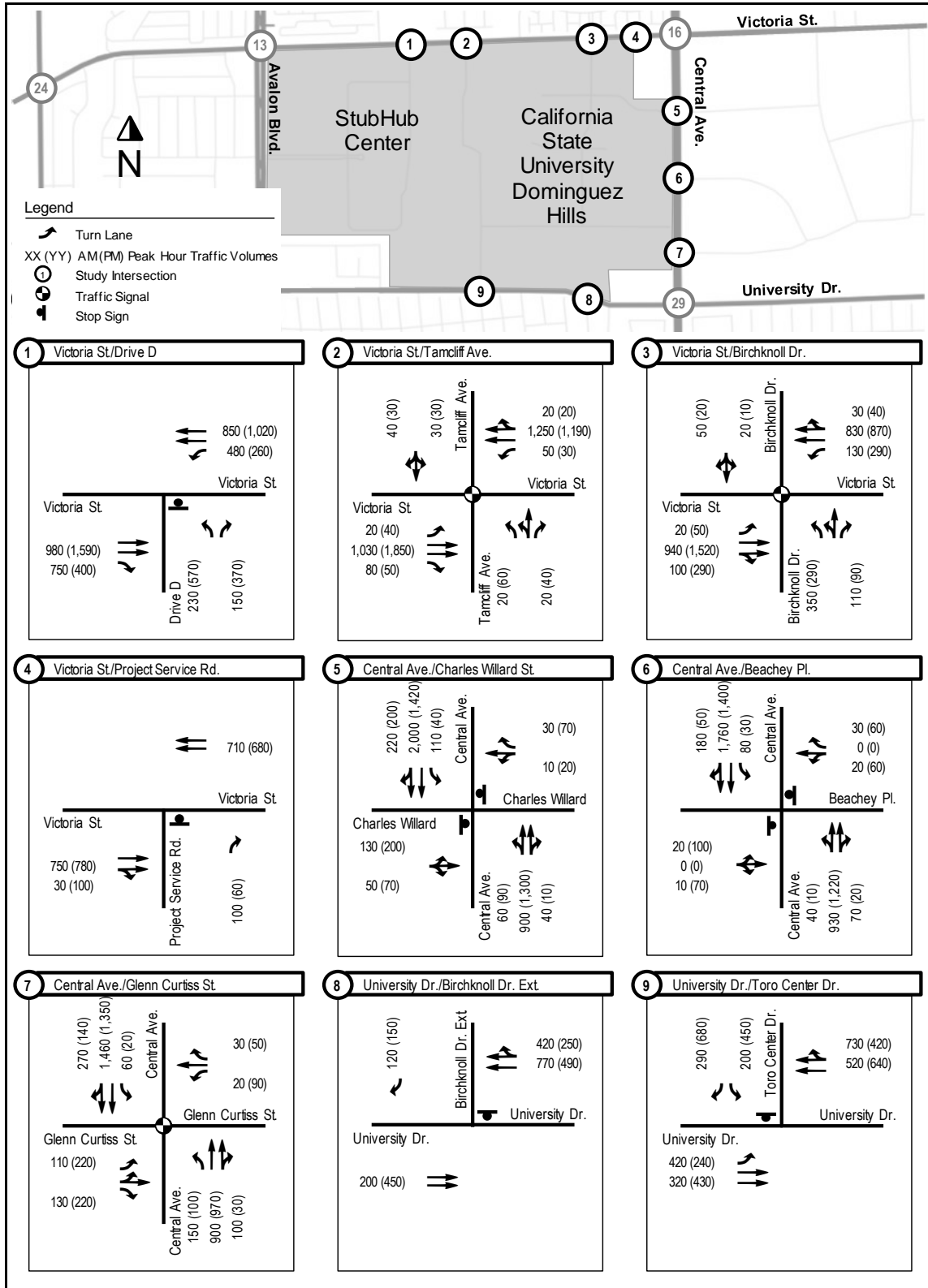


Exhibit 49: Existing Plus Project Alternative 1 Traffic Volumes and Lane Configurations

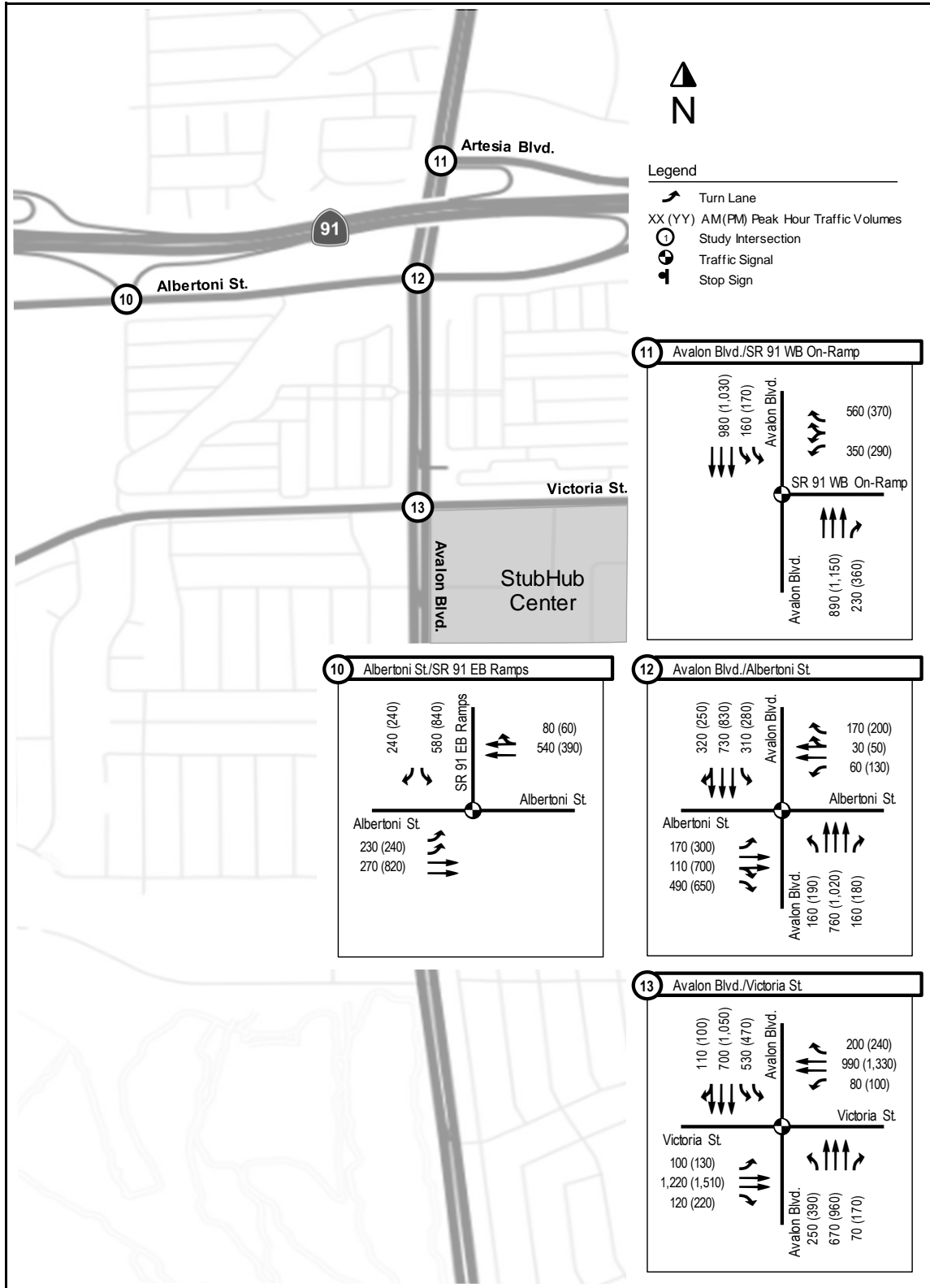


Exhibit 49: Existing Plus Project Alternative 1 Traffic Volumes and Lane Configurations (Map B)

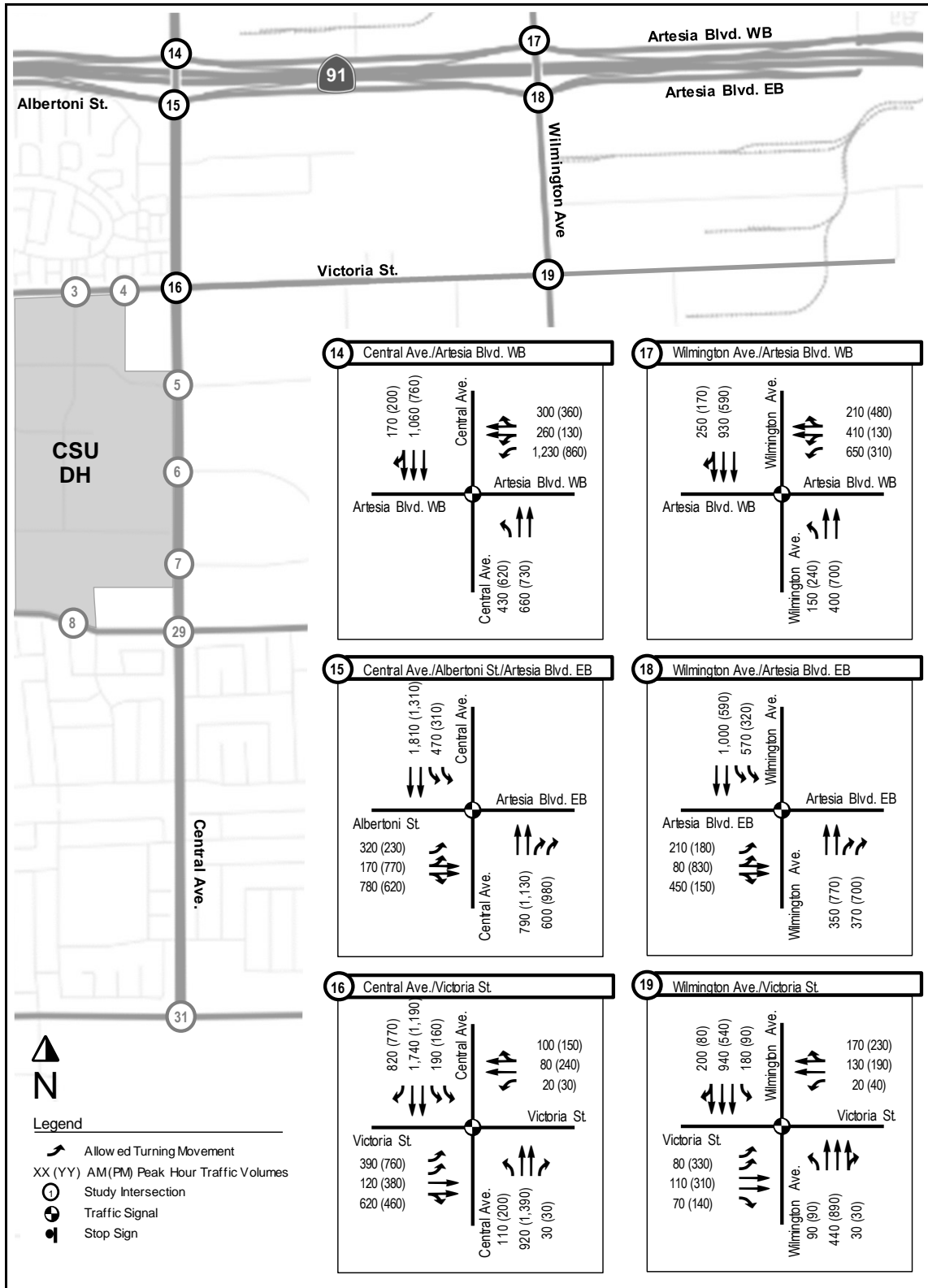


Exhibit 49: Existing Plus Project Alternative 1 Traffic Volumes and Lane Configurations (Map C)

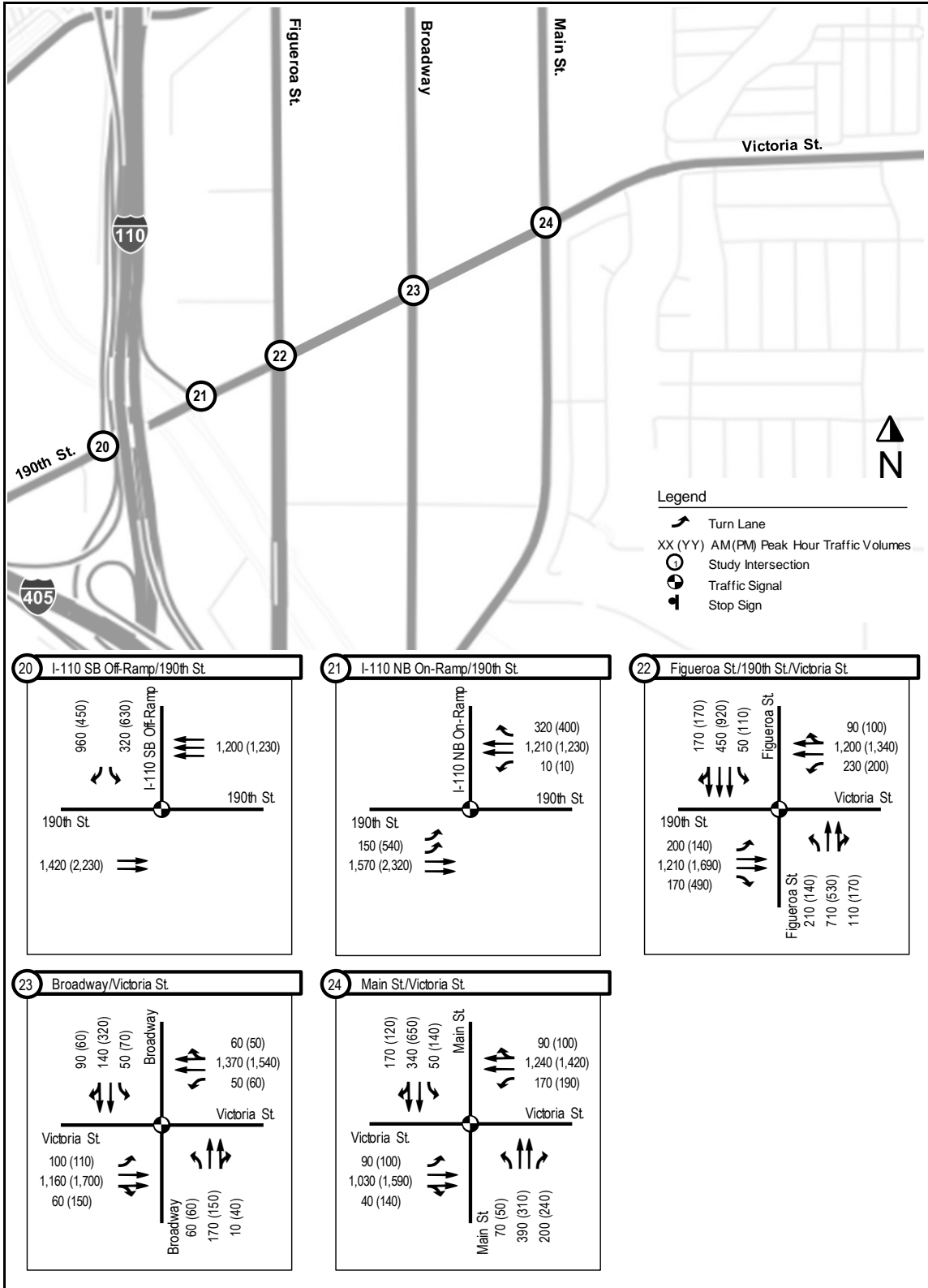


Exhibit 49: Existing Plus Project Alternative 1 Traffic Volumes and Lane Configurations (Map D)

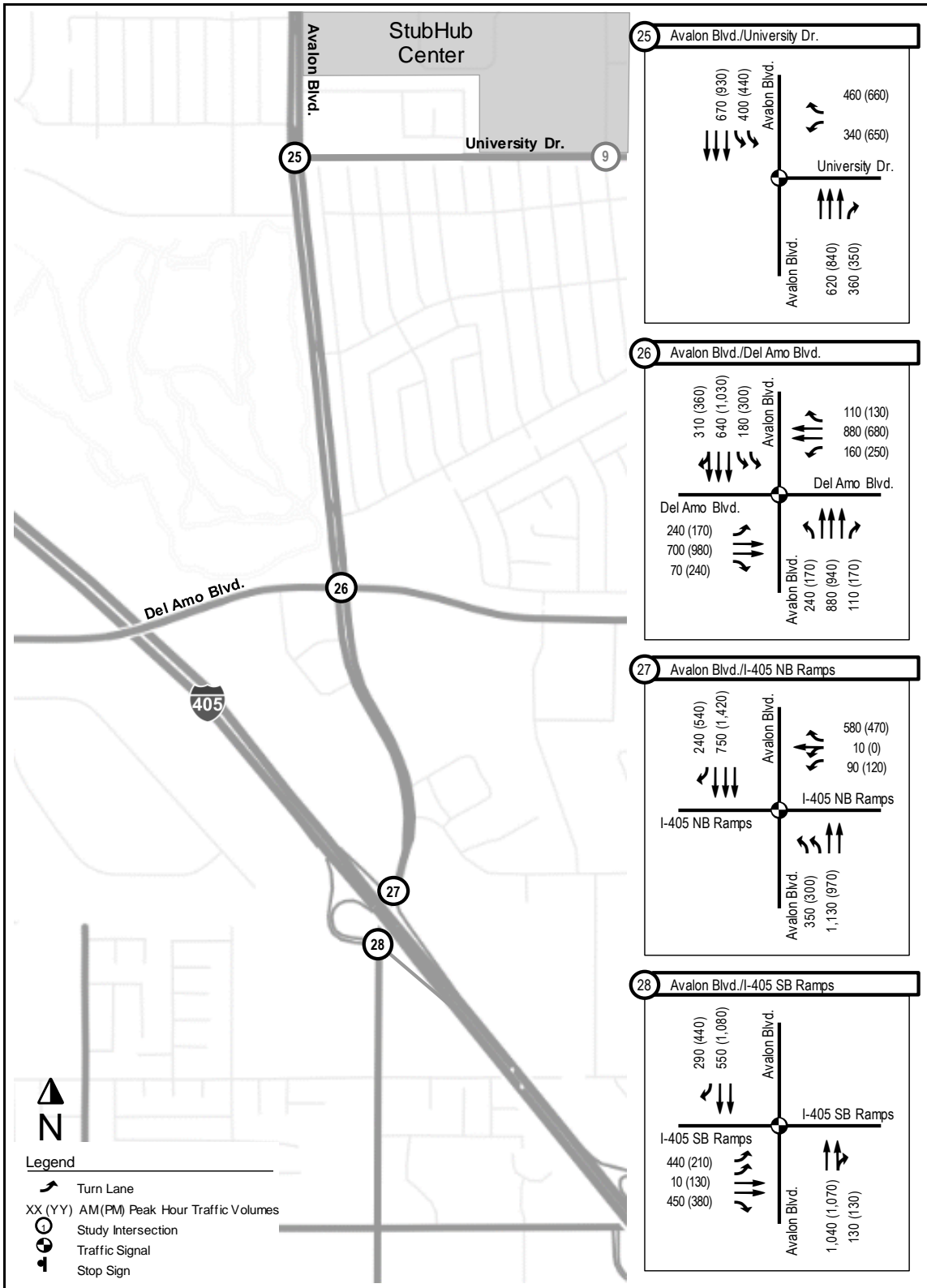


Exhibit 49: Existing Plus Project Alternative 1 Traffic Volumes and Lane Configurations (Map E)

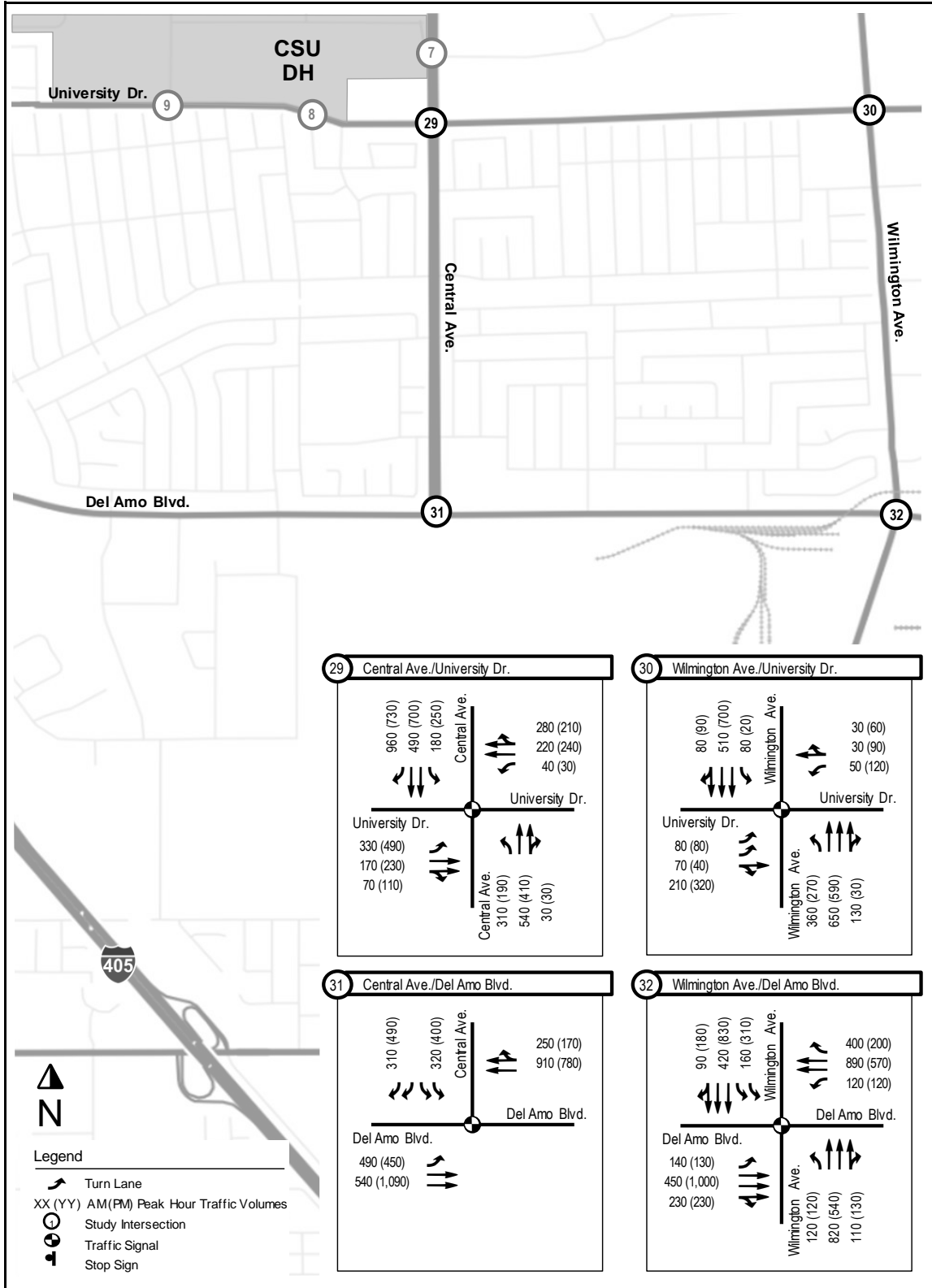


Exhibit 49: Existing Plus Project Alternative 1 Traffic Volumes and Lane Configurations (Map F)

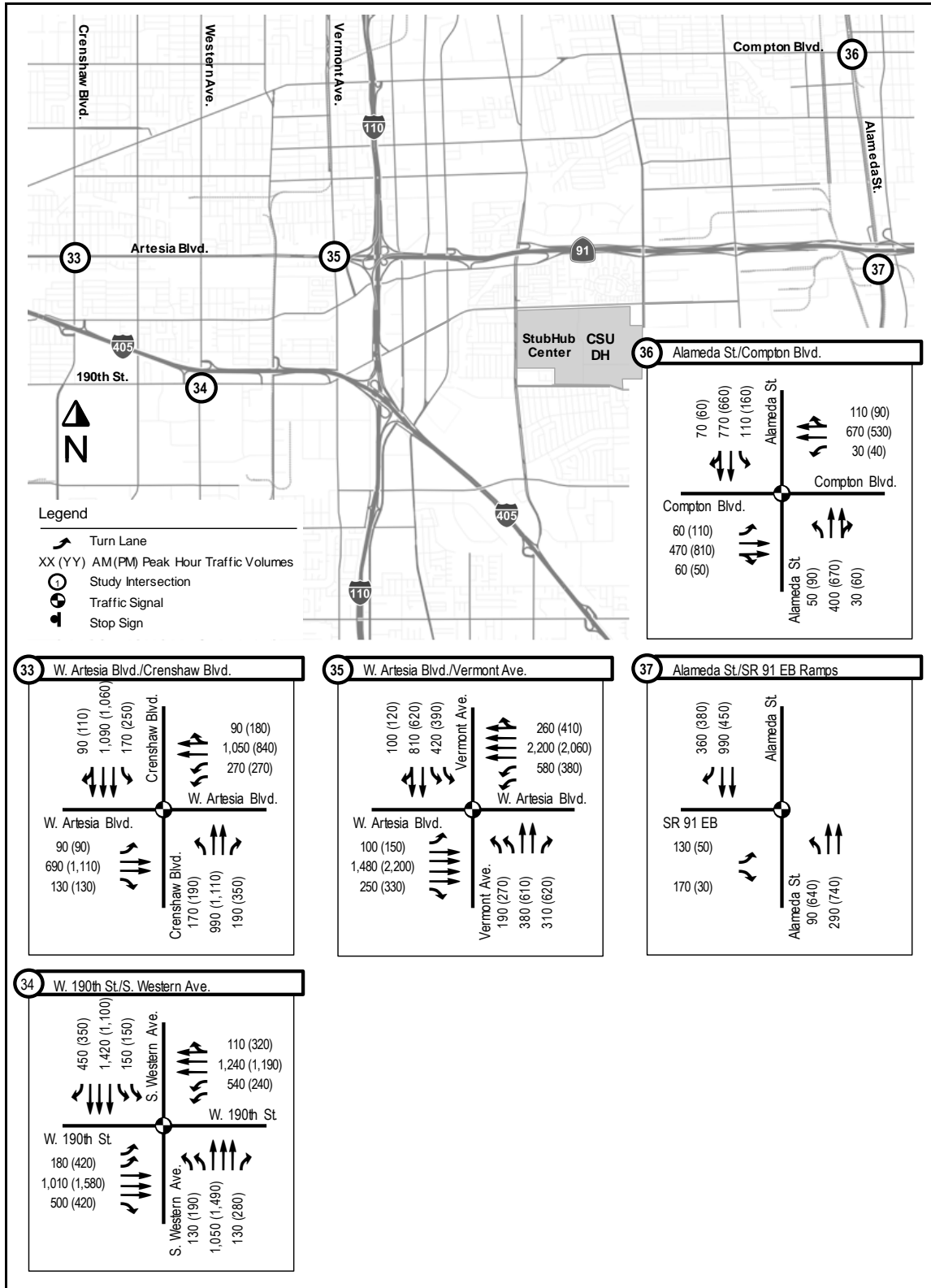


Exhibit 49: Existing Plus Project Alternative 1 Traffic Volumes and Lane Configurations (Map G)

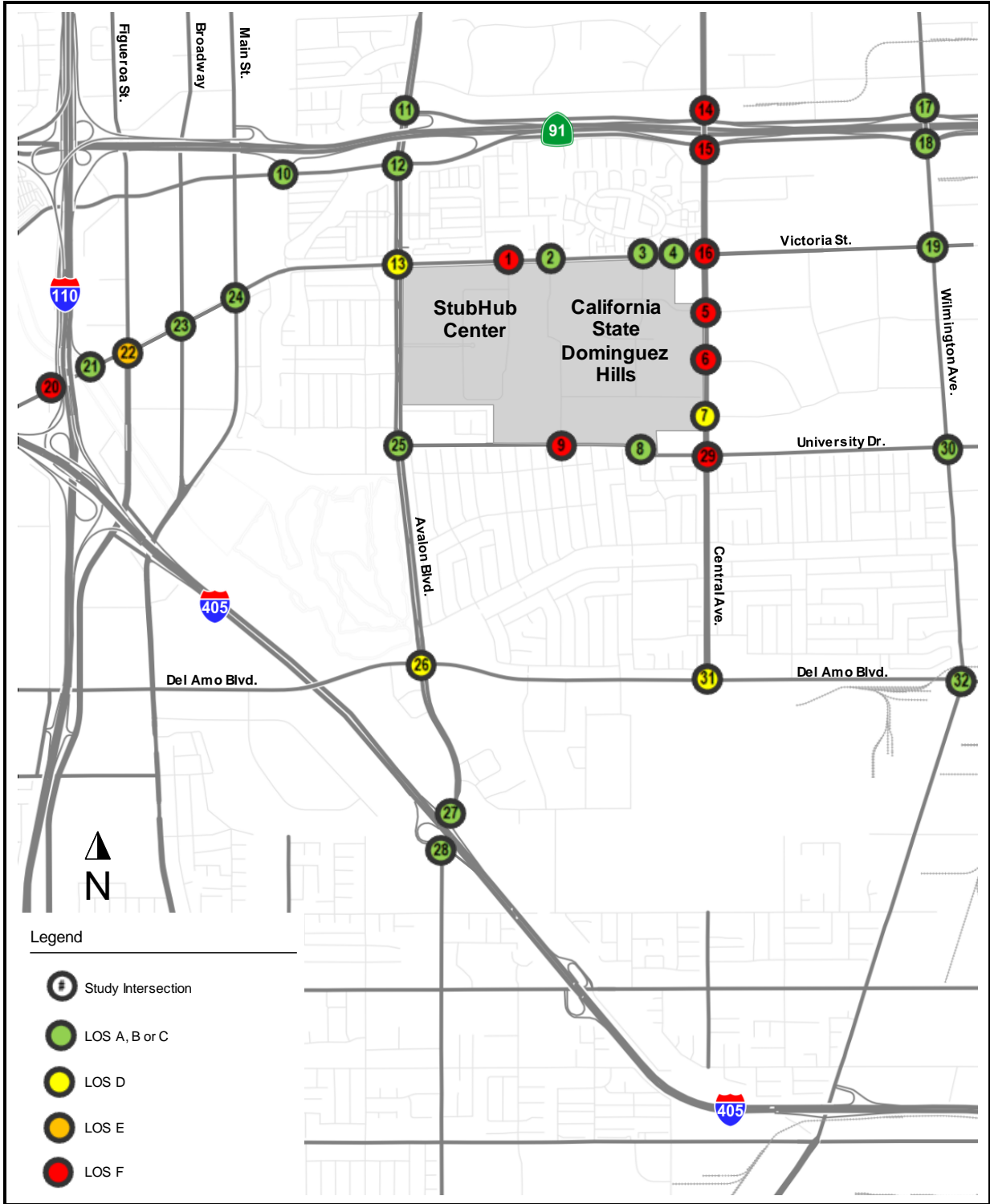


Exhibit 50: Existing Plus Project Alternative 1 AM Peak Hour LOS (Map)

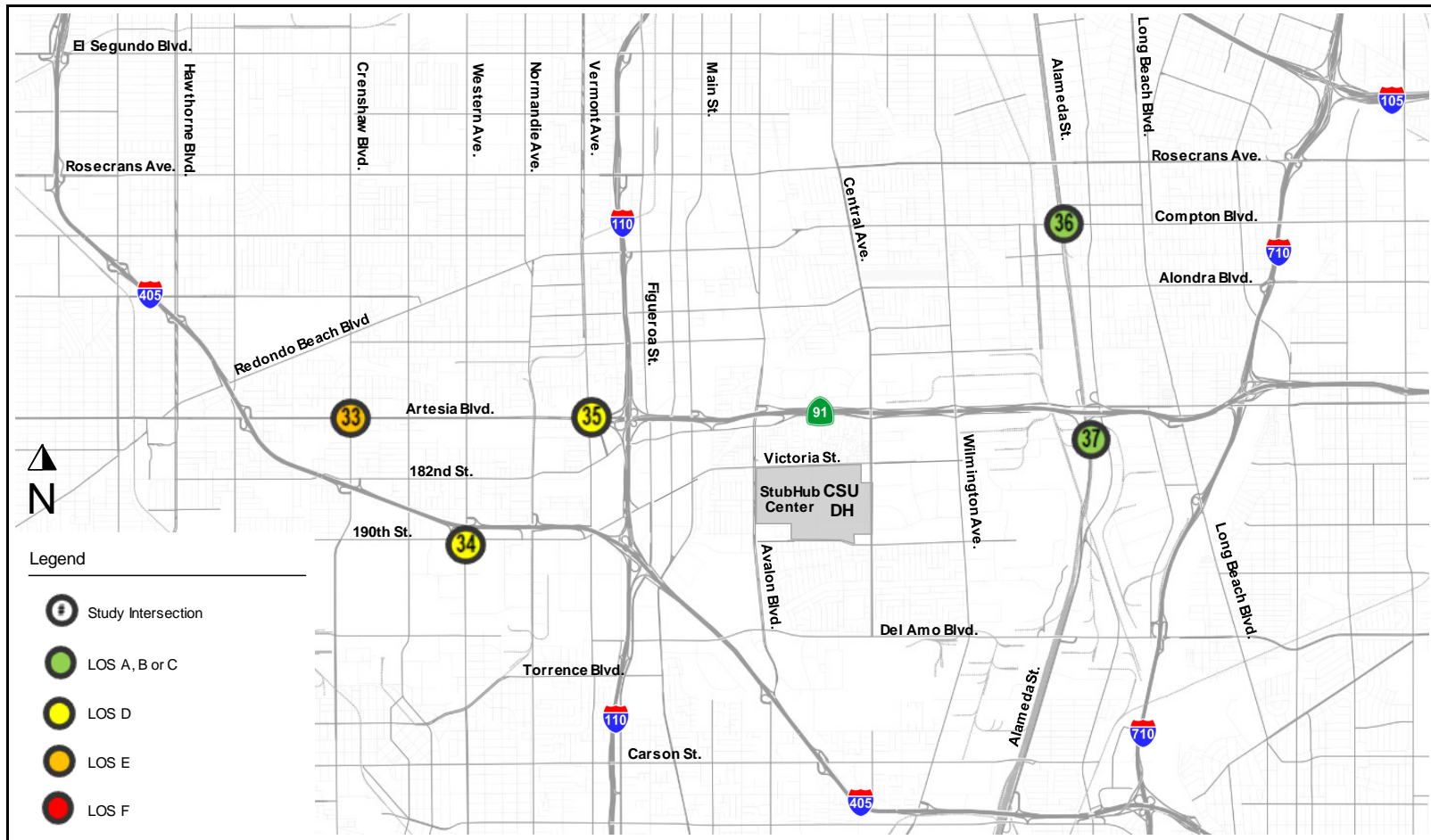


Exhibit 50: Existing Plus Project Alternative 1 AM Peak Hour LOS (Map)

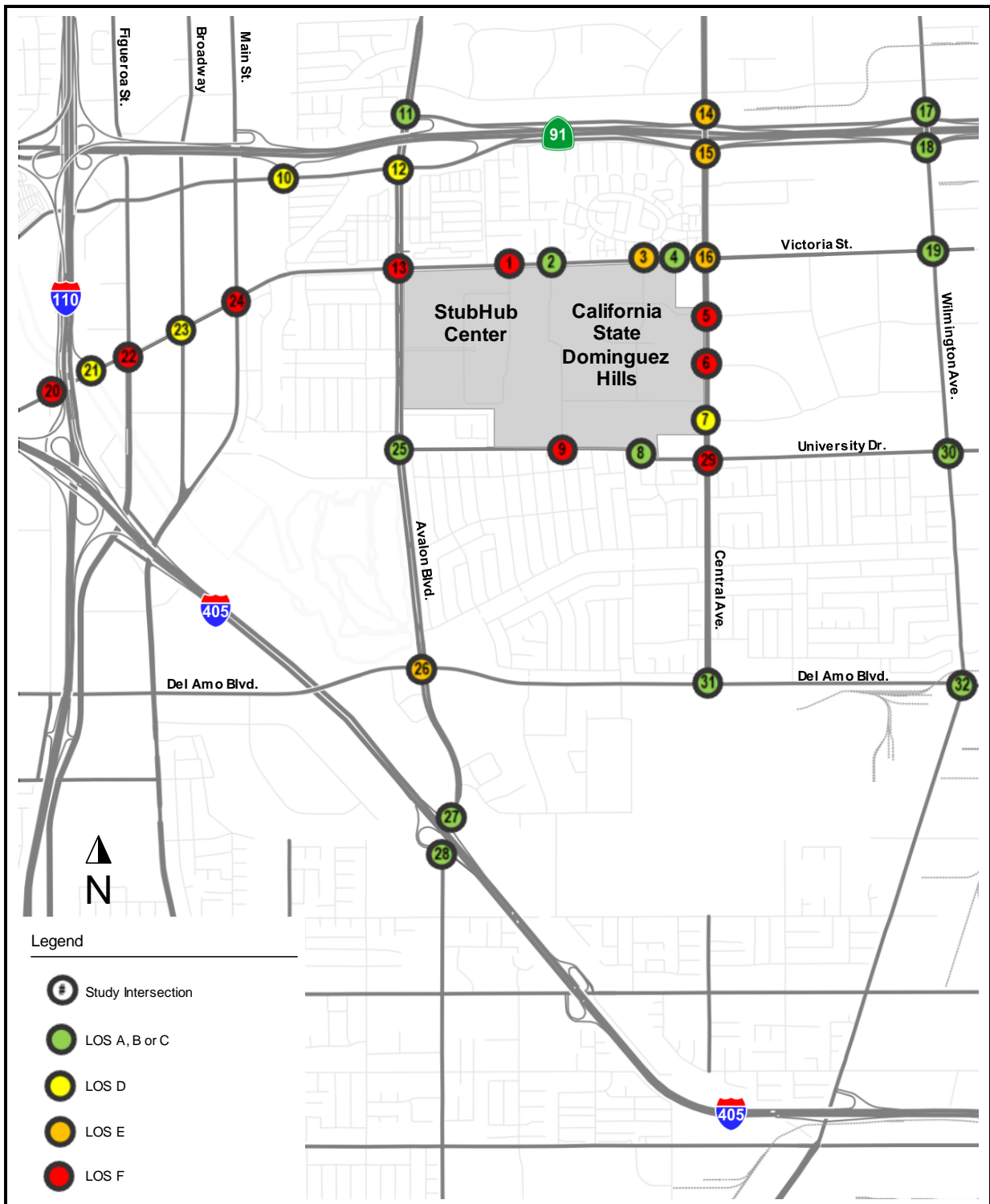


Exhibit 51: Existing Plus Project Alternative 1 PM Peak Hour LOS (Map)

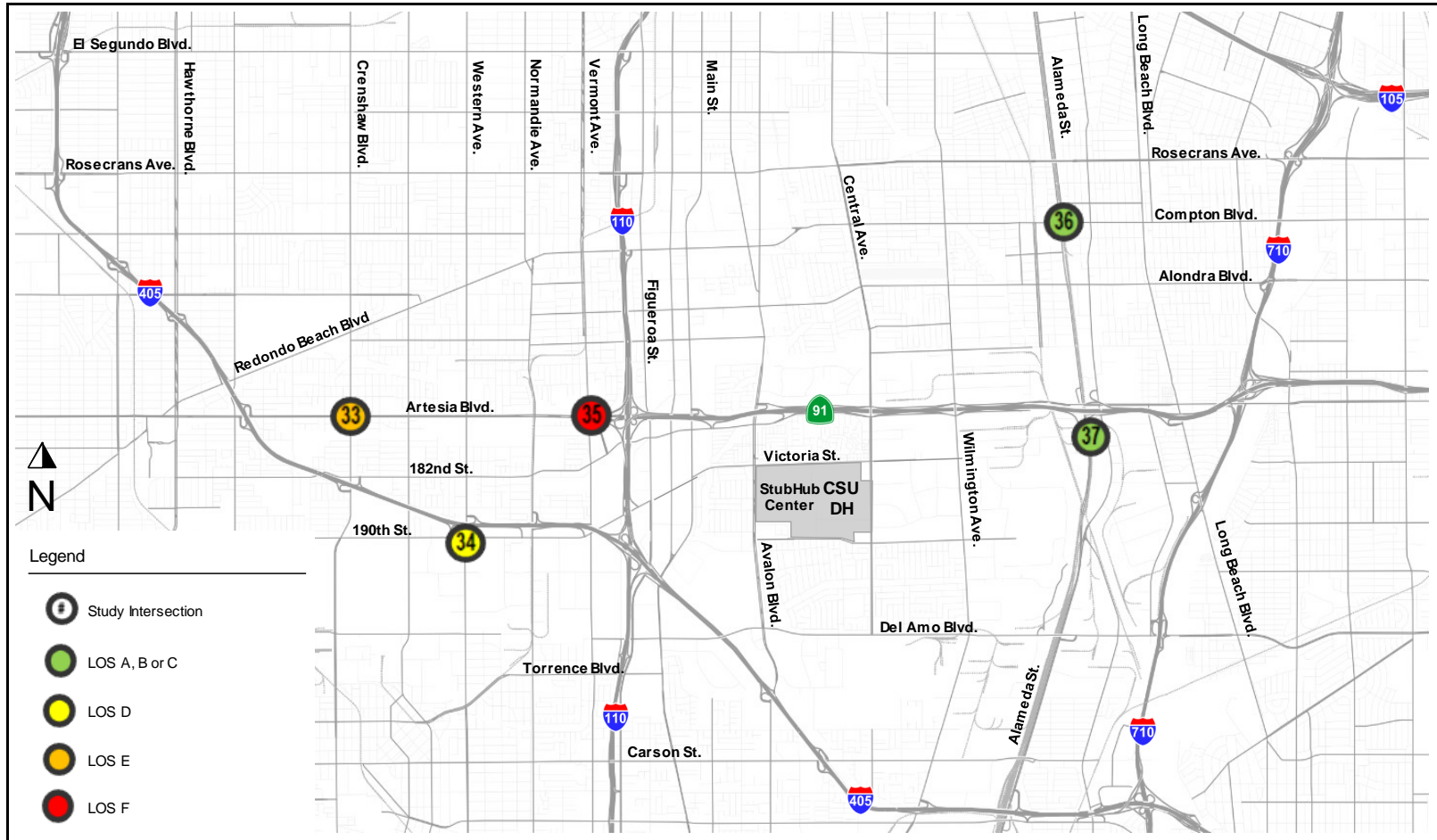


Exhibit 51: Existing Plus Project Alternative 1 PM Peak Hour LOS (Map)

Study ID	Intersection Name	Control Type	Existing Scenarios					
			AM Peak Hour			PM Peak Hour		
			No Project LOS	Plus Project LOS	Project Has Significant Impact?	No Project LOS	Plus Project LOS	Project Has Significant Impact?
1	Victoria St./Drive D	TWSC	C	F	Yes	F	F	Yes
2	Victoria St./Tamcliff Ave.	Signalized	A	A	No	A	C	No
3	Victoria St./Birchknoll Dr.	Signalized	A	B	No	B	E	Yes
4	Victoria St./Project Service Rd.	TWSC	N/A	B	No	N/A	B	No
5	Central Ave./Charles Willard St.	TWSC	C	F	Yes	C	F	Yes
6	Central Ave./Beachey Pl.	TWSC	C	F	Yes	C	F	Yes
7	Central Ave./Glenn Curtiss St.	Signalized	A	D	No	A	D	No
8	University Dr./Birchknoll Dr. Ext.	N/A	N/A	C	No	N/A	B	No
9	University Dr./Toro Center Dr.	TWSC	B	F	Yes	B	F	Yes
10	Albertoni St./SR 91 EB Ramps	Signalized	A	B	No	C	D	No
11	Avalon Blvd./SR 91 WB On-Ramp	Signalized	A	A	No	A	A	No
12	Avalon Blvd./Albertoni St.	Signalized	A	B	No	C	D	No
13	Avalon Blvd./Victoria St.	Signalized	A	D	No	D	F	Yes
14	Central Ave./Artesia Blvd. WB	Signalized	C	F	Yes	C	E	Yes
15	Central Ave./Albertoni St./Artesia Blvd. EB	Signalized	C	F	Yes	C	E	Yes
16	Central Ave./Victoria St.	Signalized	A	F	Yes	B	E	Yes
17	Wilmington Ave./Artesia Blvd. WB	Signalized	B	C	No	C	C	No
18	Wilmington Ave./Artesia Blvd. EB	Signalized	B	B	No	C	C	No
19	Wilmington Ave./Victoria St.	Signalized	A	A	No	A	A	No
20	I-110 SB Off-Ramp/190th St.	Signalized	E	F	Yes	F	F	Yes
21	I-110 NB On-Ramp/190th St.	Signalized	A	A	No	B	D	No
22	Figueroa St./190th St./Victoria St.	Signalized	C	E	Yes	D	F	Yes
23	Broadway/Victoria St.	Signalized	A	C	No	C	D	No
24	Main St./Victoria St.	Signalized	B	C	No	D	F	Yes
25	Avalon Blvd./University Dr.	Signalized	A	A	No	B	C	No
26	Avalon Blvd./Del Amo Blvd.	Signalized	D	D	No	D	E	Yes
27	Avalon Blvd./I-405 NB Ramps	Signalized	A	A	No	A	A	No
28	Avalon Blvd./I-405 SB Ramps	Signalized	A	A	No	A	A	No
29	Central Ave./University Dr.	Signalized	A	F	Yes	A	F	Yes
30	Wilmington Ave./University Dr.	Signalized	A	B	No	A	C	No
31	Central Ave./Del Amo Blvd.	Signalized	C	D	No	B	C	No
32	Wilmington Ave./Del Amo Blvd.	Signalized	B	B	No	B	C	No
33	W. Artesia Blvd./Crenshaw Blvd.	Signalized	E	E	No	E	E	No
34	W. 190th St./S. Western Ave.	Signalized	D	D	No	C	D	No
35	W. Artesia Blvd./Vermont Ave.	Signalized	D	D	No	F	F	No
36	Alameda St./Compton Blvd.	Signalized	B	B	No	C	C	No
37	Alameda St./SR 91 EB Ramps	Signalized	A	A	No	C	C	No

Exhibit 52: Determination of Intersection Impacts for the Existing Plus Project Alternative 1 Scenario

6.1.3 Existing Plus Project Alternative 1 Freeway Level of Service

The LOS for the study freeway segments under Existing Plus Project conditions are shown in **Error! Reference source not found.** All CMP locations were analyzed using the Demand to Capacity ratio (D/C) as required by the Los Angeles County CMP. **Error! Reference source not found.** shows that the Project would have significant impacts at seven CMP locations, namely:

- CMP Station #1033, SR 91 East of Alameda St./Santa Fe Ave., eastbound during the PM peak hour
- CMP Station #1034, SR 91 East of Cherry Ave., eastbound during the PM peak hour and westbound, during AM peak hour
- CMP Station #1046, I-110 at Manchester Blvd., northbound during the PM peak hour and southbound in the AM and PM peak hours
- CMP Station #1047, I-110 at Slauson Ave., northbound during the PM peak hour and southbound in both peak hours
- CMP Station #1066, I-405 at Santa Fe Ave., northbound during both peak hours and southbound during the PM peak hour
- CMP Station #1067, I-405 at the Carson Scales, northbound during AM and PM peak hours and southbound during the PM peak hour
- CMP Station #1068, I-405 North of Inglewood Ave. at Compton Blvd., northbound during the PM peak hour

Altogether 80 freeway segments would have significant impacts, including those that are not CMP monitoring stations. These additional locations are:

- SR-91 eastbound, Jct. Rte. 110 to Avalon Blvd., during the PM peak hour
- SR-91 eastbound, Avalon Blvd. to Central Ave., during the PM peak hour
- SR-91 eastbound, Central Ave. to Wilmington Ave., during the PM peak hour
- SR-91 eastbound, Wilmington Ave. to Alameda St., during the PM peak hour
- SR-91 eastbound, Alameda St. to Alameda St./Santa Fe Ave., during the both peak hours
- SR-91 eastbound, Alameda St./Santa Fe Ave. to Long Beach Blvd., during the PM peak hour
- SR-91 eastbound, Long Beach Blvd. to Jct. Rte. 710, during the PM peak hour
- SR-91 eastbound, Jct. Rte. 710 to Cherry Ave., during the PM peak hour
- SR-91 eastbound, Cherry Ave. to Paramount Blvd., during the PM peak hour
- SR-91 eastbound, Jct. Rte. 19 to Clark Ave., during the PM peak hour
- I-110 northbound, Sepulveda Blvd. to Carson St., during the AM peak hour
- I-110 northbound, Carson St. to Torrance/Del Amo Blvd., during the both peak hours
- I-110 northbound, Torrance/Del Amo Blvd. to Jct. Rte. 405, during the both peak hours
- I-110 northbound, Jct. Rte. 405 to Jct. Rte. 91, during the AM peak hour
- I-110 northbound, El Segundo Blvd. to Jct. Rte. 105, during the PM peak hour
- I-110 northbound, Century Blvd. to Manchester Ave., during the PM peak hour
- I-110 northbound, Manchester Ave. to Florence Ave., during the PM peak hour
- I-110 northbound, Florence Ave. to Gage Ave., during the PM peak hour
- I-110 northbound, Gage Ave. to Slauson Ave., during the PM peak hour

- I-110 northbound, Slauson Ave. to 51st St., during the PM peak hour
- I-110 northbound, 51st St. to Vernon Ave., during the PM peak hour
- I-110 northbound, Vernon Ave. to Martin Luther King Jr. Blvd., during the PM peak hour
- I-405 northbound, Lakewood Blvd. to Cherry Ave., during the AM peak hour
- I-405 northbound, Cherry Ave. to Orange Ave., during the AM peak hour
- I-405 northbound, Orange Ave. to Atlantic Ave., during the both peak hours
- I-405 northbound, Atlantic Ave. to Long Beach Blvd, during the both peak hours
- I-405 northbound, Jct. Rte. 710 to Alameda St., during the both peak hours
- I-405 northbound, Alameda St. to Wilmington Ave., during the both peak hours
- I-405 northbound, Wilmington Ave. to Carson St., during the both peak hours
- I-405 northbound, Carson St. to Avalon Blvd., during the both peak hours
- I-405 northbound, Avalon Blvd. to Jct. Rte. 110, during the both peak hours
- I-405 northbound, Jct. Rte. 110 to Vermont Ave., during the PM peak hour
- I-405 northbound, Vermont Ave. to Normandie Ave., during the AM peak hour
- I-405 northbound, Normandie Ave. to Western Ave., during the both peak hours
- I-405 northbound, Western Ave. to Crenshaw Blvd., during the both peak hours
- I-405 northbound, Crenshaw Blvd. to Artesia Blvd., during the both peak hours
- I-405 northbound, Inglewood Ave. to Rosecrans Ave., during the PM peak hour
- SR-91 westbound, Jct. Rte. 110 to Avalon Blvd., during the both peak hours
- SR-91 westbound, Avalon Blvd. to Central Ave., during the AM peak hour
- SR-91 westbound, Central Ave. to Wilmington Ave., during the AM peak hour
- SR-91 westbound, Wilmington Ave. to Alameda St., during the AM peak hour
- SR-91 westbound, Alameda St. to Alameda St./Santa Fe Ave., during the AM peak hour
- SR-91 westbound, Long Beach Blvd. to Jct. Rte. 710, during the AM peak hour
- SR-91 westbound, Jct. Rte. 710 to Cherry Ave., during the AM peak hour
- SR-91 westbound, Cherry Ave. to Paramount Blvd., during the AM peak hour
- SR-91 westbound, Paramount Blvd. to Downey Ave., during the AM peak hour
- SR-91 westbound, Downey Ave. to Jct. Rte. 19, during the AM peak hour
- SR-91 westbound, Jct. Rte. 19 to Clark Ave., during the both peak hours
- SR-91 westbound, Clark Ave. to Bellflower Blvd., during the AM peak hour
- SR-91 westbound, Bellflower Blvd. to Jct. Rte. 605, during the AM peak hour
- I-110 southbound, Sepulveda Blvd. to Carson St., during the PM peak hour
- I-110 southbound, Carson St. to Torrance/Del Amo Blvd., during the both peak hours
- I-110 southbound, Torrance/Del Amo Blvd. to Jct. Rte. 405, during the both peak hours
- I-110 southbound, Jct. Rte. 405 to Jct. Rte. 91, during the both peak hours

- I-110 southbound, Redondo Beach Blvd. to Rosecrans Ave., during the AM peak hour
- I-110 southbound, Rosecrans Ave. to El Segundo Blvd., during the both peak hours
- I-110 southbound, Century Blvd. to Manchester Ave., during the both peak hours
- I-110 southbound, Manchester Ave. to Florence Ave., during the both peak hours
- I-110 southbound, Florence Ave. to Gage Ave., during the both peak hours
- I-110 southbound, Gage Ave. to Slauson Ave., during the both peak hours
- I-110 southbound, Slauson Ave. to 51st St., during the both peak hours
- I-110 southbound, 51st St. to Vernon Ave., during the both peak hours
- I-110 southbound, Vernon Ave. to Martin Luther King Jr. Blvd., during the AM peak hour
- I-110 southbound, Martin Luther King Jr. Blvd. to Exposition Blvd., during the both peak hours
- I-405 southbound, Cherry Ave. to Orange Ave., during the PM peak hour
- I-405 southbound, Orange Ave. to Atlantic Ave., during the PM peak hour
- I-405 southbound, Atlantic Ave. to Long Beach Blvd, during the PM peak hour
- I-405 southbound, Long Beach Blvd to Jct. Rte. 710, during the PM peak hour
- I-405 southbound, Jct. Rte. 710 to Alameda St., during the PM peak hour
- I-405 southbound, Alameda St. to Wilmington Ave., during the PM peak hour
- I-405 southbound, Wilmington Ave. to Carson St., during the PM peak hour
- I-405 southbound, Carson St. to Avalon Blvd., during the PM peak hour
- I-405 southbound, Avalon Blvd. to Jct. Rte. 110, during the PM peak hour
- I-405 southbound, Jct. Rte. 110 to Vermont Ave., during the both peak hours
- I-405 southbound, Vermont Ave. to Normandie Ave., during the PM peak hour
- I-405 southbound, Normandie Ave. to Western Ave., during the both peak hours
- I-405 southbound, Western Ave. to Crenshaw Blvd., during the both peak hours
- I-405 southbound, Crenshaw Blvd. to Artesia Blvd., during the both peak hours
- I-405 southbound, Artesia Blvd. to Hawthorne Blvd., during the AM peak hour
- I-405 southbound, Hawthorne Blvd. to Inglewood Ave., during the both peak hours

These are direct (as opposed to cumulative) impacts. The distinction between direct and cumulative impacts is discussed further in Chapter 14.

ID	CMP Station	Fwy Rte	Post Mile	Location	Northbound/Eastbound								Southbound/Westbound							
					AM Peak Hour				PM Peak Hour				AM Peak Hour				PM Peak Hour			
					Demand	Capacity	D/C	LOS	Demand	Capacity	D/C	LOS	Demand	Capacity	D/C	LOS	Demand	Capacity	D/C	LOS
91-1		91	6.344	Jct. Rte. 110 to Avalon Blvd.	6,920	12,000	0.58	C	14,190	12,000	1.18	F(0)	9,150	4,000	2.29	F(3)	6,220	4,000	1.56	F(3)
91-2		91	7.426	Avalon Blvd. to Central Ave.	7,130	10,000	0.71	C	14,630	10,000	1.46	F(3)	9,570	10,000	0.96	E	6,500	10,000	0.65	C
91-3		91	8.435	Central Ave. to Wilmington Ave.	7,280	10,000	0.73	C	14,930	10,000	1.49	F(3)	9,910	10,000	0.99	E	6,730	10,000	0.67	C
91-4		91	9.162	Wilmington Ave. to Alameda St.	7,550	10,000	0.76	C	15,490	10,000	1.55	F(3)	10,260	10,000	1.03	F(0)	6,970	10,000	0.70	C
91-5		91	10.271	Alameda St. to Alameda St./Santa Fe Ave.	7,520	8,000	0.94	E	15,440	8,000	1.93	F(3)	10,260	8,000	1.28	F(1)	6,970	8,000	0.87	D
91-6	1033	91	10.41	Alameda St./Santa Fe Ave. to Long Beach Blvd.	7,820	12,000	0.65	C	16,060	12,000	1.34	F(1)	10,670	12,000	0.89	D	7,250	12,000	0.60	C
91-7		91	11.096	Long Beach Blvd. to Jct. Rte. 710	7,820	12,000	0.65	C	16,040	12,000	1.34	F(1)	10,640	10,000	1.06	F(0)	7,220	10,000	0.72	C
91-8		91	11.681	Jct. Rte. 710 to Cherry Ave.	7,900	10,000	0.79	D	11,350	10,000	1.14	F(0)	12,780	10,000	1.28	F(1)	8,980	10,000	0.90	D
91-9	1034	91	13.094	Cherry Ave. to Paramount Blvd.	8,030	10,000	0.80	D	11,530	10,000	1.15	F(0)	12,980	12,000	1.08	F(0)	9,120	12,000	0.76	C
91-10		91	13.594	Paramount Blvd. to Downey Ave.	7,920	10,000	0.79	D	11,370	10,000	1.14	F(0)	12,800	10,000	1.28	F(1)	9,000	10,000	0.90	D
91-11		91	14.103	Downey Ave. to Jct. Rte. 19	7,880	12,000	0.66	C	11,320	12,000	0.94	E	12,740	10,000	1.27	F(1)	8,960	10,000	0.90	D
91-12		91	14.618	Jct. Rte. 19 to Clark Ave.	7,300	10,000	0.73	C	10,470	10,000	1.05	F(0)	11,770	8,000	1.47	F(3)	8,280	8,000	1.04	F(0)
91-13		91	15.105	Clark Ave. to Bellflower Blvd.	7,690	12,000	0.64	C	11,040	12,000	0.92	D	12,410	10,000	1.24	F(0)	8,730	10,000	0.87	D
91-14		91	15.614	Bellflower Blvd. to Jct. Rte. 605	7,600	12,000	0.63	C	10,900	12,000	0.91	D	12,260	10,000	1.23	F(0)	8,620	10,000	0.86	D
110-1	1045	110	1.23	Channel St. to C St.	4,460	8,000	0.56	C	3,270	8,000	0.41	B	3,610	8,000	0.45	B	4,380	8,000	0.55	C
110-2		110	2.771	C St. to Anaheim St.	4,660	10,000	0.47	B	3,420	10,000	0.34	A	3,770	8,000	0.47	B	4,580	8,000	0.57	C
110-3		110	3.264	Anaheim St. to Jct. Rte. 1	5,070	10,000	0.51	B	3,710	10,000	0.37	B	4,090	10,000	0.41	B	4,970	10,000	0.50	B
110-4		110	4.061	Jct. Rte. 1 to Sepulveda Blvd.	7,100	8,000	0.89	D	5,220	8,000	0.65	C	5,720	8,000	0.72	C	6,940	8,000	0.87	D
110-5		110	5.451	Sepulveda Blvd. to Carson St.	9,190	8,000	1.15	F(0)	6,740	8,000	0.84	D	7,430	8,000	0.93	D	9,020	8,000	1.13	F(0)
110-6		110	7.016	Carson St. to Torrance/Del Amo Blvd.	10,560	8,000	1.32	F(1)	7,730	8,000	0.97	E	8,540	8,000	1.07	F(0)	10,360	8,000	1.30	F(1)
110-7		110	8.028	Torrance/Del Amo Blvd. to Jct. Rte. 405	11,150	8,000	1.39	F(2)	8,150	8,000	1.02	F(0)	9,010	8,000	1.13	F(0)	10,940	8,000	1.37	F(2)
110-8		110	8.775	Jct. Rte. 405 to Jct. Rte. 91	13,790	12,000	1.15	F(0)	10,050	12,000	0.84	D	11,140	8,000	1.39	F(2)	13,510	8,000	1.69	F(3)
110-9		110	9.87	Jct. Rte. 91 to Redondo Beach Blvd.	9,080	12,000	0.76	C	9,390	12,000	0.78	D	10,090	12,000	0.84	D	9,650	12,000	0.80	D
110-10		110	11.239	Redondo Beach Blvd. to Rosecrans Ave.	9,440	11,000	0.86	D	9,760	11,000	0.89	D	10,480	11,000	0.95	E	10,030	11,000	0.91	D
110-11		110	11.891	Rosecrans Ave. to El Segundo Blvd.	9,830	11,000	0.89	D	10,140	11,000	0.92	D	10,920	11,000	0.99	E	10,440	11,000	0.95	E
110-12		110	12.898	El Segundo Blvd. to Jct. Rte. 105	9,990	11,000	0.91	D	10,300	11,000	0.94	E	11,100	13,000	0.85	D	10,620	13,000	0.82	D
110-13		110	13.82	Jct. Rte. 105 to Century Blvd.	11,160	14,000	0.80	D	11,480	14,000	0.82	D	12,380	14,000	0.88	D	11,870	14,000	0.85	D
110-14		110	14.967	Century Blvd. to Manchester Ave.	11,980	12,000	1.00	E	12,320	12,000	1.03	F(0)	13,290	12,000	1.11	F(0)	12,740	12,000	1.06	F(0)
110-15	1046	110	15.976	Manchester Ave. to Florence Ave.	11,660	12,000	0.97	E	11,980	12,000	1.00	E	12,900	12,000	1.08	F(0)	12,360	12,000	1.03	F(0)
110-16		110	16.981	Florence Ave. to Gage Ave.	12,000	12,000	1.00	E	12,310	12,000	1.03	F(0)	13,030	12,000	1.09	F(0)	12,510	12,000	1.04	F(0)
110-17	1047	110	17.514	Gage Ave. to Slauson Ave.	11,930	12,000	0.99	E	12,230	12,000	1.02	F(0)	12,960	12,000	1.08	F(0)	12,430	12,000	1.04	F(0)
110-18		110	17.98	Slauson Ave. to 51st St.	11,490	10,000	1.15	F(0)	11,770	10,000	1.18	F(0)	12,460	10,000	1.25	F(0)	11,950	10,000	1.20	F(0)
110-19		110	18.495	51st St. to Vernon Ave.	11,710	10,000	1.17	F(0)	12,000	10,000	1.20	F(0)	12,700	12,000	1.06	F(0)	12,180	12,000	1.02	F(0)
110-20		110	18.998	Vernon Ave. to Martin Luther King Jr. Blvd.	11,690	12,000	0.97	E	11,980	12,000	1.00	E	12,680	12,000	1.06	F(0)	12,170	12,000	1.01	F(0)
110-21		110	19.502	Martin Luther King Jr. Blvd. to Exposition Blvd.	10,590	12,000	0.88	D	10,840	12,000	0.90	D	11,490	10,000	1.15	F(0)	11,020	10,000	1.10	F(0)
110-22		110	19.996	Exposition Blvd. to Jct. Rte. 10	10,240	12,000	0.85	D	10,480	12,000	0.87	D	11,140	12,000	0.93	D	10,690	12,000	0.89	D
405-1		405	3.324	Lakewood Blvd. to Cherry Ave.	11,770	10,000	1.18	F(0)	9,990	10,000	1.00	E	8,750	10,000	0.88	D	10,970	10,000	1.10	F(0)
405-2		405	4.879	Cherry Ave. to Orange Ave.	12,360	10,000	1.24	F(0)	10,480	10,000	1.05	F(0)	9,170	8,000	1.15	F(0)	11,510	8,000	1.44	F(2)
405-3		405	5.388	Orange Ave. to Atlantic Ave.	12,890	8,000	1.61	F(3)	10,930	8,000	1.37	F(2)	9,580	8,000	1.20	F(0)	12,010	8,000	1.50	F(3)
405-4		405	6.076	Atlantic Ave. to Long Beach Blvd	12,680	8,000	1.59	F(3)	10,760	8,000	1.35	F(1)	9,430	12,000	0.79	D	11,830	12,000	0.99	E
405-5		405	6.34	Long Beach Blvd to Jct. Rte. 710	12,620	12,000	1.05	F(0)	10,710	12,000	0.89	D	9,380	10,000	0.94	E	11,770	10,000	1.18	F(0)
405-6	1066	405	7.596	Jct. Rte. 710 to Alameda St.	12,030	10,000	1.20	F(0)	10,190	10,000	1.02	F(0)	8,910	10,000	0.89	D	11,200	10,000	1.12	F(0)
405-7		405	8.784	Alameda St. to Wilmington Ave.	11,650	10,000	1.17	F(0)	9,870	10,000	0.99	E	8,630	10,000	0.86	D	10,860	10,000	1.09	F(0)
405-8		405	9.556	Wilmington Ave. to Carson St.	10,860	8,000	1.36	F(2)	9,350	8,000	1.17	F(0)	9,220	8,000	1.15	F(0)	11,220	8,000	1.40	F(2)
405-9		405	10.541	Carson St. to Avalon Blvd.	10,700	8,000	1.34	F(1)	9,210	8,000	1.15	F(0)	9,080	8,000	1.14	F(0)	11,050	8,000	1.38	F(2)
405-10	1067	405	11.224	Avalon Blvd. to Jct. Rte. 110	11,460	10,000	1.15	F(0)	9,870	10,000	0.99	E	9,730	10,000	0.97	E	11,840	10,000	1.18	F(0)
405-11		405	12.97	Jct. Rte. 110 to Vermont Ave.	11,400	10,000	1.14	F(0)	10,030	10,000	1.00	E	8,650	8,000	1.08	F(0)	10,590	8,000	1.32	F(1)
405-12		405	13.28	Vermont Ave. to Normandie Ave.	11,880	12,000	0.99	E	10,440	12,000	0.87	D	8,970	10,000	0.90	D	10,980	10,000	1.10	F(0)
405-13		405	13.826	Normandie Ave. to Western Ave.	11,130	10,000	1.11	F(0)	9,790	10,000	0.98	E	8,360	8,000	1.05	F(0)	10,260	8,000	1.28	F(1)
405-14		405	14.398	Western Ave. to Crenshaw Blvd.	10,700	8,000	1.34	F(1)	9,410	8,000	1.18	F(0)	8,040	8,000	1.01	F(0)	9,860	8,000	1.23	F(0)
405-15		405	15.447	Crenshaw Blvd. to Artesia Blvd.	10,430	8,000	1.30	F(1)	9,170	8,000	1.15	F(0)	7,850	8,000	0.98	E	9,620	8,000	1.20	F(0)
405-16		405	16.573	Artesia Blvd. to Hawthorne Blvd.	10,520	10,000	1.05	F(0)	9,230	10,000	0.92	D	7,910	8,000	0.99	E	9,710	8,000	1.21	F(0)
405-17		405	17.589	Hawthorne Blvd. to Inglewood Ave.	11,010	10,000	1.10	F(0)	9,640	10,000	0.96	E	8,280	8,000	1.04	F(0)	10,180	8,000	1.27	F(1)
405-18	1068	405	18.233	Inglewood Ave. to Rosecrans Ave.	11,510	10,000	1.15	F(0)	10,060	10,000	1.01	F(0)	8,640	10,000	0.86	D	10,620	10,000	1.06	F(0)
710-1		710	12.97	Jct. Rte. 91 to Alondra Blvd.	10,670	12,000	0.89	D	16,560	12,000	1.38	F(2)	10,540	12,000	0.88	D	8,450	12,000	0.70	C
710-2		710	13.945	Alondra Blvd. to Jct. Rte. 105	11,020	12,000	0.92	D	17,090	12,000	1.42	F(2)	10,860	12,000	0.91	D	8,710	12,000	0.73	C

Note: D/C is demand-to-capacity ratio.

Exhibit 53: Existing Plus Project Alternative 1 Level of Service (LOS) for Study Freeway Locations

Northbound/Eastbound

ID	CMP Station	Fwy Rte	Post Mile	Location	Existing (2017)				2017 Plus Project				2017 Increase in D/C Ratio with Project		2017 Project Has Significant Impact?	
					AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM	PM	AM	PM
					D/C	LOS	D/C	LOS	D/C	LOS	D/C	LOS				
91-1		91	6.344	Jct. Rte. 110 to Avalon Blvd.	0.56	C	1.16	F(0)	0.58	C	1.18	F(0)	0.02	0.02	No	Yes
91-2		91	7.426	Avalon Blvd. to Central Ave.	0.69	C	1.42	F(2)	0.71	C	1.46	F(3)	0.02	0.04	No	Yes
91-3		91	8.435	Central Ave. to Wilmington Ave.	0.70	C	1.44	F(2)	0.73	C	1.49	F(3)	0.03	0.05	No	Yes
91-4		91	9.162	Wilmington Ave. to Alameda St.	0.73	C	1.50	F(3)	0.76	C	1.55	F(3)	0.03	0.05	No	Yes
91-5		91	10.271	Alameda St. to Alameda St./Santa F	0.91	D	1.87	F(3)	0.94	E	1.93	F(3)	0.03	0.06	Yes	Yes
91-6	1033	91	10.41	Alameda St./Santa Fe Ave. to Long	0.63	C	1.30	F(1)	0.65	C	1.34	F(1)	0.02	0.04	No	Yes
91-7		91	11.096	Long Beach Blvd. to Jct. Rte. 710	0.63	C	1.30	F(1)	0.65	C	1.34	F(1)	0.02	0.04	No	Yes
91-8		91	11.681	Jct. Rte. 710 to Cherry Ave.	0.78	D	1.11	F(0)	0.79	D	1.14	F(0)	0.01	0.03	No	Yes
91-9	1034	91	13.094	Cherry Ave. to Paramount Blvd.	0.79	D	1.13	F(0)	0.80	D	1.15	F(0)	0.01	0.02	No	Yes
91-10		91	13.594	Paramount Blvd. to Downey Ave.	0.78	D	1.12	F(0)	0.79	D	1.14	F(0)	0.01	0.02	No	No
91-11		91	14.103	Downey Ave. to Jct. Rte. 19	0.65	C	0.93	D	0.66	C	0.94	E	0.01	0.01	No	No
91-12		91	14.618	Jct. Rte. 19 to Clark Ave.	0.72	C	1.03	F(0)	0.73	C	1.05	F(0)	0.01	0.02	No	Yes
91-13		91	15.105	Clark Ave. to Bellflower Blvd.	0.63	C	0.90	D	0.64	C	0.92	D	0.01	0.02	No	No
91-14		91	15.614	Bellflower Blvd. to Jct. Rte. 605	0.63	C	0.89	D	0.63	C	0.91	D	0.00	0.02	No	No
110-1	1045	110	1.23	Channel St. to C St.	0.54	B	0.39	B	0.56	C	0.41	B	0.02	0.02	No	No
110-2		110	2.771	C St. to Anaheim St.	0.45	B	0.32	A	0.47	B	0.34	A	0.02	0.02	No	No
110-3		110	3.264	Anaheim St. to Jct. Rte. 1	0.49	B	0.35	A	0.51	B	0.37	B	0.02	0.02	No	No
110-4		110	4.061	Jct. Rte. 1 to Sepulveda Blvd.	0.86	D	0.62	C	0.89	D	0.65	C	0.03	0.03	No	No
110-5		110	5.451	Sepulveda Blvd. to Carson St.	1.11	F(0)	0.80	D	1.15	F(0)	0.84	D	0.04	0.04	Yes	No
110-6		110	7.016	Carson St. to Torrance/Del Amo Blvd	1.28	F(1)	0.93	D	1.32	F(1)	0.97	E	0.04	0.04	Yes	Yes
110-7		110	8.028	Torrance/Del Amo Blvd. to Jct. Rte.	1.36	F(2)	0.98	E	1.39	F(2)	1.02	F(0)	0.03	0.04	Yes	Yes
110-8		110	8.775	Jct. Rte. 405 to Jct. Rte. 91	1.12	F(0)	0.81	D	1.15	F(0)	0.84	D	0.03	0.03	Yes	No
110-9		110	9.87	Jct. Rte. 91 to Redondo Beach Blvd.	0.74	C	0.75	C	0.76	C	0.78	D	0.02	0.03	No	No
110-10		110	11.239	Redondo Beach Blvd. to Rosecrans	0.84	D	0.85	D	0.86	D	0.89	D	0.02	0.04	No	No
110-11		110	11.891	Rosecrans Ave. to El Segundo Blvd.	0.88	D	0.89	D	0.89	D	0.92	D	0.01	0.03	No	No
110-12		110	12.898	El Segundo Blvd. to Jct. Rte. 105	0.89	D	0.91	D	0.91	D	0.94	E	0.02	0.03	No	Yes
110-13		110	13.82	Jct. Rte. 105 to Century Blvd.	0.79	D	0.80	D	0.80	D	0.82	D	0.01	0.02	No	No
110-14		110	14.967	Century Blvd. to Manchester Ave.	0.99	E	1.00	E	1.00	E	1.03	F(0)	0.01	0.03	No	Yes
110-15	1046	110	15.976	Manchester Ave. to Florence Ave.	0.96	E	0.98	E	0.97	E	1.00	E	0.01	0.02	No	Yes
110-16		110	16.981	Florence Ave. to Gage Ave.	0.99	E	1.01	F(0)	1.00	E	1.03	F(0)	0.01	0.02	No	Yes
110-17	1047	110	17.514	Gage Ave. to Slauson Ave.	0.98	E	1.00	E	0.99	E	1.02	F(0)	0.01	0.02	No	Yes
110-18		110	17.98	Slauson Ave. to 51st St.	1.14	F(0)	1.16	F(0)	1.15	F(0)	1.18	F(0)	0.01	0.02	No	Yes
110-19		110	18.495	51st St. to Vernon Ave.	1.16	F(0)	1.18	F(0)	1.17	F(0)	1.20	F(0)	0.01	0.02	No	Yes
110-20		110	18.998	Vernon Ave. to Martin Luther King Jr	0.97	E	0.98	E	0.97	E	1.00	E	0.00	0.02	No	Yes
110-21		110	19.502	Martin Luther King Jr. Blvd. to Expos	0.87	D	0.89	D	0.88	D	0.90	D	0.01	0.01	No	No
110-22		110	19.996	Exposition Blvd. to Jct. Rte. 10	0.85	D	0.86	D	0.85	D	0.87	D	0.00	0.01	No	No
405-1		405	3.324	Lakewood Blvd. to Cherry Ave.	1.16	F(0)	0.99	E	1.18	F(0)	1.00	E	0.02	0.01	Yes	No
405-2		405	4.879	Cherry Ave. to Orange Ave.	1.22	F(0)	1.04	F(0)	1.24	F(0)	1.05	F(0)	0.02	0.01	Yes	No
405-3		405	5.388	Orange Ave. to Atlantic Ave.	1.59	F(3)	1.35	F(1)	1.61	F(3)	1.37	F(2)	0.02	0.02	Yes	Yes
405-4		405	6.076	Atlantic Ave. to Long Beach Blvd	1.57	F(3)	1.33	F(1)	1.59	F(3)	1.35	F(1)	0.02	0.02	Yes	Yes
405-5		405	6.34	Long Beach Blvd to Jct. Rte. 710	1.04	F(0)	0.88	D	1.05	F(0)	0.89	D	0.01	0.01	No	No
405-6	1066	405	7.596	Jct. Rte. 710 to Alameda St.	1.18	F(0)	1.00	E	1.20	F(0)	1.02	F(0)	0.02	0.02	Yes	Yes
405-7		405	8.784	Alameda St. to Wilmington Ave.	1.14	F(0)	0.97	E	1.17	F(0)	0.99	E	0.03	0.02	Yes	Yes
405-8		405	9.556	Wilmington Ave. to Carson St.	1.33	F(1)	1.15	F(0)	1.36	F(2)	1.17	F(0)	0.03	0.02	Yes	Yes
405-9		405	10.541	Carson St. to Avalon Blvd.	1.31	F(1)	1.13	F(0)	1.34	F(1)	1.15	F(0)	0.03	0.02	Yes	Yes
405-10	1067	405	11.224	Avalon Blvd. to Jct. Rte. 110	1.12	F(0)	0.97	E	1.15	F(0)	0.99	E	0.03	0.02	Yes	Yes
405-11		405	12.97	Jct. Rte. 110 to Vermont Ave.	1.12	F(0)	0.97	E	1.14	F(0)	1.00	E	0.02	0.03	No	Yes
405-12		405	13.28	Vermont Ave. to Normandie Ave.	0.97	E	0.85	D	0.99	E	0.87	D	0.02	0.02	Yes	No
405-13		405	13.826	Normandie Ave. to Western Ave.	1.09	F(0)	0.95	E	1.11	F(0)	0.98	E	0.02	0.03	Yes	Yes
405-14		405	14.398	Western Ave. to Crenshaw Blvd.	1.31	F(1)	1.14	F(0)	1.34	F(1)	1.18	F(0)	0.03	0.04	Yes	Yes
405-15		405	15.447	Crenshaw Blvd. to Artesia Blvd.	1.28	F(1)	1.11	F(0)	1.30	F(1)	1.15	F(0)	0.02	0.04	Yes	Yes
405-16		405	16.573	Artesia Blvd. to Hawthorne Blvd.	1.04	F(0)	0.90	D	1.05	F(0)	0.92	D	0.01	0.02	No	No
405-17		405	17.589	Hawthorne Blvd. to Inglewood Ave.	1.09	F(0)	0.95	E	1.10	F(0)	0.96	E	0.01	0.01	No	No
405-18	1068	405	18.233	Inglewood Ave. to Rosecrans Ave.	1.14	F(0)	0.99	E	1.15	F(0)	1.01	F(0)	0.01	0.02	No	Yes
710-1		710	12.97	Jct. Rte. 91 to Alondra Blvd.	0.88	D	1.37	F(2)	0.89	D	1.38	F(2)	0.01	0.01	No	No
710-2		710	13.945	Alondra Blvd. to Jct. Rte. 105	0.91	D	1.41	F(2)	0.92	D	1.42	F(2)	0.01	0.01	No	No

Note: D/C is demand-to-capacity ratio.

Exhibit 54: Determination of Freeway Impact for Existing Plus Project Alternative 1 Scenario

Southbound/Wesbound

ID	CMP Station	Fwy Rte	Post Mile	Location	Existing (2017)				2017 Plus Project				2017 Increase in D/C Ratio with Project		2017 Project Has Significant Impact?	
					AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM	PM	AM	PM
					D/C	LOS	D/C	LOS	D/C	LOS	D/C	LOS				
91-1		91	6.344	Jct. Rte. 110 to Avalon Blvd.	2.25	F(3)	1.53	F(3)	2.29	F(3)	1.56	F(3)	0.04	0.03	Yes	Yes
91-2		91	7.426	Avalon Blvd. to Central Ave.	0.92	D	0.63	C	0.96	E	0.65	C	0.04	0.02	Yes	No
91-3		91	8.435	Central Ave. to Wilmington Ave.	0.94	E	0.64	C	0.99	E	0.67	C	0.05	0.03	Yes	No
91-4		91	9.162	Wilmington Ave. to Alameda St.	0.97	E	0.66	C	1.03	F(0)	0.70	C	0.06	0.04	Yes	No
91-5		91	10.271	Alameda St. to Alameda St./Santa F	1.21	F(0)	0.83	D	1.28	F(1)	0.87	D	0.07	0.04	Yes	No
91-6	1033	91	10.41	Alameda St./Santa Fe Ave. to Long	0.84	D	0.57	C	0.89	D	0.60	C	0.05	0.03	No	No
91-7		91	11.096	Long Beach Blvd. to Jct. Rte. 710	1.01	F(0)	0.69	C	1.06	F(0)	0.72	C	0.05	0.03	Yes	No
91-8		91	11.681	Jct. Rte. 710 to Cherry Ave.	1.25	F(0)	0.88	D	1.28	F(1)	0.90	D	0.03	0.02	Yes	No
91-9	1034	91	13.094	Cherry Ave. to Paramount Blvd.	1.06	F(0)	0.75	C	1.08	F(0)	0.76	C	0.02	0.01	Yes	No
91-10		91	13.594	Paramount Blvd. to Downey Ave.	1.25	F(0)	0.88	D	1.28	F(1)	0.90	D	0.03	0.02	Yes	No
91-11		91	14.103	Downey Ave. to Jct. Rte. 19	1.25	F(0)	0.88	D	1.27	F(1)	0.90	D	0.02	0.02	Yes	No
91-12		91	14.618	Jct. Rte. 19 to Clark Ave.	1.44	F(2)	1.02	F(0)	1.47	F(3)	1.04	F(0)	0.03	0.02	Yes	Yes
91-13		91	15.105	Clark Ave. to Bellflower Blvd.	1.22	F(0)	0.86	D	1.24	F(0)	0.87	D	0.02	0.01	Yes	No
91-14		91	15.614	Bellflower Blvd. to Jct. Rte. 605	1.21	F(0)	0.85	D	1.23	F(0)	0.86	D	0.02	0.01	Yes	No
110-1	1045	110	1.23	Channel St. to C St.	0.43	B	0.53	B	0.45	B	0.55	C	0.02	0.02	No	No
110-2		110	2.771	C St. to Anaheim St.	0.45	B	0.55	C	0.47	B	0.57	C	0.02	0.02	No	No
110-3		110	3.264	Anaheim St. to Jct. Rte. 1	0.39	B	0.48	B	0.41	B	0.50	B	0.02	0.02	No	No
110-4		110	4.061	Jct. Rte. 1 to Sepulveda Blvd.	0.69	C	0.84	D	0.72	C	0.87	D	0.03	0.03	No	No
110-5		110	5.451	Sepulveda Blvd. to Carson St.	0.90	D	1.09	F(0)	0.93	D	1.13	F(0)	0.03	0.04	No	Yes
110-6		110	7.016	Carson St. to Torrance/Del Amo Blvd	1.04	F(0)	1.25	F(0)	1.07	F(0)	1.30	F(1)	0.03	0.05	Yes	Yes
110-7		110	8.028	Torrance/Del Amo Blvd. to Jct. Rte.	1.09	F(0)	1.33	F(1)	1.13	F(0)	1.37	F(2)	0.04	0.04	Yes	Yes
110-8		110	8.775	Jct. Rte. 405 to Jct. Rte. 91	1.36	F(2)	1.65	F(3)	1.39	F(2)	1.69	F(3)	0.03	0.04	Yes	Yes
110-9		110	9.87	Jct. Rte. 91 to Redondo Beach Blvd.	0.81	D	0.78	D	0.84	D	0.80	D	0.03	0.02	No	No
110-10		110	11.239	Redondo Beach Blvd. to Rosecrans	0.92	D	0.88	D	0.95	E	0.91	D	0.03	0.03	Yes	No
110-11		110	11.891	Rosecrans Ave. to El Segundo Blvd.	0.96	E	0.92	D	0.99	E	0.95	E	0.03	0.03	Yes	Yes
110-12		110	12.898	El Segundo Blvd. to Jct. Rte. 105	0.82	D	0.79	D	0.85	D	0.82	D	0.03	0.03	No	No
110-13		110	13.82	Jct. Rte. 105 to Century Blvd.	0.86	D	0.83	D	0.88	D	0.85	D	0.02	0.02	No	No
110-14		110	14.967	Century Blvd. to Manchester Ave.	1.08	F(0)	1.04	F(0)	1.11	F(0)	1.06	F(0)	0.03	0.02	Yes	Yes
110-15	1046	110	15.976	Manchester Ave. to Florence Ave.	1.05	F(0)	1.01	F(0)	1.08	F(0)	1.03	F(0)	0.03	0.02	Yes	Yes
110-16		110	16.981	Florence Ave. to Gage Ave.	1.06	F(0)	1.02	F(0)	1.09	F(0)	1.04	F(0)	0.03	0.02	Yes	Yes
110-17	1047	110	17.514	Gage Ave. to Slauson Ave.	1.06	F(0)	1.02	F(0)	1.08	F(0)	1.04	F(0)	0.02	0.02	Yes	Yes
110-18		110	17.98	Slauson Ave. to 51st St.	1.22	F(0)	1.17	F(0)	1.25	F(0)	1.20	F(0)	0.03	0.03	Yes	Yes
110-19		110	18.495	51st St. to Vernon Ave.	1.04	F(0)	1.00	E	1.06	F(0)	1.02	F(0)	0.02	0.02	Yes	Yes
110-20		110	18.998	Vernon Ave. to Martin Luther King Jr	1.04	F(0)	1.00	E	1.06	F(0)	1.01	F(0)	0.02	0.01	Yes	No
110-21		110	19.502	Martin Luther King Jr. Blvd. to Expos	1.12	F(0)	1.08	F(0)	1.15	F(0)	1.10	F(0)	0.03	0.02	Yes	Yes
110-22		110	19.996	Exposition Blvd. to Jct. Rte. 10	0.91	D	0.87	D	0.93	D	0.89	D	0.02	0.02	No	No
405-1		405	3.324	Lakewood Blvd. to Cherry Ave.	0.87	D	1.09	F(0)	0.88	D	1.10	F(0)	0.01	0.01	No	No
405-2		405	4.879	Cherry Ave. to Orange Ave.	1.14	F(0)	1.42	F(2)	1.15	F(0)	1.44	F(2)	0.01	0.02	No	Yes
405-3		405	5.388	Orange Ave. to Atlantic Ave.	1.19	F(0)	1.48	F(3)	1.20	F(0)	1.50	F(3)	0.01	0.02	No	Yes
405-4		405	6.076	Atlantic Ave. to Long Beach Blvd	0.78	D	0.97	E	0.79	D	0.99	E	0.01	0.02	No	Yes
405-5		405	6.34	Long Beach Blvd to Jct. Rte. 710	0.93	D	1.16	F(0)	0.94	E	1.18	F(0)	0.01	0.02	No	Yes
405-6	1066	405	7.596	Jct. Rte. 710 to Alameda St.	0.88	D	1.10	F(0)	0.89	D	1.12	F(0)	0.01	0.02	No	Yes
405-7		405	8.784	Alameda St. to Wilmington Ave.	0.85	D	1.06	F(0)	0.86	D	1.09	F(0)	0.01	0.03	No	Yes
405-8		405	9.556	Wilmington Ave. to Carson St.	1.14	F(0)	1.37	F(2)	1.15	F(0)	1.40	F(2)	0.01	0.03	No	Yes
405-9		405	10.541	Carson St. to Avalon Blvd.	1.12	F(0)	1.35	F(1)	1.14	F(0)	1.38	F(2)	0.02	0.03	No	Yes
405-10	1067	405	11.224	Avalon Blvd. to Jct. Rte. 110	0.96	E	1.16	F(0)	0.97	E	1.18	F(0)	0.01	0.02	No	Yes
405-11		405	12.97	Jct. Rte. 110 to Vermont Ave.	1.04	F(0)	1.29	F(1)	1.08	F(0)	1.32	F(1)	0.04	0.03	Yes	Yes
405-12		405	13.28	Vermont Ave. to Normandie Ave.	0.87	D	1.08	F(0)	0.90	D	1.10	F(0)	0.03	0.02	No	Yes
405-13		405	13.826	Normandie Ave. to Western Ave.	1.02	F(0)	1.26	F(1)	1.05	F(0)	1.28	F(1)	0.03	0.02	Yes	Yes
405-14		405	14.398	Western Ave. to Crenshaw Blvd.	0.98	E	1.21	F(0)	1.01	F(0)	1.23	F(0)	0.03	0.02	Yes	Yes
405-15		405	15.447	Crenshaw Blvd. to Artesia Blvd.	0.96	E	1.18	F(0)	0.98	E	1.20	F(0)	0.02	0.02	Yes	Yes
405-16		405	16.573	Artesia Blvd. to Hawthorne Blvd.	0.97	E	1.20	F(0)	0.99	E	1.21	F(0)	0.02	0.01	Yes	No
405-17		405	17.589	Hawthorne Blvd. to Inglewood Ave.	1.02	F(0)	1.25	F(0)	1.04	F(0)	1.27	F(1)	0.02	0.02	Yes	Yes
405-18	1068	405	18.233	Inglewood Ave. to Rosecrans Ave.	0.85	D	1.05	F(0)	0.86	D	1.06	F(0)	0.01	0.01	No	No
710-1		710	12.97	Jct. Rte. 91 to Alondra Blvd.	0.86	D	0.69	C	0.88	D	0.70	C	0.02	0.01	No	No
710-2		710	13.945	Alondra Blvd. to Jct. Rte. 105	0.89	D	0.71	C	0.91	D	0.73	C	0.02	0.02	No	No

Note: D/C is demand-to-capacity ratio.

Exhibit 54: Determination of Freeway Impact for Existing Plus Project Alternative 1 Scenario (continued)

6.1.4 Determination of Pedestrian Impacts

The CSU system has defined a significant pedestrian impact as a situation where,

- *“A project fails to provide safe pedestrian connections between campus buildings and adjacent streets and transit facilities. Or*
- *A project significantly disrupts existing or planned pedestrian facilities or significantly conflicts with applicable non-automotive transportation plans, guidelines, policies, or standards.”*

Based on this standard, the Project would not impose such disruptions and so would not have any significant pedestrian impacts.

6.1.5 Determination of Bicycle Impacts

The CSU system has defined a significant bicycle impact as a situation where, *“A project significantly disrupts existing or planned bicycle facilities or significantly conflicts with applicable non-automotive transportation plans, guidelines, policies, or standards.”* Based on this standard, the Project would not impose such disruptions and so would not have any significant bicycle impacts.

6.1.6 Determination of Transit Impacts

CSU guideline state that a significant transit impact would occur if, *“A project significantly disrupts existing or planned transit facilities and services or significantly conflicts with applicable transit plans, guidelines, policies, or standards.”* Based on this standard, the Project would not impose such disruptions and so would not have any significant transit impacts.

As a supplement to the transit analysis procedure described in the CSU Transportation Impact Study Manual, based on the substantial transit services available in the CSUDH area and their potential to reduce project-related vehicle trips, an analysis was performed of the capacity of the local transit system to accommodate an increase in passengers arising from the Project.

The analysis was conducted in three steps. First, the number of additional transit trips that would be generated by the proposed Project was estimated using available mode share data; that is, available data illustrating the percentage of travel utilizing transit. Thereafter, the capacity of the area’s transit systems to accommodate the additional passengers was assessed. The final step was to compare the number of new trips attributable to the Project with the available capacity of the system to determine if the increase in passengers attributable to the Project could be accommodated by the system. Because CSU has not developed criteria specific to a transit capacity analysis, and due to the location of the proposed Project in Los Angeles County, for the limited purposes of this analysis, the LA Metro standards¹⁶ relative to passenger loading were used. The LA Metro standards are shown in Exhibit 55.

¹⁶ *Transit Service Policy*. Los Angeles County Metropolitan Transportation Authority, October 2015. Pg 50. Transit-related thresholds to be applied at other CSU campuses throughout the state will vary dependent upon multiple factors, including project location.

Frequency Range in Minutes	Passengers per Seat
1 - 10	1.40
11 - 20	1.30
21 - 40	1.20
41 - 60	1.10
60+	1.00

Exhibit 55: Loading Standards for Weekday AM and PM Periods

Project Transit Demand Estimate

Several sources of information were reviewed regarding the transit mode share at CSUDH and for the City of Carson more generally. Based on data from the CSUDH Transportation Services Department, approximately 1% of students purchase transit access passes. Thus, based on this data point, approximately 2% of CSUDH students utilize public transit to travel to/from the campus. In addition to the CSUDH Transportation Services Department data, the LA County CMP Transit Impact Methodology was reviewed. The methodology recommends assuming 1.4 person trips per car trip and 3.4% of person-trips by transit for locations not within ¼ mile of transit centers or rail transit. These percentages are consistent with U.S. Census data¹⁷ for the City of Carson, which reports a 3.4% transit mode share. The higher of the two sources, i.e. the 3.4% share from the CMP rather than the 1% from the CSU data, was used to ensure a conservative estimate of Project impacts.

Using the LA County CMP methodology to conduct the analysis, for every 100 car-trips to the campus there would be 4.9 transit trips. This ratio of 4.49 transit trips for every 100 car trips was combined with the auto trip generation rate for the various Project components to identify a transit trip generation rate for the proposed Project (see Exhibit 56).

Land Use (ITE Code)	Unit	Transit Trips per 100 Car Trips	AM Peak Hour		PM Peak Hour	
			Auto Rate	Transit Rate	Rate	Transit Rate
			(A)	(B)	(C)=(A)*(B)/100	(D)	(E)=(A)*(D)/100
On-Campus Student	Students	4.9	0.033	0.002	0.093	0.005
Off-Campus Student	Students	4.9	0.151	0.007	0.161	0.008
Faculty and Staff	Employee	4.9	0.067	0.003	0.013	0.001
High School (530)	Students	4.9	0.430	0.021	0.130	0.006
Child Care Centers	Students	4.9	0.962	0.047	0.962	0.047
Market Rate Housing (220)	Dwelling Unit	4.9	0.51	0.025	0.62	0.030
Retail (820)	1,000 sq. ft.	4.9	1.58	0.078	6.07	0.297
Business Park (770)	1,000 sq. ft.	4.9	1.34	0.066	1.21	0.059

Exhibit 56: Computation of Transit Trip Generation Rate

The proposed Project transit trip generation rates were then applied to the number of units in each component of the Project (students, market-rate apartments, etc.) to estimate the number of peak-hour transit trips that would be generated by the Project. This number is shown in Exhibit 57. As shown, the

¹⁷ U.S. Census Bureau American FactFinder website, accessed November 8, 2018

exhibit distinguishes direction of travel, with some project components generating inbound trips in the morning and outbound trips in the evening, while other components generate trips in the opposite direction. The analysis ultimately focused on Project trips in the peak direction, which is the relevant timeframe for assessing demand and capacity. Peak direction was identified in Exhibit 57 as inbound towards the campus in the AM peak hour and outbound away from the campus in the PM peak hour. If the peak hour peak direction demand can be accommodated, then the non-peak direction can also be accommodated. As shown on Exhibit 57, the Project would generate a net increase of 134 transit trips in the AM peak hour, and 154 transit trips in the PM peak hour.

Land Use (ITE Code)	Unit	Existing Conditions					2035 Alternative 1				
		Number of Units	AM Transit Trip-Gen Rate	AM Peak Hour Transit Trips	PM Transit Trip-Gen Rate	PM Peak Hour Transit Trips	Number of Units	AM Peak Hour Transit Trips	Net Increase in Trips in AM (i.e. Project trips)	PM Peak Hour Transit Trips	Net Increase in Trips in PM (i.e. Project trips)
		(A)	(B)	(C)=(A)*(B)	(D)	(E)=(A)*(D)	(F)	(G)=(B)*(F)	(H)=(G)-(C)	(I)=(D)*(F)	(J)=(I)-(E)
Inbound in AM, Outbound in PM											
Off-Campus Student	Students	12,822	0.007	95	0.008	101	22,645	167	72	179	78
Faculty and Staff	Employee	1,052	0.003	3	0.001	1	1,892	6	3	1	1
High School (530)	Students	676	0.021	14	0.006	4	676	14	0	4	0
Child Care Centers	Students	92	0.047	4	0.047	4	184	9	4	9	4
Retail (820)	1,000 sq. ft.	0	0.078	0	0.297	0	96,085	7	7	29	29
Business Park (770)	1,000 sq. ft.	0	0.066	0	0.059	0	720,918	47	47	43	43
	Subtotal			117		111		251	134	265	154
Outbound in AM, Inbound in PM											
On-Campus Student	Students	649	0.002	1	0.005	3	1,588	3	2	7	4
Market Rate Housing (220)	Dwelling Unit	0	0.025	0	0.030	0	2,149	54	54	65	65
	Subtotal			1		3		56	55	73	70

Exhibit 57: Project Peak-Hour Transit Trips

The next step in the analysis was to determine how Project transit trips would be distributed among the various transit lines serving the CSUDH campus. This determination was made based on the SCAG travel demand model¹⁸. Based on the model, the total number of arriving or departing Project trips was distributed among the transit lines as shown in Exhibit 58¹⁹. Since the SCAG model only depicts AM transit operations and does not explicitly represent PM transit operations, the reverse of the AM peak directionality was used for the PM. The resulting number of passengers for each transit system is the number of Project passengers (i.e., the Project transit demand) that would need to be accommodated by each respective system, as shown in Exhibit 58.

¹⁸ The SCAG travel demand model does not explicitly represent the Toro Shuttle. The Toro Shuttle goes between the Blue Line station and the campus, as does Metro Route 130. Accordingly, for purposes of the analysis, the demand for the Toro Shuttle was included as part of the Route 130 demand in the model.

¹⁹ The number of AM arriving trips in Exhibit 59 is slightly different from Exhibit 58 due to rounding.

Transit Operator	Route	% of Campus Transit Arrivals	AM Arriving Project Passengers	% of Campus Transit Departures	PM Departing Project Passengers
City of Carson	A	20.1%	27	20%	31
City of Carson	E	0.0%	0	0%	0
City of Carson	H	1.5%	2	1%	2
Torrance Transit	6 E	5.3%	7	6%	10
Torrance Transit	6 W	6.3%	9	5%	8
Metro	52 N	20.1%	27	0%	1
Metro	52 S	0.4%	1	20%	31
Metro	53 N	20.1%	27	0%	1
Metro	53 S	0.4%	1	20%	31
Metro	130 E	6.6%	9	8%	12
Metro	130 W	8.0%	11	7%	10
Metro	205 N	3.0%	4	1%	2
Metro	205 S	1.5%	2	3%	5
Metro	246 N	3.0%	4	2%	3
Metro	246 S	2.2%	3	3%	5
Long Beach Transit	1 N	0.7%	1	1%	1
Long Beach Transit	1 S	0.7%	1	1%	1
Total		100%	136	100%	154

Exhibit 58: Project Transit Trips by Transit Route

Comparing Project Trips to the Available Transit Capacity

Once the Project peak hour transit trips were estimated, the next step was to compute the available capacity of each route. This is done in Exhibit 59, as explained below (the letters preceding the description correspond to columns in the exhibit):

Capacity of Transit

- A. Peak hour headways were obtained from each transit route’s schedule.
- B. The number of seats per vehicle were obtained directly from the transit agency, except for Metro routes, which were assumed as average seating capacity of a standard 40 feet municipal bus.
- C. The peak hour seated capacity was calculated by dividing the number of seats by the headway in hour. For example, if the number of seats is 40 and the headway is 30 minutes, the hourly seated capacity is 80 seats.

Existing Transit Operations

- D. The load factor standard was taken from Metro’s Transit Service Policy, as discussed earlier in Exhibit 55.
- E. The Existing AM Peak Hour load for City of Carson Transit was estimated from its monthly ridership obtained from the City of Carson. For the remaining transit lines the peak hour maximum load near the campus was obtained from the SCAG travel demand model.
- F. The Existing AM Peak Hour load factor was then calculated by dividing the existing peak hour load by the peak hour seated capacity.

Existing Plus Project Transit Demand

- G. The number of new AM peak hour transit passengers generated by the Project for each route was taken from Exhibit 58.

- H. The Existing AM Peak Hour Plus Project passenger load was then estimated by adding the Project riders to the existing peak hour load.
- I. The Existing AM Peak Hour Plus Project load factor was then estimated by dividing the Existing Plus Project transit load by peak hour seated capacity.

Steps E through I were repeated for the PM Peak hour in steps J through N.

The final two columns in Exhibit 59 compare the load factors for the Existing and Existing Plus Project condition with the load factor standard shown in Column D. The conclusion was that there are no existing deficiencies in the transit system serving the CSUDH campus and that the addition of the Project would not cause any deficiencies to arise. Therefore, the Project would have no significant transit capacity impacts.

The Existing Plus Alternative 1 scenario is the worst case in terms of possible transit impacts for several reasons:

- Transit service providers monitor demand growth and add capacity where needed. That means that the Existing Conditions study year represents the lowest capacity that the system is likely to have in the planning horizon of this study.
- Alternative 2 has more off-campus students commuting to CSUDH than Alternative 2, so the highest demand occurs in this scenario.

Since there would be no transit capacity impacts in the worse-case scenario, we conclude that there would be not transit capacity impacts in any of the other scenarios.

Route	Headway (minutes)	Seats per vehicle	Peak Hour Seated Capacity	Load Factor Standard (maximum allowable)	Existing AM Peak Hour Load	Existing AM Load Factor	AM Arriving Project Passengers	AM Load with Project	AM Load Factor with Project	Existing PM Peak Hour Load	Existing PM Load Factor	PM Departing Project Passengers	PM Load with Project	PM Load Factor with Project	Existing Deficiency?	Deficiency with Project?	
	(A)	(B)	(C)=(B)/(A)/60	(D)	(E)	(F)=(E)/(C)	(G)	(H)=(E)+(G)	(I)=(H)/(C)	(J)	(K)=(J)/(C)	(L)	(M)=(J)+(L)	(N)=(M)/(C)	(E)>(D) or (K)>(D)?	(I)>(D) or (N)>(D)?	
City of Carson	A	40	35	53	1.20	11	0.21	27	38	0.72	11	0.21	31	42	0.80	No	No
City of Carson	E	60	35	35	1.00	4	0.10	0	4	0.10	4	0.10	0	4	0.10	No	No
City of Carson	H	40	35	53	1.20	9	0.18	2	11	0.22	9	0.18	2	11	0.22	No	No
Torrance Transit	6 E	40	40	60	1.20	16	0.27	7	23	0.38	17	0.28	10	27	0.45	No	No
Torrance Transit	6 W	40	40	60	1.20	17	0.28	9	26	0.43	16	0.27	8	24	0.40	No	No
Metro	52 N	20	40	120	1.30	90	0.75	27	117	0.97	24	0.20	1	25	0.21	No	No
Metro	52 S	20	40	120	1.30	24	0.20	1	25	0.21	90	0.75	31	121	1.00	No	No
Metro	53 N	20	40	120	1.30	90	0.75	27	117	0.97	24	0.20	1	25	0.21	No	No
Metro	53 S	20	40	120	1.30	24	0.20	1	25	0.21	90	0.75	31	121	1.00	No	No
Metro	130 E	30	40	80	1.20	34	0.43	9	43	0.54	68	0.85	12	80	1.00	No	No
Metro	130 W	30	40	80	1.20	68	0.85	11	79	0.98	34	0.43	10	44	0.55	No	No
Metro	205 N	30	40	80	1.20	24	0.30	4	28	0.35	64	0.80	2	66	0.83	No	No
Metro	205 S	30	40	80	1.20	64	0.80	2	66	0.83	24	0.30	5	29	0.36	No	No
Metro	246 N	30	40	80	1.20	65	0.81	4	69	0.86	39	0.49	3	42	0.53	No	No
Metro	246 S	30	40	80	1.20	39	0.49	3	42	0.53	65	0.81	5	70	0.88	No	No
Long Beach Transit	1 N	30	29	58	1.20	6	0.10	1	7	0.12	8	0.14	1	9	0.16	No	No
Long Beach Transit	1 S	30	29	58	1.20	8	0.14	1	9	0.16	6	0.10	1	7	0.12	No	No

Exhibit 59: Determination of Plus Project Transit Capacity Impacts

6.2 Existing Plus Project Alternative 2 Weekday Conditions

6.2.1 Forecasting Existing Plus Project Alternative 2 Weekday Traffic

Traffic volumes for the Existing Plus Project condition were developed by adding the trips generated by full buildout of the Master Plan to the existing traffic volumes. The resulting Existing Plus Project traffic volumes are shown in Exhibit 61.

6.2.2 Existing Plus Project Alternative 2 Intersection Level of Service

Exhibit 60 shows in tabular format the Existing Plus Project weekday level of service (LOS) based on the traffic volumes shown in Exhibit 61 (also see Appendix H). The LOS is also shown on maps in Exhibit 62 for the AM peak hour condition, and Exhibit 63 for the PM peak hour condition. Exhibit 64 shows the intersection impacts of the Project. As shown, the Project would have significant impacts at 14 intersections, namely

- Intersection #1, Victoria St./Drive D, during both peak hours
- Intersection #3, Victoria St./Birchknoll Dr., during PM peak hour
- Intersection #5, Central Ave./Charles Willard St., during both peak hours
- Intersection #6, Central Ave./Project Driveway/Beachey Pl., during both peak hours
- Intersection #9, University Dr./Toro Center Dr., during both peak hours
- Intersection #13, Avalon Blvd./Victoria St., during PM peak hour
- Intersection #14, Central Ave./Artesia Blvd. WB, during both peak hours
- Intersection #15, Central Ave./Albertoni St./Artesia Blvd. EB, during both peak hours
- Intersection #16, Central Ave./Victoria St., during PM peak hour
- Intersection #20, I-110 SB Off-Ramp/190th St., during both peak hours
- Intersection #22, Figueroa St./190th St./Victoria St., during both peak hours
- Intersection #24, Main St./Victoria St., during PM peak hour
- Intersection #26, Avalon Blvd./Del Amo Blvd., during PM peak hour
- Intersection #29, Central Ave./University Dr., during both peak hours

These are direct (as opposed to cumulative) impacts. The distinction between direct and cumulative impacts is discussed further in Chapter 14.

Study ID	Intersection Name	Control Type	AM Peak Hour		PM Peak Hour	
			V/C Ratio or Delay	LOS (ICU or HCM)	V/C Ratio or Delay	LOS (ICU or HCM)
1	Victoria St./Drive D	TWSC	>180	F	>180	F
2	Victoria St./Tamcliff Ave.	Signalized	0.547	A	0.744	C
3	Victoria St./Birchknoll Dr.	Signalized	0.653	B	0.938	E
4	Victoria St./Project Service Rd.	TWSC	11.7	B	11.9	B
5	Central Ave./Charles Willard St.	TWSC	>180	F	>180	F
6	Central Ave./Beachey Pl.	TWSC	>180	F	>180	F
7	Central Ave./Glenn Curtiss St.	Signalized	0.806	D	0.819	D
8	University Dr./Birchknoll Dr. Ext.	TWSC	15	B	12.6	B
9	University Dr./Toro Center Dr.	TWSC	>180	F	>180	F
10	Albertoni St./SR 91 EB Ramps	Signalized	0.684	B	0.869	D
11	Avalon Blvd./SR 91 WB On-Ramp	Signalized	0.503	A	0.507	A
12	Avalon Blvd./Albertoni St.	Signalized	0.634	B	0.844	D
13	Avalon Blvd./Victoria St.	Signalized	0.843	D	1.108	F
14	Central Ave./Artesia Blvd. WB	Signalized	0.985	E	0.964	E
15	Central Ave./Albertoni St./Artesia Blvd. EB	Signalized	1.125	F	0.984	E
16	Central Ave./Victoria St.	Signalized	1.081	F	0.888	D
17	Wilmington Ave./Artesia Blvd. WB	Signalized	0.704	C	0.708	C
18	Wilmington Ave./Artesia Blvd. EB	Signalized	0.694	B	0.718	C
19	Wilmington Ave./Victoria St.	Signalized	0.514	A	0.549	A
20	I-110 SB Off-Ramp/190th St.	Signalized	1.138	F	1.184	F
21	I-110 NB On-Ramp/190th St.	Signalized	0.584	A	0.819	D
22	Figueroa St./190th St./Victoria St.	Signalized	0.909	E	1.061	F
23	Broadway/Victoria St.	Signalized	0.712	C	0.866	D
24	Main St./Victoria St.	Signalized	0.766	C	1.025	F
25	Avalon Blvd./University Dr.	Signalized	0.505	A	0.758	C
26	Avalon Blvd./Del Amo Blvd.	Signalized	0.873	D	0.958	E
27	Avalon Blvd./I-405 NB Ramps	Signalized	0.488	A	0.485	A
28	Avalon Blvd./I-405 SB Ramps	Signalized	0.544	A	0.511	A
29	Central Ave./University Dr.	Signalized	1.231	F	1.1	F
30	Wilmington Ave./University Dr.	Signalized	0.648	B	0.733	C
31	Central Ave./Del Amo Blvd.	Signalized	0.824	D	0.754	C
32	Wilmington Ave./Del Amo Blvd.	Signalized	0.687	B	0.717	C
33	W. Artesia Blvd./Crenshaw Blvd.	Signalized	0.928	E	0.997	E
34	W. 190th St./S. Western Ave.	Signalized	0.825	D	0.822	D
35	W. Artesia Blvd./Vermont Ave.	Signalized	0.864	D	1.033	F
36	Alameda St./Compton Blvd.	Signalized	0.675	B	0.722	C
37	Alameda St./SR 91 EB Ramps	Signalized	0.572	A	0.769	C

*Intersection LOS was calculated using HCM 2000 Delay Method, because ICU cannot be calculated for TWSC intersections.

Exhibit 60: Existing Plus Project Alternative 2 Weekday Level of Service (LOS) at Study Intersections (Table)

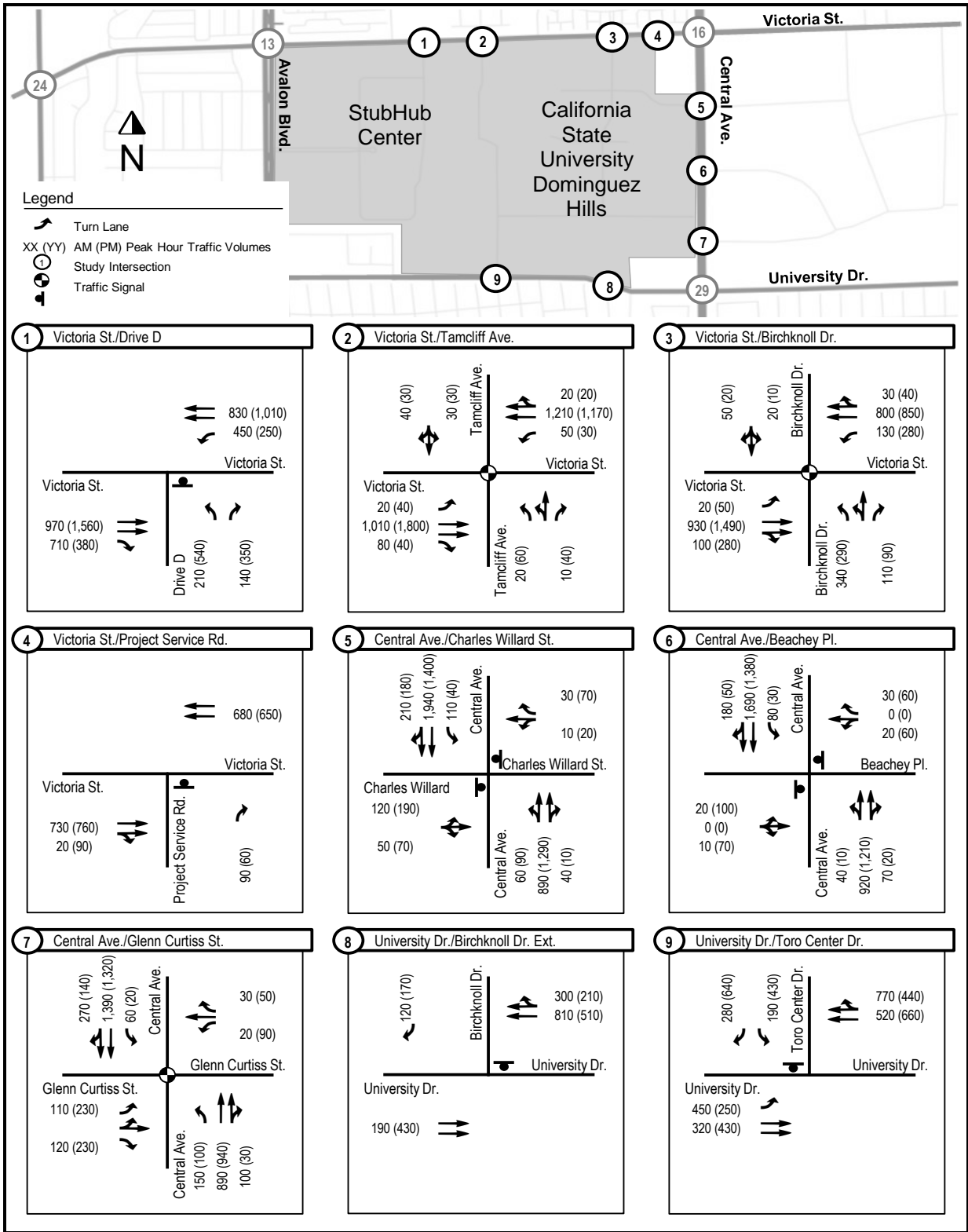


Exhibit 61: Existing Plus Project Alternative 2 Traffic Volumes and Lane Configurations

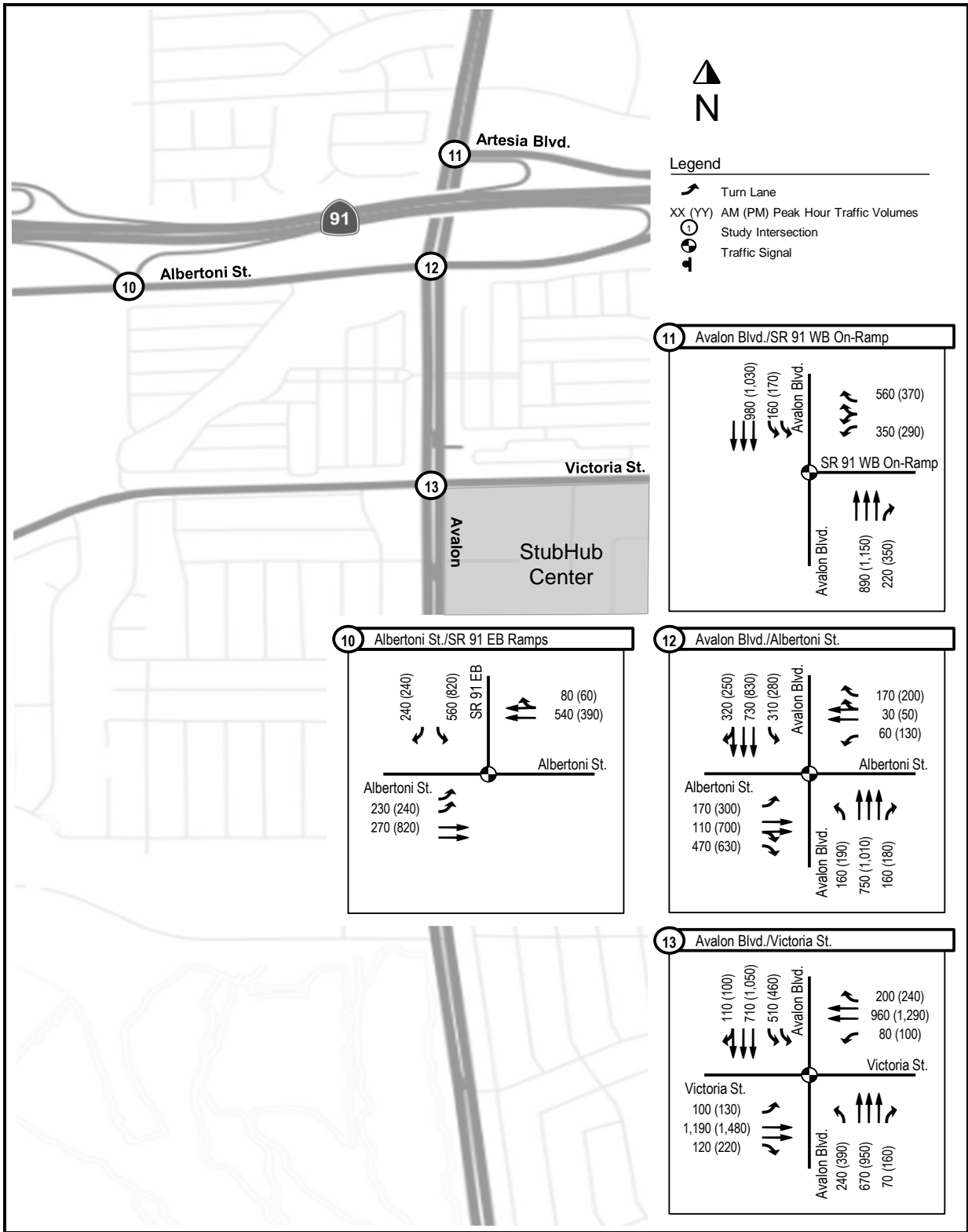


Exhibit 61: Existing Plus Project Alternative 2 Traffic Volumes and Lane Configurations (Map B)

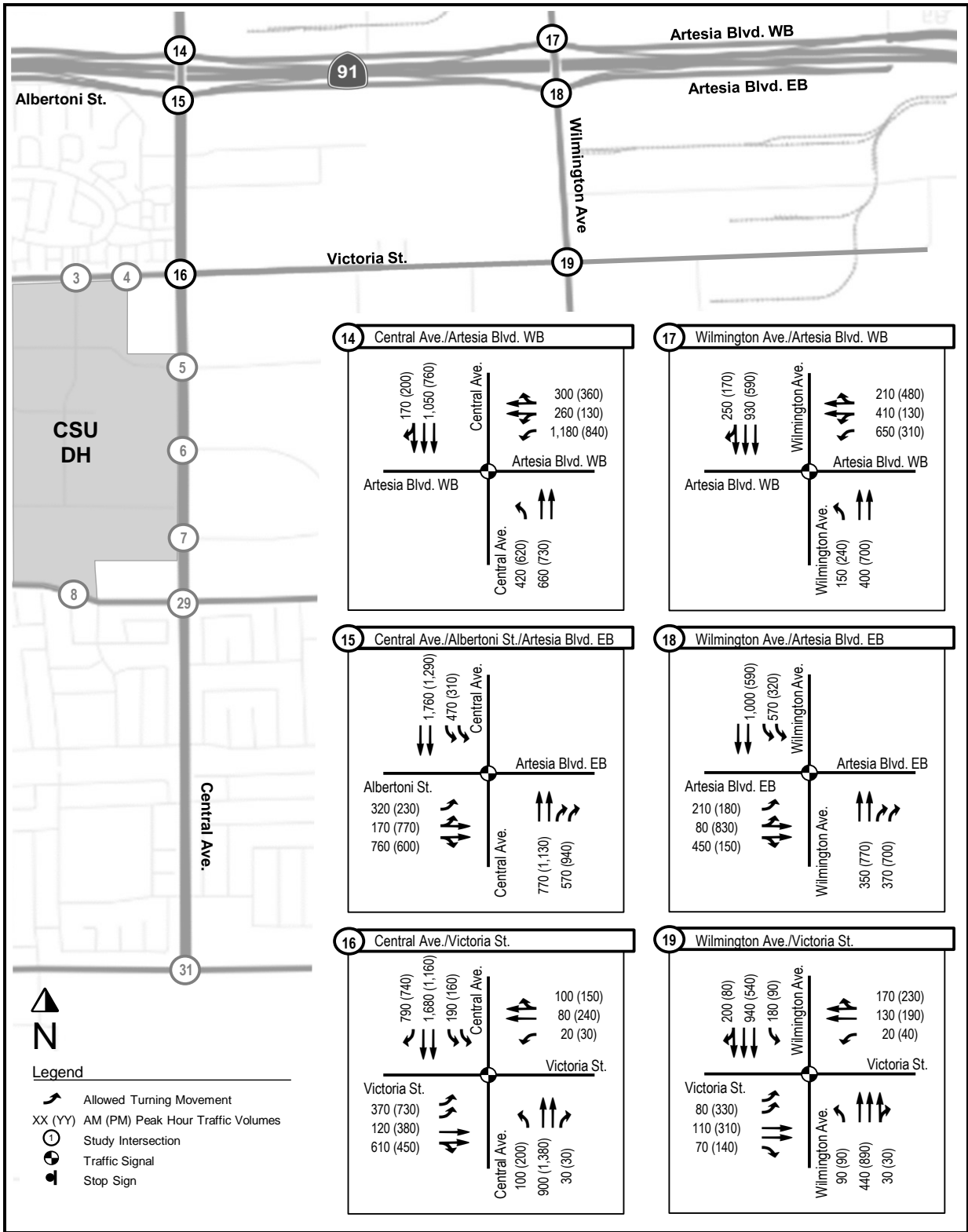


Exhibit 61: Existing Plus Project Alternative 2 Traffic Volumes and Lane Configurations (Map C)

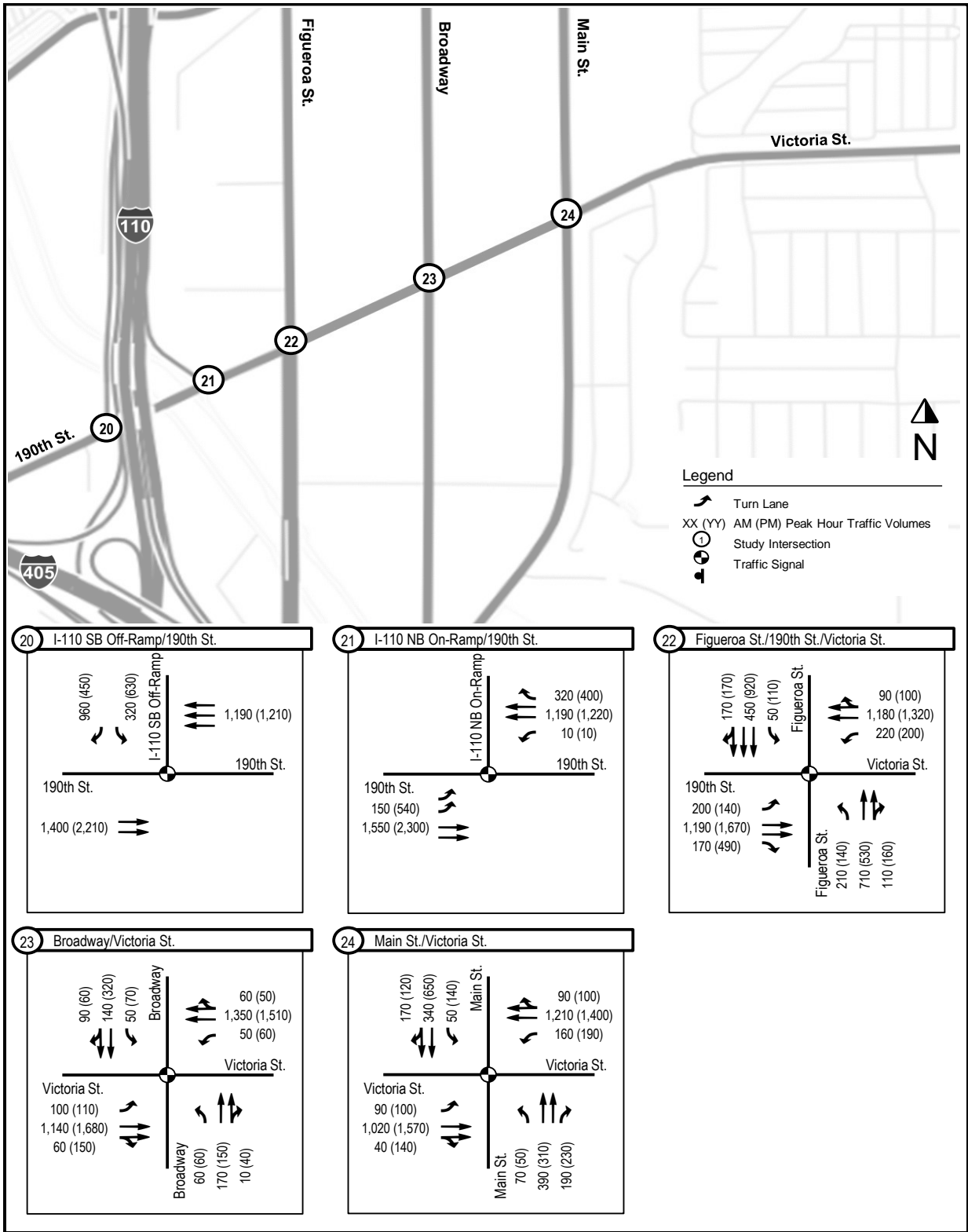


Exhibit 61: Existing Plus Project Alternative 2 Traffic Volumes and Lane Configurations (Map D)

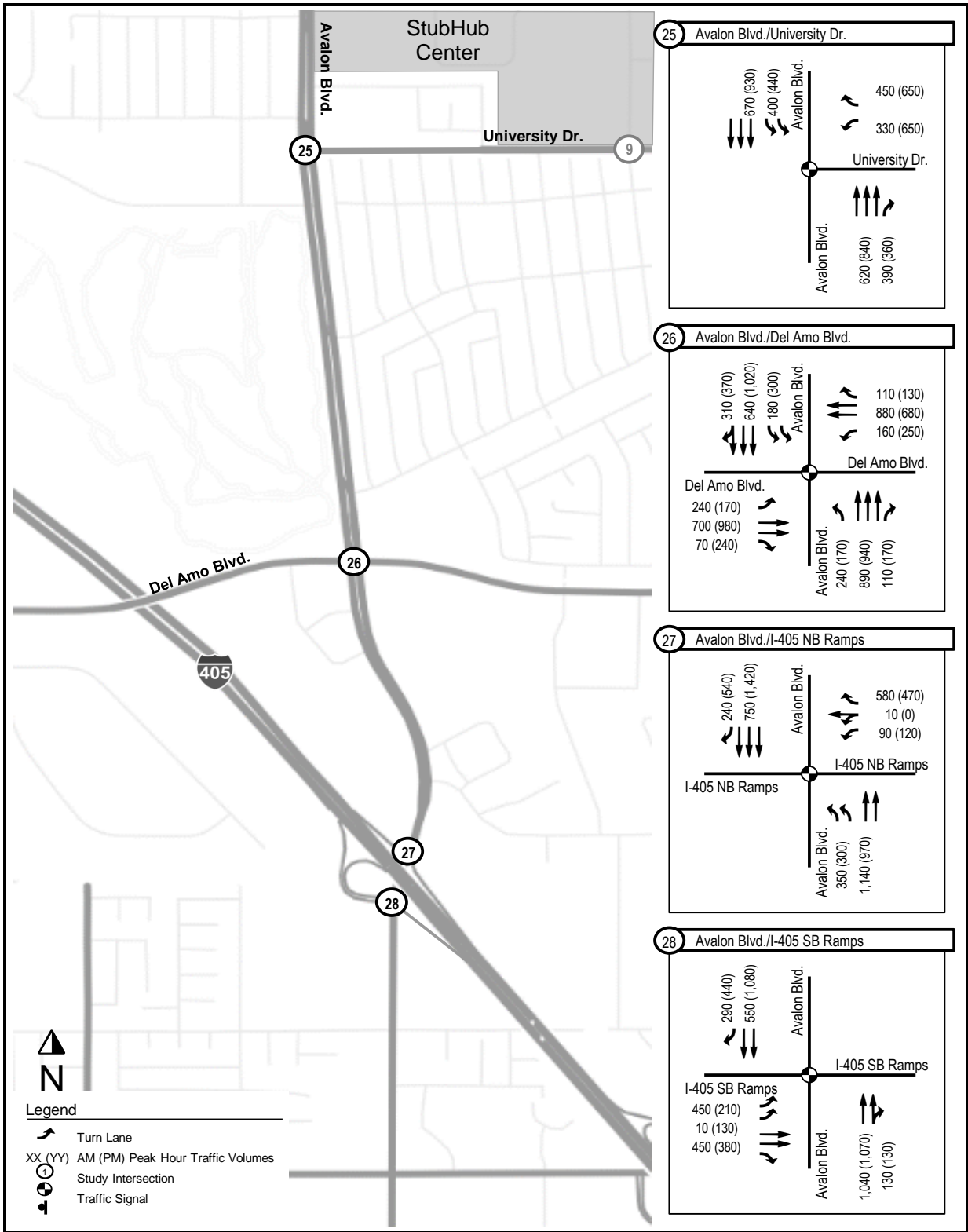


Exhibit 61: Existing Plus Project Alternative 2 Traffic Volumes and Lane Configurations (Map E)

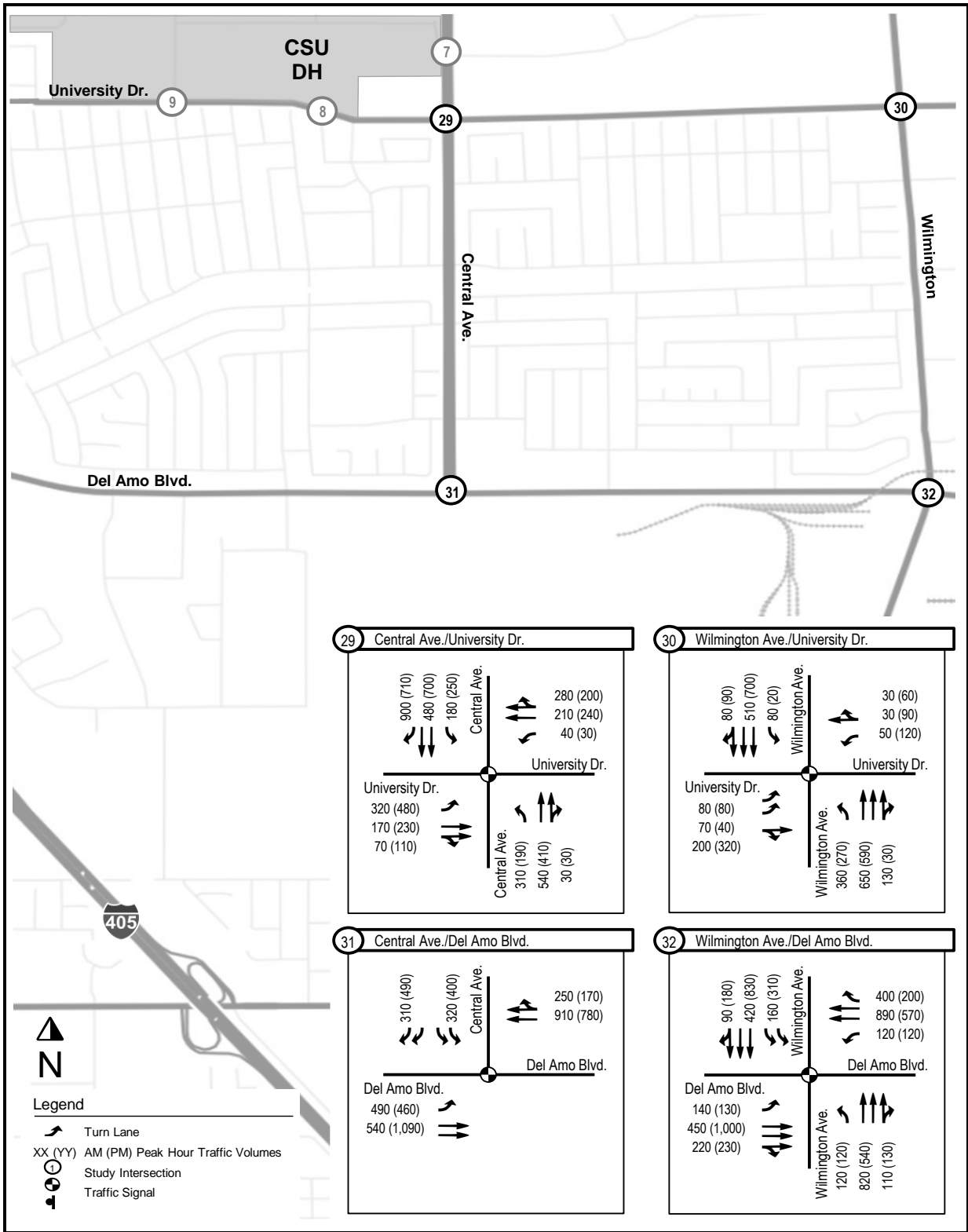


Exhibit 61: Existing Plus Project Alternative 2 Traffic Volumes and Lane Configurations (Map F)

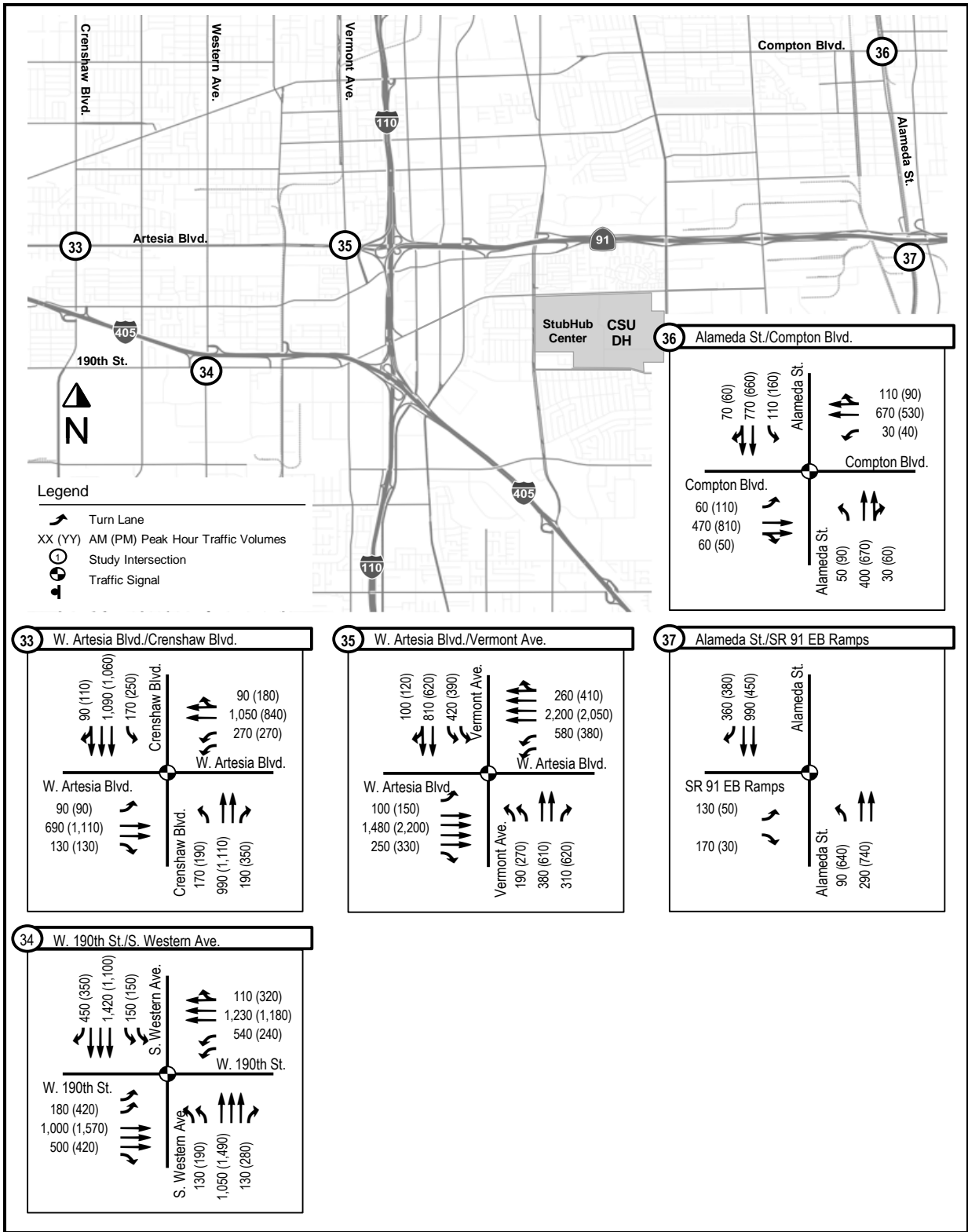


Exhibit 61: Existing Plus Project Alternative 2 Traffic Volumes and Lane Configurations (Map G)

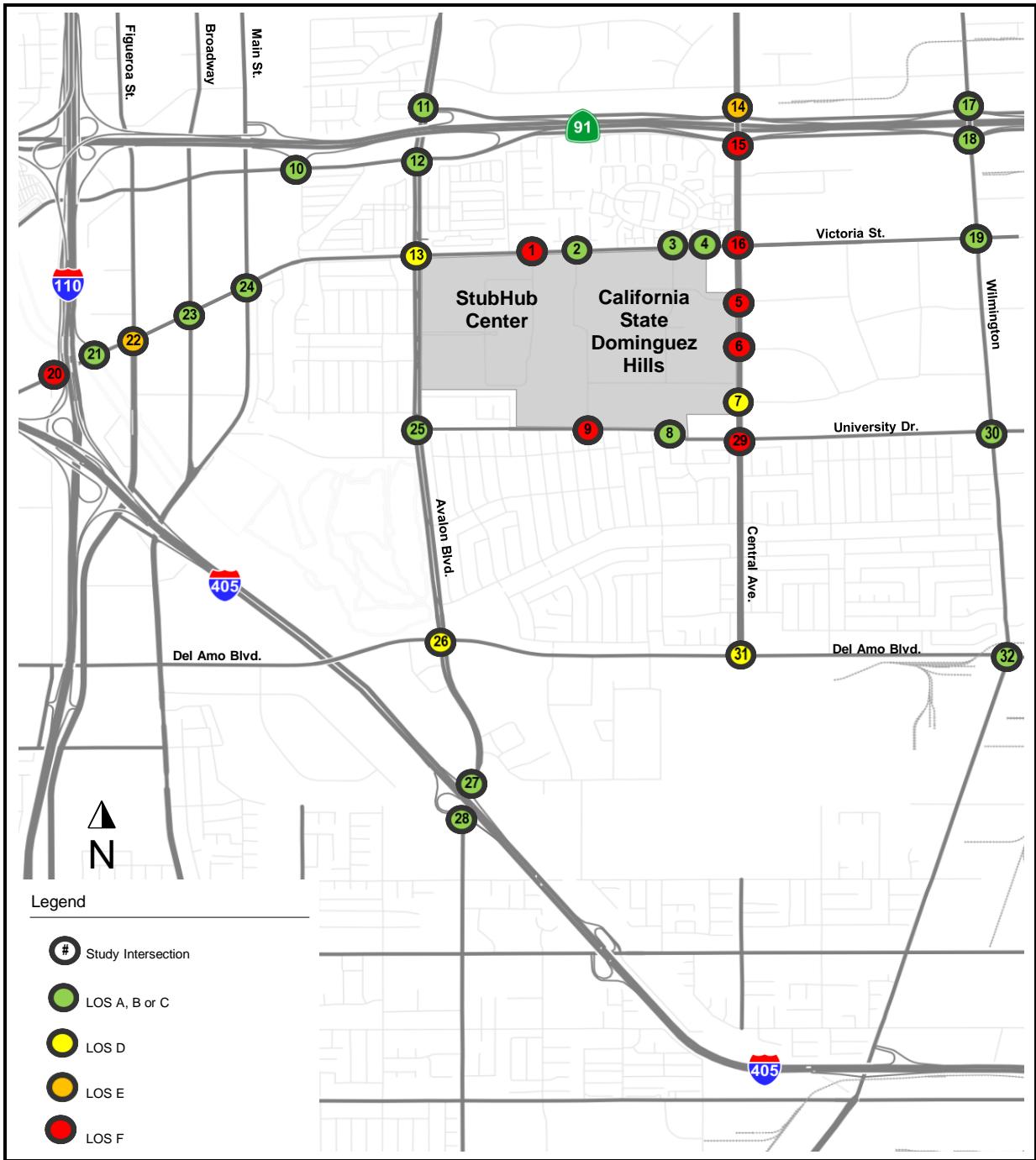


Exhibit 62: Existing Plus Project Alternative 2 AM Peak Hour LOS (Map)

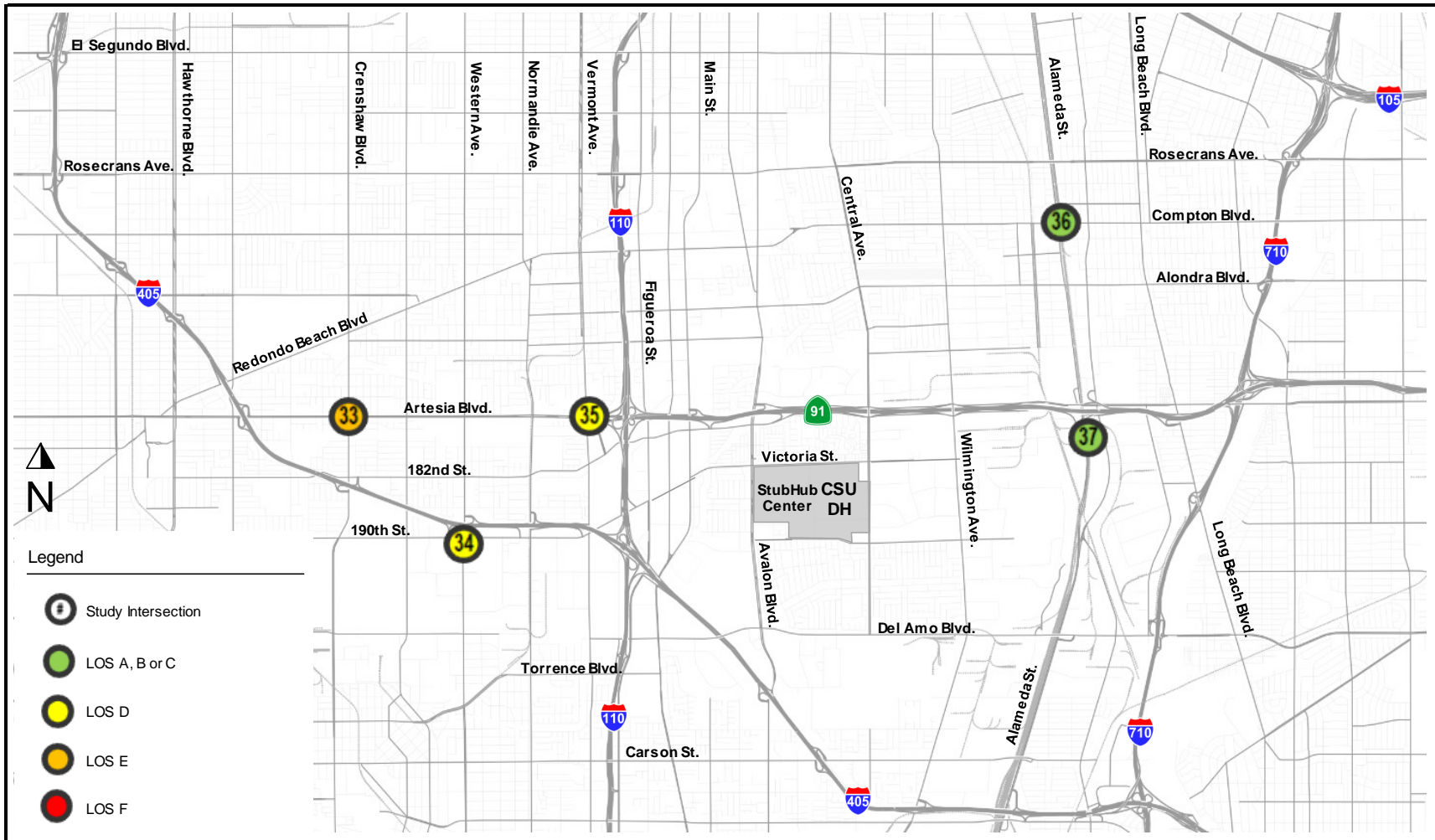


Exhibit 62: Existing Plus Project Alternative 2 AM Peak Hour LOS (Map)

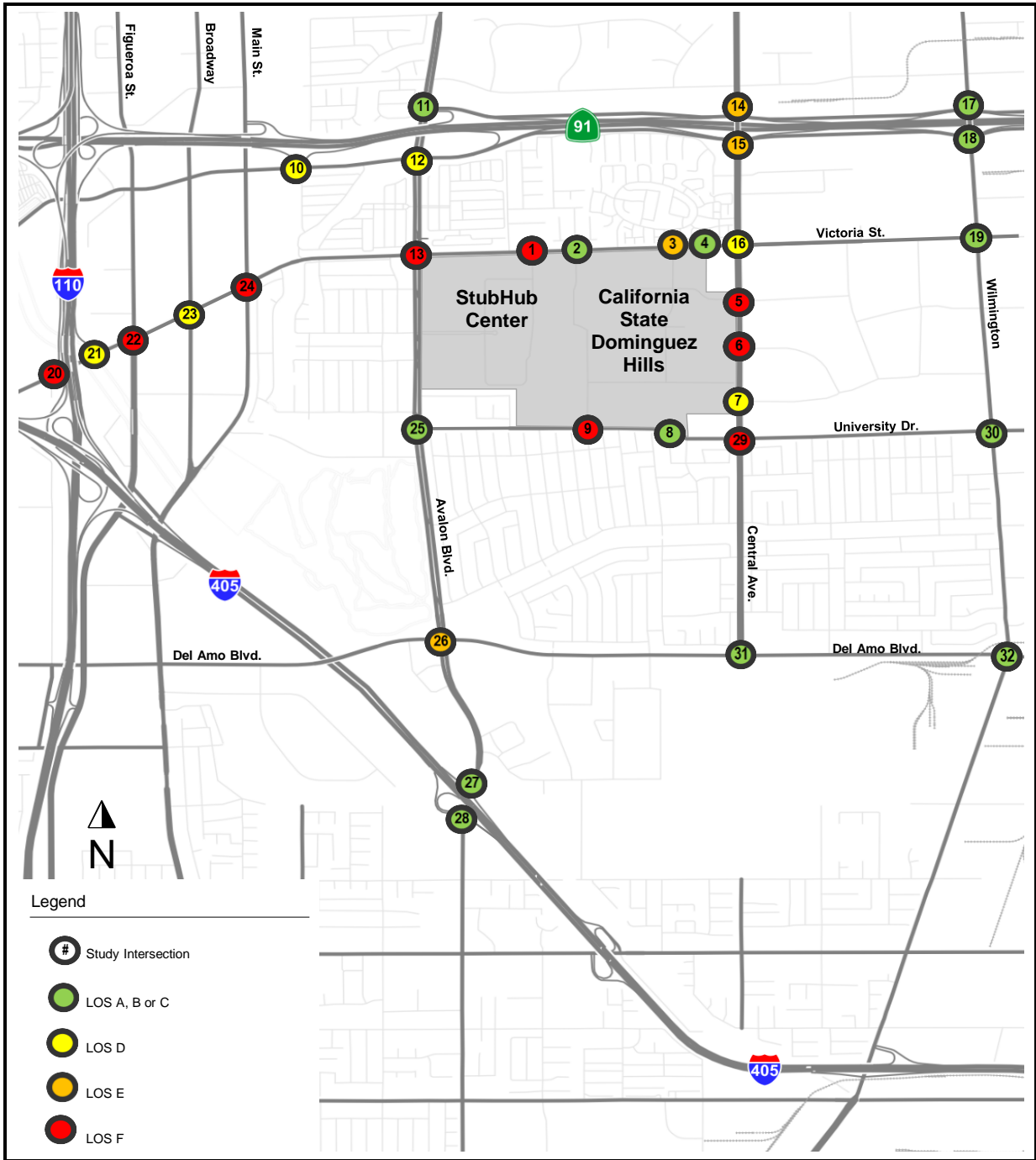


Exhibit 63: Existing Plus Project Alternative 2 PM Peak Hour LOS (Map)

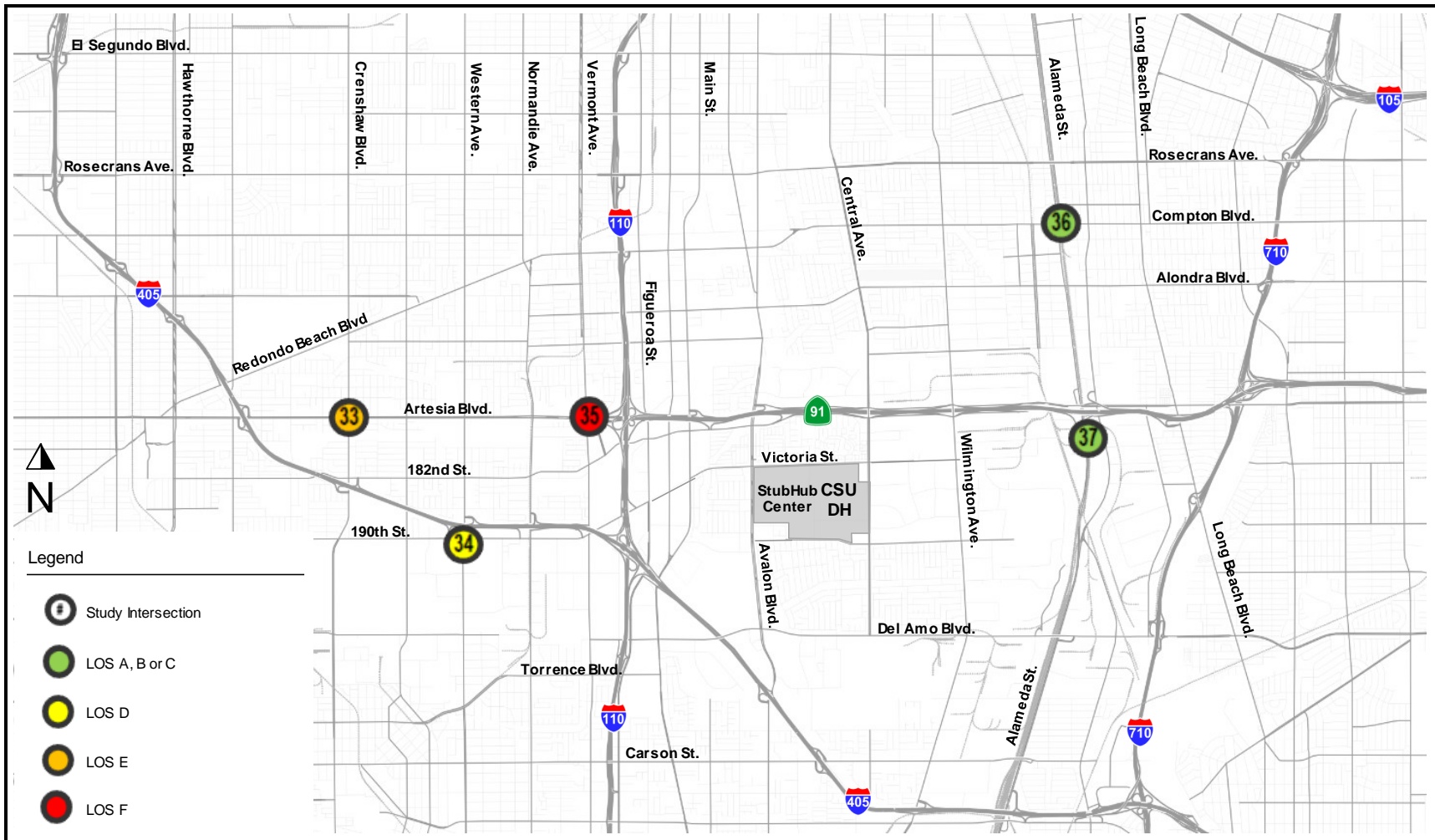


Exhibit 63: Existing Plus Project Alternative 2 PM Peak Hour LOS (Map)

Study ID	Intersection Name	Control Type	Existing Scenarios					
			AM Peak Hour			PM Peak Hour		
			No Project LOS	Plus Project LOS	Project Has Significant Impact?	No Project LOS	Plus Project LOS	Project Has Significant Impact?
1	Victoria St./Drive D	TWSC	C	F	Yes	F	F	Yes
2	Victoria St./Tamcliff Ave.	Signalized	A	A	No	A	C	No
3	Victoria St./Birchknoll Dr.	Signalized	A	B	No	B	E	Yes
4	Victoria St./Project Service Rd.	TWSC	N/A	B	No	N/A	B	No
5	Central Ave./Charles Willard St.	TWSC	C	F	Yes	C	F	Yes
6	Central Ave./Beachey Pl.	TWSC	C	F	Yes	C	F	Yes
7	Central Ave./Glenn Curtiss St.	Signalized	A	D	No	A	D	No
8	University Dr./Birchknoll Dr. Ext.	N/A	N/A	B	No	N/A	B	No
9	University Dr./Toro Center Dr.	TWSC	B	F	Yes	B	F	Yes
10	Albertoni St./SR 91 EB Ramps	Signalized	A	B	No	C	D	No
11	Avalon Blvd./SR 91 WB On-Ramp	Signalized	A	A	No	A	A	No
12	Avalon Blvd./Albertoni St.	Signalized	A	B	No	C	D	No
13	Avalon Blvd./Victoria St.	Signalized	A	D	No	D	F	Yes
14	Central Ave./Artesia Blvd. WB	Signalized	C	E	Yes	C	E	Yes
15	Central Ave./Albertoni St./Artesia Blvd. EB	Signalized	C	F	Yes	C	E	Yes
16	Central Ave./Victoria St.	Signalized	A	F	Yes	B	D	No
17	Wilmington Ave./Artesia Blvd. WB	Signalized	B	C	No	C	C	No
18	Wilmington Ave./Artesia Blvd. EB	Signalized	B	B	No	C	C	No
19	Wilmington Ave./Victoria St.	Signalized	A	A	No	A	A	No
20	I-110 SB Off-Ramp/190th St.	Signalized	E	F	Yes	F	F	Yes
21	I-110 NB On-Ramp/190th St.	Signalized	A	A	No	B	D	No
22	Figueroa St./190th St./Victoria St.	Signalized	C	E	Yes	D	F	Yes
23	Broadway/Victoria St.	Signalized	A	C	No	C	D	No
24	Main St./Victoria St.	Signalized	B	C	No	D	F	Yes
25	Avalon Blvd./University Dr.	Signalized	A	A	No	B	C	No
26	Avalon Blvd./Del Amo Blvd.	Signalized	D	D	No	D	E	Yes
27	Avalon Blvd./I-405 NB Ramps	Signalized	A	A	No	A	A	No
28	Avalon Blvd./I-405 SB Ramps	Signalized	A	A	No	A	A	No
29	Central Ave./University Dr.	Signalized	A	F	Yes	A	F	Yes
30	Wilmington Ave./University Dr.	Signalized	A	B	No	A	C	No
31	Central Ave./Del Amo Blvd.	Signalized	C	D	No	B	C	No
32	Wilmington Ave./Del Amo Blvd.	Signalized	B	B	No	B	C	No
33	W. Artesia Blvd./Crenshaw Blvd.	Signalized	E	E	No	E	E	No
34	W. 190th St./S. Western Ave.	Signalized	D	D	No	C	D	No
35	W. Artesia Blvd./Vermont Ave.	Signalized	D	D	No	F	F	No
36	Alameda St./Compton Blvd.	Signalized	B	B	No	C	C	No
37	Alameda St./SR 91 EB Ramps	Signalized	A	A	No	C	C	No

Exhibit 64: Determination of Intersection Impacts for the Existing Plus Project Alternative 2 Scenario

6.2.3 Existing Plus Project Alternative 2 Freeway Level of Service

The LOS for the study freeway segments under Existing Plus Project conditions are shown in Exhibit 65. All CMP locations were analyzed using the Demand to Capacity ratio (D/C) as required by the Los Angeles County CMP. Exhibit 66 shows that the Project would have significant impacts at seven locations, namely:

- CMP Station #1033, SR 91 East of Alameda St./Santa Fe Ave., eastbound during the PM peak hour
- CMP Station #1034, SR 91 East of Cherry Ave., eastbound during the PM peak hour and westbound, during AM peak hour
- CMP Station #1046, I-110 at Manchester Blvd., northbound during the PM peak hour and southbound during both peak hours
- CMP Station #1047, I-110 at Slauson Ave., northbound during the PM peak hour and southbound during the AM peak hour
- CMP Station #1066, I-405 at Santa Fe Ave., northbound during both peak hours and southbound during the PM peak hour
- CMP Station #1067, I-405 at the Carson Scales, northbound and southbound during the PM peak hour
- CMP Station #1068, I-405 North of Inglewood Ave. at Compton Blvd., northbound during the AM peak hour

Altogether 79 freeway segments would have significant impacts, including those that are not CMP monitoring stations. These additional locations are:

- SR-91 eastbound, Jct. Rte. 110 to Avalon Blvd., during the PM peak hour
- SR-91 eastbound, Avalon Blvd. to Central Ave., during the PM peak hour
- SR-91 eastbound, Central Ave. to Wilmington Ave., during the PM peak hour
- SR-91 eastbound, Wilmington Ave. to Alameda St., during the PM peak hour
- SR-91 eastbound, Alameda St. to Alameda St./Santa Fe Ave., during the both peak hours
- SR-91 eastbound, Long Beach Blvd. to Jct. Rte. 710, during the PM peak hour
- SR-91 eastbound, Jct. Rte. 19 to Clark Ave., during the PM peak hour
- I-110 northbound, Sepulveda Blvd. to Carson St., during the AM peak hour
- I-110 northbound, Carson St. to Torrance/Del Amo Blvd., during the both peak hours
- I-110 northbound, Torrance/Del Amo Blvd. to Jct. Rte. 405, during the both peak hours
- I-110 northbound, Jct. Rte. 405 to Jct. Rte. 91, during the AM peak hour
- I-110 northbound, El Segundo Blvd. to Jct. Rte. 105, during the PM peak hour
- I-110 northbound, Century Blvd. to Manchester Ave., during the PM peak hour
- I-110 northbound, Florence Ave. to Gage Ave., during the PM peak hour
- I-110 northbound, Slauson Ave. to 51st St., during the PM peak hour
- I-110 northbound, 51st St. to Vernon Ave., during the PM peak hour
- I-110 northbound, Vernon Ave. to Martin Luther King Jr. Blvd., during the PM peak hour
- I-405 northbound, Lakewood Blvd. to Cherry Ave., during the AM peak hour
- I-405 northbound, Cherry Ave. to Orange Ave., during the AM peak hour

- I-405 northbound, Orange Ave. to Atlantic Ave., during the both peak hours
- I-405 northbound, Atlantic Ave. to Long Beach Blvd, during the PM peak hour
- I-405 northbound, Alameda St. to Wilmington Ave., during the both peak hours
- I-405 northbound, Wilmington Ave. to Carson St., during the both peak hours
- I-405 northbound, Carson St. to Avalon Blvd., during the both peak hours
- I-405 northbound, Jct. Rte. 110 to Vermont Ave., during the PM peak hour
- I-405 northbound, Vermont Ave. to Normandie Ave., during the AM peak hour
- I-405 northbound, Normandie Ave. to Western Ave., during the both peak hours
- I-405 northbound, Western Ave. to Crenshaw Blvd., during the both peak hours
- I-405 northbound, Crenshaw Blvd. to Artesia Blvd., during the both peak hours
- SR-91 westbound, Jct. Rte. 110 to Avalon Blvd., during the both peak hours
- SR-91 westbound, Avalon Blvd. to Central Ave., during the AM peak hour
- SR-91 westbound, Central Ave. to Wilmington Ave., during the AM peak hour
- SR-91 westbound, Wilmington Ave. to Alameda St., during the AM peak hour
- SR-91 westbound, Alameda St. to Alameda St./Santa Fe Ave., during the AM peak hour
- SR-91 westbound, Long Beach Blvd. to Jct. Rte. 710, during the AM peak hour
- SR-91 westbound, Jct. Rte. 710 to Cherry Ave., during the AM peak hour
- SR-91 westbound, Paramount Blvd. to Downey Ave., during the AM peak hour
- SR-91 westbound, Downey Ave. to Jct. Rte. 19, during the AM peak hour
- SR-91 westbound, Jct. Rte. 19 to Clark Ave., during the AM peak hour
- SR-91 westbound, Clark Ave. to Bellflower Blvd., during the AM peak hour
- SR-91 westbound, Bellflower Blvd. to Jct. Rte. 605, during the AM peak hour
- I-110 southbound, Sepulveda Blvd. to Carson St., during the PM peak hour
- I-110 southbound, Carson St. to Torrance/Del Amo Blvd., during the both peak hours
- I-110 southbound, Torrance/Del Amo Blvd. to Jct. Rte. 405, during the both peak hours
- I-110 southbound, Jct. Rte. 405 to Jct. Rte. 91, during the both peak hours
- I-110 southbound, Redondo Beach Blvd. to Rosecrans Ave., during the AM peak hour
- I-110 southbound, Rosecrans Ave. to El Segundo Blvd., during the both peak hours
- I-110 southbound, Century Blvd. to Manchester Ave., during the both peak hours
- I-110 southbound, Florence Ave. to Gage Ave., during the both peak hours
- I-110 southbound, Slauson Ave. to 51st St., during the both peak hours
- I-110 southbound, 51st St. to Vernon Ave., during the AM peak hour
- I-110 southbound, Vernon Ave. to Martin Luther King Jr. Blvd., during the AM peak hour
- I-110 southbound, Martin Luther King Jr. Blvd. to Exposition Blvd., during the both peak hours
- I-405 southbound, Cherry Ave. to Orange Ave., during the PM peak hour

- I-405 southbound, Orange Ave. to Atlantic Ave., during the PM peak hour
- I-405 southbound, Atlantic Ave. to Long Beach Blvd, during the PM peak hour
- I-405 southbound, Long Beach Blvd to Jct. Rte. 710, during the PM peak hour
- I-405 southbound, Alameda St. to Wilmington Ave., during the PM peak hour
- I-405 southbound, Wilmington Ave. to Carson St., during the PM peak hour
- I-405 southbound, Carson St. to Avalon Blvd., during the PM peak hour
- I-405 southbound, Jct. Rte. 110 to Vermont Ave., during the both peak hours
- I-405 southbound, Vermont Ave. to Normandie Ave., during the PM peak hour
- I-405 southbound, Normandie Ave. to Western Ave., during the both peak hours
- I-405 southbound, Western Ave. to Crenshaw Blvd., during the both peak hours
- I-405 southbound, Crenshaw Blvd. to Artesia Blvd., during the both peak hours
- I-405 southbound, Artesia Blvd. to Hawthorne Blvd., during the AM peak hour
- I-405 southbound, Hawthorne Blvd. to Inglewood Ave., during the PM peak hour

These are direct (as opposed to cumulative) impacts. The distinction between direct and cumulative impacts is discussed further in Chapter 14.

6.2.4 Determination of Pedestrian Impacts

The CSU system has defined a significant pedestrian impact as a situation where,

- *“A project fails to provide safe pedestrian connections between campus buildings and adjacent streets and transit facilities. Or*
- *A project significantly disrupts existing or planned pedestrian facilities or significantly conflicts with applicable non-automotive transportation plans, guidelines, policies, or standards.”*

Based on this standard, the Project would not impose such disruptions and so would not have any significant pedestrian impacts.

6.2.5 Determination of Bicycle Impacts

The CSU system has defined a significant bicycle impact as a situation where, *“A project significantly disrupts existing or planned bicycle facilities or significantly conflicts with applicable non-automotive transportation plans, guidelines, policies, or standards.”* Based on this standard, the Project would not impose such disruptions and so would not have any significant bicycle impacts.

6.2.6 Determination of Transit Impacts

CSU guideline state that a significant transit impact would occur if, *“A project significantly disrupts existing or planned transit facilities and services or significantly conflicts with applicable transit plans, guidelines, policies, or standards.”* Based on this standard, the Project would not impose such disruptions and so would not have any significant transit impacts. The Project would also not have any transit capacity impacts, as was shown earlier in Section 6.1.6.

ID	CMP Station	Fwy Rte	Post Mile	Location	Northbound/Eastbound						Southbound/Westbound									
					AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour						
					Demand	Capacity	D/C	LOS	Demand	Capacity	D/C	LOS	Demand	Capacity	D/C	LOS	Demand	Capacity	D/C	LOS
91-1		91	6.344	Jct. Rte. 110 to Avalon Blvd.	6,900	12,000	0.58	C	14,170	12,000	1.18	F(0)	9,130	4,000	2.28	F(3)	6,210	4,000	1.55	F(3)
91-2		91	7.426	Avalon Blvd. to Central Ave.	7,110	10,000	0.71	C	14,600	10,000	1.46	F(3)	9,550	10,000	0.96	E	6,490	10,000	0.65	C
91-3		91	8.435	Central Ave. to Wilmington Ave.	7,260	10,000	0.73	C	14,890	10,000	1.49	F(3)	9,870	10,000	0.99	E	6,700	10,000	0.67	C
91-4		91	9.162	Wilmington Ave. to Alameda St.	7,520	10,000	0.75	C	15,460	10,000	1.55	F(3)	10,220	10,000	1.02	F(0)	6,940	10,000	0.69	C
91-5		91	10.271	Alameda St. to Alameda St./Santa Fe Ave.	7,500	8,000	0.94	E	15,410	8,000	1.93	F(3)	10,210	8,000	1.28	F(1)	6,940	8,000	0.87	D
91-6	1033	91	10.41	Alameda St./Santa Fe Ave. to Long Beach Blvd.	7,800	12,000	0.65	C	16,020	12,000	1.34	F(1)	10,630	12,000	0.89	D	7,220	12,000	0.60	C
91-7		91	11.096	Long Beach Blvd. to Jct. Rte. 710	7,790	12,000	0.65	C	16,010	12,000	1.33	F(1)	10,600	10,000	1.06	F(0)	7,200	10,000	0.72	C
91-8		91	11.681	Jct. Rte. 710 to Cherry Ave.	7,890	10,000	0.79	D	11,340	10,000	1.13	F(0)	12,760	10,000	1.28	F(1)	8,970	10,000	0.90	D
91-9	1034	91	13.094	Cherry Ave. to Paramount Blvd.	8,010	10,000	0.80	D	11,520	10,000	1.15	F(0)	12,960	12,000	1.08	F(0)	9,110	12,000	0.76	C
91-10		91	13.594	Paramount Blvd. to Downey Ave.	7,910	10,000	0.79	D	11,350	10,000	1.14	F(0)	12,780	10,000	1.28	F(1)	8,990	10,000	0.90	D
91-11		91	14.103	Downey Ave. to Jct. Rte. 19	7,870	12,000	0.66	C	11,310	12,000	0.94	E	12,720	10,000	1.27	F(1)	8,950	10,000	0.90	D
91-12		91	14.618	Jct. Rte. 19 to Clark Ave.	7,290	10,000	0.73	C	10,460	10,000	1.05	F(0)	11,750	8,000	1.47	F(3)	8,270	8,000	1.03	F(0)
91-13		91	15.105	Clark Ave. to Bellflower Blvd.	7,680	12,000	0.64	C	11,020	12,000	0.92	D	12,390	10,000	1.24	F(0)	8,720	10,000	0.87	D
91-14		91	15.614	Bellflower Blvd. to Jct. Rte. 605	7,590	12,000	0.63	C	10,890	12,000	0.91	D	12,250	10,000	1.23	F(0)	8,620	10,000	0.86	D
110-1	1045	110	1.23	Channel St. to C St.	4,460	8,000	0.56	C	3,270	8,000	0.41	B	3,600	8,000	0.45	B	4,380	8,000	0.55	C
110-2		110	2.771	C St. to Anaheim St.	4,660	10,000	0.47	B	3,410	10,000	0.34	A	3,770	8,000	0.47	B	4,580	8,000	0.57	C
110-3		110	3.264	Anaheim St. to Jct. Rte. 1	5,060	10,000	0.51	B	3,710	10,000	0.37	B	4,090	10,000	0.41	B	4,970	10,000	0.50	B
110-4		110	4.061	Jct. Rte. 1 to Sepulveda Blvd.	7,100	8,000	0.89	D	5,210	8,000	0.65	C	5,710	8,000	0.71	C	6,940	8,000	0.87	D
110-5		110	5.451	Sepulveda Blvd. to Carson St.	9,180	8,000	1.15	F(0)	6,730	8,000	0.84	D	7,420	8,000	0.93	D	9,020	8,000	1.13	F(0)
110-6		110	7.016	Carson St. to Torrance/Del Arno Blvd.	10,550	8,000	1.32	F(1)	7,720	8,000	0.97	E	8,520	8,000	1.07	F(0)	10,360	8,000	1.30	F(1)
110-7		110	8.028	Torrance/Del Arno Blvd. to Jct. Rte. 405	11,140	8,000	1.39	F(2)	8,140	8,000	1.02	F(0)	8,990	8,000	1.12	F(0)	10,940	8,000	1.37	F(2)
110-8		110	8.775	Jct. Rte. 405 to Jct. Rte. 91	13,780	12,000	1.15	F(0)	10,040	12,000	0.84	D	11,120	8,000	1.39	F(2)	13,510	8,000	1.69	F(3)
110-9		110	9.87	Jct. Rte. 91 to Redondo Beach Blvd.	9,070	12,000	0.76	C	9,370	12,000	0.78	D	10,070	12,000	0.84	D	9,630	12,000	0.80	D
110-10		110	11.239	Redondo Beach Blvd. to Rosecrans Ave.	9,430	11,000	0.86	D	9,740	11,000	0.89	D	10,460	11,000	0.95	E	10,010	11,000	0.91	D
110-11		110	11.891	Rosecrans Ave. to El Segundo Blvd.	9,820	11,000	0.89	D	10,130	11,000	0.92	D	10,900	11,000	0.99	E	10,420	11,000	0.95	E
110-12		110	12.898	El Segundo Blvd. to Jct. Rte. 105	9,980	11,000	0.91	D	10,290	11,000	0.94	E	11,080	13,000	0.85	D	10,600	13,000	0.82	D
110-13		110	13.82	Jct. Rte. 105 to Century Blvd.	11,150	14,000	0.80	D	11,470	14,000	0.82	D	12,370	14,000	0.88	D	11,850	14,000	0.85	D
110-14		110	14.967	Century Blvd. to Manchester Ave.	11,970	12,000	1.00	E	12,310	12,000	1.03	F(0)	13,280	12,000	1.11	F(0)	12,720	12,000	1.06	F(0)
110-15	1046	110	15.976	Manchester Ave. to Florence Ave.	11,650	12,000	0.97	E	11,970	12,000	1.00	E	12,880	12,000	1.07	F(0)	12,350	12,000	1.03	F(0)
110-16		110	16.981	Florence Ave. to Gage Ave.	12,000	12,000	1.00	E	12,300	12,000	1.03	F(0)	13,020	12,000	1.09	F(0)	12,500	12,000	1.04	F(0)
110-17	1047	110	17.514	Gage Ave. to Slauson Ave.	11,920	12,000	0.99	E	12,220	12,000	1.02	F(0)	12,940	12,000	1.08	F(0)	12,410	12,000	1.03	F(0)
110-18		110	17.98	Slauson Ave. to 51st St.	11,480	10,000	1.15	F(0)	11,760	10,000	1.18	F(0)	12,450	10,000	1.25	F(0)	11,940	10,000	1.19	F(0)
110-19		110	18.495	51st St. to Vernon Ave.	11,700	10,000	1.17	F(0)	11,990	10,000	1.20	F(0)	12,690	12,000	1.06	F(0)	12,170	12,000	1.01	F(0)
110-20		110	18.998	Vernon Ave. to Martin Luther King Jr. Blvd.	11,690	12,000	0.97	E	11,970	12,000	1.00	E	12,670	12,000	1.06	F(0)	12,160	12,000	1.01	F(0)
110-21		110	19.502	Martin Luther King Jr. Blvd. to Exposition Blvd.	10,580	12,000	0.88	D	10,830	12,000	0.90	D	11,470	10,000	1.15	F(0)	11,010	10,000	1.10	F(0)
110-22		110	19.996	Exposition Blvd. to Jct. Rte. 10	10,230	12,000	0.85	D	10,470	12,000	0.87	D	11,120	12,000	0.93	D	10,680	12,000	0.89	D
405-1		405	3.324	Lakewood Blvd. to Cherry Ave.	11,760	10,000	1.18	F(0)	9,980	10,000	1.00	E	8,740	10,000	0.87	D	10,960	10,000	1.10	F(0)
405-2		405	4.879	Cherry Ave. to Orange Ave.	12,350	10,000	1.24	F(0)	10,470	10,000	1.05	F(0)	9,170	8,000	1.15	F(0)	11,500	8,000	1.44	F(2)
405-3		405	5.388	Orange Ave. to Atlantic Ave.	12,880	8,000	1.61	F(3)	10,920	8,000	1.37	F(2)	9,570	8,000	1.20	F(0)	12,000	8,000	1.50	F(3)
405-4		405	6.076	Atlantic Ave. to Long Beach Blvd	12,670	8,000	1.58	F(3)	10,760	8,000	1.35	F(1)	9,430	12,000	0.79	D	11,830	12,000	0.99	E
405-5		405	6.34	Long Beach Blvd to Jct. Rte. 710	12,610	12,000	1.05	F(0)	10,700	12,000	0.89	D	9,370	10,000	0.94	E	11,760	10,000	1.18	F(0)
405-6	1066	405	7.596	Jct. Rte. 710 to Alameda St.	12,010	10,000	1.20	F(0)	10,180	10,000	1.02	F(0)	8,910	10,000	0.89	D	11,200	10,000	1.12	F(0)
405-7		405	8.784	Alameda St. to Wilmington Ave.	11,630	10,000	1.16	F(0)	9,860	10,000	0.99	E	8,630	10,000	0.86	D	10,850	10,000	1.09	F(0)
405-8		405	9.556	Wilmington Ave. to Carson St.	10,840	8,000	1.36	F(2)	9,340	8,000	1.17	F(0)	9,220	8,000	1.15	F(0)	11,210	8,000	1.40	F(2)
405-9		405	10.541	Carson St. to Avalon Blvd.	10,680	8,000	1.34	F(1)	9,200	8,000	1.15	F(0)	9,080	8,000	1.14	F(0)	11,040	8,000	1.38	F(2)
405-10	1067	405	11.224	Avalon Blvd. to Jct. Rte. 110	11,440	10,000	1.14	F(0)	9,860	10,000	0.99	E	9,730	10,000	0.97	E	11,830	10,000	1.18	F(0)
405-11		405	12.97	Jct. Rte. 110 to Vermont Ave.	11,380	10,000	1.14	F(0)	10,020	10,000	1.00	E	8,630	8,000	1.08	F(0)	10,570	8,000	1.32	F(1)
405-12		405	13.28	Vermont Ave. to Normandie Ave.	11,860	12,000	0.99	E	10,430	12,000	0.87	D	8,960	10,000	0.90	D	10,970	10,000	1.10	F(0)
405-13		405	13.826	Normandie Ave. to Western Ave.	11,110	10,000	1.11	F(0)	9,780	10,000	0.98	E	8,350	8,000	1.04	F(0)	10,250	8,000	1.28	F(1)
405-14		405	14.398	Western Ave. to Crenshaw Blvd.	10,680	8,000	1.34	F(1)	9,400	8,000	1.18	F(0)	8,030	8,000	1.00	E	9,850	8,000	1.23	F(0)
405-15		405	15.447	Crenshaw Blvd. to Artesia Blvd.	10,420	8,000	1.30	F(1)	9,160	8,000	1.15	F(0)	7,840	8,000	0.98	E	9,620	8,000	1.20	F(0)
405-16		405	16.573	Artesia Blvd. to Hawthorne Blvd.	10,510	10,000	1.05	F(0)	9,220	10,000	0.92	D	7,900	8,000	0.99	E	9,700	8,000	1.21	F(0)
405-17		405	17.589	Hawthorne Blvd. to Inglewood Ave.	11,010	10,000	1.10	F(0)	9,630	10,000	0.96	E	8,270	8,000	1.03	F(0)	10,170	8,000	1.27	F(1)
405-18	1068	405	18.233	Inglewood Ave. to Rosecrans Ave.	11,500	10,000	1.15	F(0)	10,050	10,000	1.01	F(0)	8,630	10,000	0.86	D	10,620	10,000	1.06	F(0)
710-1		710	12.97	Jct. Rte. 91 to Alondra Blvd.	10,660	12,000	0.89	D	16,550	12,000	1.38	F(2)	10,520	12,000	0.88	D	8,440	12,000	0.70	C
710-2		710	13.945	Alondra Blvd. to Jct. Rte. 105	11,010	12,000	0.92	D	17,080	12,000	1.42	F(2)	10,840	12,000	0.90	D	8,700	12,000	0.73	C

Note: D/C is demand-to-capacity ratio.

Exhibit 65: Existing Plus Project Alternative 2 Level of Service (LOS) for Study Freeway Locations

Northbound/Eastbound

ID	CMP Station	Fwy Rte	Post Mile	Location	Existing (2017)				2017 Plus Project				2017 Increase in D/C Ratio with Project		2017 Project Has Significant Impact?	
					AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM	PM	AM	PM
					D/C	LOS	D/C	LOS	D/C	LOS	D/C	LOS				
91-1		91	6.344	Jct. Rte. 110 to Avalon Blvd.	0.56	C	1.16	F(0)	0.58	C	1.18	F(0)	0.02	0.02	No	Yes
91-2		91	7.426	Avalon Blvd. to Central Ave.	0.69	C	1.42	F(2)	0.71	C	1.46	F(3)	0.02	0.04	No	Yes
91-3		91	8.435	Central Ave. to Wilmington Ave.	0.70	C	1.44	F(2)	0.73	C	1.49	F(3)	0.03	0.05	No	Yes
91-4		91	9.162	Wilmington Ave. to Alameda St.	0.73	C	1.50	F(3)	0.75	C	1.55	F(3)	0.02	0.05	No	Yes
91-5		91	10.271	Alameda St. to Alameda St./Santa F	0.91	D	1.87	F(3)	0.94	E	1.93	F(3)	0.03	0.06	Yes	Yes
91-6	1033	91	10.41	Alameda St./Santa Fe Ave. to Long	0.63	C	1.30	F(1)	0.65	C	1.34	F(1)	0.02	0.04	No	Yes
91-7		91	11.096	Long Beach Blvd. to Jct. Rte. 710	0.63	C	1.30	F(1)	0.65	C	1.33	F(1)	0.02	0.03	No	Yes
91-8		91	11.681	Jct. Rte. 710 to Cherry Ave.	0.78	D	1.11	F(0)	0.79	D	1.13	F(0)	0.01	0.02	No	No
91-9	1034	91	13.094	Cherry Ave. to Paramount Blvd.	0.79	D	1.13	F(0)	0.80	D	1.15	F(0)	0.01	0.02	No	Yes
91-10		91	13.594	Paramount Blvd. to Downey Ave.	0.78	D	1.12	F(0)	0.79	D	1.14	F(0)	0.01	0.02	No	No
91-11		91	14.103	Downey Ave. to Jct. Rte. 19	0.65	C	0.93	D	0.66	C	0.94	E	0.01	0.01	No	No
91-12		91	14.618	Jct. Rte. 19 to Clark Ave.	0.72	C	1.03	F(0)	0.73	C	1.05	F(0)	0.01	0.02	No	Yes
91-13		91	15.105	Clark Ave. to Bellflower Blvd.	0.63	C	0.90	D	0.64	C	0.92	D	0.01	0.02	No	No
91-14		91	15.614	Bellflower Blvd. to Jct. Rte. 605	0.63	C	0.89	D	0.63	C	0.91	D	0.00	0.02	No	No
110-1	1045	110	1.23	Channel St. to C St.	0.54	B	0.39	B	0.56	C	0.41	B	0.02	0.02	No	No
110-2		110	2.771	C St. to Anaheim St.	0.45	B	0.32	A	0.47	B	0.34	A	0.02	0.02	No	No
110-3		110	3.264	Anaheim St. to Jct. Rte. 1	0.49	B	0.35	A	0.51	B	0.37	B	0.02	0.02	No	No
110-4		110	4.061	Jct. Rte. 1 to Sepulveda Blvd.	0.86	D	0.62	C	0.89	D	0.65	C	0.03	0.03	No	No
110-5		110	5.451	Sepulveda Blvd. to Carson St.	1.11	F(0)	0.80	D	1.15	F(0)	0.84	D	0.04	0.04	Yes	No
110-6		110	7.016	Carson St. to Torrance/Del Amo Blvd	1.28	F(1)	0.93	D	1.32	F(1)	0.97	E	0.04	0.04	Yes	Yes
110-7		110	8.028	Torrance/Del Amo Blvd. to Jct. Rte.	1.36	F(2)	0.98	E	1.39	F(2)	1.02	F(0)	0.03	0.04	Yes	Yes
110-8		110	8.775	Jct. Rte. 405 to Jct. Rte. 91	1.12	F(0)	0.81	D	1.15	F(0)	0.84	D	0.03	0.03	Yes	No
110-9		110	9.87	Jct. Rte. 91 to Redondo Beach Blvd.	0.74	C	0.75	C	0.76	C	0.78	D	0.02	0.03	No	No
110-10		110	11.239	Redondo Beach Blvd. to Rosecrans	0.84	D	0.85	D	0.86	D	0.89	D	0.02	0.04	No	No
110-11		110	11.891	Rosecrans Ave. to El Segundo Blvd.	0.88	D	0.89	D	0.89	D	0.92	D	0.01	0.03	No	No
110-12		110	12.898	El Segundo Blvd. to Jct. Rte. 105	0.89	D	0.91	D	0.91	D	0.94	E	0.02	0.03	No	Yes
110-13		110	13.82	Jct. Rte. 105 to Century Blvd.	0.79	D	0.80	D	0.80	D	0.82	D	0.01	0.02	No	No
110-14		110	14.967	Century Blvd. to Manchester Ave.	0.99	E	1.00	E	1.00	E	1.03	F(0)	0.01	0.03	No	Yes
110-15	1046	110	15.976	Manchester Ave. to Florence Ave.	0.96	E	0.98	E	0.97	E	1.00	E	0.01	0.02	No	Yes
110-16		110	16.981	Florence Ave. to Gage Ave.	0.99	E	1.01	F(0)	1.00	E	1.03	F(0)	0.01	0.02	No	Yes
110-17	1047	110	17.514	Gage Ave. to Slauson Ave.	0.98	E	1.00	E	0.99	E	1.02	F(0)	0.01	0.02	No	Yes
110-18		110	17.98	Slauson Ave. to 51st St.	1.14	F(0)	1.16	F(0)	1.15	F(0)	1.18	F(0)	0.01	0.02	No	Yes
110-19		110	18.495	51st St. to Vernon Ave.	1.16	F(0)	1.18	F(0)	1.17	F(0)	1.20	F(0)	0.01	0.02	No	Yes
110-20		110	18.998	Vernon Ave. to Martin Luther King Jr	0.97	E	0.98	E	0.97	E	1.00	E	0.00	0.02	No	Yes
110-21		110	19.502	Martin Luther King Jr. Blvd. to Expos	0.87	D	0.89	D	0.88	D	0.90	D	0.01	0.01	No	No
110-22		110	19.996	Exposition Blvd. to Jct. Rte. 10	0.85	D	0.86	D	0.85	D	0.87	D	0.00	0.01	No	No
405-1		405	3.324	Lakewood Blvd. to Cherry Ave.	1.16	F(0)	0.99	E	1.18	F(0)	1.00	E	0.02	0.01	Yes	No
405-2		405	4.879	Cherry Ave. to Orange Ave.	1.22	F(0)	1.04	F(0)	1.24	F(0)	1.05	F(0)	0.02	0.01	Yes	No
405-3		405	5.388	Orange Ave. to Atlantic Ave.	1.59	F(3)	1.35	F(1)	1.61	F(3)	1.37	F(2)	0.02	0.02	Yes	Yes
405-4		405	6.076	Atlantic Ave. to Long Beach Blvd	1.57	F(3)	1.33	F(1)	1.58	F(3)	1.35	F(1)	0.01	0.02	No	Yes
405-5		405	6.34	Long Beach Blvd to Jct. Rte. 710	1.04	F(0)	0.88	D	1.05	F(0)	0.89	D	0.01	0.01	No	No
405-6	1066	405	7.596	Jct. Rte. 710 to Alameda St.	1.18	F(0)	1.00	E	1.20	F(0)	1.02	F(0)	0.02	0.02	Yes	Yes
405-7		405	8.784	Alameda St. to Wilmington Ave.	1.14	F(0)	0.97	E	1.16	F(0)	0.99	E	0.02	0.02	Yes	Yes
405-8		405	9.556	Wilmington Ave. to Carson St.	1.33	F(1)	1.15	F(0)	1.36	F(2)	1.17	F(0)	0.03	0.02	Yes	Yes
405-9		405	10.541	Carson St. to Avalon Blvd.	1.31	F(1)	1.13	F(0)	1.34	F(1)	1.15	F(0)	0.03	0.02	Yes	Yes
405-10	1067	405	11.224	Avalon Blvd. to Jct. Rte. 110	1.12	F(0)	0.97	E	1.14	F(0)	0.99	E	0.02	0.02	No	Yes
405-11		405	12.97	Jct. Rte. 110 to Vermont Ave.	1.12	F(0)	0.97	E	1.14	F(0)	1.00	E	0.02	0.03	No	Yes
405-12		405	13.28	Vermont Ave. to Normandie Ave.	0.97	E	0.85	D	0.99	E	0.87	D	0.02	0.02	Yes	No
405-13		405	13.826	Normandie Ave. to Western Ave.	1.09	F(0)	0.95	E	1.11	F(0)	0.98	E	0.02	0.03	Yes	Yes
405-14		405	14.398	Western Ave. to Crenshaw Blvd.	1.31	F(1)	1.14	F(0)	1.34	F(1)	1.18	F(0)	0.03	0.04	Yes	Yes
405-15		405	15.447	Crenshaw Blvd. to Artesia Blvd.	1.28	F(1)	1.11	F(0)	1.30	F(1)	1.15	F(0)	0.02	0.04	Yes	Yes
405-16		405	16.573	Artesia Blvd. to Hawthorne Blvd.	1.04	F(0)	0.90	D	1.05	F(0)	0.92	D	0.01	0.02	No	No
405-17		405	17.589	Hawthorne Blvd. to Inglewood Ave.	1.09	F(0)	0.95	E	1.10	F(0)	0.96	E	0.01	0.01	No	No
405-18	1068	405	18.233	Inglewood Ave. to Rosecrans Ave.	1.14	F(0)	0.99	E	1.15	F(0)	1.01	F(0)	0.01	0.02	No	Yes
710-1		710	12.97	Jct. Rte. 91 to Alondra Blvd.	0.88	D	1.37	F(2)	0.89	D	1.38	F(2)	0.01	0.01	No	No
710-2		710	13.945	Alondra Blvd. to Jct. Rte. 105	0.91	D	1.41	F(2)	0.92	D	1.42	F(2)	0.01	0.01	No	No

Note: D/C is demand-to-capacity ratio.

Exhibit 66: Determination of Freeway Impact for Existing Plus Project Alternative 2 Scenario

Southbound/Wesbound

ID	CMP Station	Fwy Rte	Post Mile	Location	Existing (2017)				2017 Plus Project				2017 Increase in D/C Ratio with Project		2017 Project Has Significant Impact?	
					AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM	PM	AM	PM
					D/C	LOS	D/C	LOS	D/C	LOS	D/C	LOS				
91-1		91	6.344	Jct. Rte. 110 to Avalon Blvd.	2.25	F(3)	1.53	F(3)	2.28	F(3)	1.55	F(3)	0.03	0.02	Yes	Yes
91-2		91	7.426	Avalon Blvd. to Central Ave.	0.92	D	0.63	C	0.96	E	0.65	C	0.04	0.02	Yes	No
91-3		91	8.435	Central Ave. to Wilmington Ave.	0.94	E	0.64	C	0.99	E	0.67	C	0.05	0.03	Yes	No
91-4		91	9.162	Wilmington Ave. to Alameda St.	0.97	E	0.66	C	1.02	F(0)	0.69	C	0.05	0.03	Yes	No
91-5		91	10.271	Alameda St. to Alameda St./Santa F	1.21	F(0)	0.83	D	1.28	F(1)	0.87	D	0.07	0.04	Yes	No
91-6	1033	91	10.41	Alameda St./Santa Fe Ave. to Long	0.84	D	0.57	C	0.89	D	0.60	C	0.05	0.03	No	No
91-7		91	11.096	Long Beach Blvd. to Jct. Rte. 710	1.01	F(0)	0.69	C	1.06	F(0)	0.72	C	0.05	0.03	Yes	No
91-8		91	11.681	Jct. Rte. 710 to Cherry Ave.	1.25	F(0)	0.88	D	1.28	F(1)	0.90	D	0.03	0.02	Yes	No
91-9	1034	91	13.094	Cherry Ave. to Paramount Blvd.	1.06	F(0)	0.75	C	1.08	F(0)	0.76	C	0.02	0.01	Yes	No
91-10		91	13.594	Paramount Blvd. to Downey Ave.	1.25	F(0)	0.88	D	1.28	F(1)	0.90	D	0.03	0.02	Yes	No
91-11		91	14.103	Downey Ave. to Jct. Rte. 19	1.25	F(0)	0.88	D	1.27	F(1)	0.90	D	0.02	0.02	Yes	No
91-12		91	14.618	Jct. Rte. 19 to Clark Ave.	1.44	F(2)	1.02	F(0)	1.47	F(3)	1.03	F(0)	0.03	0.01	Yes	No
91-13		91	15.105	Clark Ave. to Bellflower Blvd.	1.22	F(0)	0.86	D	1.24	F(0)	0.87	D	0.02	0.01	Yes	No
91-14		91	15.614	Bellflower Blvd. to Jct. Rte. 605	1.21	F(0)	0.85	D	1.23	F(0)	0.86	D	0.02	0.01	Yes	No
110-1	1045	110	1.23	Channel St. to C St.	0.43	B	0.53	B	0.45	B	0.55	C	0.02	0.02	No	No
110-2		110	2.771	C St. to Anaheim St.	0.45	B	0.55	C	0.47	B	0.57	C	0.02	0.02	No	No
110-3		110	3.264	Anaheim St. to Jct. Rte. 1	0.39	B	0.48	B	0.41	B	0.50	B	0.02	0.02	No	No
110-4		110	4.061	Jct. Rte. 1 to Sepulveda Blvd.	0.69	C	0.84	D	0.71	C	0.87	D	0.02	0.03	No	No
110-5		110	5.451	Sepulveda Blvd. to Carson St.	0.90	D	1.09	F(0)	0.93	D	1.13	F(0)	0.03	0.04	No	Yes
110-6		110	7.016	Carson St. to Torrance/Del Amo Blvd	1.04	F(0)	1.25	F(0)	1.07	F(0)	1.30	F(1)	0.03	0.05	Yes	Yes
110-7		110	8.028	Torrance/Del Amo Blvd. to Jct. Rte.	1.09	F(0)	1.33	F(1)	1.12	F(0)	1.37	F(2)	0.03	0.04	Yes	Yes
110-8		110	8.775	Jct. Rte. 405 to Jct. Rte. 91	1.36	F(2)	1.65	F(3)	1.39	F(2)	1.69	F(3)	0.03	0.04	Yes	Yes
110-9		110	9.87	Jct. Rte. 91 to Redondo Beach Blvd.	0.81	D	0.78	D	0.84	D	0.80	D	0.03	0.02	No	No
110-10		110	11.239	Redondo Beach Blvd. to Rosecrans	0.92	D	0.88	D	0.95	E	0.91	D	0.03	0.03	Yes	No
110-11		110	11.891	Rosecrans Ave. to El Segundo Blvd.	0.96	E	0.92	D	0.99	E	0.95	E	0.03	0.03	Yes	Yes
110-12		110	12.898	El Segundo Blvd. to Jct. Rte. 105	0.82	D	0.79	D	0.85	D	0.82	D	0.03	0.03	No	No
110-13		110	13.82	Jct. Rte. 105 to Century Blvd.	0.86	D	0.83	D	0.88	D	0.85	D	0.02	0.02	No	No
110-14		110	14.967	Century Blvd. to Manchester Ave.	1.08	F(0)	1.04	F(0)	1.11	F(0)	1.06	F(0)	0.03	0.02	Yes	Yes
110-15	1046	110	15.976	Manchester Ave. to Florence Ave.	1.05	F(0)	1.01	F(0)	1.07	F(0)	1.03	F(0)	0.02	0.02	Yes	Yes
110-16		110	16.981	Florence Ave. to Gage Ave.	1.06	F(0)	1.02	F(0)	1.09	F(0)	1.04	F(0)	0.03	0.02	Yes	Yes
110-17	1047	110	17.514	Gage Ave. to Slauson Ave.	1.06	F(0)	1.02	F(0)	1.08	F(0)	1.03	F(0)	0.02	0.01	Yes	No
110-18		110	17.98	Slauson Ave. to 51st St.	1.22	F(0)	1.17	F(0)	1.25	F(0)	1.19	F(0)	0.03	0.02	Yes	Yes
110-19		110	18.495	51st St. to Vernon Ave.	1.04	F(0)	1.00	E	1.06	F(0)	1.01	F(0)	0.02	0.01	Yes	No
110-20		110	18.998	Vernon Ave. to Martin Luther King Jr	1.04	F(0)	1.00	E	1.06	F(0)	1.01	F(0)	0.02	0.01	Yes	No
110-21		110	19.502	Martin Luther King Jr. Blvd. to Expos	1.12	F(0)	1.08	F(0)	1.15	F(0)	1.10	F(0)	0.03	0.02	Yes	Yes
110-22		110	19.996	Exposition Blvd. to Jct. Rte. 10	0.91	D	0.87	D	0.93	D	0.89	D	0.02	0.02	No	No
405-1		405	3.324	Lakewood Blvd. to Cherry Ave.	0.87	D	1.09	F(0)	0.87	D	1.10	F(0)	0.00	0.01	No	No
405-2		405	4.879	Cherry Ave. to Orange Ave.	1.14	F(0)	1.42	F(2)	1.15	F(0)	1.44	F(2)	0.01	0.02	No	Yes
405-3		405	5.388	Orange Ave. to Atlantic Ave.	1.19	F(0)	1.48	F(3)	1.20	F(0)	1.50	F(3)	0.01	0.02	No	Yes
405-4		405	6.076	Atlantic Ave. to Long Beach Blvd	0.78	D	0.97	E	0.79	D	0.99	E	0.01	0.02	No	Yes
405-5		405	6.34	Long Beach Blvd to Jct. Rte. 710	0.93	D	1.16	F(0)	0.94	E	1.18	F(0)	0.01	0.02	No	Yes
405-6	1066	405	7.596	Jct. Rte. 710 to Alameda St.	0.88	D	1.10	F(0)	0.89	D	1.12	F(0)	0.01	0.02	No	Yes
405-7		405	8.784	Alameda St. to Wilmington Ave.	0.85	D	1.06	F(0)	0.86	D	1.09	F(0)	0.01	0.03	No	Yes
405-8		405	9.556	Wilmington Ave. to Carson St.	1.14	F(0)	1.37	F(2)	1.15	F(0)	1.40	F(2)	0.01	0.03	No	Yes
405-9		405	10.541	Carson St. to Avalon Blvd.	1.12	F(0)	1.35	F(1)	1.14	F(0)	1.38	F(2)	0.02	0.03	No	Yes
405-10	1067	405	11.224	Avalon Blvd. to Jct. Rte. 110	0.96	E	1.16	F(0)	0.97	E	1.18	F(0)	0.01	0.02	No	Yes
405-11		405	12.97	Jct. Rte. 110 to Vermont Ave.	1.04	F(0)	1.29	F(1)	1.08	F(0)	1.32	F(1)	0.04	0.03	Yes	Yes
405-12		405	13.28	Vermont Ave. to Normandie Ave.	0.87	D	1.08	F(0)	0.90	D	1.10	F(0)	0.03	0.02	No	Yes
405-13		405	13.826	Normandie Ave. to Western Ave.	1.02	F(0)	1.26	F(1)	1.04	F(0)	1.28	F(1)	0.02	0.02	Yes	Yes
405-14		405	14.398	Western Ave. to Crenshaw Blvd.	0.98	E	1.21	F(0)	1.00	E	1.23	F(0)	0.02	0.02	Yes	Yes
405-15		405	15.447	Crenshaw Blvd. to Artesia Blvd.	0.96	E	1.18	F(0)	0.98	E	1.20	F(0)	0.02	0.02	Yes	Yes
405-16		405	16.573	Artesia Blvd. to Hawthorne Blvd.	0.97	E	1.20	F(0)	0.99	E	1.21	F(0)	0.02	0.01	Yes	No
405-17		405	17.589	Hawthorne Blvd. to Inglewood Ave.	1.02	F(0)	1.25	F(0)	1.03	F(0)	1.27	F(1)	0.01	0.02	No	Yes
405-18	1068	405	18.233	Inglewood Ave. to Rosecrans Ave.	0.85	D	1.05	F(0)	0.86	D	1.06	F(0)	0.01	0.01	No	No
710-1		710	12.97	Jct. Rte. 91 to Alondra Blvd.	0.86	D	0.69	C	0.88	D	0.70	C	0.02	0.01	No	No
710-2		710	13.945	Alondra Blvd. to Jct. Rte. 105	0.89	D	0.71	C	0.90	D	0.73	C	0.01	0.02	No	No

Note: D/C is demand-to-capacity ratio.

Exhibit 66: Determination of Freeway Impact for Existing Plus Project Alternative 2 Scenario (continued)

6.3 Existing Sunday with 30,000-Seats Conditions

6.3.1 Forecasting Existing Sunday with 30,000-Seats Traffic

Traffic volumes for the 2017 Plus Project condition were developed adding in the traffic for a 30,000-seat event to the existing Sunday traffic counts. The resulting 2017 Plus Project traffic volumes are shown in Exhibit 69 for the pre-event hour and in Exhibit 70 for the post-event hour.

6.3.2 Existing Sunday with 30,000-Seats Intersection Level of Service

Exhibit 68 shows in tabular format the 2019 Plus Project Sunday level of service (LOS) based on the traffic volumes shown in Exhibit 69 and Exhibit 70 (also see Appendix I). The LOS is also shown on maps in Exhibit 71, for the pre-game peak hour condition, and Exhibit 72 for the post-game peak hour condition. Exhibit 73 shows the results of the analysis; that there are no impacts to the intersections for 30,000 seat-conditions.

6.3.3 Determination of Freeway Impacts

As stated earlier, Caltrans' traffic impact analysis guidelines focus on weekday peak periods. The lack of forecasts for Sunday traffic, lack of LOS thresholds for Sundays, lack of Sunday trip generation rates for most land uses, etc. preclude a typical analysis of freeway impacts. Instead, the intersection analysis described in the previous section for the additional 3,000 seats was check to identify any locations where the Project would add more than 150 cars (the threshold for analysis). This was found to occur at only one location, namely SR-91 Eastbound. Exhibit 67 below compares Sunday traffic volumes²⁰ on SR-91 to the capacity of the freeway. As can be seen in the exhibit, the freeway is at most only about half full on Sundays and can easily accommodate another 170 trips (the Project's addition).

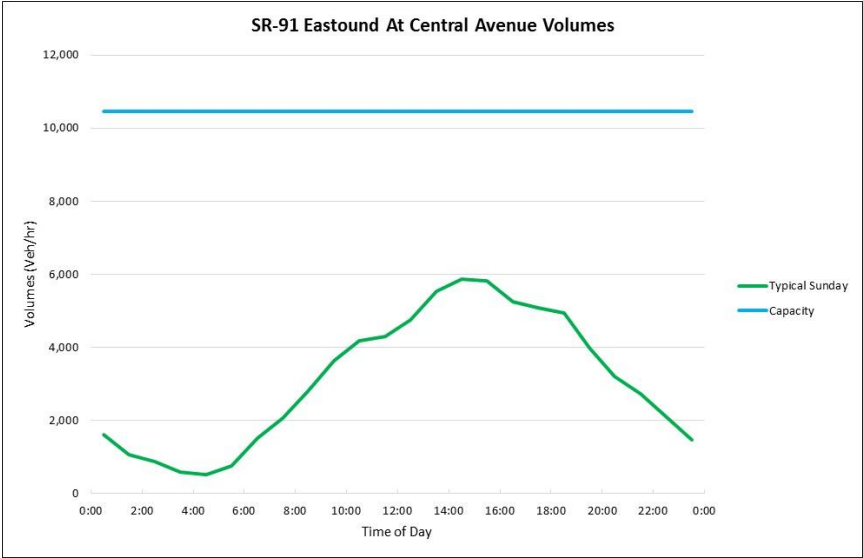


Exhibit 67: Comparison of Sunday Freeway Traffic to Capacity

²⁰ This data comes from PeMS, Caltrans' system of embedded loops

6.3.4 Determination of Pedestrian Impacts

The CSU system has defined a significant pedestrian impact as a situation where,

- *“A project fails to provide safe pedestrian connections between campus buildings and adjacent streets and transit facilities. Or*
- *A project significantly disrupts existing or planned pedestrian facilities or significantly conflicts with applicable non-automotive transportation plans, guidelines, policies, or standards.”*

Based on this standard the 30,000-seat game does not impose any significant pedestrian impacts since the 30,000-seat game will include temporary control of intersections by traffic control officers who will be able to stop traffic to allow pedestrians to safely cross the street when going to and from the stadium.

The 30,000-seat game does not involve any construction activities that would disrupt any existing or planned pedestrian facilities.

6.3.5 Determination of Bicycle Impacts

The CSU system has defined a significant bicycle impact as a situation where, *“A project significantly disrupts existing or planned bicycle facilities or significantly conflicts with applicable non-automotive transportation plans, guidelines, policies, or standards.”* Based on this standard the 30,000-seat game does not impose any significant bicycle impacts since the 30,000-seat game does not involve any construction activities that would it disrupt any existing or planned bicycle facilities. The 30,000-seat game will include temporary control of intersections by traffic control officers whose presence will make the streets around StubHub Center safer for bicyclists than streets that are unsupervised.

6.3.6 Determination of Transit Impacts

CSU guideline state that a significant transit impact would occur if, *“A project significantly disrupts existing or planned transit facilities and services or significantly conflicts with applicable transit plans, guidelines, policies, or standards.”* Based on this standard the 30,000-seat game does not impose any significant transit impacts since it would not disrupt any existing or planned transit facilities. The 30,000-seat game will complement the transit system by providing shuttle buses from transit centers to the stadium.

Study ID	Intersection Name	Control Type	Pre-Game Peak Hour		Post-Game Peak Hour	
			V/C Ratio	ICU LOS	V/C Ratio	ICU LOS
1	Victoria St./Drive D	TWSC	0.591	A	0.494	A
2	Victoria St./Tamcliff Ave.	Signalized	0.341	A	0.603	B
3	Victoria St./Birchknoll Dr.	Signalized	0.206	A	0.659	B
9	University Dr./Toro Center Dr.	TWSC	0.575	A	0.734	C
10	Albertoni St./SR 91 EB Ramps	Signalized	0.577	A	0.320	A
11	Avalon Blvd./SR 91 WB On-Ramp	Signalized	0.661	B	0.816	D
12	Avalon Blvd./Albertoni St.	Signalized	0.800	C	0.615	B
13	Avalon Blvd./Victoria St.	Signalized	0.715	C	0.564	A
14	Central Ave./Artesia Blvd. WB	Signalized	0.537	A	0.448	A
15	Central Ave./Albertoni St./Artesia Blvd. EB	Signalized	0.519	A	0.474	A
16	Central Ave./Victoria St.	Signalized	0.781	C	0.559	A
17	Wilmington Ave./Artesia Blvd. WB	Signalized	0.505	A	0.542	A
18	Wilmington Ave./Artesia Blvd. EB	Signalized	0.381	A	0.804	D
19	Wilmington Ave./Victoria St.	Signalized	0.536	A	0.624	B
22	Figuroa St./190th St./Victoria St.	Signalized	0.469	A	0.331	A
24	Main St./Victoria St.	Signalized	0.438	A	0.316	A
25	Avalon Blvd./University Dr.	Signalized	0.644	B	0.890	D
26	Avalon Blvd./Del Amo Blvd.	Signalized	0.732	C	0.773	C
27	Avalon Blvd./I-405 NB Ramps	Signalized	0.650	B	0.528	A
28	Avalon Blvd./I-405 SB Ramps	Signalized	0.587	A	0.457	A
29	Central Ave./University Dr.	Signalized	0.837	D	0.674	B
30	Wilmington Ave./University Dr.	Signalized	0.777	C	0.426	A
31	Central Ave./Del Amo Blvd.	Signalized	0.459	A	0.430	A
32	Wilmington Ave./Del Amo Blvd.	Signalized	0.537	A	0.505	A
38	Avalon Blvd./184th St.	Signalized	0.475	A	0.383	A
39	Avalon Blvd./182nd St.	TWSC	0.369	A	0.644	B
40	Victoria St./Drive C	TWSC	0.675	B	0.347	A
41	Victoria St./Rainsbury Ave.	TWSC	0.809	D	0.384	A
42	Avalon Blvd./Harbor Village/Colony Cove	Signalized	0.677	B	0.567	A

Exhibit 68: 2017 Existing Sunday with 30,000 Seats Level of Service (LOS) at Study Intersections (Table)

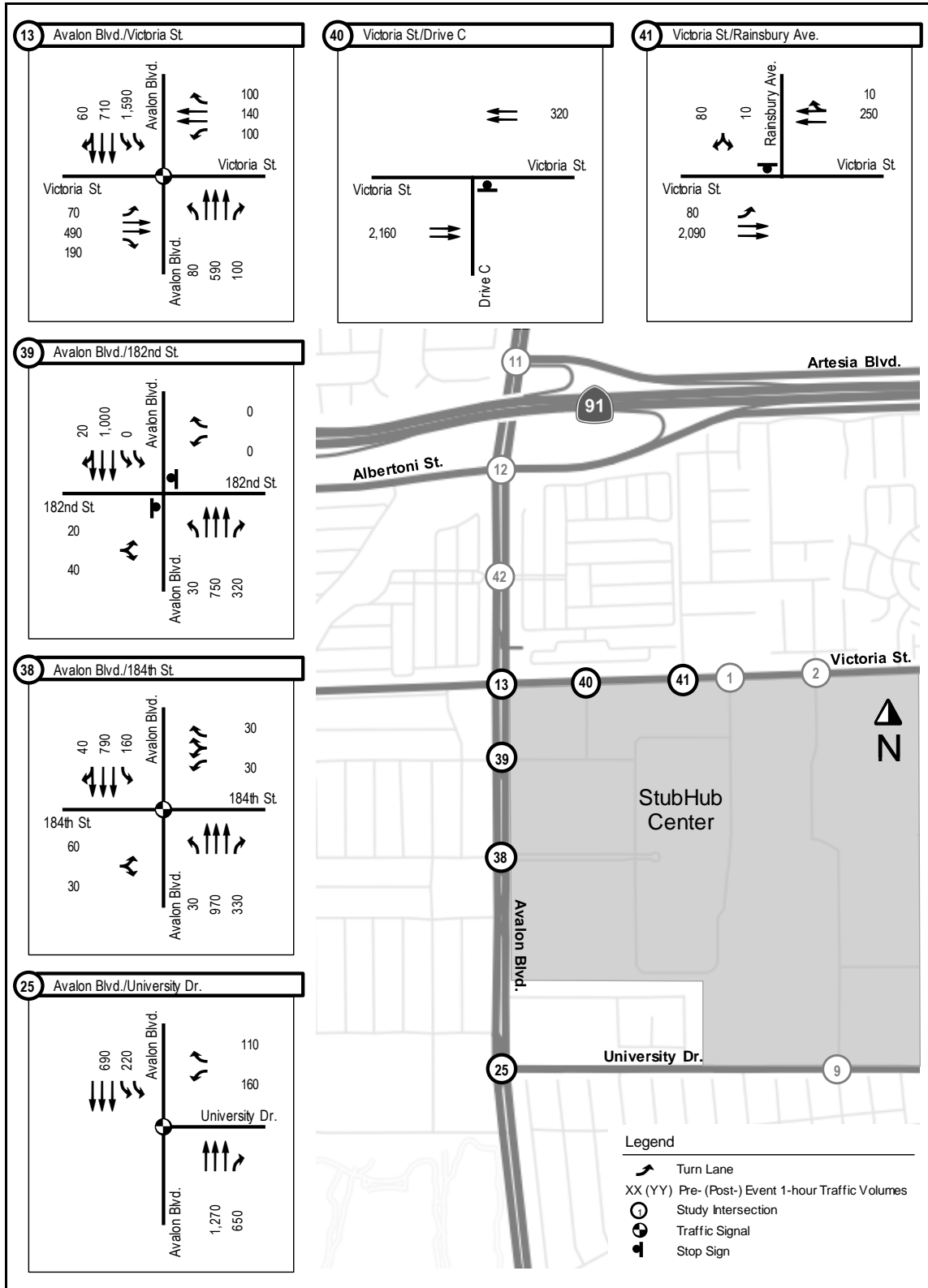


Exhibit 69: 2017 Existing Sunday with 30,000 Pre-Game Traffic Volumes and Lane Configurations

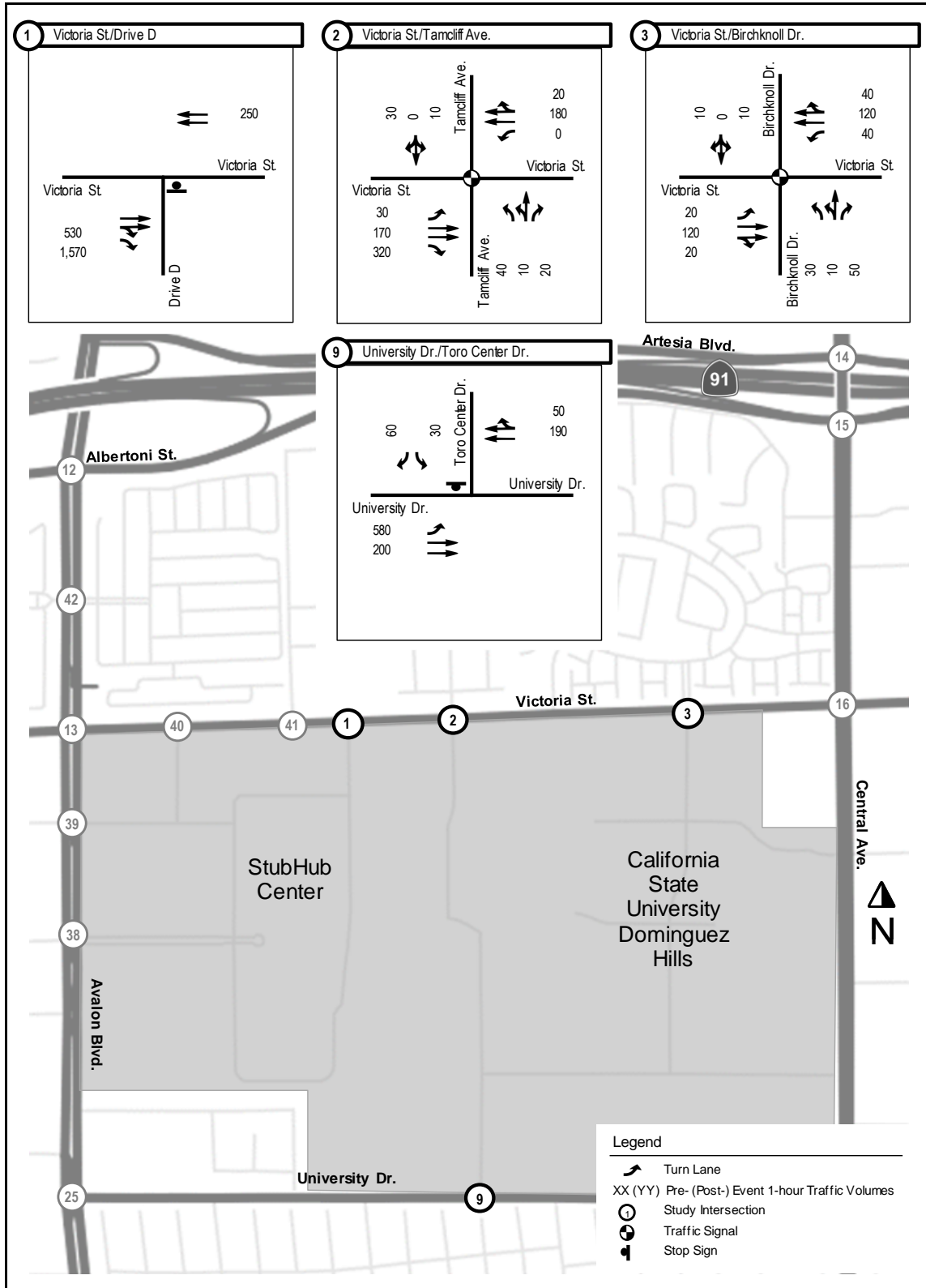


Exhibit 69: 2017 Existing Sunday with 30,000 Pre-Game Traffic Volumes and Lane Configurations (Map B)

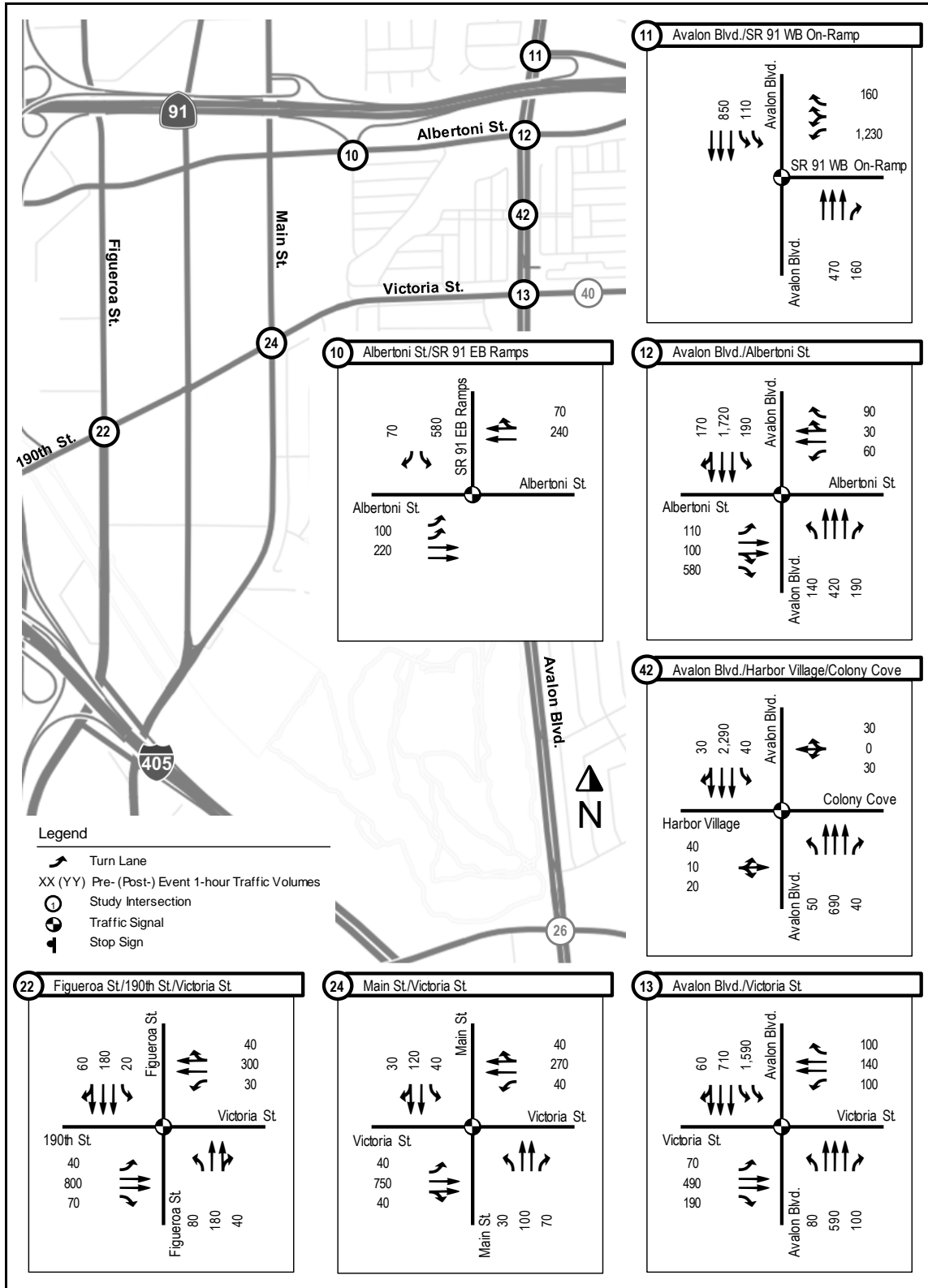


Exhibit 69: 2017 Existing Sunday with 30,000 Pre-Game Traffic Volumes and Lane Configurations (Map C)

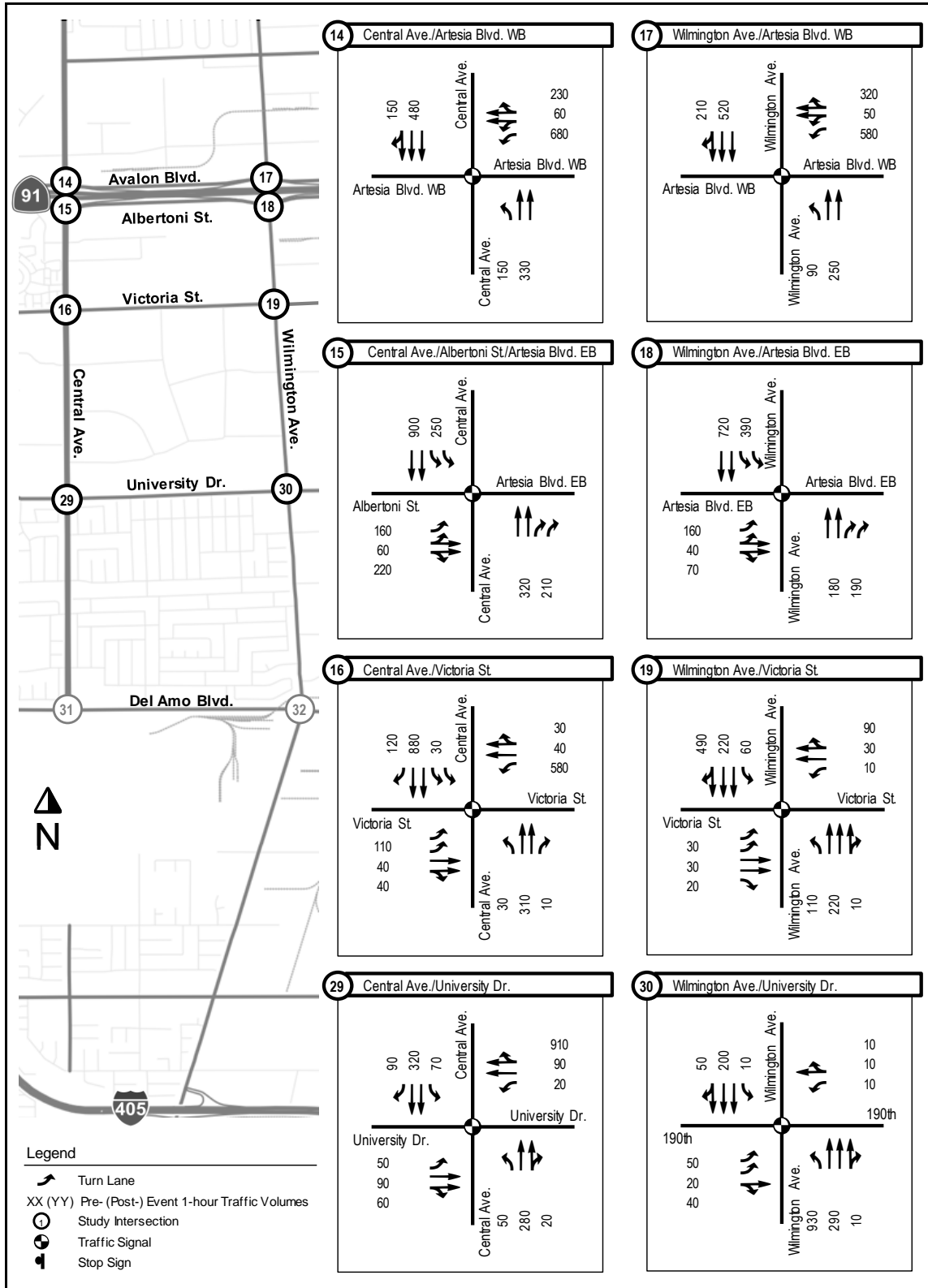


Exhibit 69: 2017 Existing Sunday with 30,000 Pre-Game Traffic Volumes and Lane Configurations (Map D)

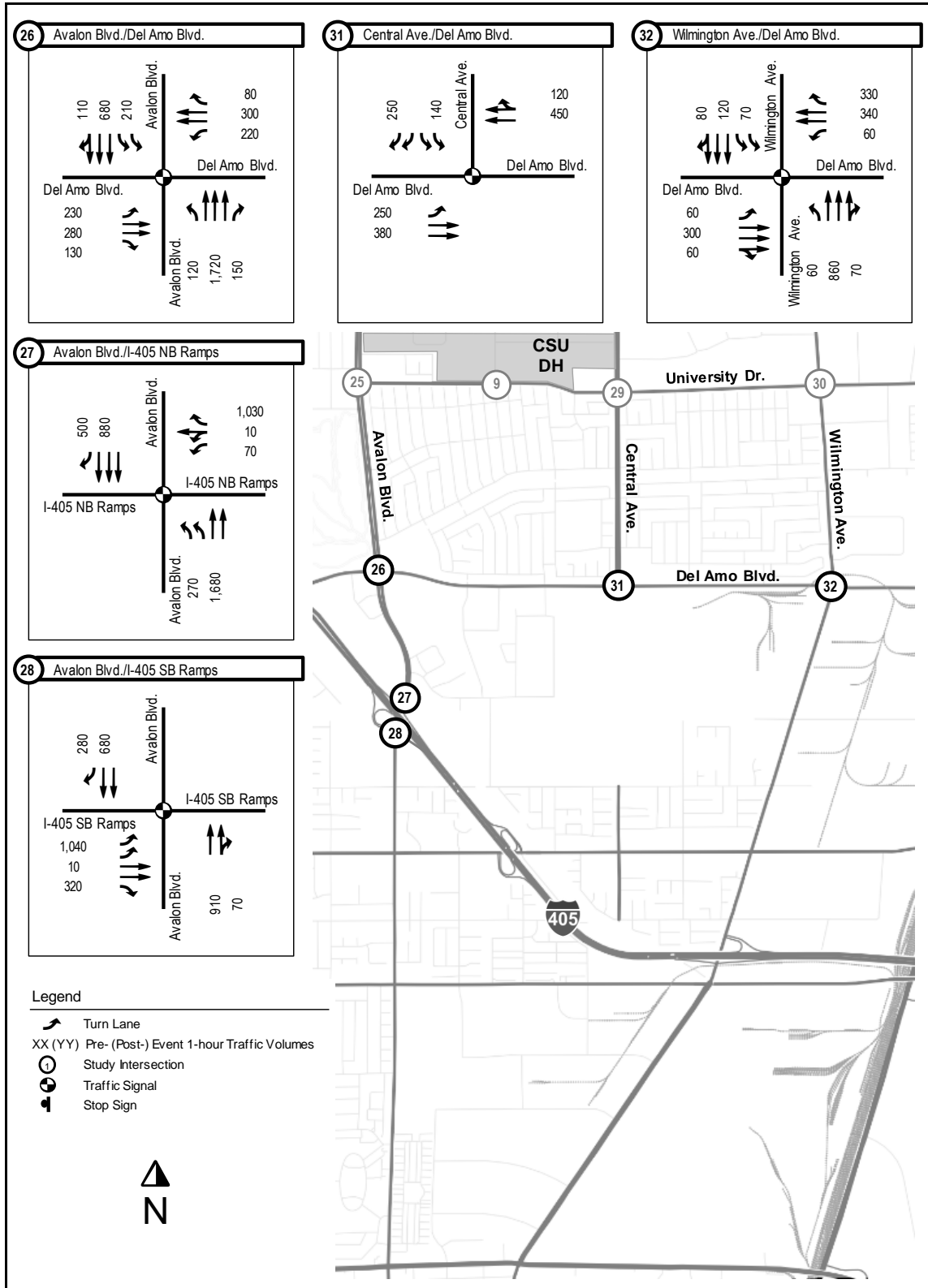


Exhibit 69: 2017 Existing Sunday with 30,000 Pre-Game Traffic Volumes and Lane Configurations (Map E)

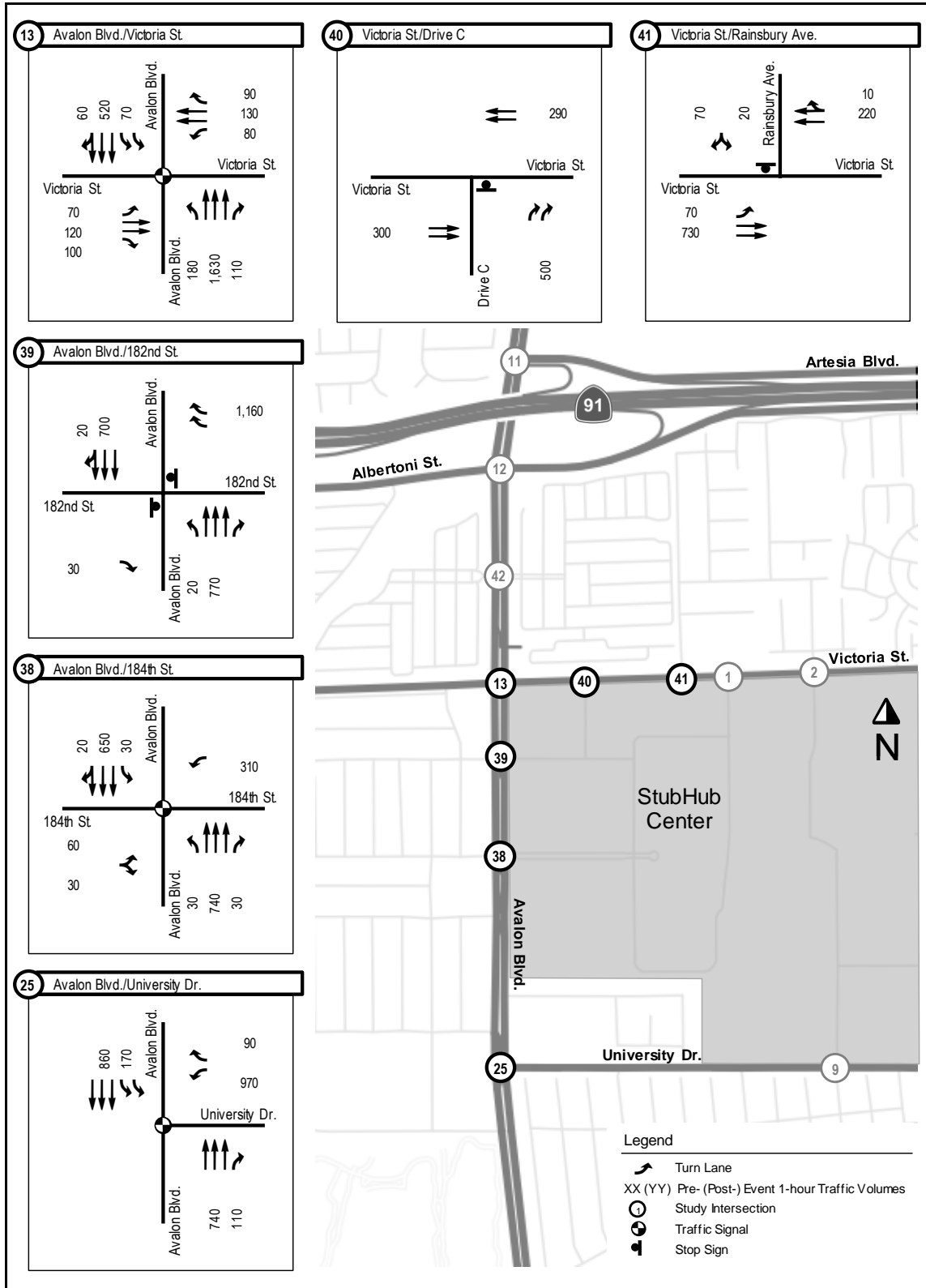


Exhibit 70: 2017 Existing Sunday with 30,000 Post-Game Traffic Volumes and Lane Configurations

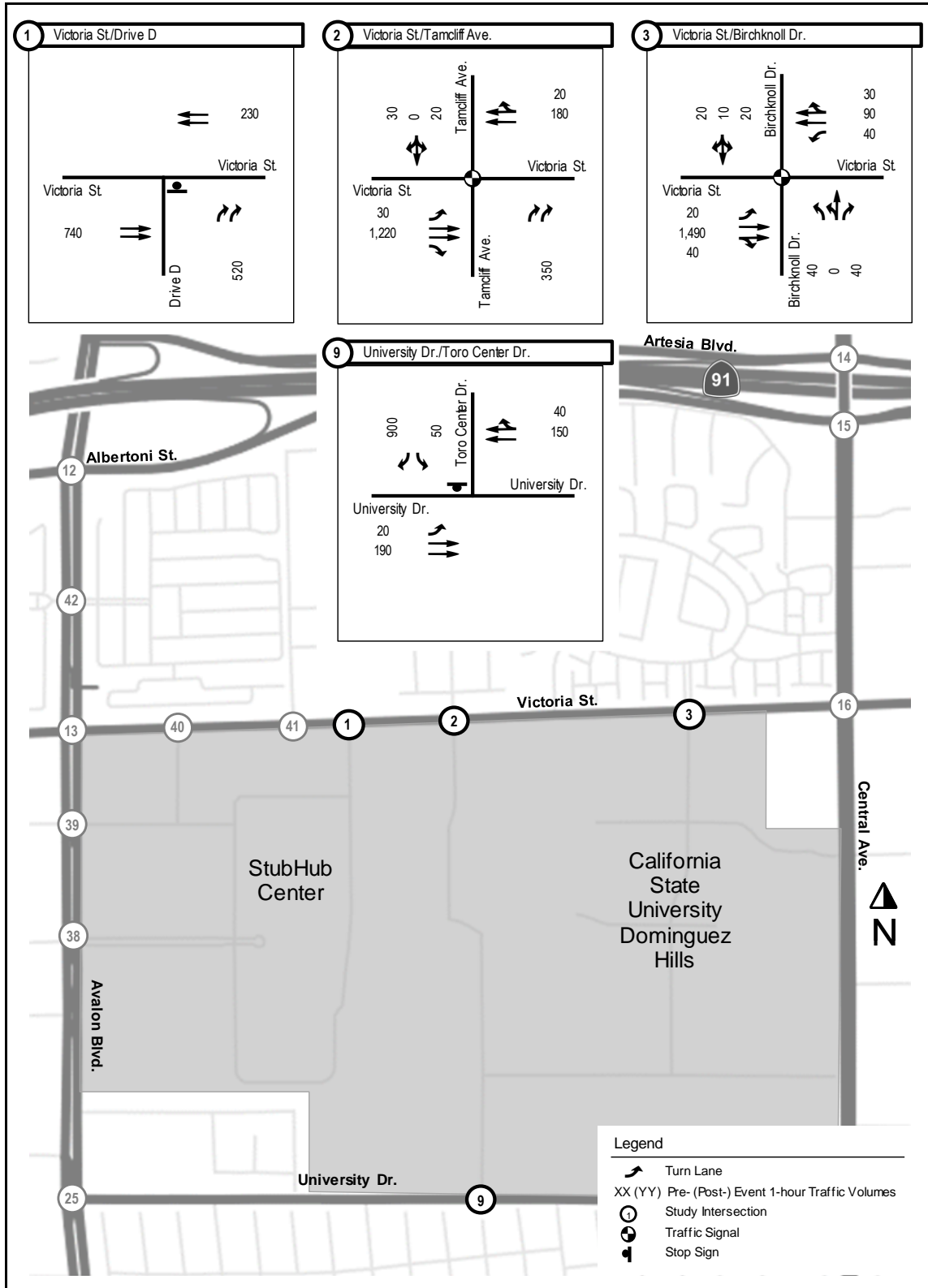


Exhibit 70: 2017 Existing Sunday with 30,000 Post-Game Traffic Volumes and Lane Configurations (Map B)

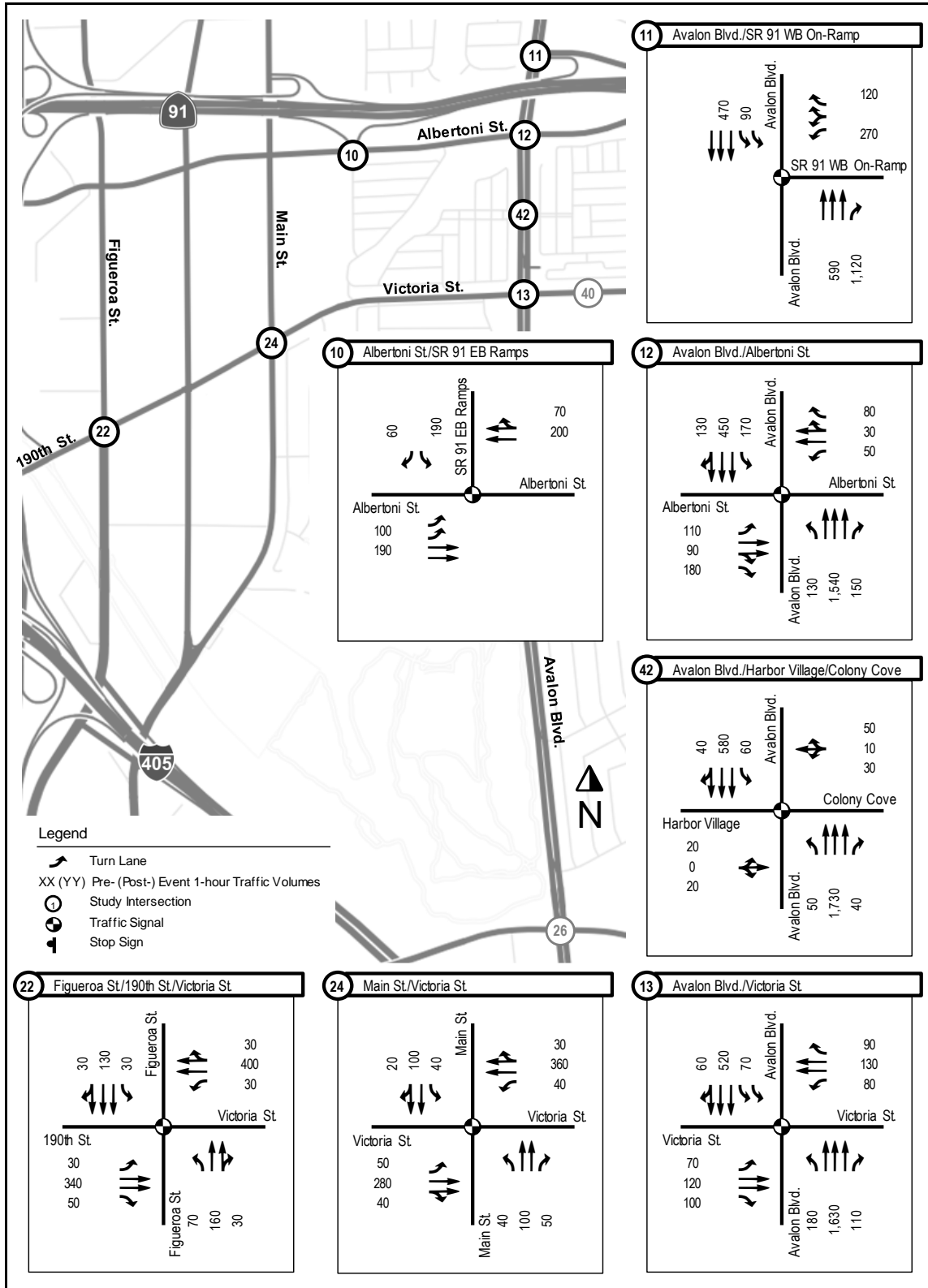


Exhibit 70: 2017 Existing Sunday with 30,000 Post-Game Traffic Volumes and Lane Configurations (Map C)

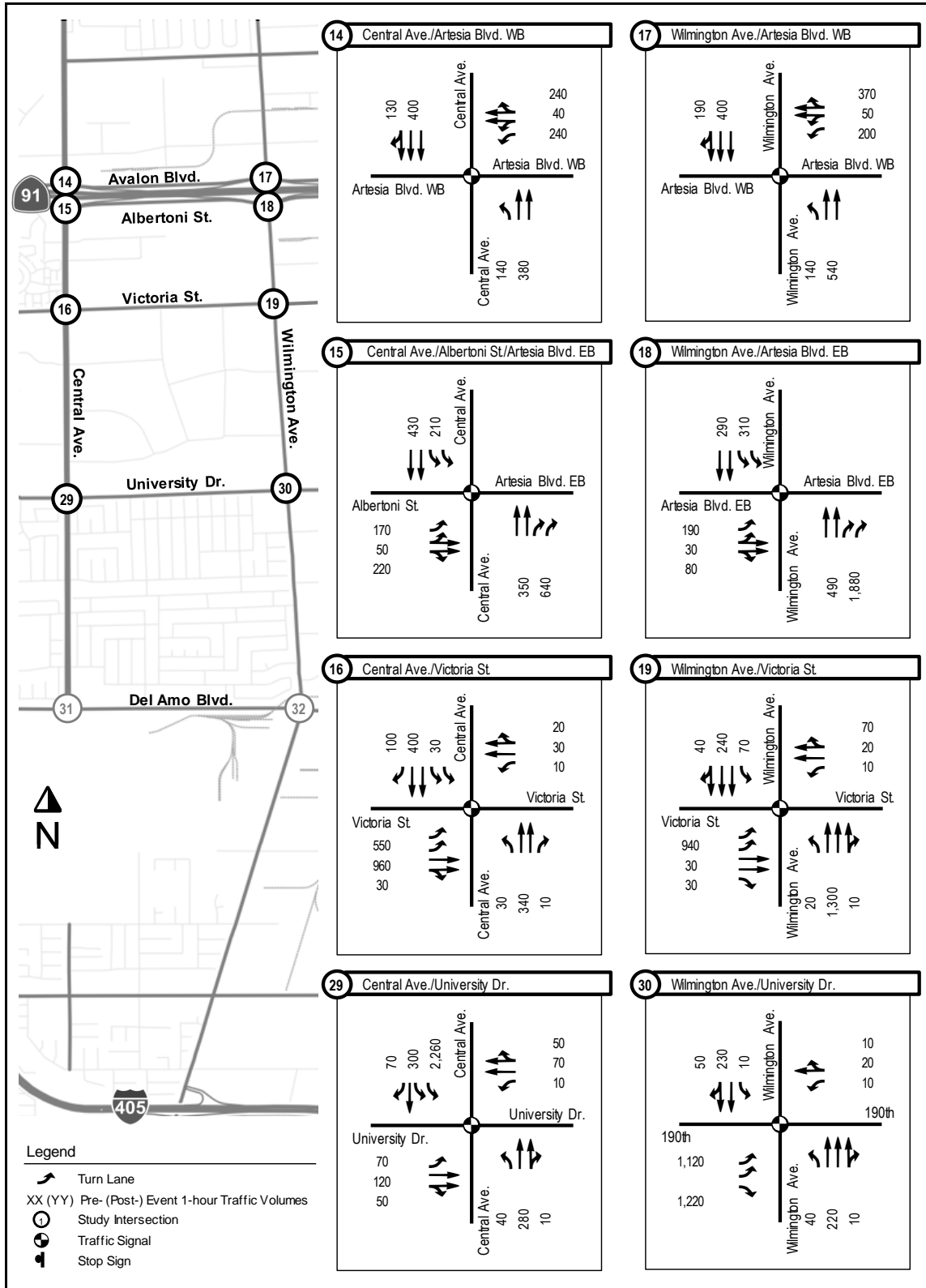


Exhibit 70: 2017 Existing Sunday with 30,000 Post-Game Traffic Volumes and Lane Configurations (Map D)

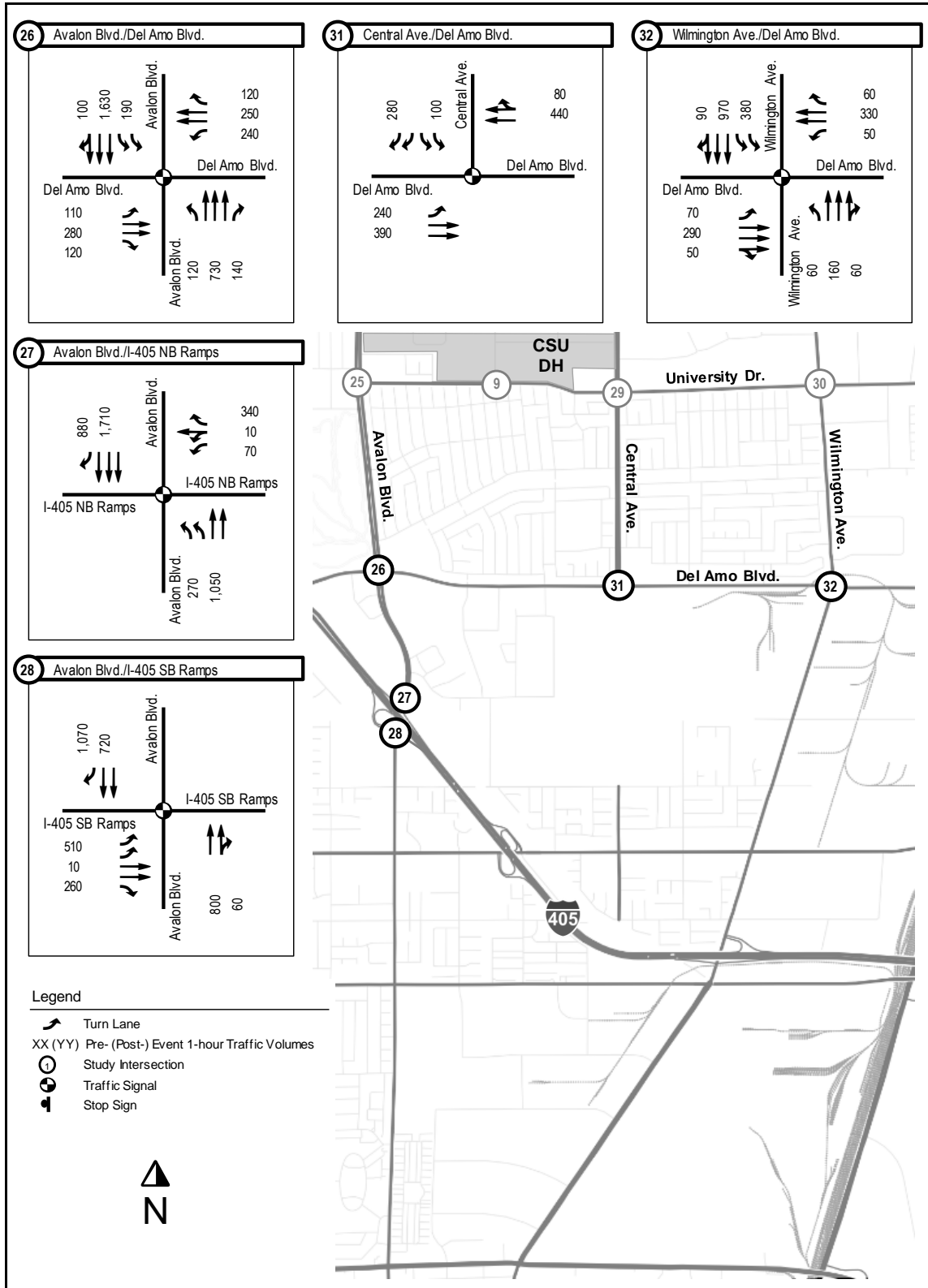


Exhibit 70: 2017 Existing Sunday with 30,000 Post-Game Traffic Volumes and Lane Configurations (Map E)

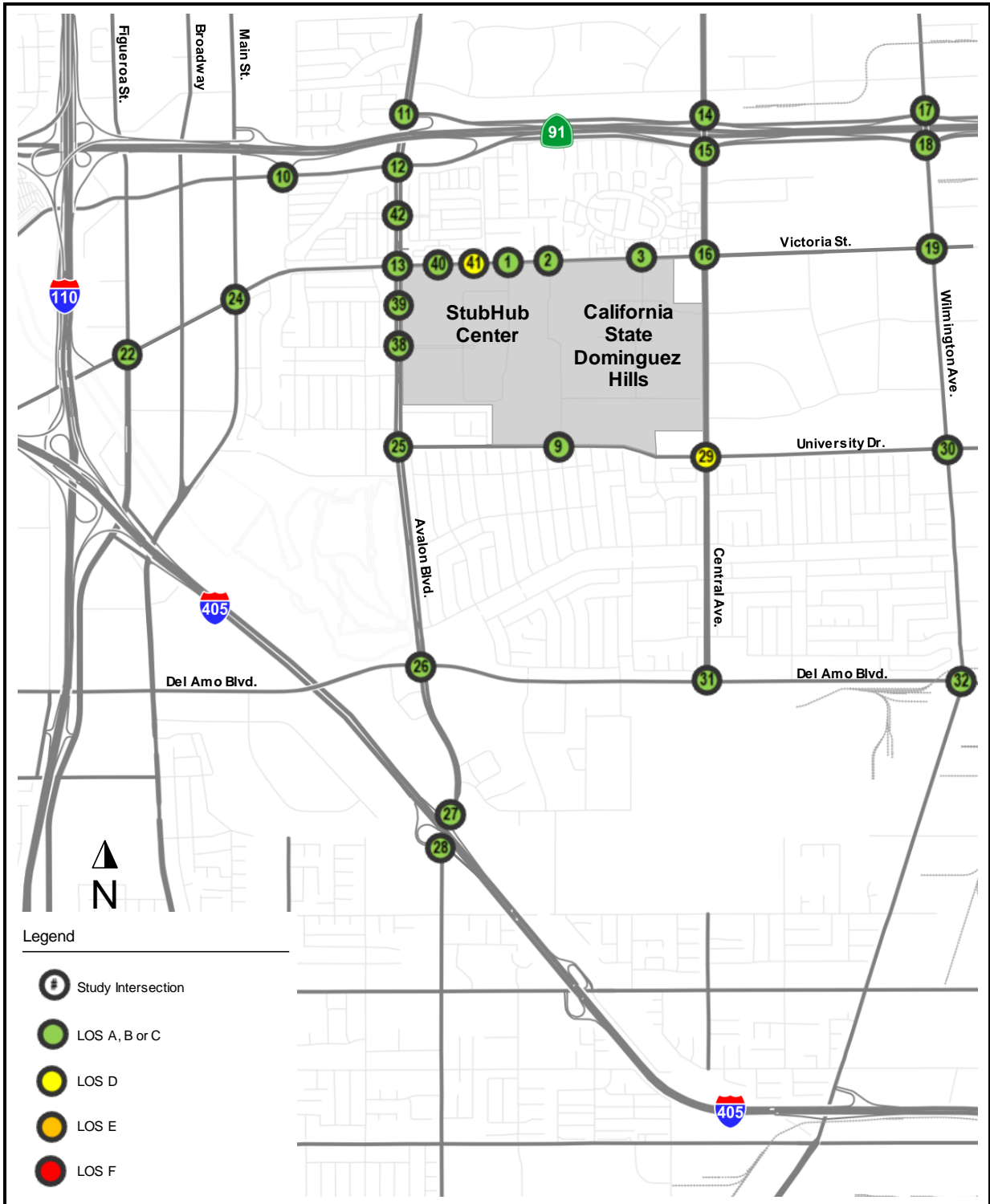


Exhibit 71: 2017 Existing Sunday with 30,000 Plus Project Pre-Game Peak Hour LOS (Map)

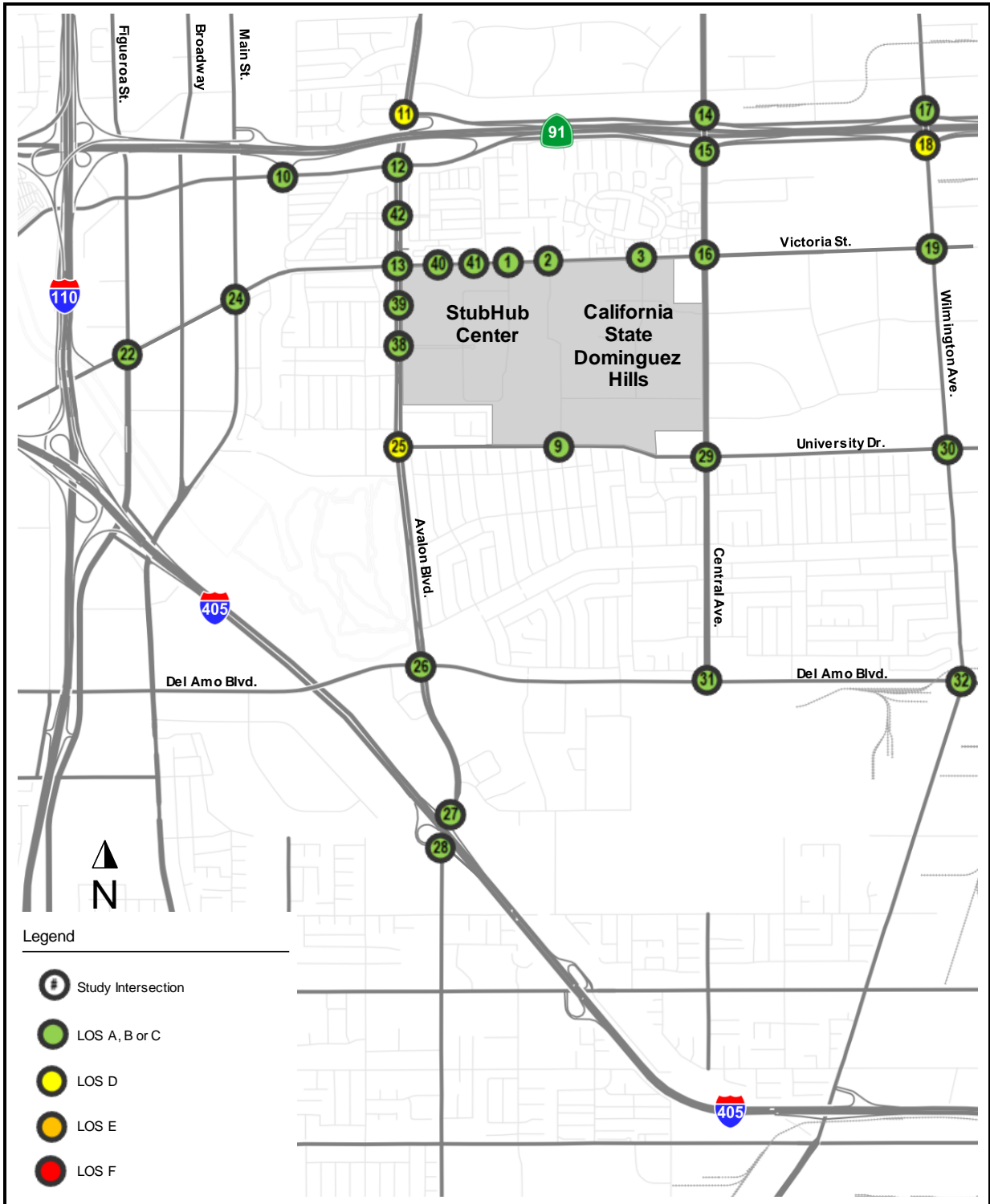


Exhibit 72: 2017 Existing Sunday with 30,000 Post-Game Peak Hour LOS (Map)

Study ID	Intersection Name	Control Type	2017 Scenarios					
			Pre-Game Peak Hour			Post-Game Peak Hour		
			Plus 27,000 LOS	Plus 30,000 LOS	Project Has Significant Impact?	Plus 27,000 LOS	Plus 30,000 LOS	Project Has Significant Impact?
1	Victoria St./Drive D	TWSC	A	A	No	A	A	No
2	Victoria St./Tamcliff Ave.	Signalized	A	A	No	A	B	No
3	Victoria St./Birchknoll Dr.	Signalized	A	A	No	B	B	No
9	University Dr./Toro Center Dr.	TWSC	A	A	No	B	C	No
10	Albertoni St./SR 91 EB Ramps	Signalized	A	A	No	A	A	No
11	Avalon Blvd./SR 91 WB On-Ramp	Signalized	B	B	No	C	D	No
12	Avalon Blvd./Albertoni St.	Signalized	C	C	No	A	B	No
13	Avalon Blvd./Victoria St.	Signalized	B	C	No	A	A	No
14	Central Ave./Artesia Blvd. WB	Signalized	A	A	No	A	A	No
15	Central Ave./Albertoni St./Artesia Blvd. EB	Signalized	A	A	No	A	A	No
16	Central Ave./Victoria St.	Signalized	C	C	No	A	A	No
17	Wilmington Ave./Artesia Blvd. WB	Signalized	A	A	No	A	A	No
18	Wilmington Ave./Artesia Blvd. EB	Signalized	A	A	No	C	D	No
19	Wilmington Ave./Victoria St.	Signalized	A	A	No	A	B	No
22	Figueroa St./190th St./Victoria St.	Signalized	A	A	No	A	A	No
24	Main St./Victoria St.	Signalized	A	A	No	A	A	No
25	Avalon Blvd./University Dr.	Signalized	B	B	No	D	D	No
26	Avalon Blvd./Del Amo Blvd.	Signalized	C	C	No	C	C	No
27	Avalon Blvd./I-405 NB Ramps	Signalized	B	B	No	A	A	No
28	Avalon Blvd./I-405 SB Ramps	Signalized	A	A	No	A	A	No
29	Central Ave./University Dr.	Signalized	C	D	No	B	B	No
30	Wilmington Ave./University Dr.	Signalized	C	C	No	A	A	No
31	Central Ave./Del Amo Blvd.	Signalized	A	A	No	A	A	No
32	Wilmington Ave./Del Amo Blvd.	Signalized	A	A	No	A	A	No
38	Avalon Blvd./184th St.	Signalized	A	A	No	A	A	No
39	Avalon Blvd./182nd St.	TWSC	A	A	No	B	B	No
40	Victoria St./Drive C	TWSC	B	B	No	A	A	No
41	Victoria St./Rainsbury Ave.	TWSC	C	D	No	A	A	No
42	Avalon Blvd./Harbor Village/Colony Cove	Signalized	B	B	No	A	A	No

Exhibit 73: Determination of Intersection Impact for the Existing Sunday with 30,000 Seats

7 2019 Sunday (27,000 Seats) Conditions

7.1 Forecasting 2019 Sunday (27,000 Seats) Traffic

Traffic volumes for the 2019 No Project condition were developed by factoring up the existing Sunday traffic counts using the growth factor from the LA-CMP and then adding in the traffic for a 27,000-seat event. The resulting 2019 No Project traffic volumes are shown in Exhibit 75 for pre-event hour and Exhibit 57 for the post event hour.

7.2 2019 Sunday (27,000 Seats) Intersection Level of Service

Exhibit 74 shows in tabular format the 2019 Sunday No Project level of service (LOS) based on the traffic volumes shown in Exhibit 75 and Exhibit 57 (also see Appendix J). The LOS is also shown on maps in Exhibit 58, for the pre-game peak hour condition, and Exhibit 78 for the post-game peak hour condition. As can be seen in the exhibit, all intersections are expected to meet the target LOS of D or better.

Study ID	Intersection Name	Control Type	Pre-Game Peak Hour		Post-Game Peak Hour	
			V/C Ratio	ICU LOS	V/C Ratio	ICU LOS
1	Victoria St./Drive D	TWSC	0.541	A	0.469	A
2	Victoria St./Tamcliff Ave.	Signalized	0.328	A	0.578	A
3	Victoria St./Birchknoll Dr.	Signalized	0.216	A	0.625	B
9	University Dr./Toro Center Dr.	TWSC	0.544	A	0.684	B
10	Albertoni St./SR 91 EB Ramps	Signalized	0.558	A	0.320	A
11	Avalon Blvd./SR 91 WB On-Ramp	Signalized	0.630	B	0.766	C
12	Avalon Blvd./Albertoni St.	Signalized	0.770	C	0.596	A
13	Avalon Blvd./Victoria St.	Signalized	0.688	B	0.552	A
14	Central Ave./Artesia Blvd. WB	Signalized	0.535	A	0.460	A
15	Central Ave./Albertoni St./Artesia Blvd. EB	Signalized	0.519	A	0.461	A
16	Central Ave./Victoria St.	Signalized	0.756	C	0.556	A
17	Wilmington Ave./Artesia Blvd. WB	Signalized	0.515	A	0.540	A
18	Wilmington Ave./Artesia Blvd. EB	Signalized	0.381	A	0.757	C
19	Wilmington Ave./Victoria St.	Signalized	0.511	A	0.595	A
22	Figuroa St./190th St./Victoria St.	Signalized	0.463	A	0.331	A
24	Main St./Victoria St.	Signalized	0.428	A	0.316	A
25	Avalon Blvd./University Dr.	Signalized	0.619	B	0.842	D
26	Avalon Blvd./Del Amo Blvd.	Signalized	0.746	C	0.806	D
27	Avalon Blvd./I-405 NB Ramps	Signalized	0.669	B	0.547	A
28	Avalon Blvd./I-405 SB Ramps	Signalized	0.632	B	0.507	A
29	Central Ave./University Dr.	Signalized	0.809	D	0.656	B
30	Wilmington Ave./University Dr.	Signalized	0.746	C	0.424	A
31	Central Ave./Del Amo Blvd.	Signalized	0.496	A	0.464	A
32	Wilmington Ave./Del Amo Blvd.	Signalized	0.529	A	0.517	A
38	Avalon Blvd./184th St.	Signalized	0.454	A	0.382	A
39	Avalon Blvd./182nd St.	TWSC	0.371	A	0.610	B
40	Victoria St./Drive C	TWSC	0.625	B	0.341	A
41	Victoria St./Rainsbury Ave.	TWSC	0.756	C	0.375	A
42	Avalon Blvd./Harbor Village/Colony Cove	Signalized	0.650	B	0.548	A

Exhibit 74: 2019 Sunday (27,000-Seats) Level of Service (LOS) at Study Intersections (Table)

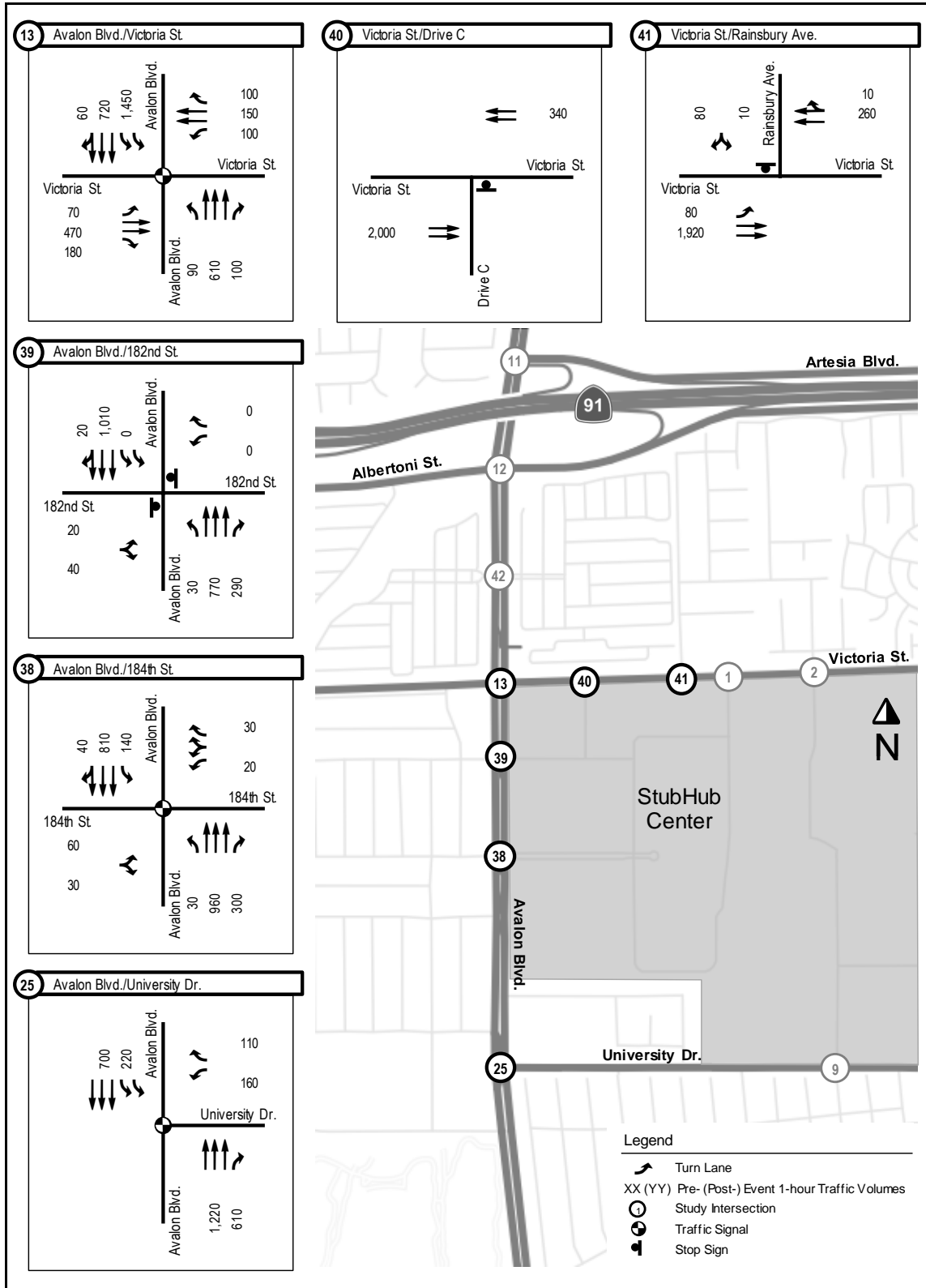


Exhibit 75: 2019 Sunday (27,000-Seats) Pre-Game Volumes and Lane Configurations

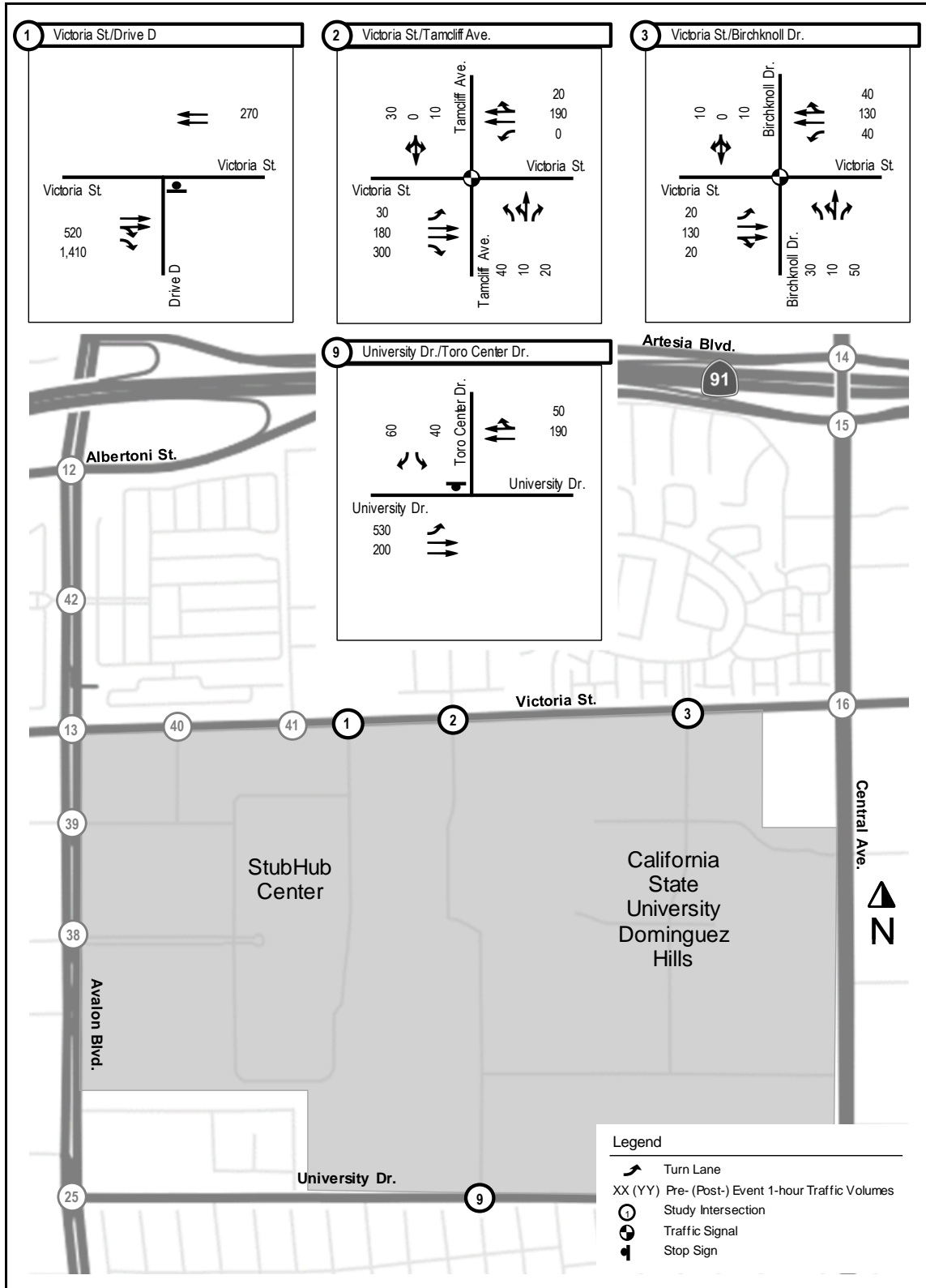


Exhibit 75: 2019 Sunday (27,000-Seats) Pre-Game Volumes and Lane Configurations (Map B)

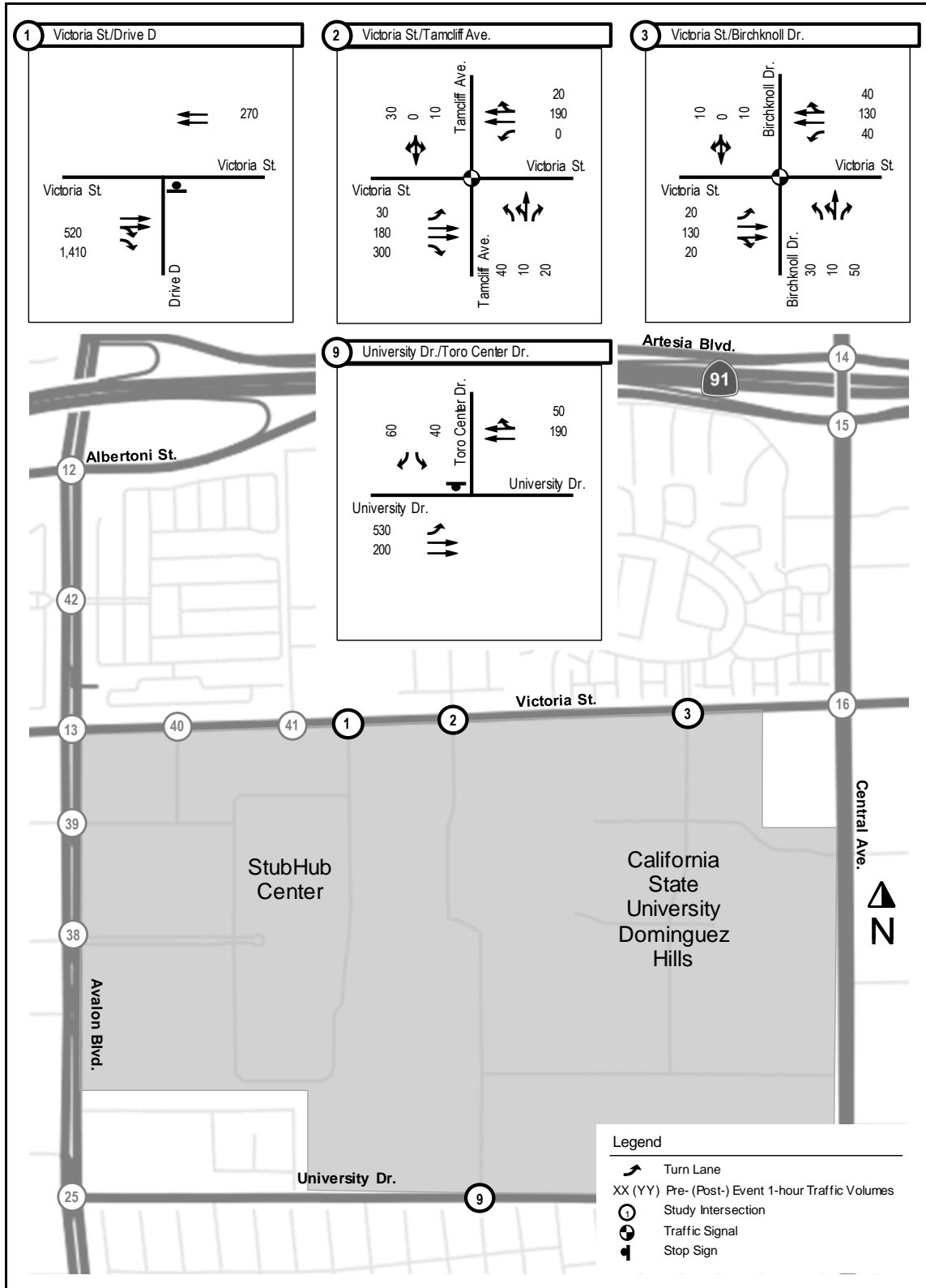


Exhibit 75: 2019 Sunday (27,000-Seats) Pre-Game Volumes and Lane Configurations (Map C)

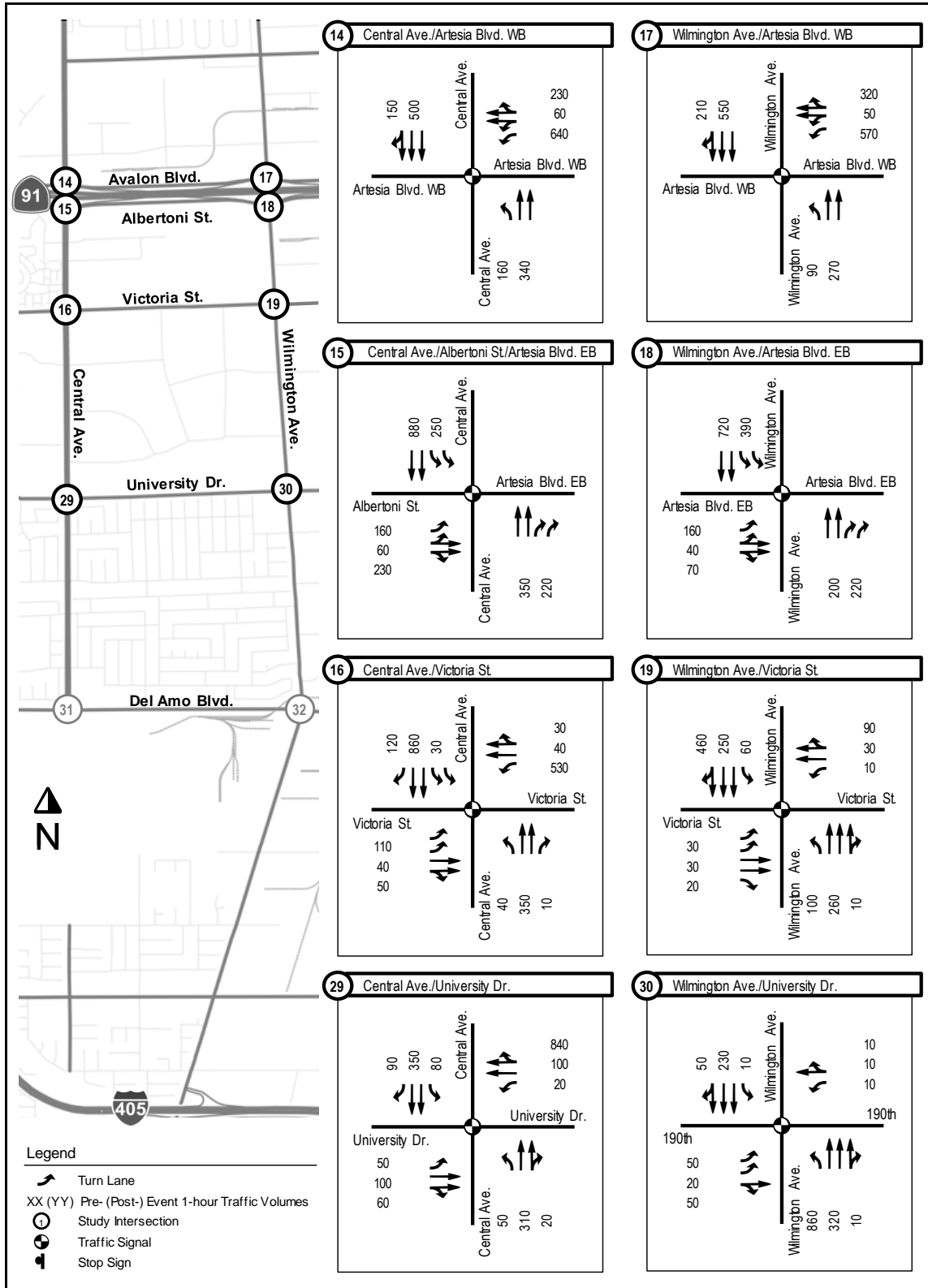


Exhibit 75: 2019 Sunday (27,000-Seats) Pre-Game Volumes and Lane Configurations (Map D)

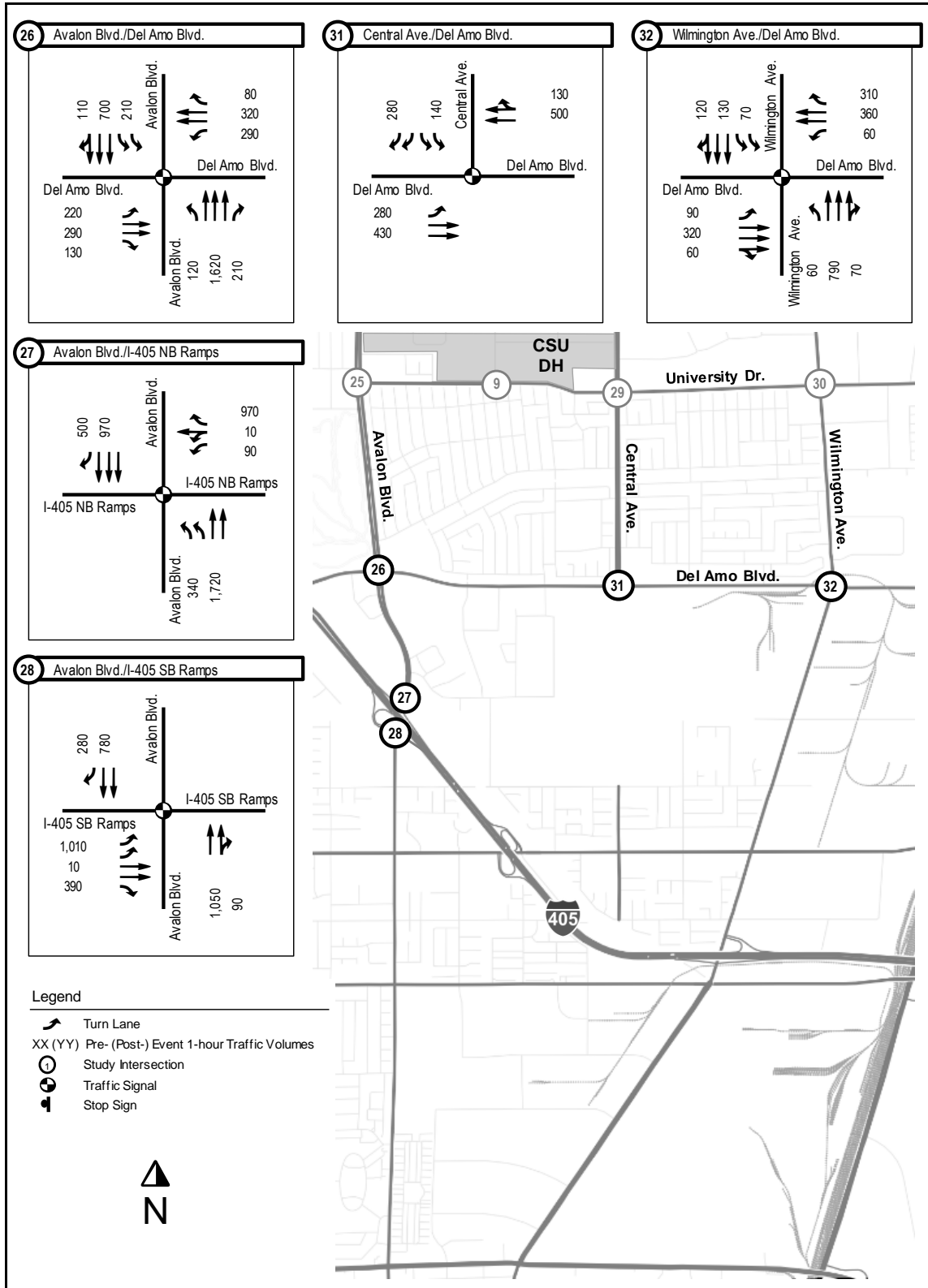


Exhibit 75: 2019 Sunday (27,000-Seats) Pre-Game Volumes and Lane Configurations (Map E)

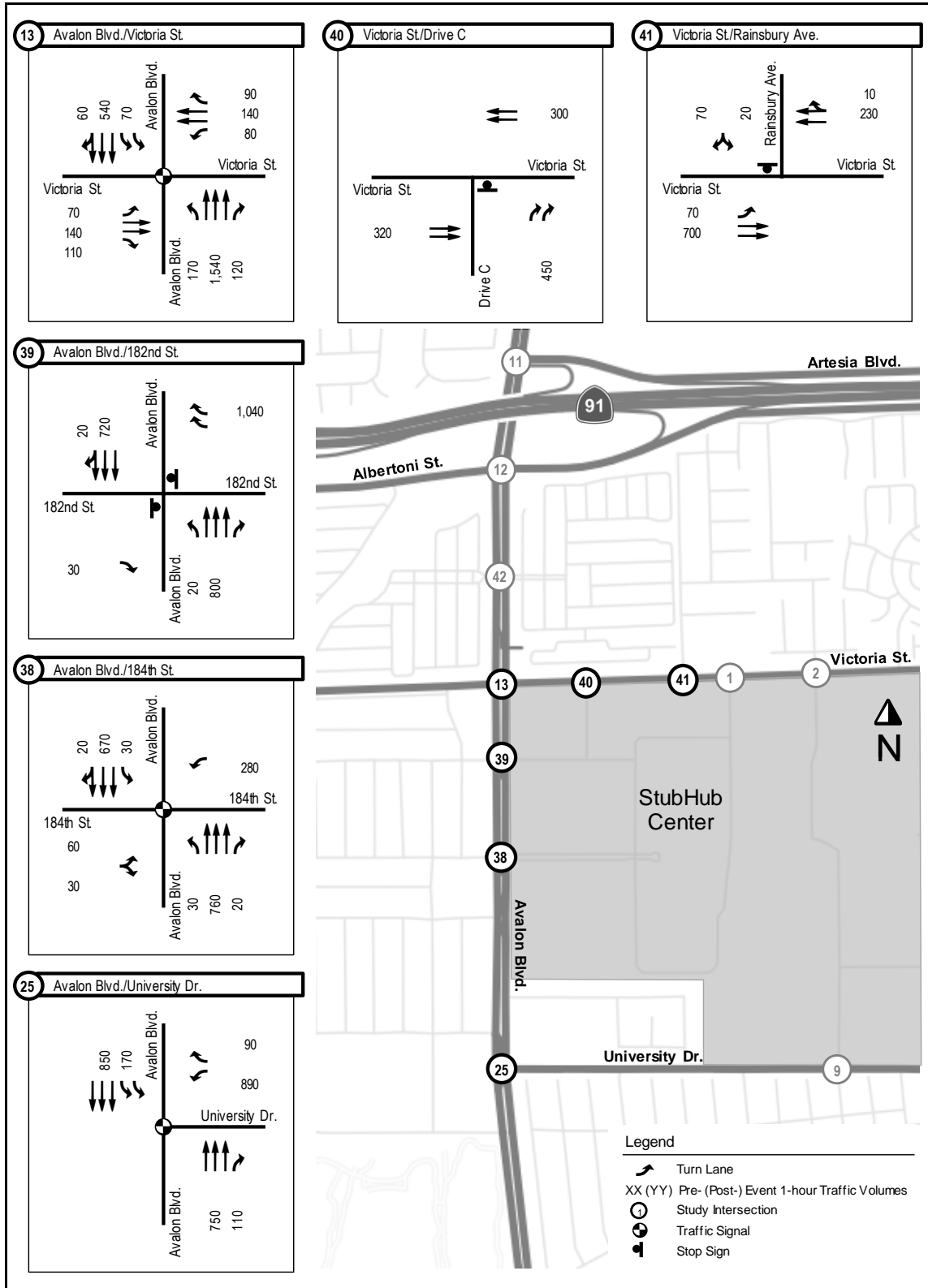


Exhibit 76: 2019 Sunday (27,000-Seats) Post-Game Volumes and Lane Configurations

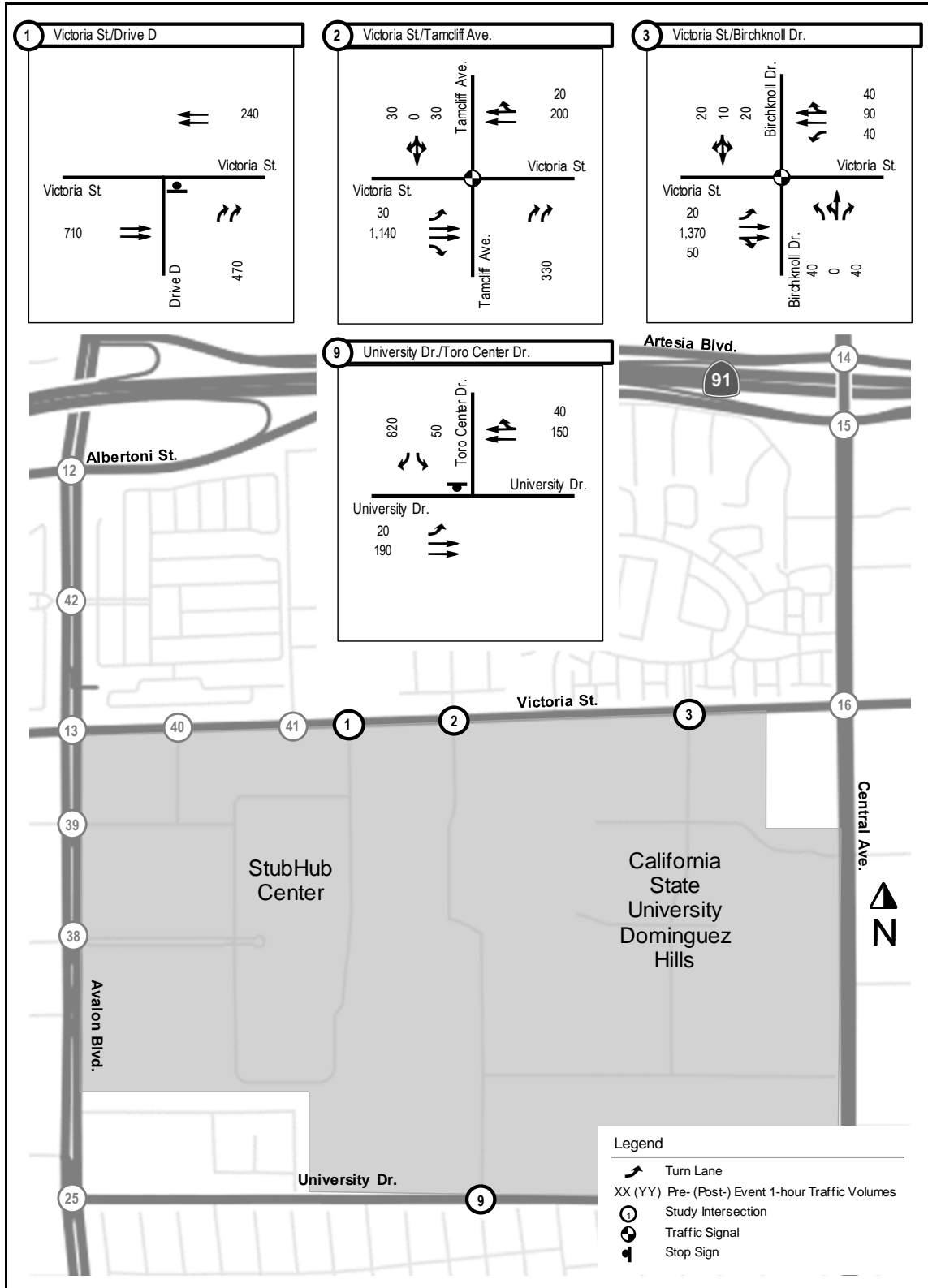


Exhibit 76: 2019 Sunday (27,000-Seats) Post-Game Volumes and Lane Configurations (Map B)

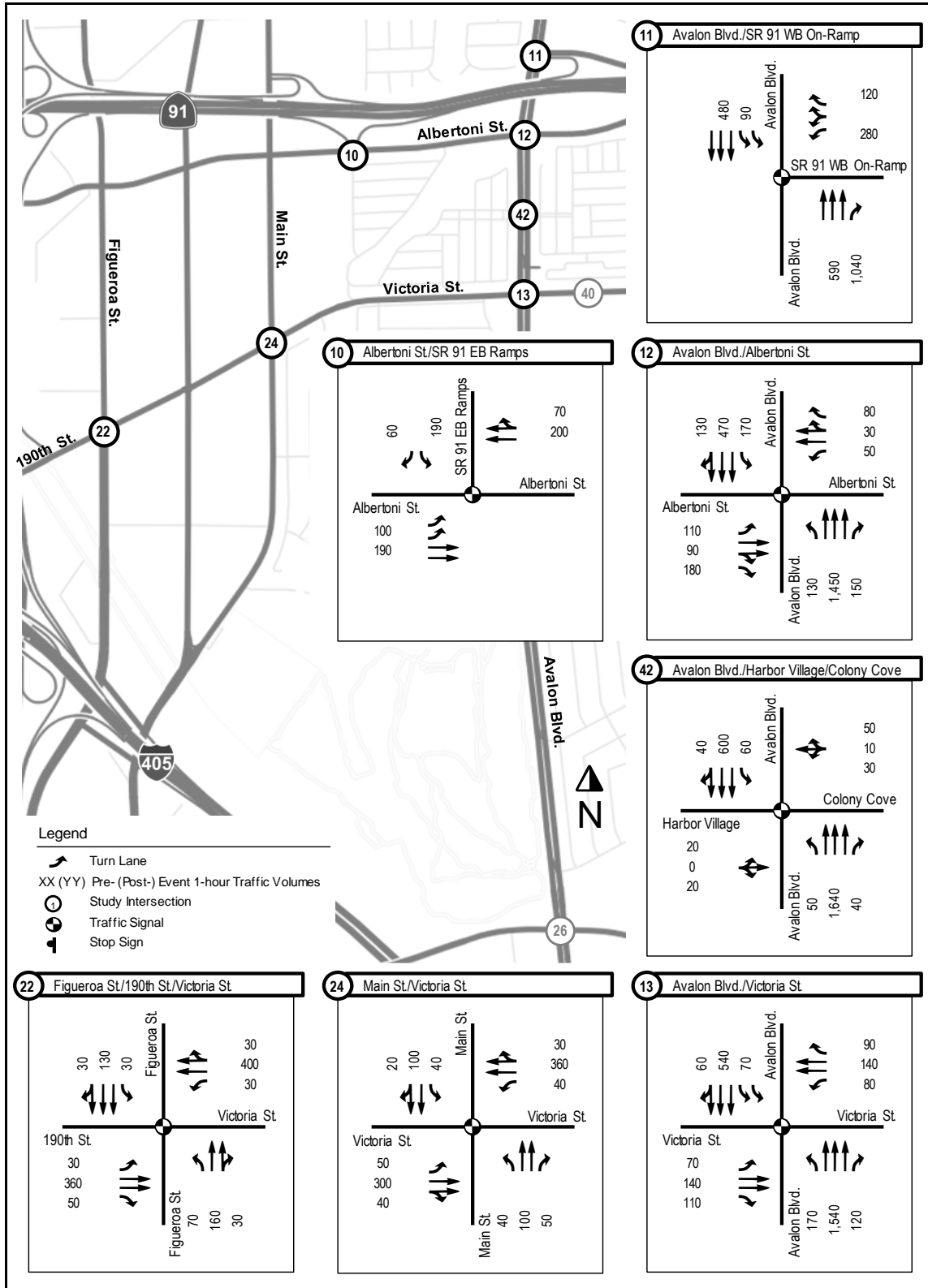


Exhibit 76: 2019 Sunday (27,000-Seats) Post-Game Volumes and Lane Configurations (Map C)

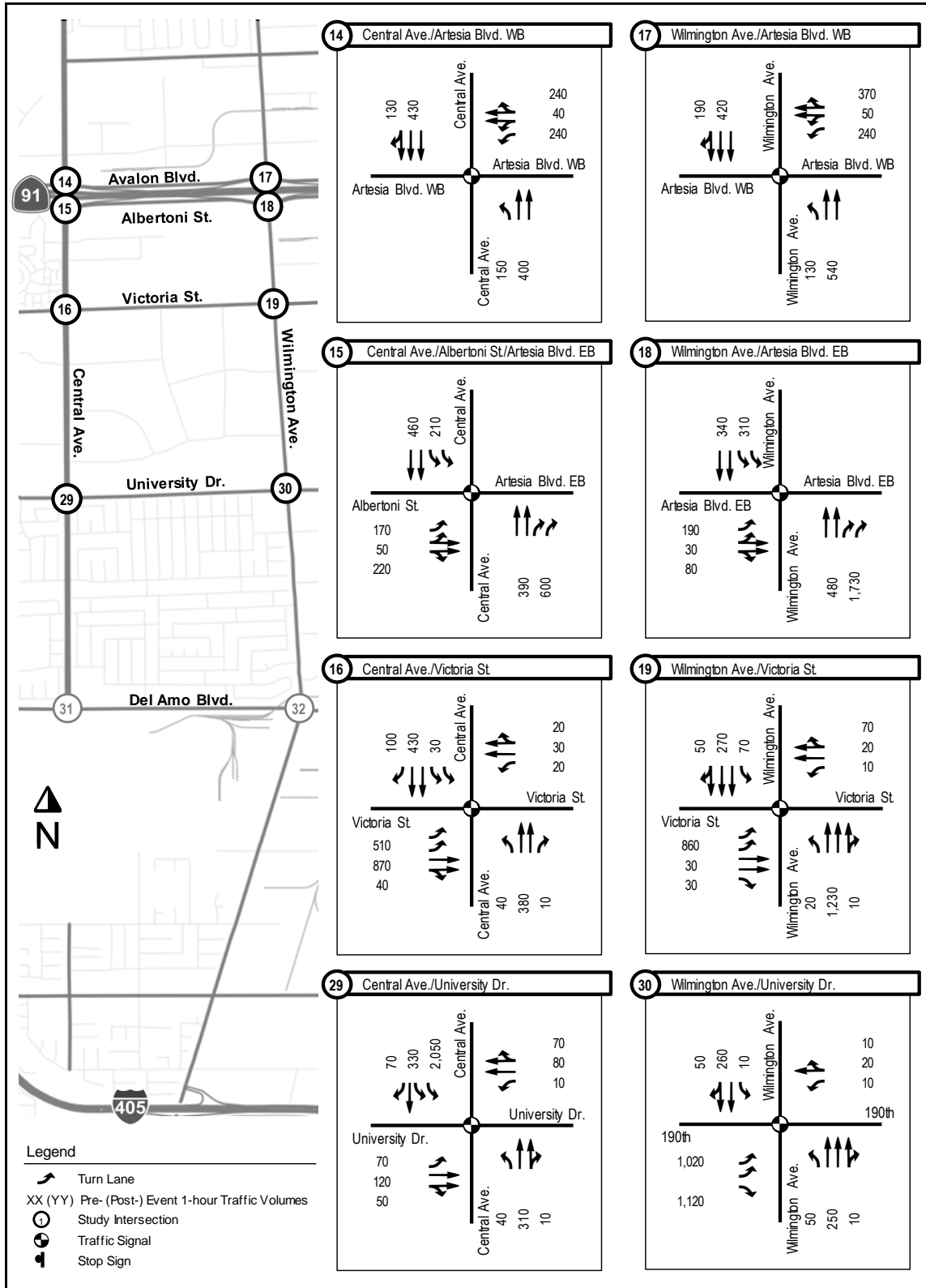


Exhibit 76: 2019 Sunday (27,000-Seats) Post-Game Volumes and Lane Configurations (Map D)

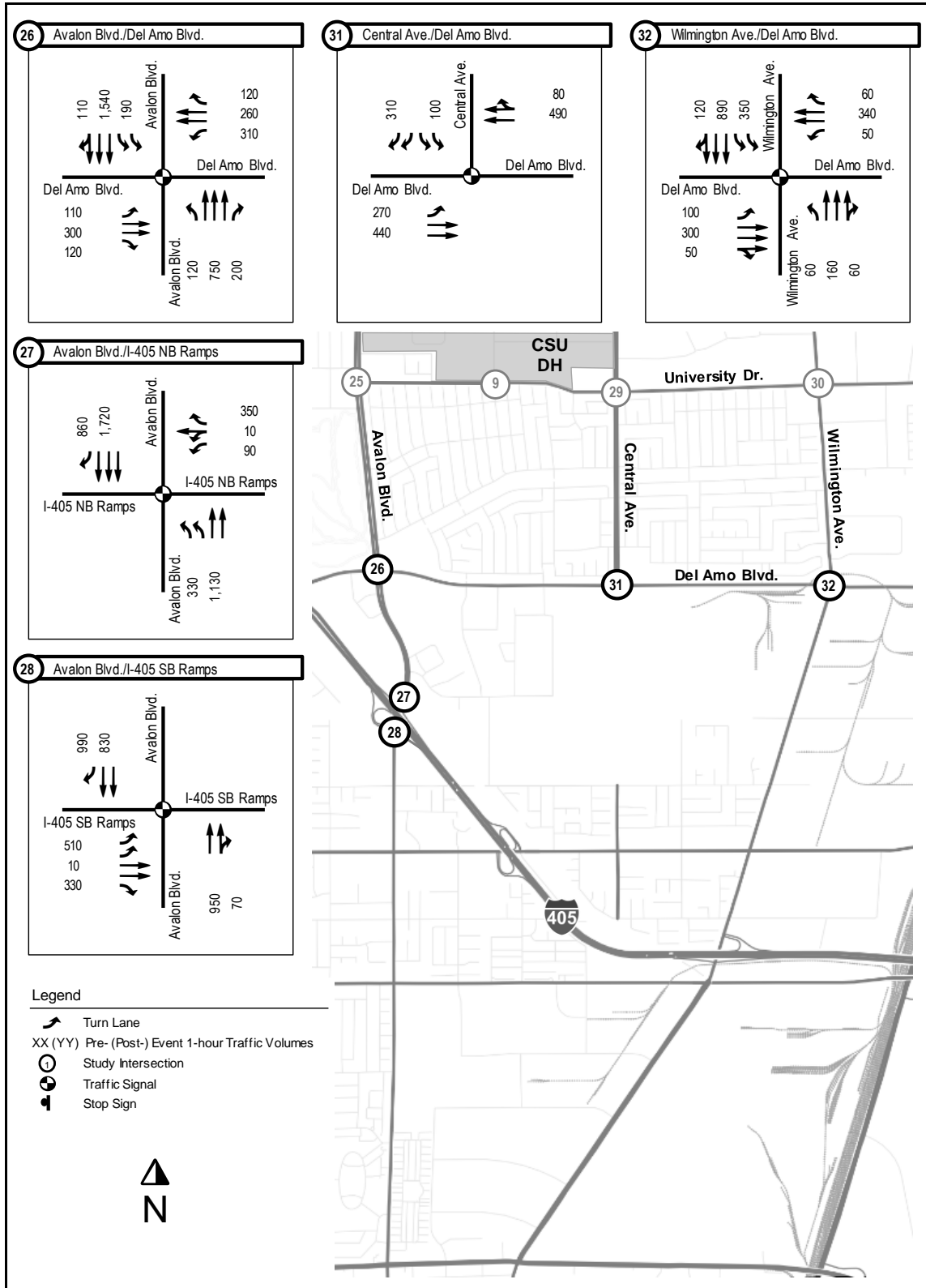


Exhibit 76: 2019 Sunday (27,000-Seats) Post-Game Volumes and Lane Configurations (Map E)

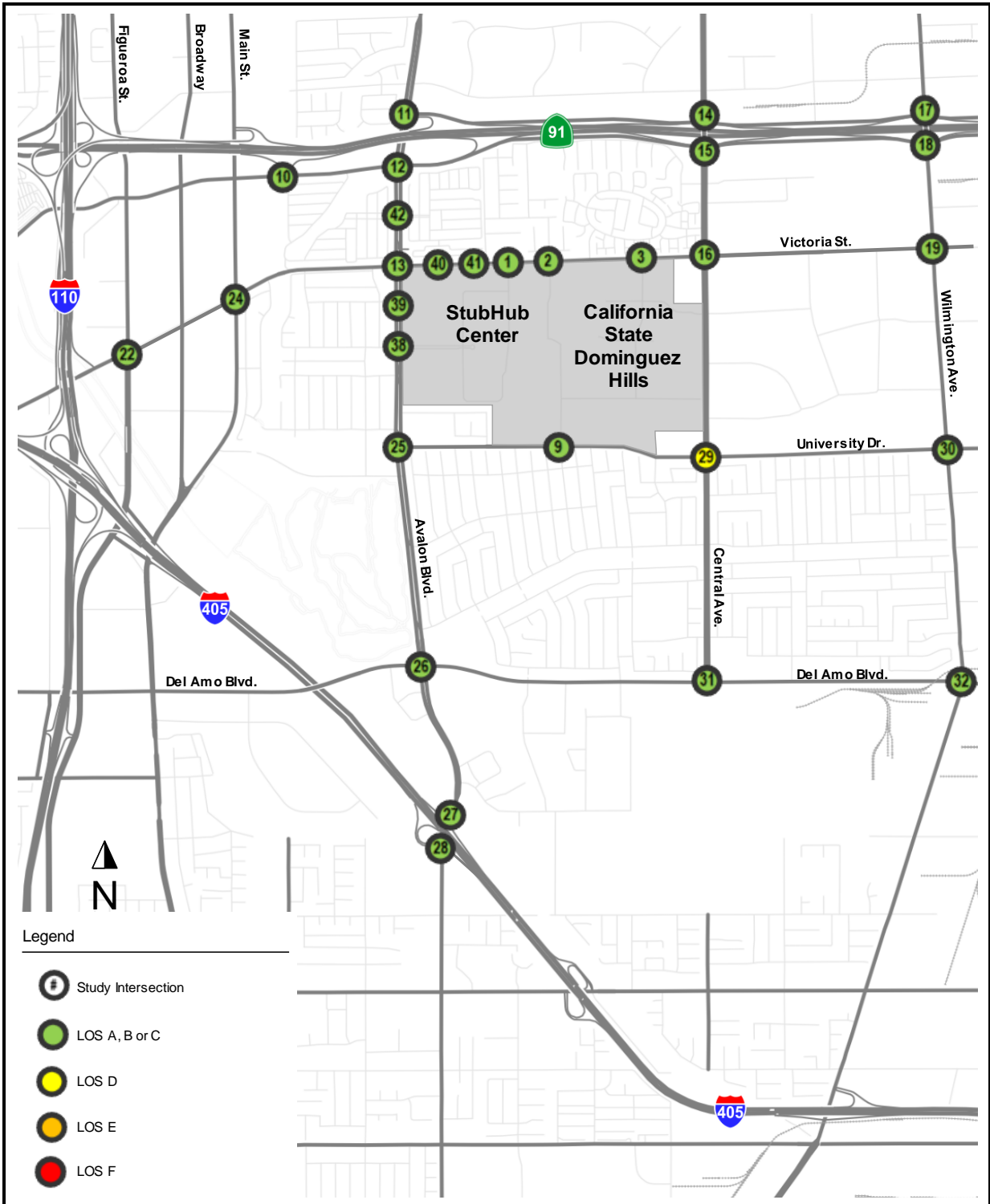


Exhibit 77: 2019 Sunday (27,000-Seats) Pre-Game Peak Hour LOS (Map)

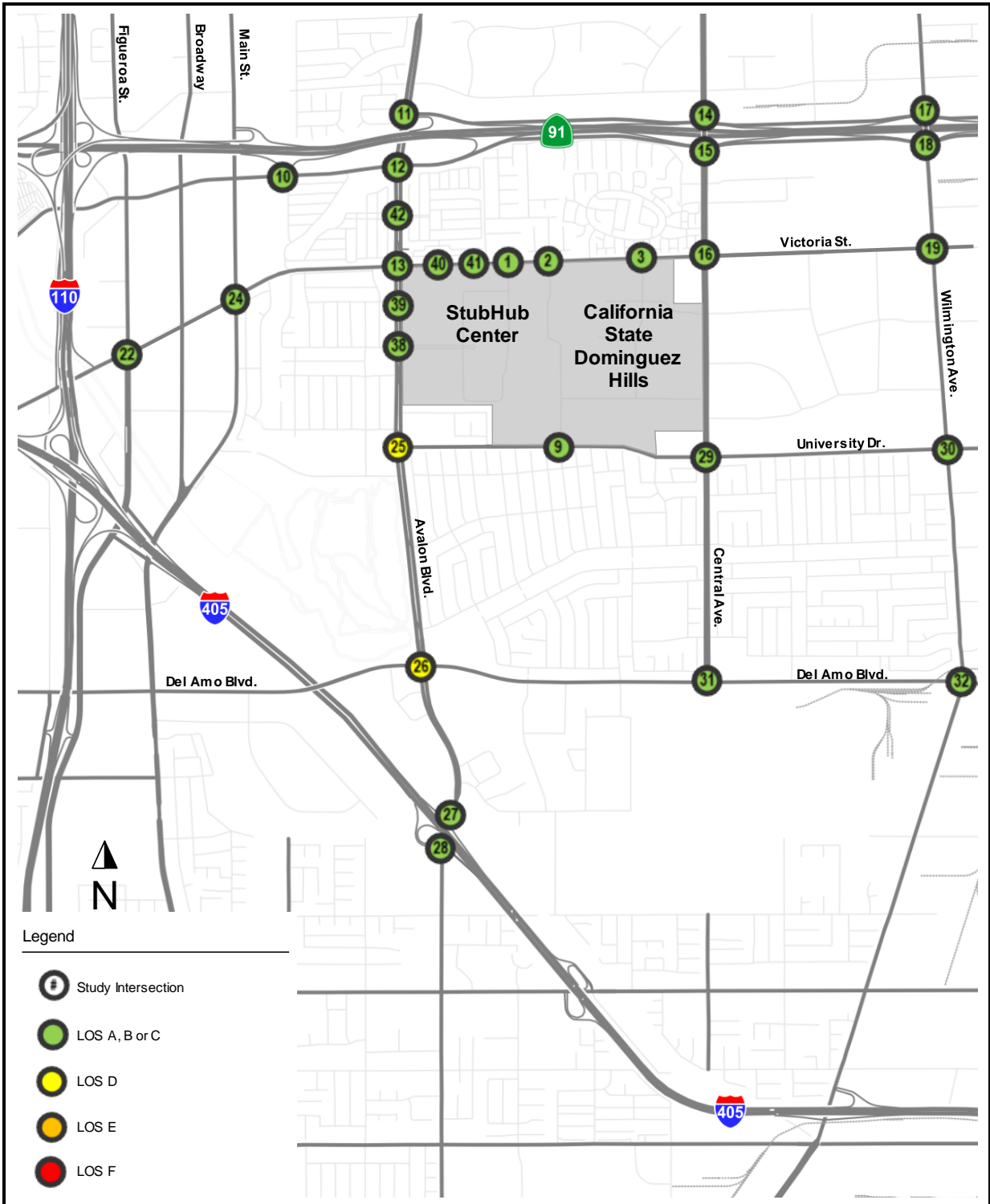


Exhibit 78: 2019 Sunday (27,000-Seats) PM Peak Hour LOS (Map)

8 2019 Sunday with 30,000-Seats Conditions

8.1 Forecasting 2019 Sunday with 30,000-Seat Traffic

Traffic volumes for the 2019 Plus Project condition were developed by factoring up the existing Sunday traffic counts using the growth factor from the LA-CMP and then adding in the traffic for a 30,000-seat event. The resulting 2019 Plus Project traffic volumes are shown in Exhibit 80 for the pre-game peak hour and Exhibit 81 for the post-game peak hour.

8.2 2019 Sunday with 30,000-Seat Intersection Level of Service

Exhibit 79 shows in tabular format the 2019 Plus Project Sunday level of service (LOS) based on the traffic volumes shown in Exhibit 80 and Exhibit 81 (also see Appendix K). The LOS is also shown on maps in Exhibit 82, for the pre-game peak hour condition, and Exhibit 83 for the post-game peak hour condition. Exhibit 84 shows that there are no significant impacts to study intersections from the additional 3,000 seats.

8.3 Determination of Pedestrian Impacts

The CSU system has defined a significant pedestrian impact as a situation where,

- *“A project fails to provide safe pedestrian connections between campus buildings and adjacent streets and transit facilities. Or*
- *A project significantly disrupts existing or planned pedestrian facilities or significantly conflicts with applicable non-automotive transportation plans, guidelines, policies, or standards.”*

Based on this standard, the 30,000-seat game does not impose any significant pedestrian impacts. The 30,000-seat game will include temporary control of intersections by traffic control officers who will be able to stop traffic to allow pedestrians to safely cross the street when going to and from the stadium. In addition, the 30,000-seat game does not involve any construction activities that would disrupt any existing or planned pedestrian facilities.

8.4 Determination of Bicycle Impacts

The CSU system has defined a significant bicycle impact as a situation where, *“A project significantly disrupts existing or planned bicycle facilities or significantly conflicts with applicable non-automotive transportation plans, guidelines, policies, or standards.”* Based on this standard the 30,000-seat game does not impose any significant bicycle impacts since the 30,000-seat game does not involve any construction activities that would it disrupt any existing or planned bicycle facilities. The 30,000-seat game will include temporary control of intersections by traffic control officers whose presence will make the streets around StubHub Center safer for bicyclists than streets that are unsupervised.

8.5 Determination of Transit Impacts

CSU guideline state that a significant transit impact would occur if, *“A project significantly disrupts existing or planned transit facilities and services or significantly conflicts with applicable transit plans, guidelines, policies, or standards.”* Based on this standard the 30,000-seat game does not impose any significant transit impacts since it would not disrupt any existing or planned transit facilities. The 30,000-seat game will complement the transit system by providing shuttle buses from transit centers to the stadium

Study ID	Intersection Name	Control Type	Pre-Game Peak Hour		Post-Game Peak Hour	
			V/C Ratio	ICU LOS	V/C Ratio	ICU LOS
1	Victoria St./Drive D	TWSC	0.591	A	0.500	A
2	Victoria St./Tamcliff Ave.	Signalized	0.347	A	0.619	B
3	Victoria St./Birchknoll Dr.	Signalized	0.216	A	0.666	B
9	University Dr./Toro Center Dr.	TWSC	0.575	A	0.734	C
10	Albertoni St./SR 91 EB Ramps	Signalized	0.583	A	0.320	A
11	Avalon Blvd./SR 91 WB On-Ramp	Signalized	0.666	B	0.822	D
12	Avalon Blvd./Albertoni St.	Signalized	0.807	D	0.619	B
13	Avalon Blvd./Victoria St.	Signalized	0.725	C	0.575	A
14	Central Ave./Artesia Blvd. WB	Signalized	0.548	A	0.460	A
15	Central Ave./Albertoni St./Artesia Blvd. EB	Signalized	0.534	A	0.480	A
16	Central Ave./Victoria St.	Signalized	0.813	D	0.588	A
17	Wilmington Ave./Artesia Blvd. WB	Signalized	0.519	A	0.546	A
18	Wilmington Ave./Artesia Blvd. EB	Signalized	0.397	A	0.810	D
19	Wilmington Ave./Victoria St.	Signalized	0.549	A	0.634	B
22	Figuroa St./190th St./Victoria St.	Signalized	0.478	A	0.334	A
24	Main St./Victoria St.	Signalized	0.444	A	0.319	A
25	Avalon Blvd./University Dr.	Signalized	0.651	B	0.894	D
26	Avalon Blvd./Del Amo Blvd.	Signalized	0.769	C	0.829	D
27	Avalon Blvd./I-405 NB Ramps	Signalized	0.681	B	0.564	A
28	Avalon Blvd./I-405 SB Ramps	Signalized	0.642	B	0.507	A
29	Central Ave./University Dr.	Signalized	0.859	D	0.699	B
30	Wilmington Ave./University Dr.	Signalized	0.802	D	0.443	A
31	Central Ave./Del Amo Blvd.	Signalized	0.496	A	0.464	A
32	Wilmington Ave./Del Amo Blvd.	Signalized	0.558	A	0.535	A
38	Avalon Blvd./184th St.	Signalized	0.475	A	0.387	A
39	Avalon Blvd./182nd St.	TWSC	0.375	A	0.648	B
40	Victoria St./Drive C	TWSC	0.681	B	0.356	A
41	Victoria St./Rainsbury Ave.	TWSC	0.813	D	0.391	A
42	Avalon Blvd./Harbor Village/Colony Cove	Signalized	0.681	B	0.571	A

Exhibit 79: 2019 Sunday with 30,000-Seats Level of Service (LOS) at Study Intersections (Table)

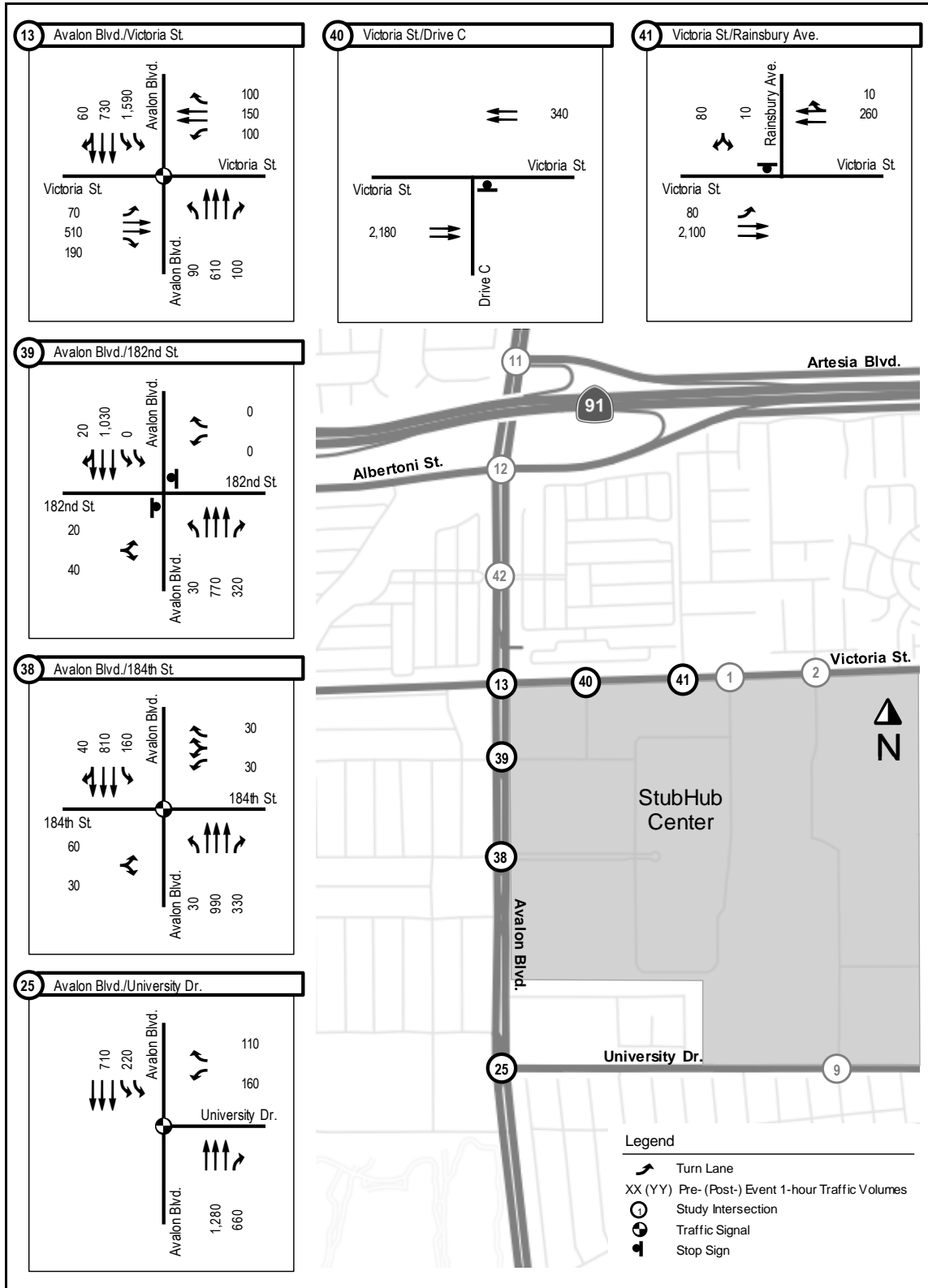


Exhibit 80: 2019 Sunday with 30,000-Seats Pre-Game Traffic Volumes and Lane Configurations

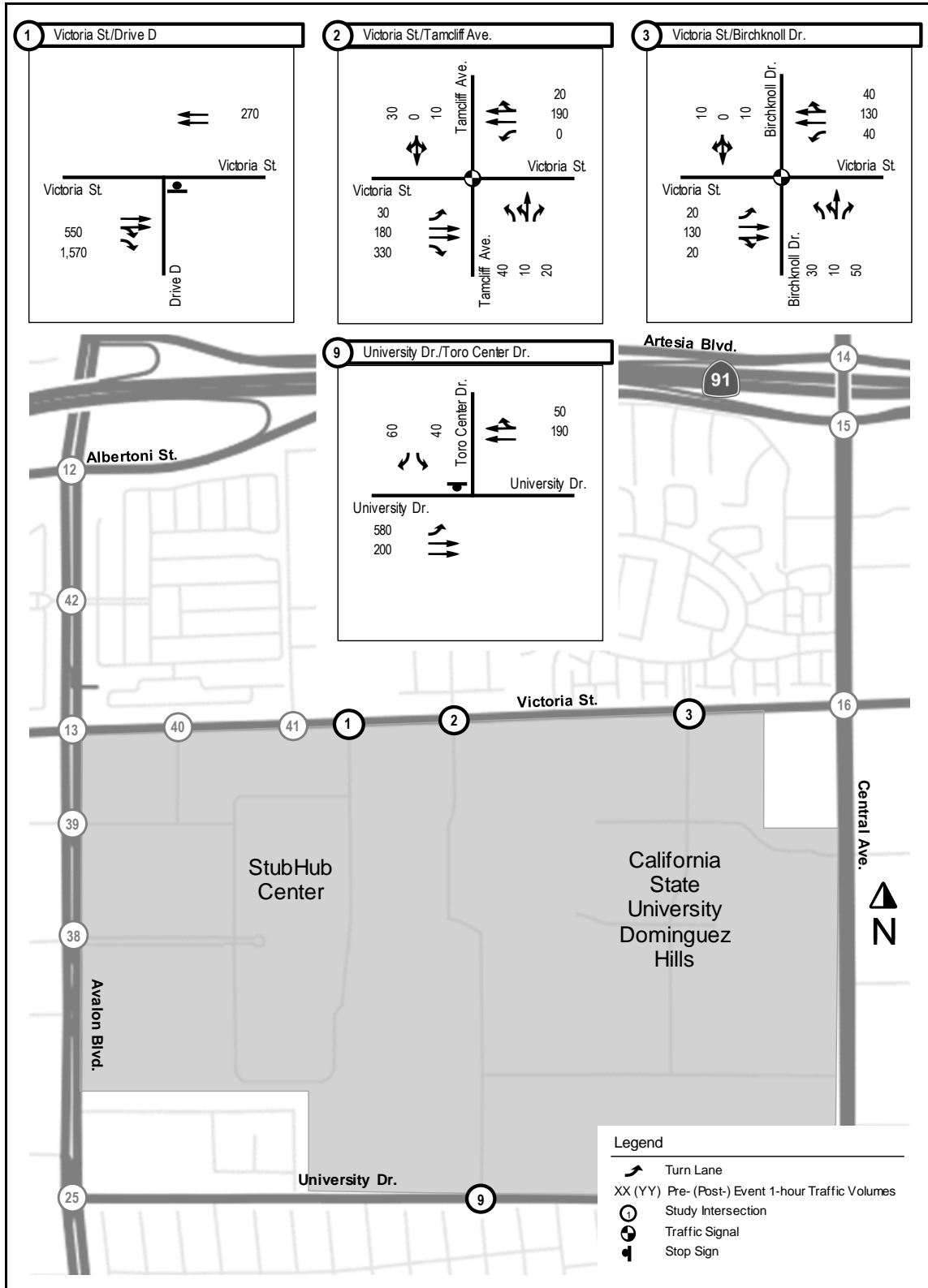


Exhibit 80: 2019 Sunday with 30,000-Seats Pre-Game Traffic Volumes and Lane Configurations (Map B)

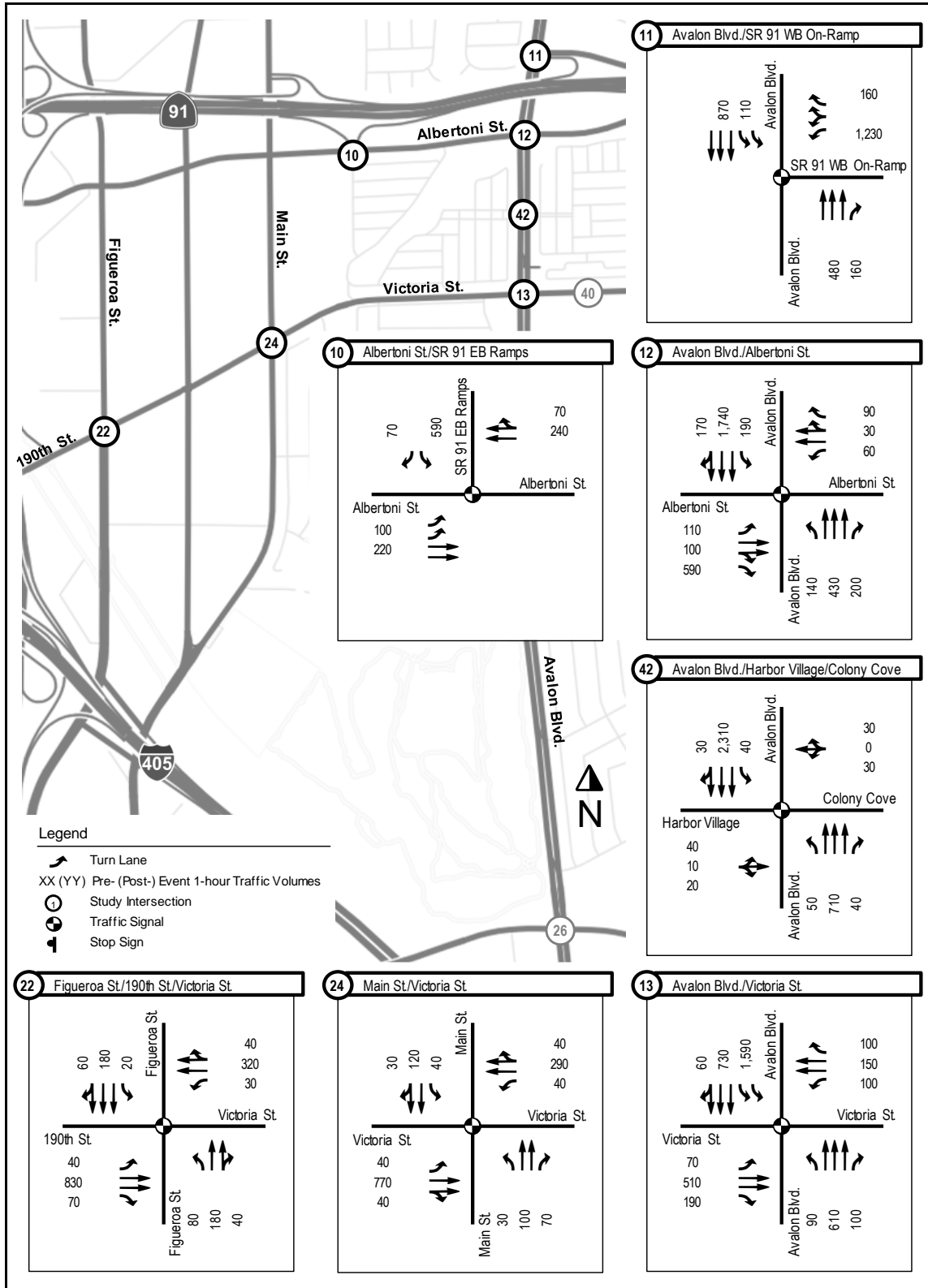


Exhibit 80: 2019 Sunday with 30,000-Seats Pre-Game Traffic Volumes and Lane Configurations (Map C)

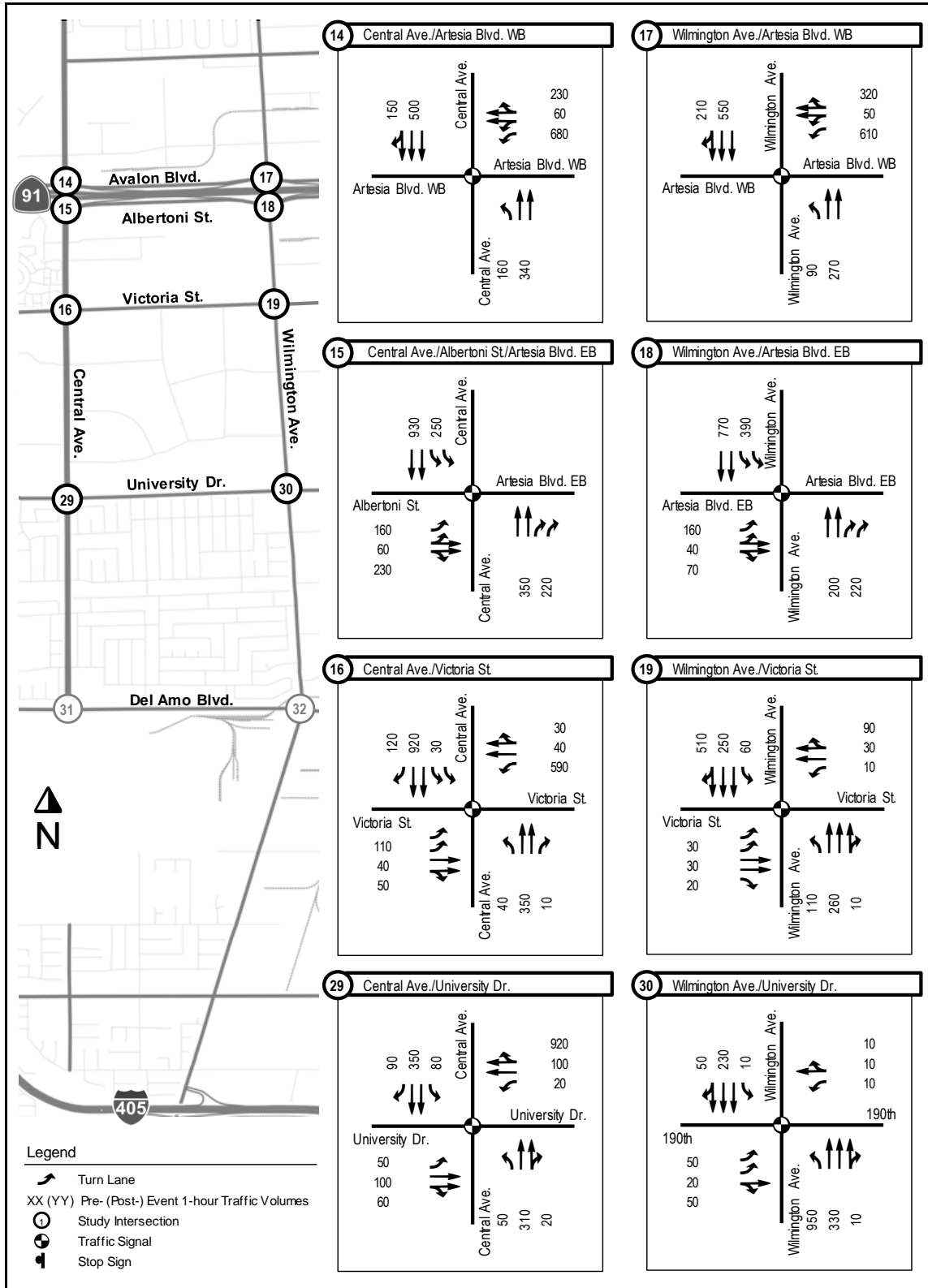


Exhibit 80: 2019 Sunday with 30,000-Seats Pre-Game Traffic Volumes and Lane Configurations (Map D)

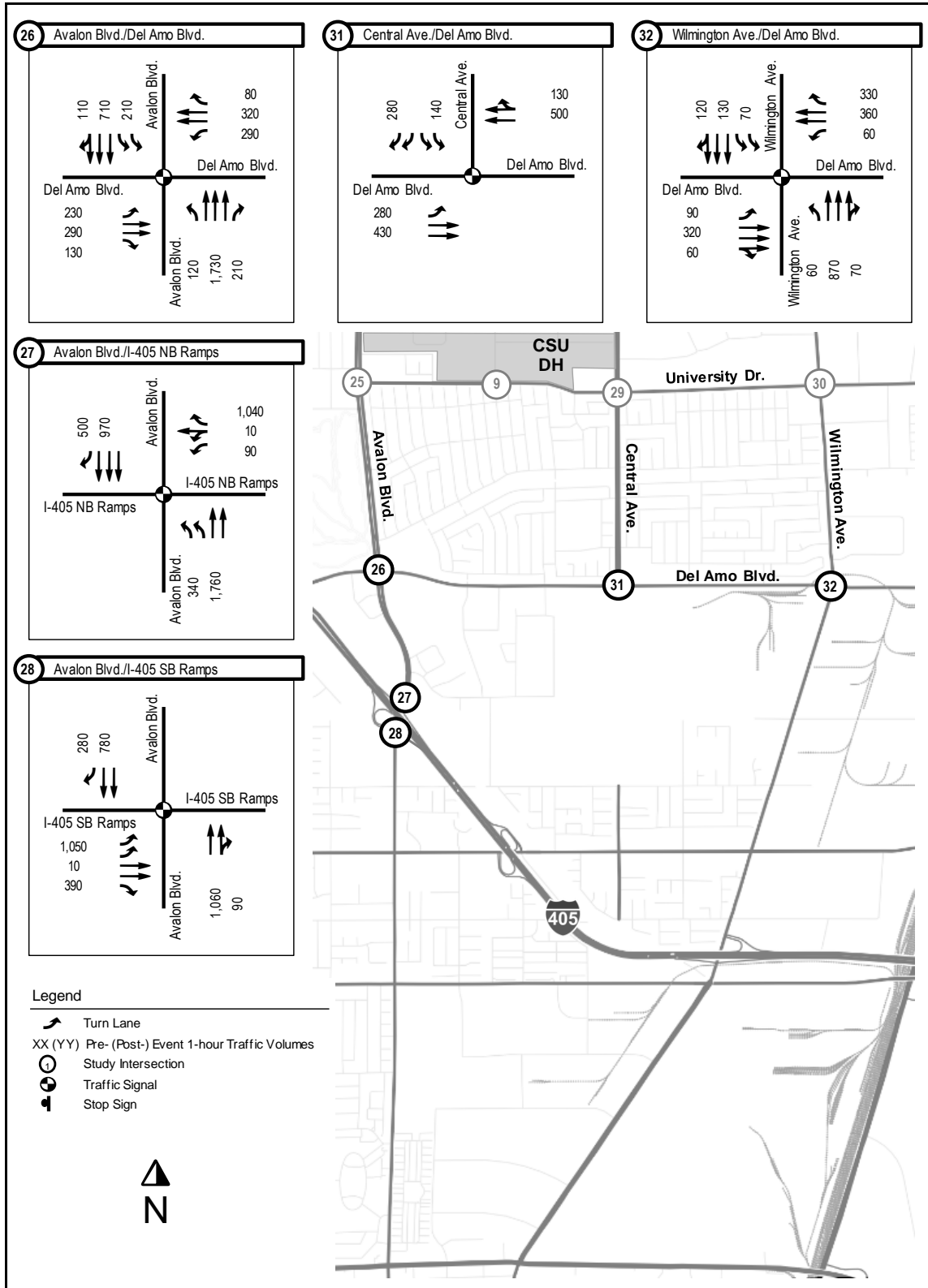


Exhibit 80: 2019 Sunday with 30,000-Seats Pre-Game Traffic Volumes and Lane Configurations (Map E)

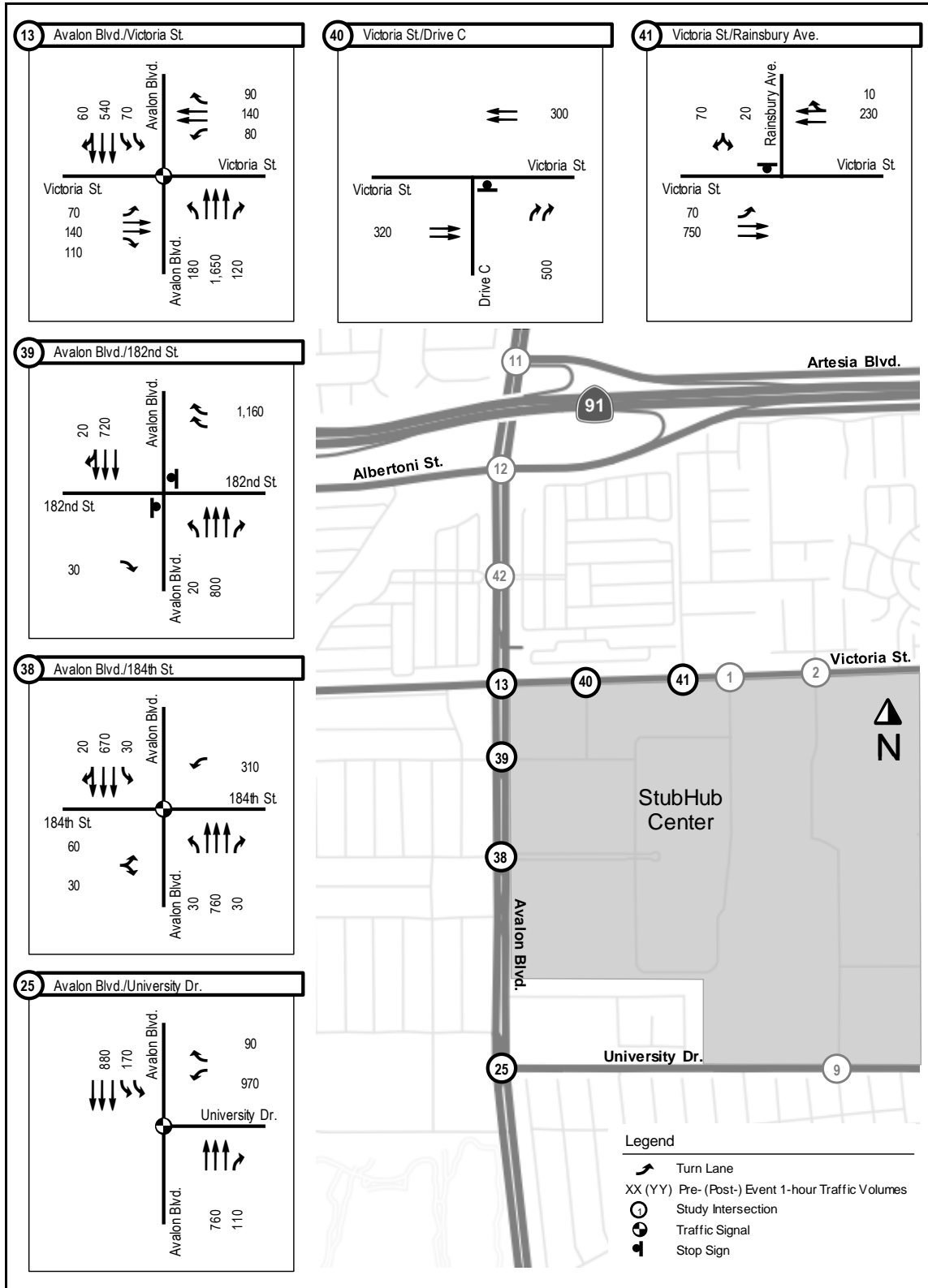


Exhibit 81: 2019 Sunday with 30,000-Seats Pre-Game Traffic Volumes and Lane Configurations

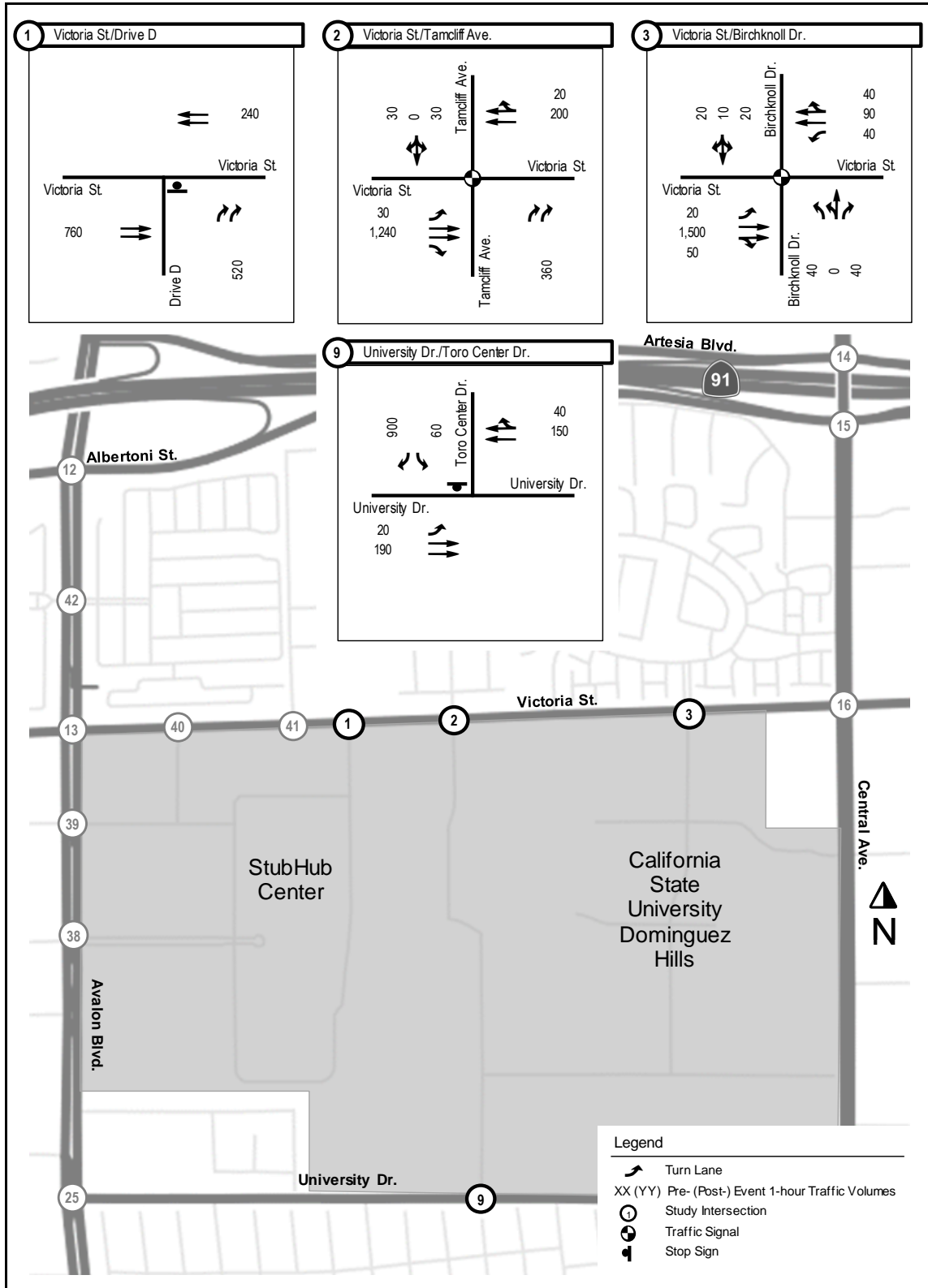


Exhibit 81: 2019 Sunday with 30,000-Seats Pre-Game Traffic Volumes and Lane Configurations (Map B)

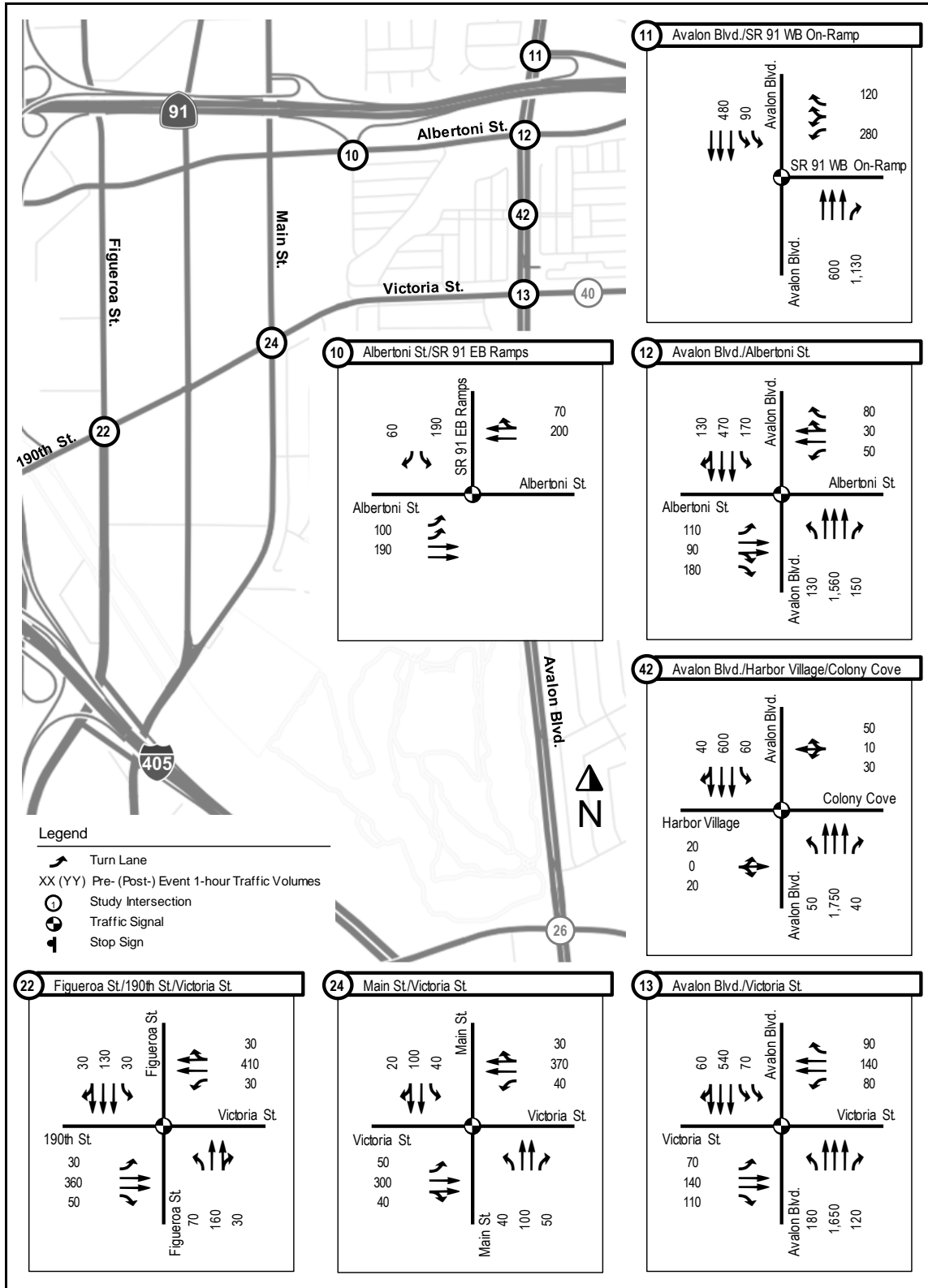


Exhibit 81: 2019 Sunday with 30,000-Seats Pre-Game Traffic Volumes and Lane Configurations (Map C)

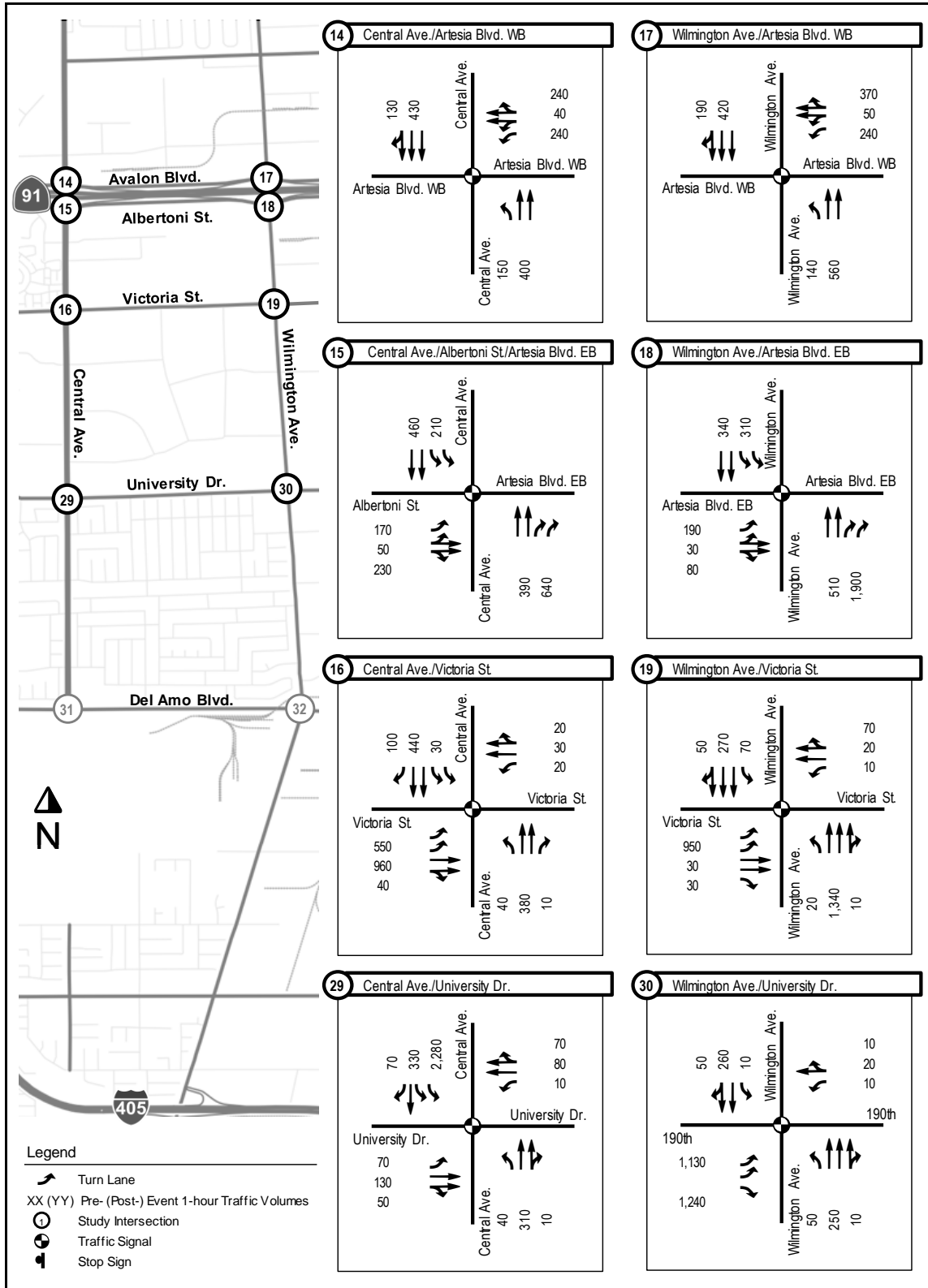


Exhibit 81: 2019 Sunday with 30,000-Seats Pre-Game Traffic Volumes and Lane Configurations (Map D)

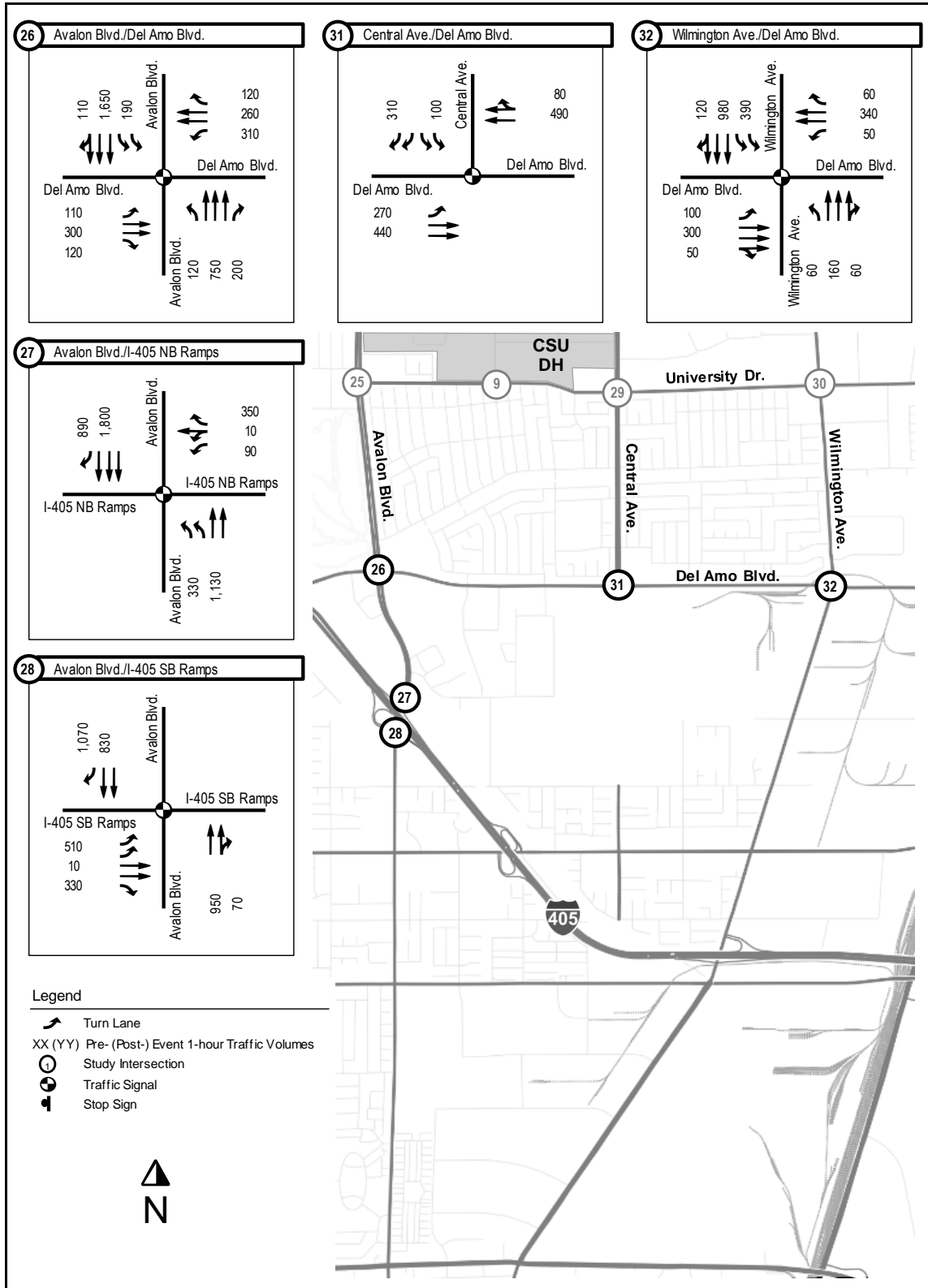


Exhibit 81: 2019 Sunday with 30,000-Seats Pre-Game Traffic Volumes and Lane Configurations (Map E)

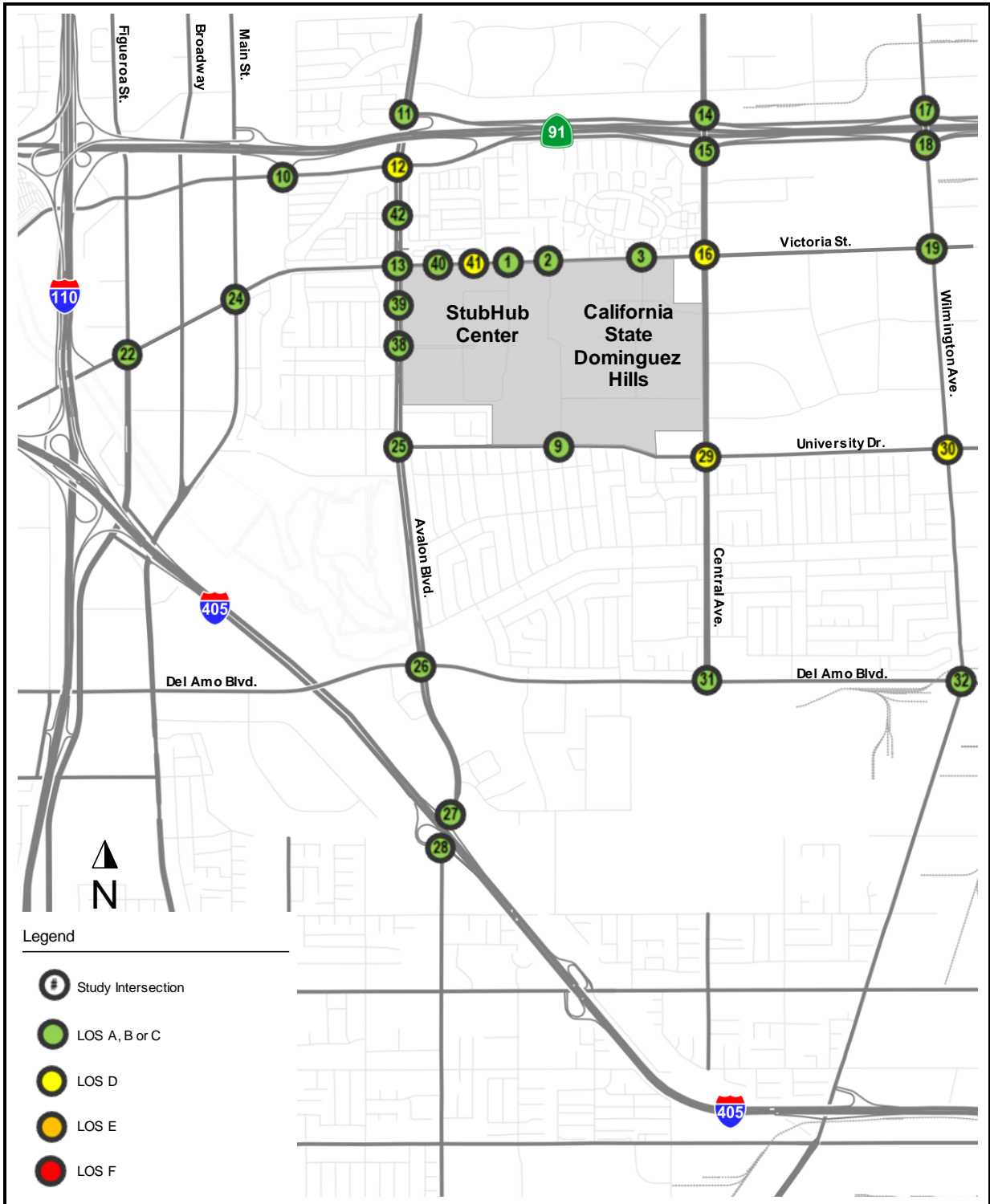


Exhibit 82: 2019 Sunday with 30,000-Seats Pre-Game Peak Hour LOS (Map)

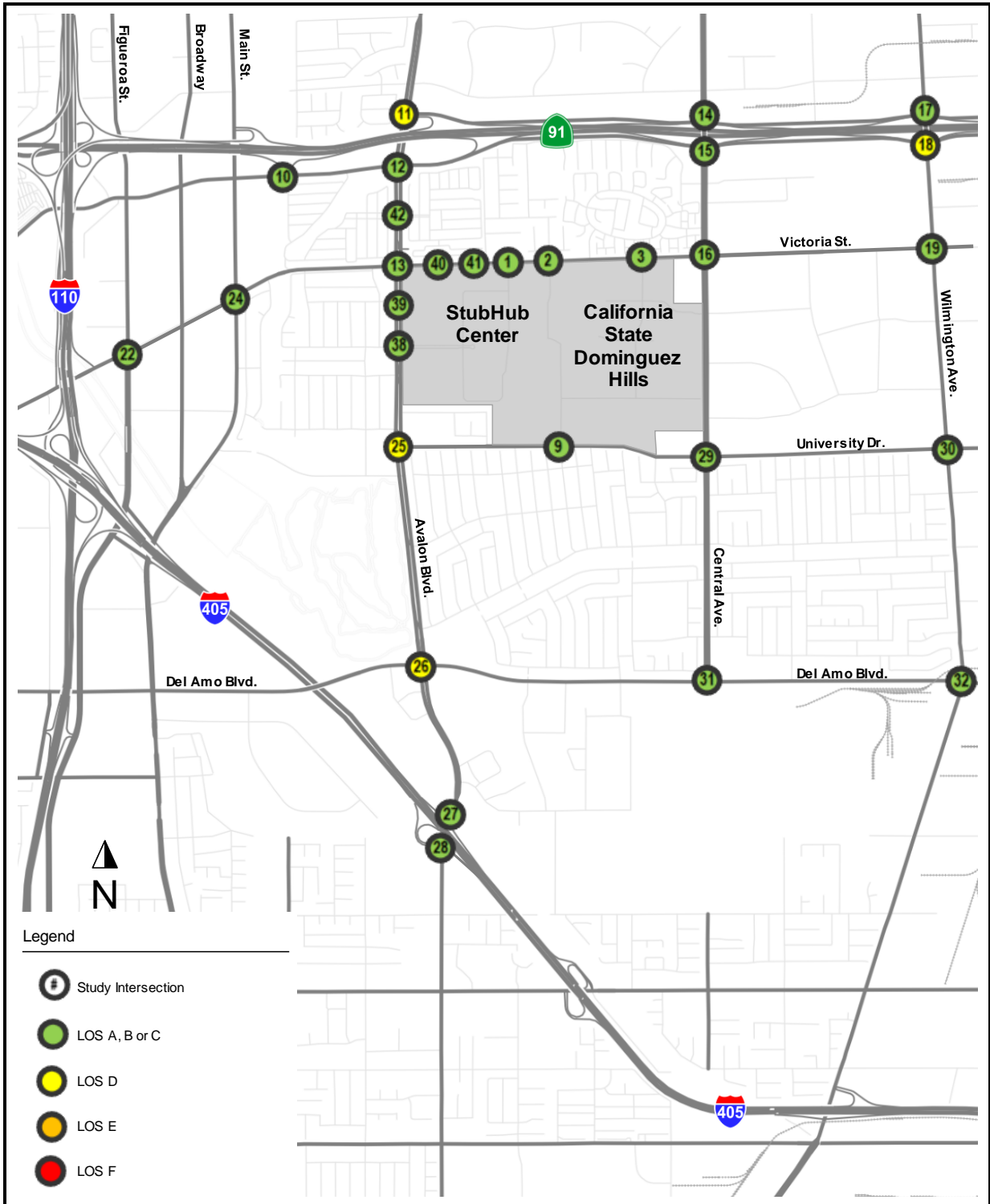


Exhibit 83: 2019 Sunday with 30,000-Seats Post-Game Peak Hour LOS (Map)

Study ID	Intersection Name	Control Type	2019 Scenarios					
			Pre-Game Peak Hour			Post-Game Peak Hour		
			Plus 27,000 LOS	Plus 30,000 LOS	Project Has Significant Impact?	Plus 27,000 LOS	Plus 30,000 LOS	Project Has Significant Impact?
1	Victoria St./Drive D	TWSC	A	A	No	A	A	No
2	Victoria St./Tamcliff Ave.	Signalized	A	A	No	A	B	No
3	Victoria St./Birchknoll Dr.	Signalized	A	A	No	B	B	No
9	University Dr./Toro Center Dr.	TWSC	A	A	No	B	C	No
10	Albertoni St./SR 91 EB Ramps	Signalized	A	A	No	A	A	No
11	Avalon Blvd./SR 91 WB On-Ramp	Signalized	B	B	No	C	D	No
12	Avalon Blvd./Albertoni St.	Signalized	C	D	No	A	B	No
13	Avalon Blvd./Victoria St.	Signalized	B	C	No	A	A	No
14	Central Ave./Artesia Blvd. WB	Signalized	A	A	No	A	A	No
15	Central Ave./Albertoni St./Artesia Blvd. EB	Signalized	A	A	No	A	A	No
16	Central Ave./Victoria St.	Signalized	C	D	No	A	A	No
17	Wilmington Ave./Artesia Blvd. WB	Signalized	A	A	No	A	A	No
18	Wilmington Ave./Artesia Blvd. EB	Signalized	A	A	No	C	D	No
19	Wilmington Ave./Victoria St.	Signalized	A	A	No	A	B	No
22	Figueroa St./190th St./Victoria St.	Signalized	A	A	No	A	A	No
24	Main St./Victoria St.	Signalized	A	A	No	A	A	No
25	Avalon Blvd./University Dr.	Signalized	B	B	No	D	D	No
26	Avalon Blvd./Del Amo Blvd.	Signalized	C	C	No	D	D	No
27	Avalon Blvd./I-405 NB Ramps	Signalized	B	B	No	A	A	No
28	Avalon Blvd./I-405 SB Ramps	Signalized	B	B	No	A	A	No
29	Central Ave./University Dr.	Signalized	D	D	No	B	B	No
30	Wilmington Ave./University Dr.	Signalized	C	D	No	A	A	No
31	Central Ave./Del Amo Blvd.	Signalized	A	A	No	A	A	No
32	Wilmington Ave./Del Amo Blvd.	Signalized	A	A	No	A	A	No
38	Avalon Blvd./184th St.	Signalized	A	A	No	A	A	No
39	Avalon Blvd./182nd St.	TWSC	A	A	No	B	B	No
40	Victoria St./Drive C	TWSC	B	B	No	A	A	No
41	Victoria St./Rainsbury Ave.	TWSC	C	D	No	A	A	No
42	Avalon Blvd./Harbor Village/Colony Cove	Signalized	B	B	No	A	A	No

Exhibit 84: Determination of Intersection Impact for the 2019 Sunday with 30,000 Seats

9 2025 No Project Conditions

9.1 Forecasting 2025 Weekday No Project Traffic

Traffic volumes for the 2025 No Project condition were developed by factoring up the existing weekday traffic counts using the growth factor from the LA-CMP and then adding in the traffic for existing, known, and reasonably foreseeable projects (see Exhibit 85).

Project Location	Building Size	Project Description
21521-21601 S Avalon Blvd	357 apartment units, 30,700 sqft. commercial	The Avalon includes new apartment units and a 749 space parking garage along with new retail, grocery, and restaurant uses.
1281 E University Dr	47,000 sqft.	University Village includes construction of new neighborhood retail center. The design incorporates a Tuscan architectural design and includes a corner plaza, pedestrian pathways, and abundant landscaping.
16100 S Avalon Blvd	44,000 sqft.	Construction of a new warehouse with a 983 sf caretaker's unit to be operated by the company Public Storage.
18701 S Wilmington Ave	443,000 sqft.	This Northrup Gruman redevelopment at the Dominguez Technology Center includes removal of existing office buildings and construction of new distribution warehouses.
200 E Alondra Blvd	137,000 sqft. Warehouse, 10,000 sqft. office	Construction of a new Class-A warehouse building with office space.
17706 S Main St	94,731 sqft. Warehouse, 15,061 sqft. office	Construction of a new warehouse building.
Hotel/Training Facility at StubHub Center	200 hotel rooms, 5,000 sqft. restaurant, 10,000 sqft. meeting space, 110,000 sqft. training facilities	The hotel/training facility will comprise a number of different facilities, including a hotel with restaurant and meeting rooms, dormitories for youth athletes, administrative offices, an athletes performance center, and a field house training facility.

Exhibit 85: Background Projects Assumed for Both the No Project and Plus Project Conditions

The resulting 2025 No Project traffic volumes are shown in Exhibit 87.

9.2 2025 Weekday No Project Intersection Level of Service

Exhibit 86 shows in tabular format the 2025 No Project weekday level of service (LOS) based on the traffic volumes shown in Exhibit 87 (also see Appendix L). The LOS is also shown on maps in Exhibit 88 for the AM peak hour condition, and Exhibit 89 for the PM peak hour condition. Seven intersections would not meet the LOS target of D or better under 2025 No Project conditions, namely:

- Intersection #1, Victoria Ave./Drive D, during the PM peak hour
- Intersection #5, Central Ave./Charles Willard St., during the AM peak hour
- Intersection #20, I-110 SB Off-Ramp/190th St, during both peak hours
- Intersection #24, Main St./Victoria St., during the PM peak hour
- Intersection #26, Avalon Blvd./Del Amo Blvd., during the PM peak hour
- Intersection #33, W. Artesia Blvd./Crenshaw Blvd., during both peak hours
- Intersection #35, W. Artesia Blvd./Vermont Ave., during the PM peak hour

Note that Intersections 1, 20, 33, and 35 already have LOS worse than D under Existing Conditions. Intersections 5, 24, and 26 would be new deficiencies.

Study ID	Intersection Name	Control Type	AM Peak Hour		PM Peak Hour	
			V/C Ratio or Delay	LOS (ICU or HCM)	V/C Ratio or Delay	LOS (ICU or HCM)
1	Victoria St./Drive D	TWSC	25.8	D	>180	F
2	Victoria St./Tamcliff Ave.	Signalized	0.438	A	0.603	B
3	Victoria St./Birchknoll Dr.	Signalized	0.566	A	0.688	B
4	Victoria St./Project Service Rd.	N/A	N/A	N/A	N/A	N/A
5	Central Ave./Charles Willard St.	TWSC	38.6	E	33.2	D
6	Central Ave./Beachey Pl.	TWSC	19	C	22.3	C
7	Central Ave./Glenn Curtiss St.	Signalized	0.45	A	0.506	A
8	University Dr./Birchknoll Dr. Ext.	N/A	N/A	N/A	N/A	N/A
9	University Dr./Toro Center Dr.	TWSC	13.4	B	14.7	B
10	Albertoni St./SR 91 EB Ramps	Signalized	0.614	B	0.8	C
11	Avalon Blvd./SR 91 WB On-Ramp	Signalized	0.522	A	0.523	A
12	Avalon Blvd./Albertoni St.	Signalized	0.616	B	0.815	D
13	Avalon Blvd./Victoria St.	Signalized	0.619	B	0.885	D
14	Central Ave./Artesia Blvd. WB	Signalized	0.792	C	0.754	C
15	Central Ave./Albertoni St./Artesia Blvd. EB	Signalized	0.803	D	0.79	C
16	Central Ave./Victoria St.	Signalized	0.572	A	0.694	B
17	Wilmington Ave./Artesia Blvd. WB	Signalized	0.727	C	0.735	C
18	Wilmington Ave./Artesia Blvd. EB	Signalized	0.731	C	0.743	C
19	Wilmington Ave./Victoria St.	Signalized	0.539	A	0.569	A
20	I-110 SB Off-Ramp/190th St.	Signalized	1.063	F	1.091	F
21	I-110 NB On-Ramp/190th St.	Signalized	0.5	A	0.713	C
22	Figueroa St./190th St./Victoria St.	Signalized	0.822	D	0.869	D
23	Broadway/Victoria St.	Signalized	0.581	A	0.753	C
24	Main St./Victoria St.	Signalized	0.653	B	0.9	E
25	Avalon Blvd./University Dr.	Signalized	0.46	A	0.649	B
26	Avalon Blvd./Del Amo Blvd.	Signalized	0.854	D	0.945	E
27	Avalon Blvd./I-405 NB Ramps	Signalized	0.506	A	0.51	A
28	Avalon Blvd./I-405 SB Ramps	Signalized	0.592	A	0.569	A
29	Central Ave./University Dr.	Signalized	0.581	A	0.522	A
30	Wilmington Ave./University Dr.	Signalized	0.504	A	0.583	A
31	Central Ave./Del Amo Blvd.	Signalized	0.74	C	0.72	C
32	Wilmington Ave./Del Amo Blvd.	Signalized	0.67	B	0.7	C
33	W. Artesia Blvd./Crenshaw Blvd.	Signalized	0.947	E	1.016	F
34	W. 190th St./S. Western Ave.	Signalized	0.839	D	0.792	C
35	W. Artesia Blvd./Vermont Ave.	Signalized	0.849	D	1.054	F
36	Alameda St./Compton Blvd.	Signalized	0.681	B	0.734	C
37	Alameda St./SR 91 EB Ramps	Signalized	0.578	A	0.788	C

*Intersection LOS was calculated using HCM 2000 Delay Method, because ICU cannot be calculated for TWSC intersections.

Exhibit 86: 2025 Weekday No Project Level of Service (LOS) at Study Intersections (Table)

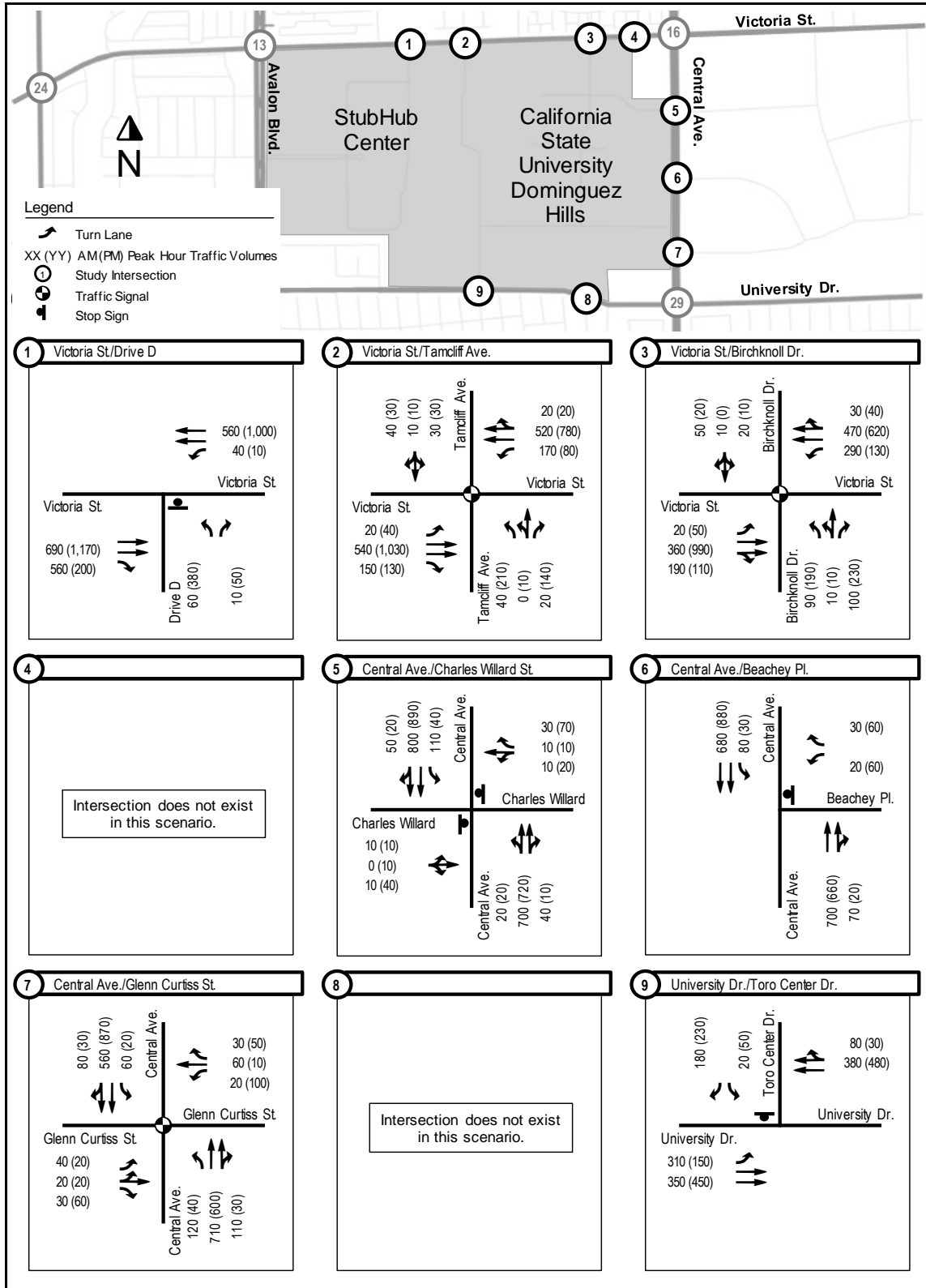


Exhibit 87: 2025 Weekday No Project Traffic Volumes and Lane Configurations

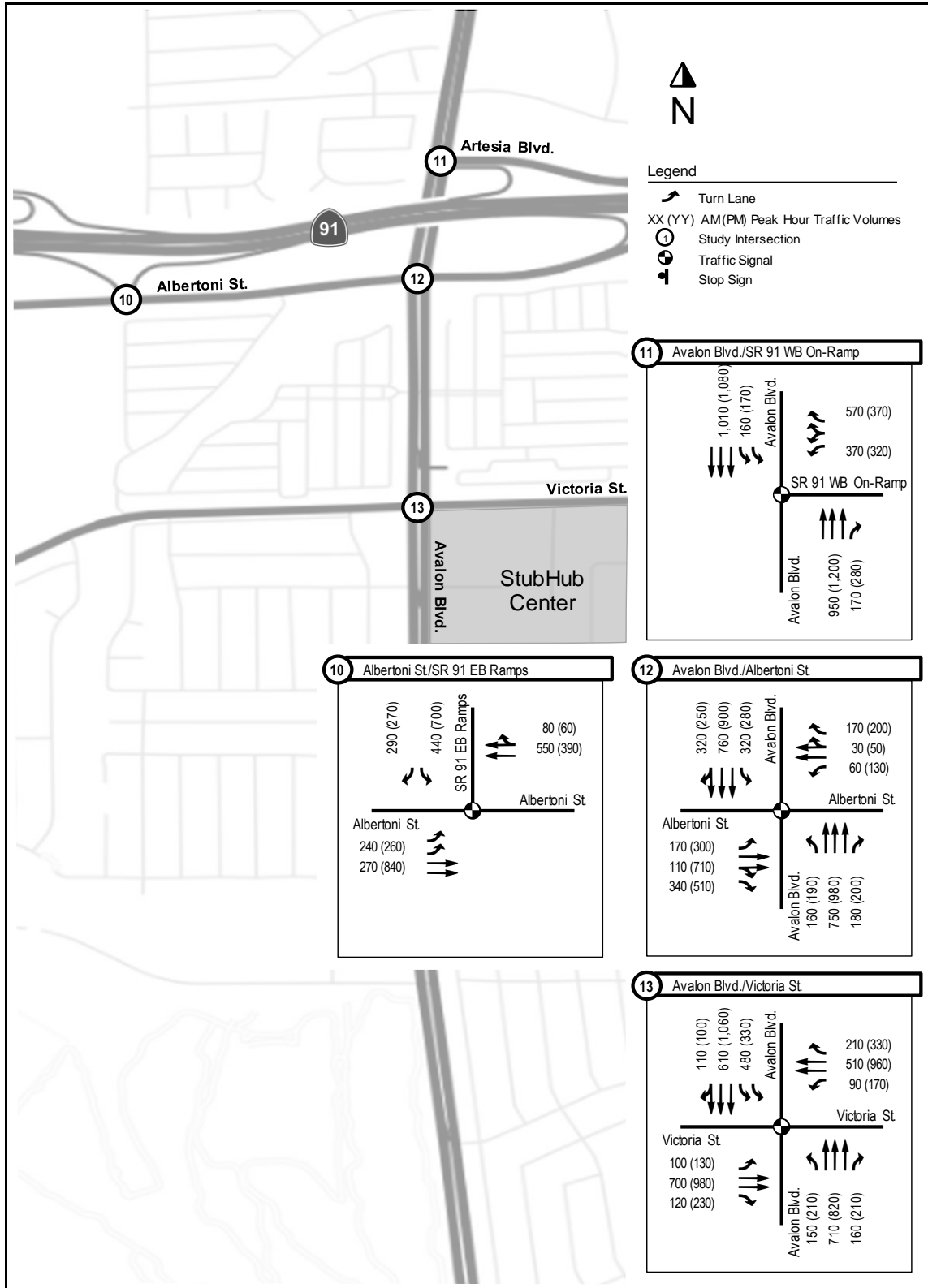


Exhibit 87: 2025 Weekday No Project Traffic Volumes and Lane Configurations (Map B)

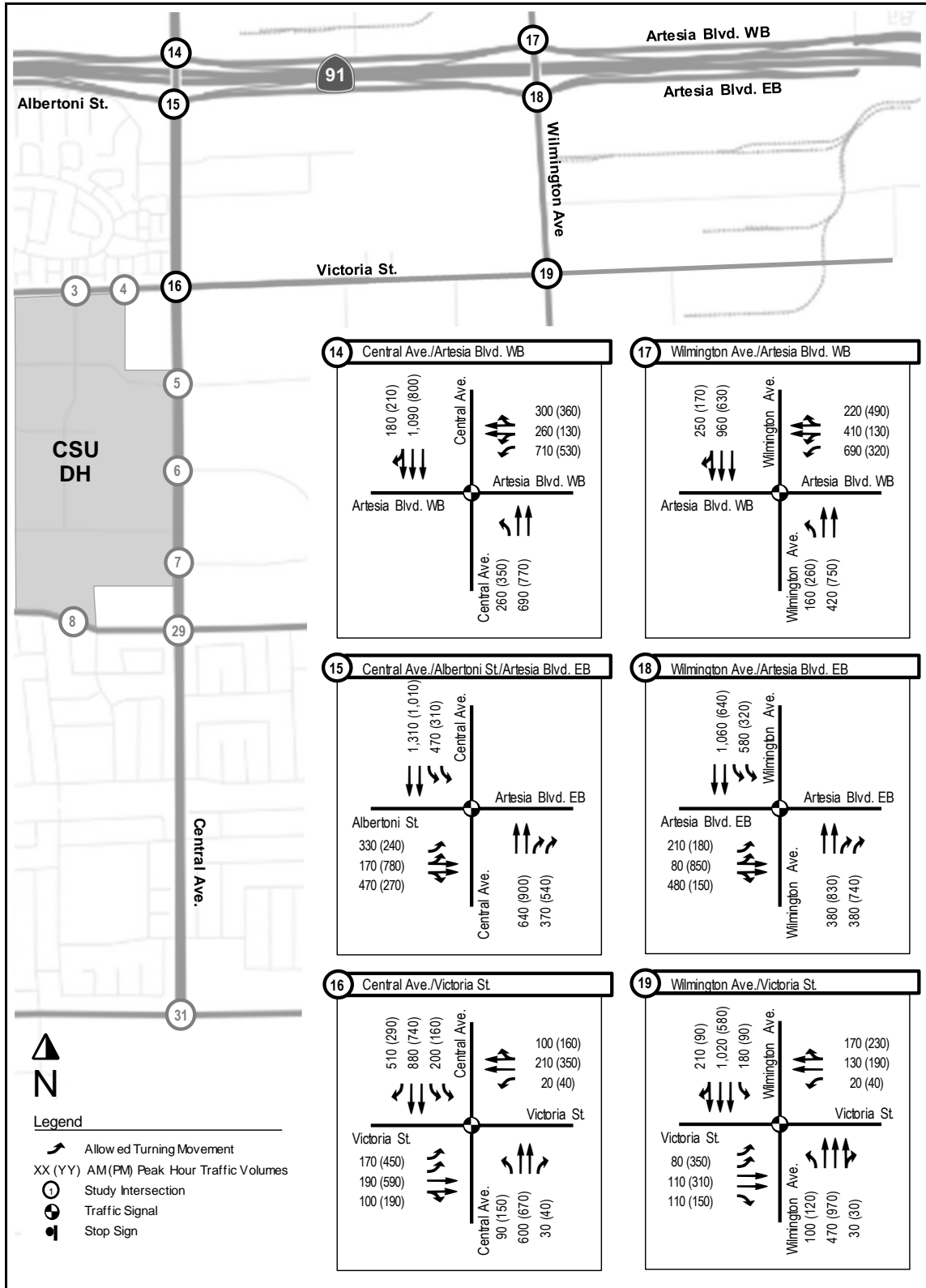


Exhibit 87: 2025 Weekday No Project Traffic Volumes and Lane Configurations (Map C)

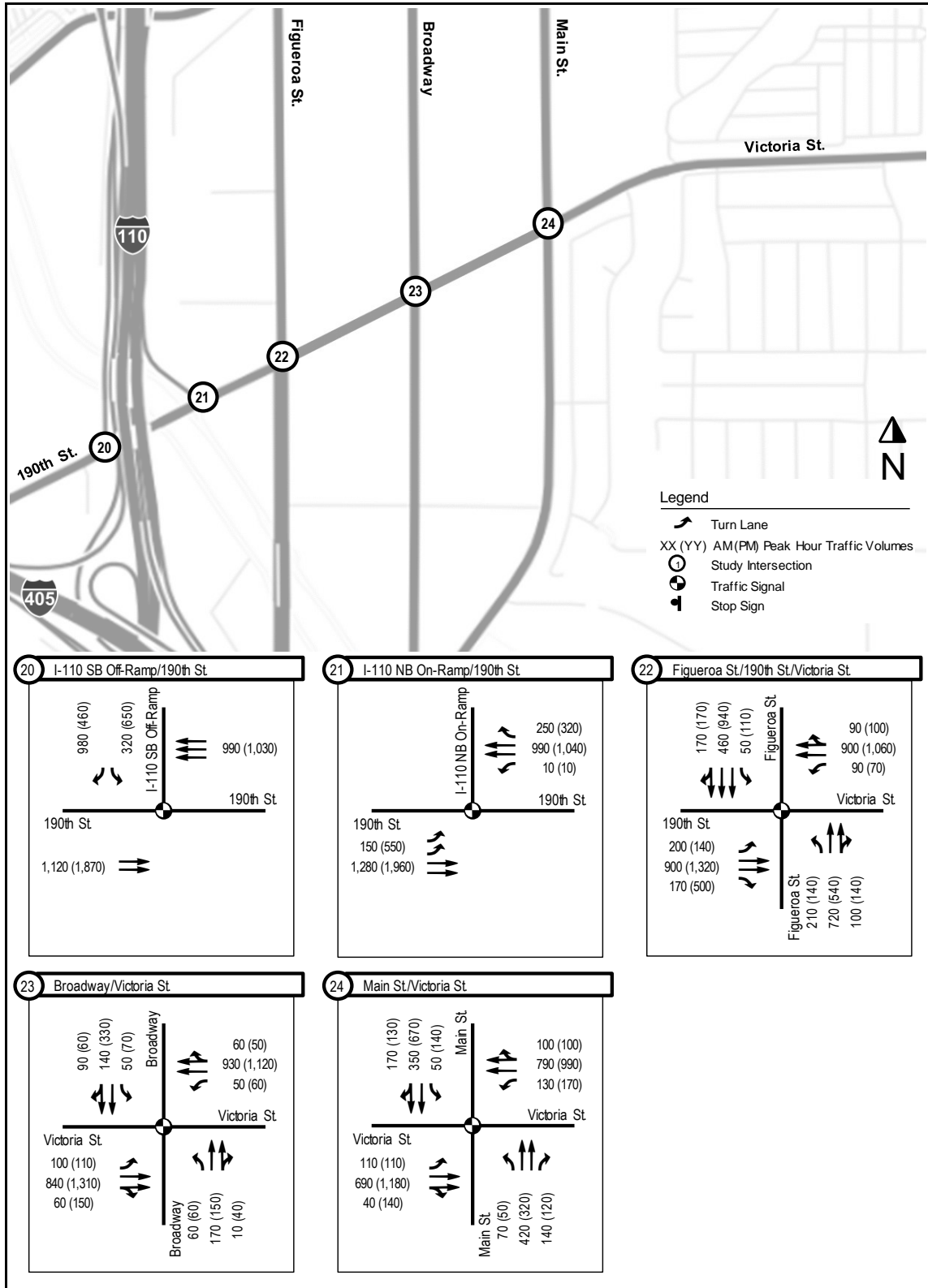


Exhibit 87: 2025 Weekday No Project Traffic Volumes and Lane Configurations (Map D)

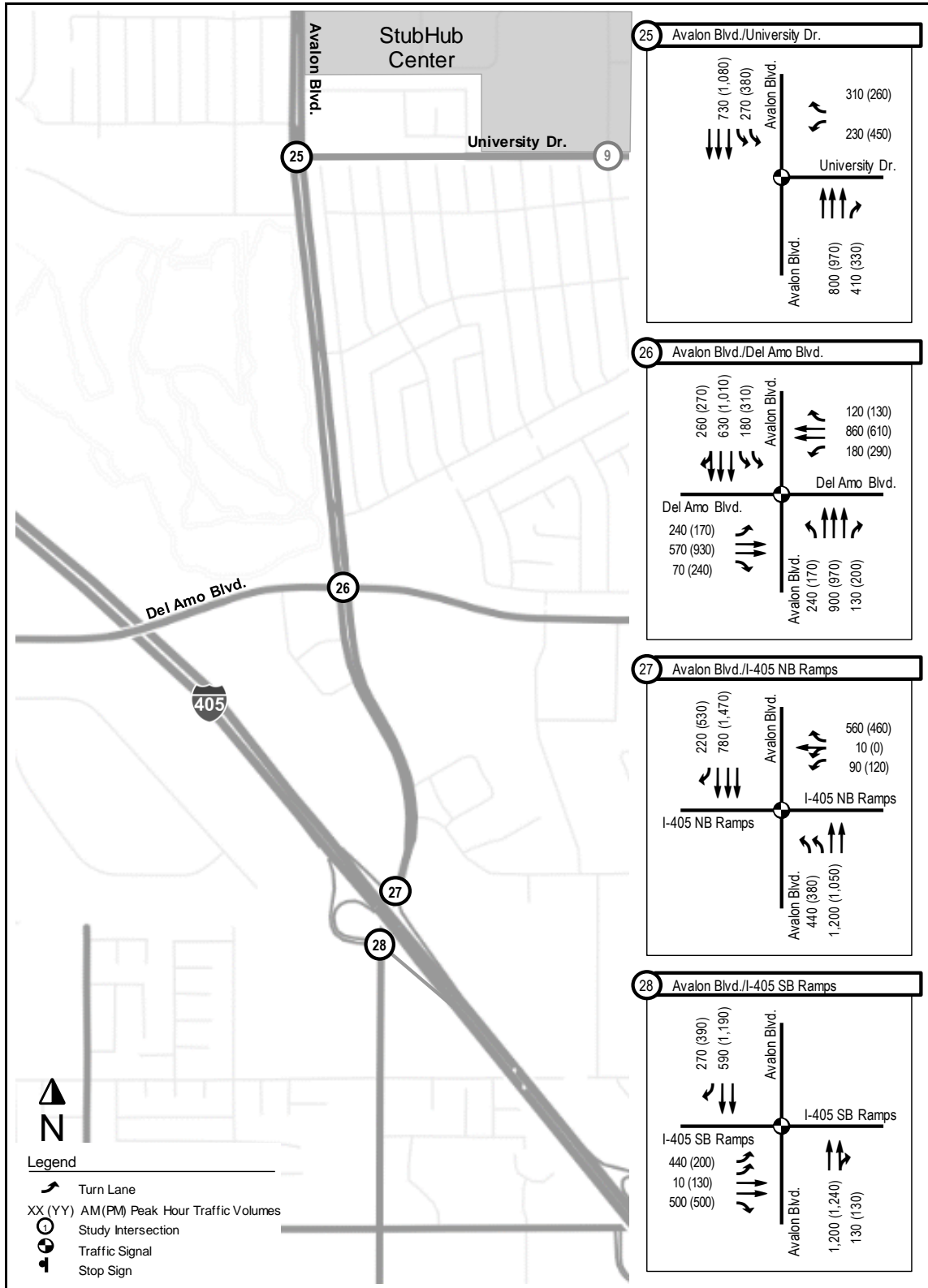


Exhibit 87: 2025 Weekday No Project Traffic Volumes and Lane Configurations (Map E)

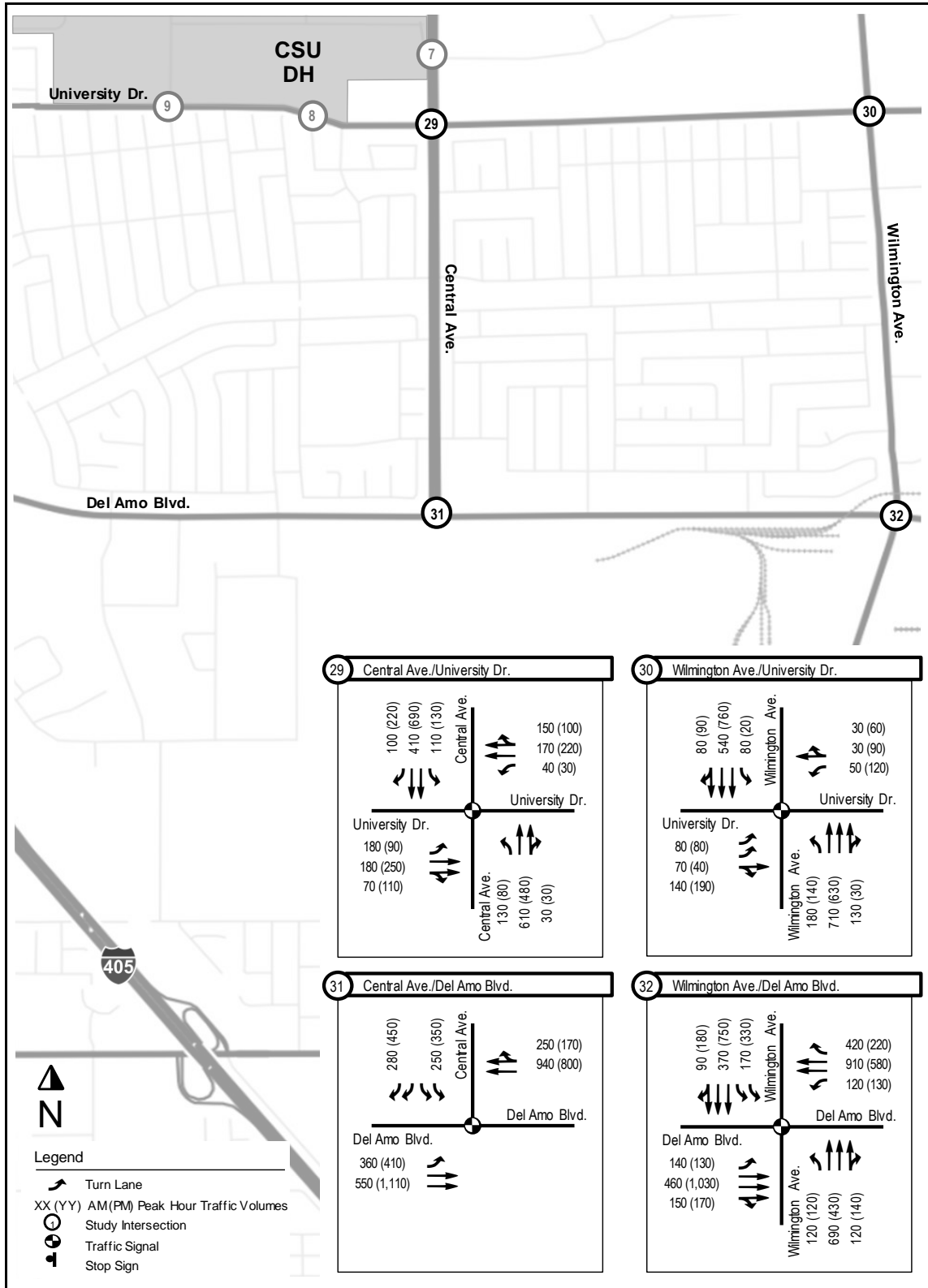


Exhibit 87: 2025 Weekday No Project Traffic Volumes and Lane Configurations (Map F)

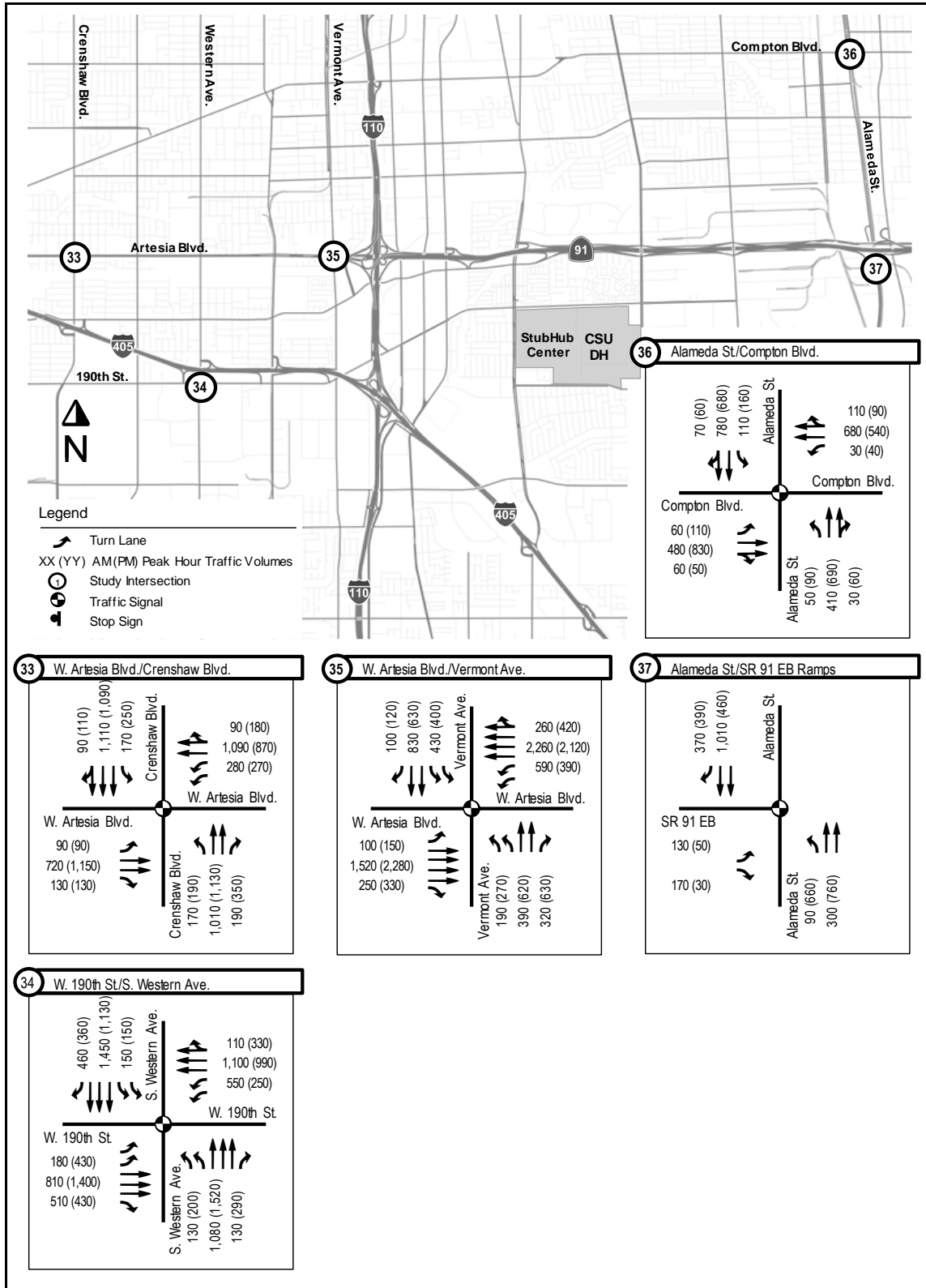


Exhibit 87: 2025 Weekday No Project Traffic Volumes and Lane Configurations (Map G)

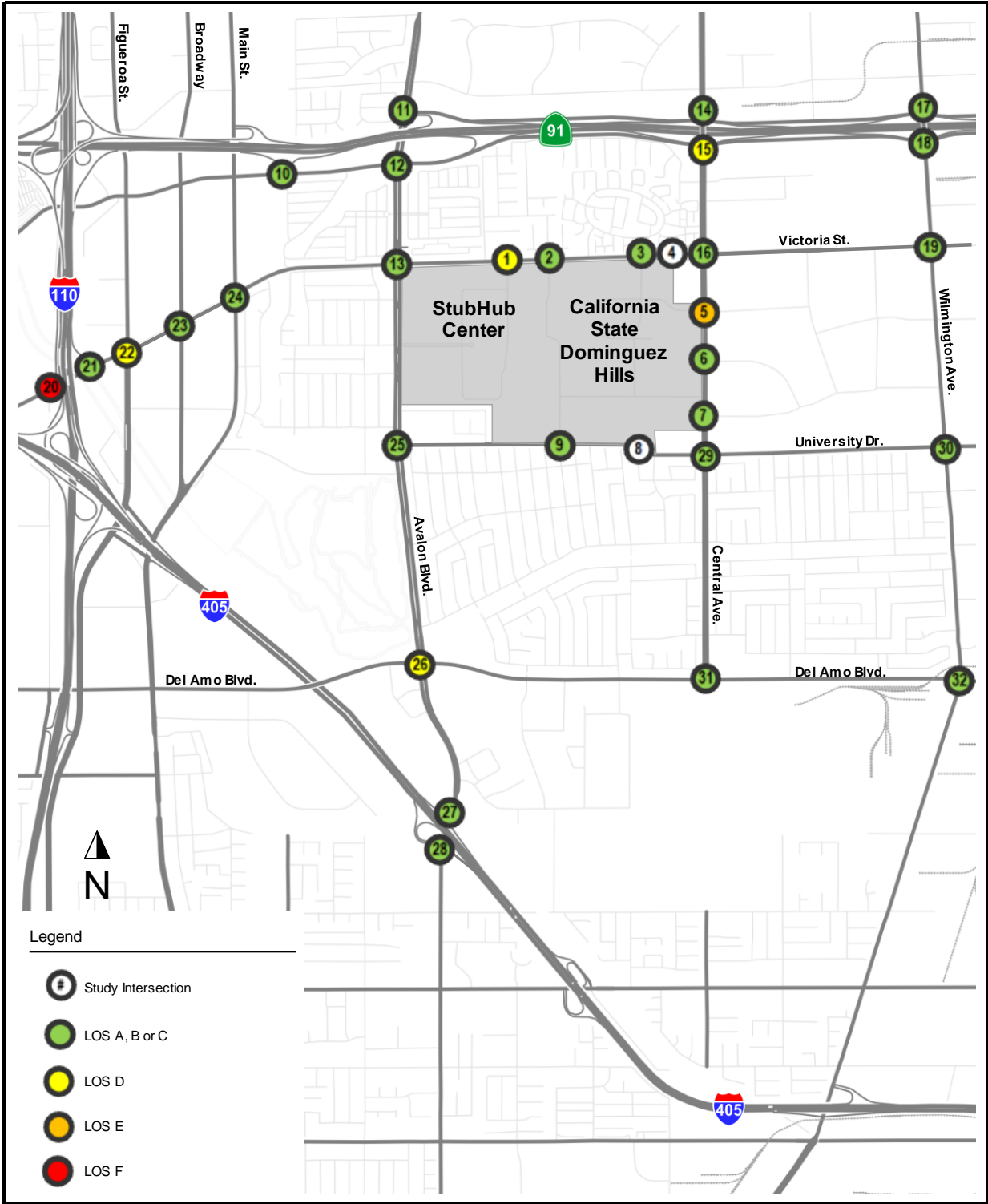


Exhibit 88: 2025 Weekday No Project AM Peak Hour LOS (Map)

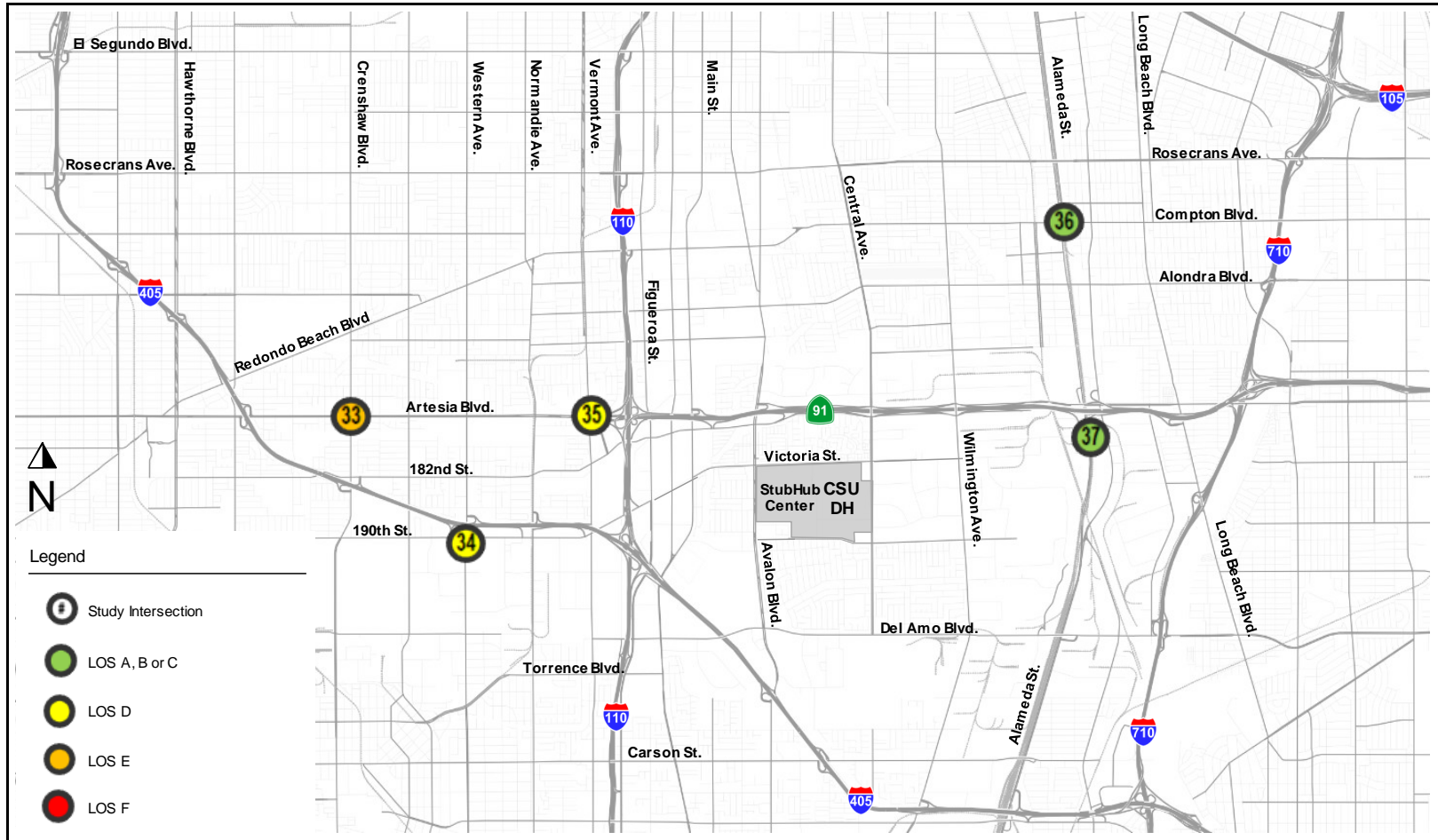


Exhibit 88: 2025 Weekday No Project AM Peak Hour LOS (Map)

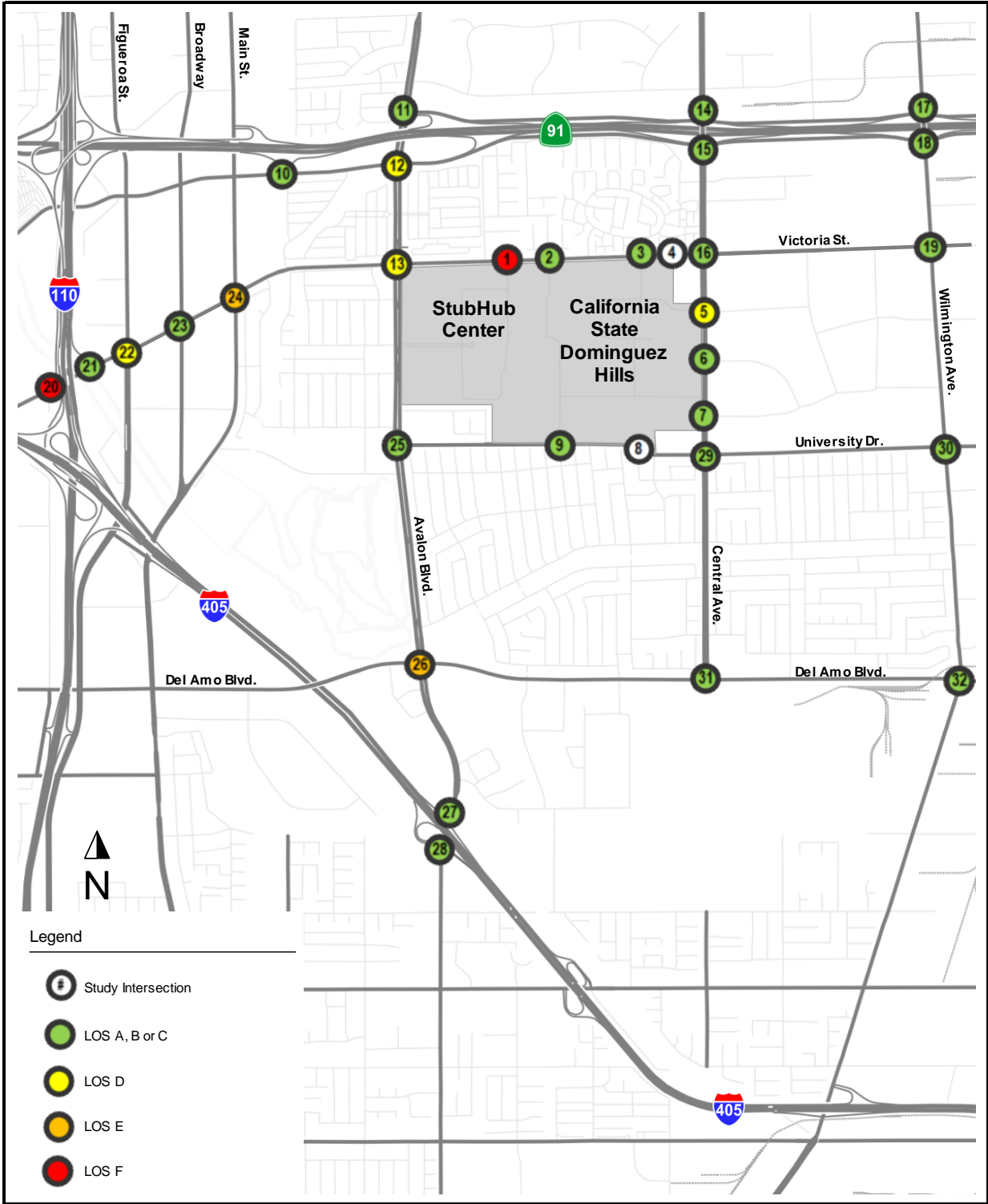


Exhibit 89: 2025 Weekday No Project PM Peak Hour LOS (Map)

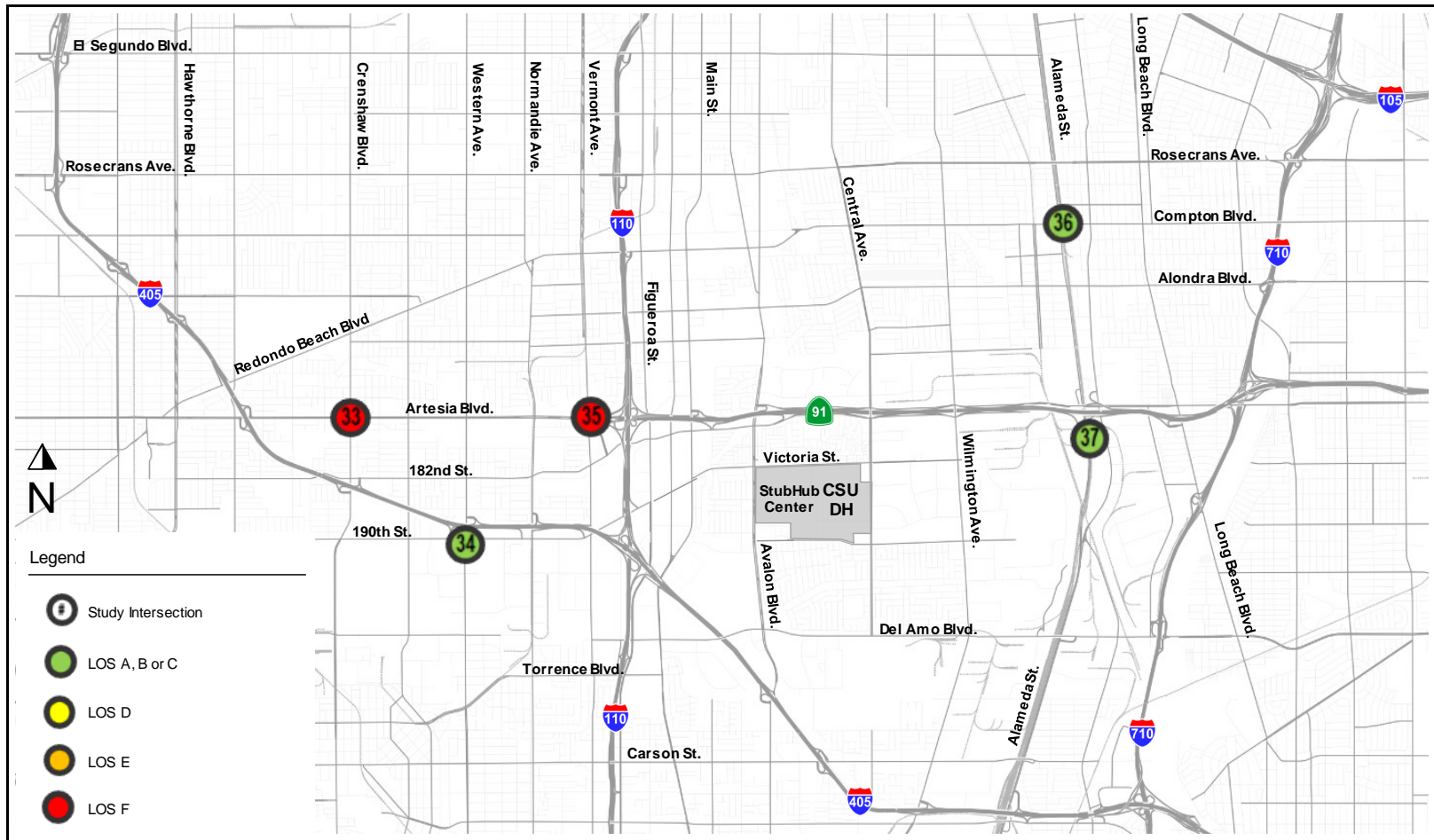


Exhibit 89: 2025 Weekday No Project PM Peak Hour LOS (Map)

9.3 2025 Weekday No Project Freeway Level of Service

The existing LOS for the study freeway segments are shown in Exhibit 90. Seven CMP freeway monitoring stations are expected to have LOS worse than the target LOS of D or better, namely:

- CMP Station #1033, SR-91 East of Alameda St./Santa Fe Ave., Eastbound, during the PM peak hour
- CMP Station #1034, SR-91 East of Cherry Ave., Eastbound, during the PM peak hour and Westbound, during the AM peak hour
- CMP Station #1046, I-110 at Manchester Blvd., Eastbound and Westbound, during both peak hours
- CMP Station #1047, I-110 at Slauson Ave., Eastbound and Westbound, during both peak hours
- CMP Station #1066, I-405 at Santa Fe Ave., Northbound, during both peak hours and Southbound, during the PM peak hour
- CMP Station #1067, I-405 South of I-110 at the Carson Scales, Northbound, during both peak hours and Southbound, during both peak hours
- CMP Station #1068, I-405 North of Inglewood Ave. at Compton Blvd., Northbound, during both peak hours and Southbound, during the PM peak hour

These are the same seven locations that already have LOS worse than D under Existing Conditions.

Altogether 91 freeway segments are forecast to have an LOS worse than D, including those that are not CMP monitoring stations. These additional locations are:

- SR-91 eastbound, Jct. Rte. 110 to Avalon Blvd., during the PM peak hour
- SR-91 eastbound, Avalon Blvd. to Central Ave., during the PM peak hour
- SR-91 eastbound, Central Ave. to Wilmington Ave., during the PM peak hour
- SR-91 eastbound, Wilmington Ave. to Alameda St., during the PM peak hour
- SR-91 eastbound, Alameda St. to Alameda St./Santa Fe Ave., during the both peak hours
- SR-91 eastbound, Long Beach Blvd. to Jct. Rte. 710, during the PM peak hour
- SR-91 eastbound, Jct. Rte. 710 to Cherry Ave., during the PM peak hour
- SR-91 eastbound, Paramount Blvd. to Downey Ave., during the PM peak hour
- SR-91 eastbound, Downey Ave. to Jct. Rte. 19, during the PM peak hour
- SR-91 eastbound, Jct. Rte. 19 to Clark Ave., during the PM peak hour
- SR-91 eastbound, Clark Ave. to Bellflower Blvd., during the PM peak hour
- SR-91 eastbound, Bellflower Blvd. to Jct. Rte. 605, during the PM peak hour
- I-110 northbound, Sepulveda Blvd. to Carson St., during the AM peak hour
- I-110 northbound, Carson St. to Torrance/Del Amo Blvd., during the both peak hours
- I-110 northbound, Torrance/Del Amo Blvd. to Jct. Rte. 405, during the both peak hours
- I-110 northbound, Jct. Rte. 405 to Jct. Rte. 91, during the AM peak hour
- I-110 northbound, Century Blvd. to Manchester Ave., during the both peak hours
- I-110 northbound, Florence Ave. to Gage Ave., during the both peak hours
- I-110 northbound, Slauson Ave. to 51st St., during the both peak hours

- I-110 northbound, 51st St. to Vernon Ave., during the both peak hours
- I-110 northbound, Vernon Ave. to Martin Luther King Jr. Blvd., during the both peak hours
- I-405 northbound, Lakewood Blvd. to Cherry Ave., during the both peak hours
- I-405 northbound, Cherry Ave. to Orange Ave., during the both peak hours
- I-405 northbound, Orange Ave. to Atlantic Ave., during the both peak hours
- I-405 northbound, Atlantic Ave. to Long Beach Blvd, during the both peak hours
- I-405 northbound, Long Beach Blvd to Jct. Rte. 710, during the both peak hours
- I-405 northbound, Alameda St. to Wilmington Ave., during the both peak hours
- I-405 northbound, Wilmington Ave. to Carson St., during the both peak hours
- I-405 northbound, Carson St. to Avalon Blvd., during the both peak hours
- I-405 northbound, Jct. Rte. 110 to Vermont Ave., during the both peak hours
- I-405 northbound, Vermont Ave. to Normandie Ave., during the AM peak hour
- I-405 northbound, Normandie Ave. to Western Ave., during the both peak hours
- I-405 northbound, Western Ave. to Crenshaw Blvd., during the both peak hours
- I-405 northbound, Crenshaw Blvd. to Artesia Blvd., during the both peak hours
- I-405 northbound, Artesia Blvd. to Hawthorne Blvd., during the AM peak hour
- I-405 northbound, Hawthorne Blvd. to Inglewood Ave., during the both peak hours
- I-710 northbound, Jct. Rte. 91 to Alondra Blvd., during the both peak hours
- I-710 northbound, Alondra Blvd. to Jct. Rte. 105, during the both peak hours
- SR-91 westbound, Jct. Rte. 110 to Avalon Blvd., during the both peak hours
- SR-91 westbound, Avalon Blvd. to Central Ave., during the AM peak hour
- SR-91 westbound, Central Ave. to Wilmington Ave., during the AM peak hour
- SR-91 westbound, Wilmington Ave. to Alameda St., during the AM peak hour
- SR-91 westbound, Alameda St. to Alameda St./Santa Fe Ave., during the AM peak hour
- SR-91 westbound, Long Beach Blvd. to Jct. Rte. 710, during the AM peak hour
- SR-91 westbound, Jct. Rte. 710 to Cherry Ave., during the both peak hours
- SR-91 westbound, Paramount Blvd. to Downey Ave., during the both peak hours
- SR-91 westbound, Downey Ave. to Jct. Rte. 19, during the AM peak hour
- SR-91 westbound, Jct. Rte. 19 to Clark Ave., during the both peak hours
- SR-91 westbound, Clark Ave. to Bellflower Blvd., during the AM peak hour
- SR-91 westbound, Bellflower Blvd. to Jct. Rte. 605, during the AM peak hour
- I-110 southbound, Sepulveda Blvd. to Carson St., during the PM peak hour
- I-110 southbound, Carson St. to Torrance/Del Amo Blvd., during the both peak hours
- I-110 southbound, Torrance/Del Amo Blvd. to Jct. Rte. 405, during the both peak hours
- I-110 southbound, Jct. Rte. 405 to Jct. Rte. 91, during the both peak hours

- I-110 southbound, Redondo Beach Blvd. to Rosecrans Ave., during the AM peak hour
- I-110 southbound, Rosecrans Ave. to El Segundo Blvd., during the both peak hours
- I-110 southbound, Century Blvd. to Manchester Ave., during the both peak hours
- I-110 southbound, Florence Ave. to Gage Ave., during the both peak hours
- I-110 southbound, Slauson Ave. to 51st St., during the both peak hours
- I-110 southbound, 51st St. to Vernon Ave., during the both peak hours
- I-110 southbound, Vernon Ave. to Martin Luther King Jr. Blvd., during the both peak hours
- I-110 southbound, Martin Luther King Jr. Blvd. to Exposition Blvd., during the both peak hours
- I-405 southbound, Lakewood Blvd. to Cherry Ave., during the both peak hours
- I-405 southbound, Cherry Ave. to Orange Ave., during the both peak hours
- I-405 southbound, Orange Ave. to Atlantic Ave., during the both peak hours
- I-405 southbound, Atlantic Ave. to Long Beach Blvd, during the PM peak hour
- I-405 southbound, Long Beach Blvd to Jct. Rte. 710, during the both peak hours
- I-405 southbound, Alameda St. to Wilmington Ave., during the PM peak hour
- I-405 southbound, Wilmington Ave. to Carson St., during the both peak hours
- I-405 southbound, Carson St. to Avalon Blvd., during the both peak hours
- I-405 southbound, Jct. Rte. 110 to Vermont Ave., during the both peak hours
- I-405 southbound, Vermont Ave. to Normandie Ave., during the PM peak hour
- I-405 southbound, Normandie Ave. to Western Ave., during the both peak hours
- I-405 southbound, Western Ave. to Crenshaw Blvd., during the both peak hours
- I-405 southbound, Crenshaw Blvd. to Artesia Blvd., during the both peak hours
- I-405 southbound, Artesia Blvd. to Hawthorne Blvd., during the both peak hours
- I-405 southbound, Hawthorne Blvd. to Inglewood Ave., during the both peak hours
- I-710 southbound, Alondra Blvd. to Jct. Rte. 105, during the AM peak hour

ID	CMP Station	Fwy Rte	Post Mile	Location	Northbound/Eastbound								Southbound/Westbound							
					AM Peak Hour				PM Peak Hour				AM Peak Hour				PM Peak Hour			
					Demand	Capacity	D/C	LOS	Demand	Capacity	D/C	LOS	Demand	Capacity	D/C	LOS	Demand	Capacity	D/C	LOS
91-1		91	6.344	Jct. Rte. 110 to Avalon Blvd.	7,000	12,000	0.58	C	14,400	12,000	1.20	F(0)	9,300	4,000	2.33	F(3)	6,300	4,000	1.58	F(3)
91-2		91	7.426	Avalon Blvd. to Central Ave.	7,200	10,000	0.72	C	14,700	10,000	1.47	F(3)	9,500	10,000	0.95	E	6,500	10,000	0.65	C
91-3		91	8.435	Central Ave. to Wilmington Ave.	7,300	10,000	0.73	C	14,900	10,000	1.49	F(3)	9,700	10,000	0.97	E	6,600	10,000	0.66	C
91-4		91	9.162	Wilmington Ave. to Alameda St.	7,600	10,000	0.76	C	15,500	10,000	1.55	F(3)	10,000	10,000	1.00	E	6,800	10,000	0.68	C
91-5		91	10.271	Alameda St. to Alameda St./Santa Fe Ave.	7,900	8,000	0.99	E	16,200	8,000	2.03	F(3)	10,500	8,000	1.31	F(1)	7,100	8,000	0.89	D
91-6	1033	91	10.41	Alameda St./Santa Fe Ave. to Long Beach Blvd.	8,200	12,000	0.68	C	16,800	12,000	1.40	F(2)	10,900	12,000	0.91	D	7,400	12,000	0.62	C
91-7		91	11.096	Long Beach Blvd. to Jct. Rte. 710	8,200	12,000	0.68	C	16,800	12,000	1.40	F(2)	10,900	10,000	1.09	F(0)	7,400	10,000	0.74	C
91-8		91	11.681	Jct. Rte. 710 to Cherry Ave.	8,400	10,000	0.84	D	12,000	10,000	1.20	F(0)	13,500	10,000	1.35	F(1)	9,500	10,000	0.95	E
91-9	1034	91	13.094	Cherry Ave. to Paramount Blvd.	8,500	10,000	0.85	D	12,200	10,000	1.22	F(0)	13,700	12,000	1.14	F(0)	9,600	12,000	0.80	D
91-10		91	13.594	Paramount Blvd. to Downey Ave.	8,300	10,000	0.83	D	11,800	10,000	1.18	F(0)	13,300	10,000	1.33	F(1)	9,400	10,000	0.94	E
91-11		91	14.103	Downey Ave. to Jct. Rte. 19	8,300	12,000	0.69	C	11,800	12,000	0.98	E	13,200	10,000	1.32	F(1)	9,300	10,000	0.93	D
91-12		91	14.618	Jct. Rte. 19 to Clark Ave.	7,600	10,000	0.76	C	10,900	10,000	1.09	F(0)	12,300	8,000	1.54	F(3)	8,600	8,000	1.08	F(0)
91-13		91	15.105	Clark Ave. to Bellflower Blvd.	8,100	12,000	0.68	C	11,500	12,000	0.96	E	12,900	10,000	1.29	F(1)	9,100	10,000	0.91	D
91-14		91	15.614	Bellflower Blvd. to Jct. Rte. 605	8,000	12,000	0.67	C	11,400	12,000	0.95	E	12,800	10,000	1.28	F(1)	9,000	10,000	0.90	D
110-1	1045	110	1.23	Channel St. to C St.	4,500	8,000	0.56	C	3,200	8,000	0.40	B	3,600	8,000	0.45	B	4,300	8,000	0.54	B
110-2		110	2.771	C St. to Anaheim St.	4,700	10,000	0.47	B	3,400	10,000	0.34	A	3,800	8,000	0.48	B	4,500	8,000	0.56	C
110-3		110	3.264	Anaheim St. to Jct. Rte. 1	5,100	10,000	0.51	B	3,600	10,000	0.36	B	4,100	10,000	0.41	B	4,900	10,000	0.49	B
110-4		110	4.061	Jct. Rte. 1 to Sepulveda Blvd.	7,100	8,000	0.89	D	5,100	8,000	0.64	C	5,700	8,000	0.71	C	6,900	8,000	0.86	D
110-5		110	5.451	Sepulveda Blvd. to Carson St.	9,200	8,000	1.15	F(0)	6,600	8,000	0.83	D	7,400	8,000	0.93	D	9,000	8,000	1.13	F(0)
110-6		110	7.016	Carson St. to Torrance/Del Arno Blvd.	10,600	8,000	1.33	F(1)	7,700	8,000	0.96	E	8,600	8,000	1.08	F(0)	10,400	8,000	1.30	F(1)
110-7		110	8.028	Torrance/Del Arno Blvd. to Jct. Rte. 405	11,200	8,000	1.40	F(2)	8,100	8,000	1.01	F(0)	9,100	8,000	1.14	F(0)	11,000	8,000	1.38	F(2)
110-8		110	8.775	Jct. Rte. 405 to Jct. Rte. 91	13,800	12,000	1.15	F(0)	9,900	12,000	0.83	D	11,100	8,000	1.39	F(2)	13,500	8,000	1.69	F(3)
110-9		110	9.87	Jct. Rte. 91 to Redondo Beach Blvd.	9,100	12,000	0.76	C	9,200	12,000	0.77	C	9,900	12,000	0.83	D	9,600	12,000	0.80	D
110-10		110	11.239	Redondo Beach Blvd. to Rosecrans Ave.	9,400	11,000	0.85	D	9,600	11,000	0.87	D	10,300	11,000	0.94	E	9,900	11,000	0.90	D
110-11		110	11.891	Rosecrans Ave. to El Segundo Blvd.	9,800	11,000	0.89	D	10,000	11,000	0.91	D	10,800	11,000	0.98	E	10,400	11,000	0.95	E
110-12		110	12.898	El Segundo Blvd. to Jct. Rte. 105	10,000	11,000	0.91	D	10,200	11,000	0.93	D	11,000	13,000	0.85	D	10,600	13,000	0.82	D
110-13		110	13.82	Jct. Rte. 105 to Century Blvd.	11,200	14,000	0.80	D	11,400	14,000	0.81	D	12,200	14,000	0.87	D	11,800	14,000	0.84	D
110-14		110	14.967	Century Blvd. to Manchester Ave.	12,000	12,000	1.00	E	12,200	12,000	1.02	F(0)	13,100	12,000	1.09	F(0)	12,700	12,000	1.06	F(0)
110-15	1046	110	15.976	Manchester Ave. to Florence Ave.	11,700	12,000	0.98	E	11,900	12,000	0.99	E	12,800	12,000	1.07	F(0)	12,300	12,000	1.03	F(0)
110-16		110	16.981	Florence Ave. to Gage Ave.	12,100	12,000	1.01	F(0)	12,300	12,000	1.03	F(0)	12,900	12,000	1.08	F(0)	12,500	12,000	1.04	F(0)
110-17	1047	110	17.514	Gage Ave. to Slauson Ave.	12,000	12,000	1.00	E	12,200	12,000	1.02	F(0)	12,900	12,000	1.08	F(0)	12,400	12,000	1.03	F(0)
110-18		110	17.98	Slauson Ave. to 51st St.	11,600	10,000	1.16	F(0)	11,700	10,000	1.17	F(0)	12,400	10,000	1.24	F(0)	11,900	10,000	1.19	F(0)
110-19		110	18.495	51st St. to Vernon Ave.	11,800	10,000	1.18	F(0)	12,000	10,000	1.20	F(0)	12,600	12,000	1.05	F(0)	12,200	12,000	1.02	F(0)
110-20		110	18.998	Vernon Ave. to Martin Luther King Jr. Blvd.	11,800	12,000	0.98	E	12,000	12,000	1.00	E	12,600	12,000	1.05	F(0)	12,200	12,000	1.02	F(0)
110-21		110	19.502	Martin Luther King Jr. Blvd. to Exposition Blvd.	10,700	12,000	0.89	D	10,800	12,000	0.90	D	11,400	10,000	1.14	F(0)	11,000	10,000	1.10	F(0)
110-22		110	19.996	Exposition Blvd. to Jct. Rte. 10	10,300	12,000	0.86	D	10,500	12,000	0.88	D	11,100	12,000	0.93	D	10,700	12,000	0.89	D
405-1		405	3.324	Lakewood Blvd. to Cherry Ave.	12,500	10,000	1.25	F(0)	10,700	10,000	1.07	F(0)	9,400	10,000	0.94	E	11,700	10,000	1.17	F(0)
405-2		405	4.879	Cherry Ave. to Orange Ave.	13,200	10,000	1.32	F(1)	11,200	10,000	1.12	F(0)	9,800	8,000	1.23	F(0)	12,300	8,000	1.54	F(3)
405-3		405	5.388	Orange Ave. to Atlantic Ave.	13,700	8,000	1.71	F(3)	11,700	8,000	1.46	F(3)	10,200	8,000	1.28	F(1)	12,800	8,000	1.60	F(3)
405-4		405	6.076	Atlantic Ave. to Long Beach Blvd	13,500	8,000	1.69	F(3)	11,500	8,000	1.44	F(2)	10,100	12,000	0.84	D	12,600	12,000	1.05	F(0)
405-5		405	6.34	Long Beach Blvd to Jct. Rte. 710	13,400	12,000	1.12	F(0)	11,400	12,000	0.95	E	10,000	10,000	1.00	E	12,500	10,000	1.25	F(0)
405-6	1066	405	7.596	Jct. Rte. 710 to Alameda St.	12,200	10,000	1.22	F(0)	10,400	10,000	1.04	F(0)	9,100	10,000	0.91	D	11,400	10,000	1.14	F(0)
405-7		405	8.784	Alameda St. to Wilmington Ave.	11,800	10,000	1.18	F(0)	10,000	10,000	1.00	E	8,800	10,000	0.88	D	11,000	10,000	1.10	F(0)
405-8		405	9.556	Wilmington Ave. to Carson St.	11,000	8,000	1.38	F(2)	9,500	8,000	1.19	F(0)	9,400	8,000	1.18	F(0)	11,400	8,000	1.43	F(2)
405-9		405	10.541	Carson St. to Avalon Blvd.	10,800	8,000	1.35	F(1)	9,300	8,000	1.16	F(0)	9,300	8,000	1.16	F(0)	11,200	8,000	1.40	F(2)
405-10	1067	405	11.224	Avalon Blvd. to Jct. Rte. 110	11,600	10,000	1.16	F(0)	10,000	10,000	1.00	E	9,900	10,000	0.99	E	12,000	10,000	1.20	F(0)
405-11		405	12.97	Jct. Rte. 110 to Vermont Ave.	11,400	10,000	1.14	F(0)	9,900	10,000	0.99	E	8,500	8,000	1.06	F(0)	10,500	8,000	1.31	F(1)
405-12		405	13.28	Vermont Ave. to Normandie Ave.	11,900	12,000	0.99	E	10,400	12,000	0.87	D	8,900	10,000	0.89	D	11,000	10,000	1.10	F(0)
405-13		405	13.826	Normandie Ave. to Western Ave.	11,200	10,000	1.12	F(0)	9,700	10,000	0.97	E	8,300	8,000	1.04	F(0)	10,300	8,000	1.29	F(1)
405-14		405	14.398	Western Ave. to Crenshaw Blvd.	10,700	8,000	1.34	F(1)	9,300	8,000	1.16	F(0)	8,000	8,000	1.00	E	9,900	8,000	1.24	F(0)
405-15		405	15.447	Crenshaw Blvd. to Artesia Blvd.	10,500	8,000	1.31	F(1)	9,100	8,000	1.14	F(0)	7,800	8,000	0.98	E	9,700	8,000	1.21	F(0)
405-16		405	16.573	Artesia Blvd. to Hawthorne Blvd.	10,600	10,000	1.06	F(0)	9,200	10,000	0.92	D	7,900	8,000	0.99	E	9,800	8,000	1.23	F(0)
405-17		405	17.589	Hawthorne Blvd. to Inglewood Ave.	11,100	10,000	1.11	F(0)	9,700	10,000	0.97	E	8,300	8,000	1.04	F(0)	10,200	8,000	1.28	F(1)
405-18	1068	405	18.233	Inglewood Ave. to Rosecrans Ave.	11,600	10,000	1.16	F(0)	10,100	10,000	1.01	F(0)	8,700	10,000	0.87	D	10,700	10,000	1.07	F(0)
710-1		710	12.97	Jct. Rte. 91 to Alondra Blvd.	11,400	12,000	0.95	E	17,700	12,000	1.48	F(3)	11,100	12,000	0.93	D	8,900	12,000	0.74	C
710-2		710	13.945	Alondra Blvd. to Jct. Rte. 105	11,800	12,000	0.98	E	18,300	12,000	1.53	F(3)	11,500	12,000	0.96	E	9,200	12,000	0.77	C

Note: D/C is demand-to-capacity ratio.

Exhibit 90: 2025 Weekday No Project of Service (LOS) for Study Freeway Locations

10 2025 Plus Project Conditions

10.1 2025 Plus Project Alternative 1 Conditions

10.1.1 Forecasting 2025 Weekday Plus Project Alternative 1 Traffic

Traffic volumes for the 2025 Plus Project condition were developed by factoring up the existing weekday traffic counts using the growth factor from the LA-CMP and then adding in the traffic for existing, known, and reasonably foreseeable projects, part of the University Village portion of the Master Plan and the two percent increase in students. The resulting 2025 Plus Project traffic volumes are shown in Exhibit 92.

10.1.2 2025 Weekday Plus Project Alternative 1 Intersection Level of Service

Exhibit 91 shows in tabular format the 2025 Plus Project weekday level of service (LOS) based on the traffic volumes shown in Exhibit 92 (also see Appendix M). The LOS is also shown on maps in Exhibit 93 for the AM peak hour condition, and Exhibit 94 for the PM peak hour condition. Exhibit 95 shows the intersection impacts of the Project. The Project would have significant impacts at 10 study intersections, namely:

- Intersection #1, Victoria St./Drive D, during the AM peak hour
- Intersection #3, Victoria St./Birchknoll Dr., during the PM peak hour
- Intersection #5, Central Ave./Charles Willard St., during the PM peak hour
- Intersection #6, Central Ave./Project Driveway/Beachey Pl., during both peak hours
- Intersection #13, Avalon Blvd./Victoria St., during the PM peak hour
- Intersection #14, Central Ave./Artesia Blvd. WB, during the PM peak hour
- Intersection #15, Central Ave./Albertoni St./Artesia Blvd. EB, during both peak hours
- Intersection #20, I-110 SB Off-Ramp/190th St., during both peak hours
- Intersection #22, Figueroa St./190th St./Victoria St., during both peak hours
- Intersection #24, Main St./Victoria St., During the PM peak hour

Study ID	Intersection Name	Control Type	AM Peak Hour		PM Peak Hour	
			V/C Ratio or Delay	LOS (ICU or HCM)	V/C Ratio or Delay	LOS (ICU or HCM)
1	Victoria St./Drive D	TWSC	94.3	F	>180	F
2	Victoria St./Tamcliff Ave.	Signalized	0.559	A	0.728	C
3	Victoria St./Birchknoll Dr.	Signalized	0.806	D	1.025	F
4	Victoria St./Project Service Rd.	TWSC	11.3	B	14.9	B
5	Central Ave./Charles Willard St.	TWSC	>180	F	>180	F
6	Central Ave./Beachey Pl.	TWSC	96.6	F	>180	F
7	Central Ave./Glenn Curtiss St.	Signalized	0.653	B	0.7	B
8	University Dr./Birchknoll Dr. Ext.	N/A	N/A	N/A	N/A	N/A
9	University Dr./Toro Center Dr.	TWSC	14.4	B	16.7	C
10	Albertoni St./SR 91 EB Ramps	Signalized	0.657	B	0.831	D
11	Avalon Blvd./SR 91 WB On-Ramp	Signalized	0.524	A	0.529	A
12	Avalon Blvd./Albertoni St.	Signalized	0.629	B	0.842	D
13	Avalon Blvd./Victoria St.	Signalized	0.755	C	1.029	F
14	Central Ave./Artesia Blvd. WB	Signalized	0.889	D	0.922	E
15	Central Ave./Albertoni St./Artesia Blvd. EB	Signalized	1.053	F	0.998	E
16	Central Ave./Victoria St.	Signalized	0.838	D	0.847	D
17	Wilmington Ave./Artesia Blvd. WB	Signalized	0.734	C	0.746	C
18	Wilmington Ave./Artesia Blvd. EB	Signalized	0.734	C	0.749	C
19	Wilmington Ave./Victoria St.	Signalized	0.551	A	0.582	A
20	I-110 SB Off-Ramp/190th St.	Signalized	1.169	F	1.175	F
21	I-110 NB On-Ramp/190th St.	Signalized	0.6	A	0.797	C
22	Figueroa St./190th St./Victoria St.	Signalized	0.9	E	1.036	F
23	Broadway/Victoria St.	Signalized	0.694	B	0.847	D
24	Main St./Victoria St.	Signalized	0.766	C	1.022	F
25	Avalon Blvd./University Dr.	Signalized	0.483	A	0.672	B
26	Avalon Blvd./Del Amo Blvd.	Signalized	0.871	D	0.963	E
27	Avalon Blvd./I-405 NB Ramps	Signalized	0.509	A	0.516	A
28	Avalon Blvd./I-405 SB Ramps	Signalized	0.595	A	0.565	A
29	Central Ave./University Dr.	Signalized	0.741	C	0.619	B
30	Wilmington Ave./University Dr.	Signalized	0.635	B	0.729	C
31	Central Ave./Del Amo Blvd.	Signalized	0.821	D	0.751	C
32	Wilmington Ave./Del Amo Blvd.	Signalized	0.707	C	0.744	C
33	W. Artesia Blvd./Crenshaw Blvd.	Signalized	0.95	E	1.019	F
34	W. 190th St./S. Western Ave.	Signalized	0.841	D	0.83	D
35	W. Artesia Blvd./Vermont Ave.	Signalized	0.858	D	1.062	F
36	Alameda St./Compton Blvd.	Signalized	0.691	B	0.738	C
37	Alameda St./SR 91 EB Ramps	Signalized	0.588	A	0.794	C

*Intersection LOS was calculated using HCM 2000 Delay Method, because ICU cannot be calculated for TWSC intersections.

Exhibit 91: 2025 Weekday Plus Project Alternative 1 Level of Service (LOS) at Study Intersections (Table)

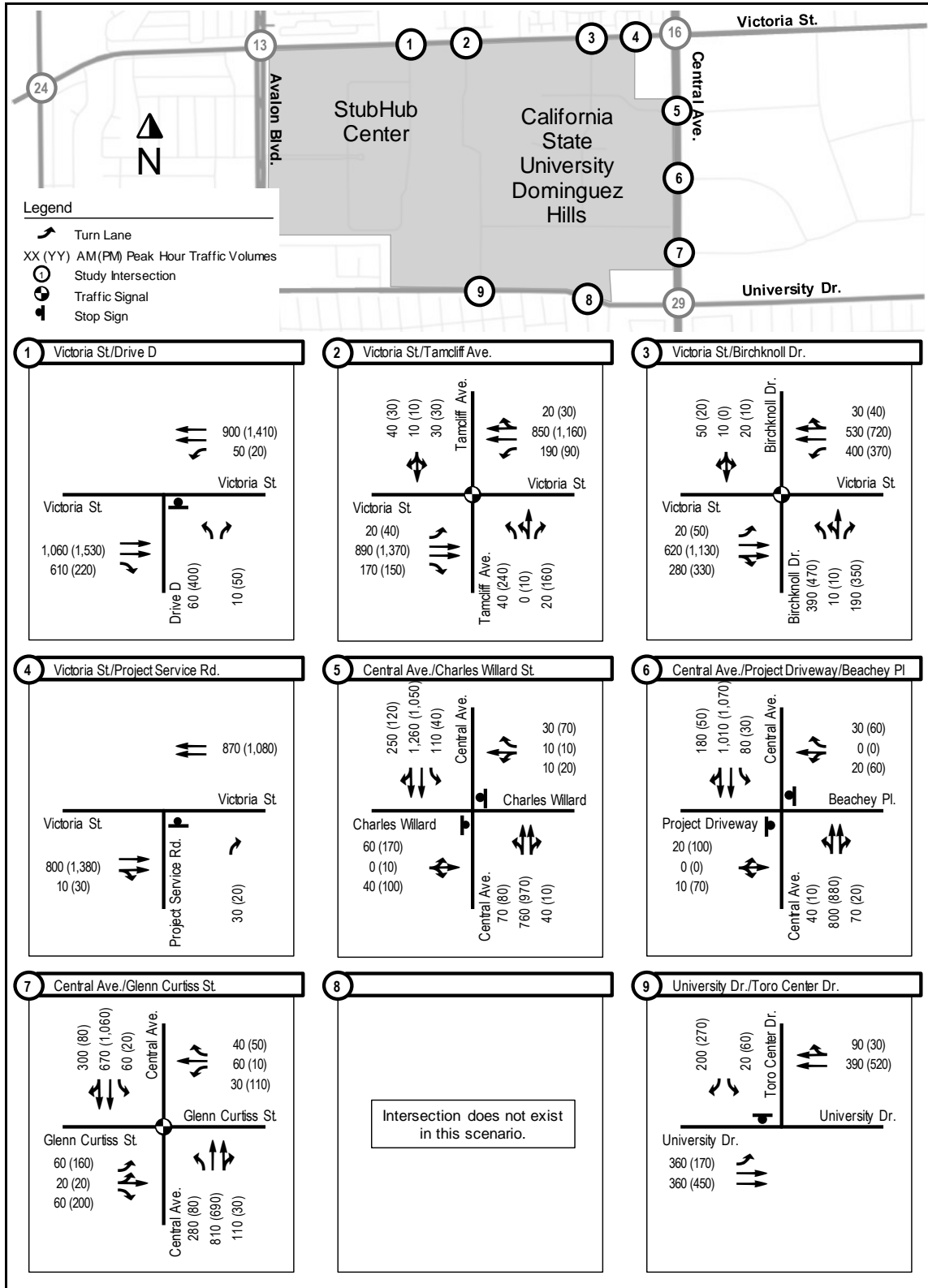


Exhibit 92: 2025 Weekday Plus Project Alternative 1 Traffic Volumes and Lane Configurations

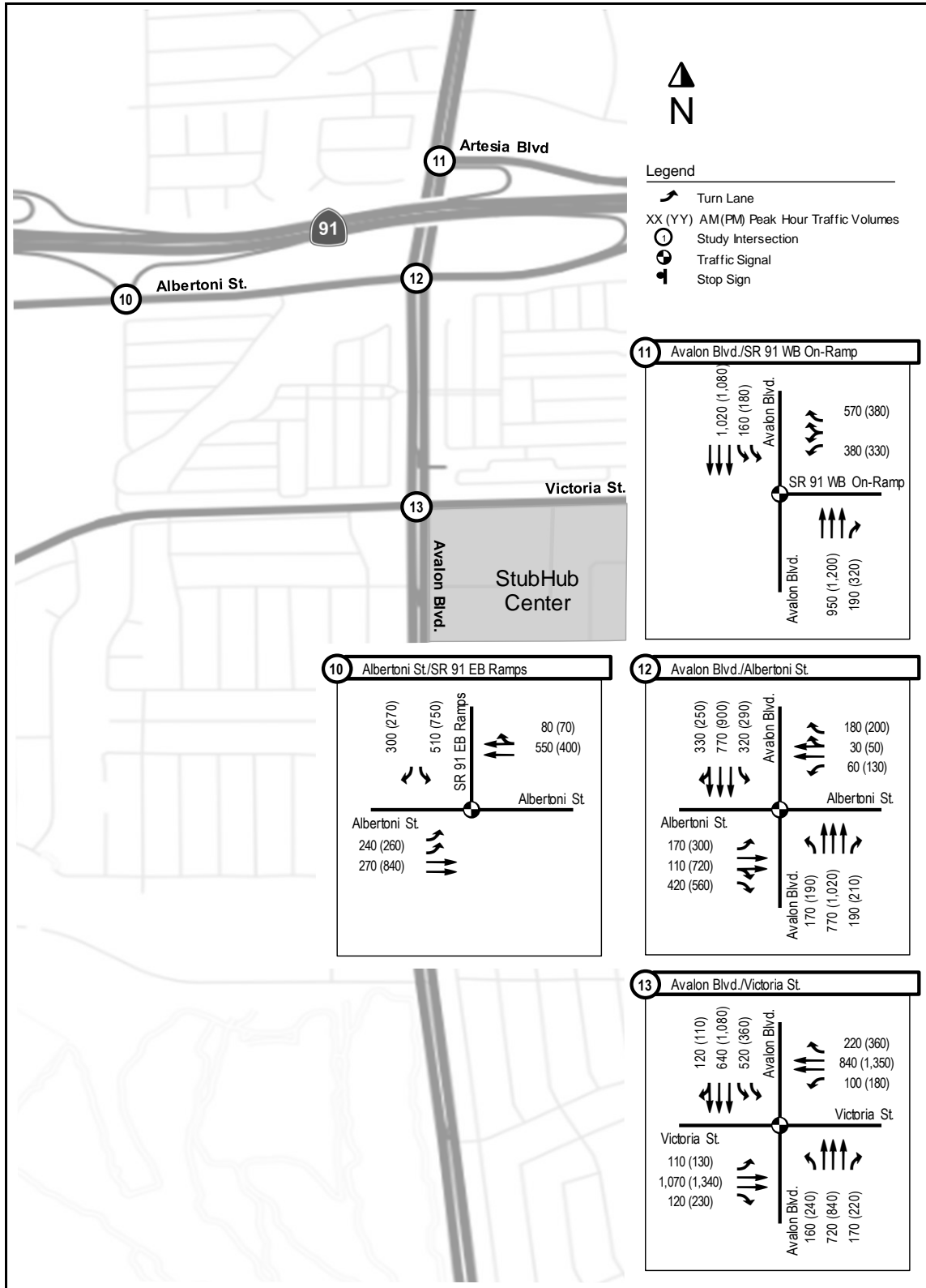


Exhibit 92: 2025 Weekday Plus Project Alternative 1 Traffic Volumes and Lane Configurations (Map B)

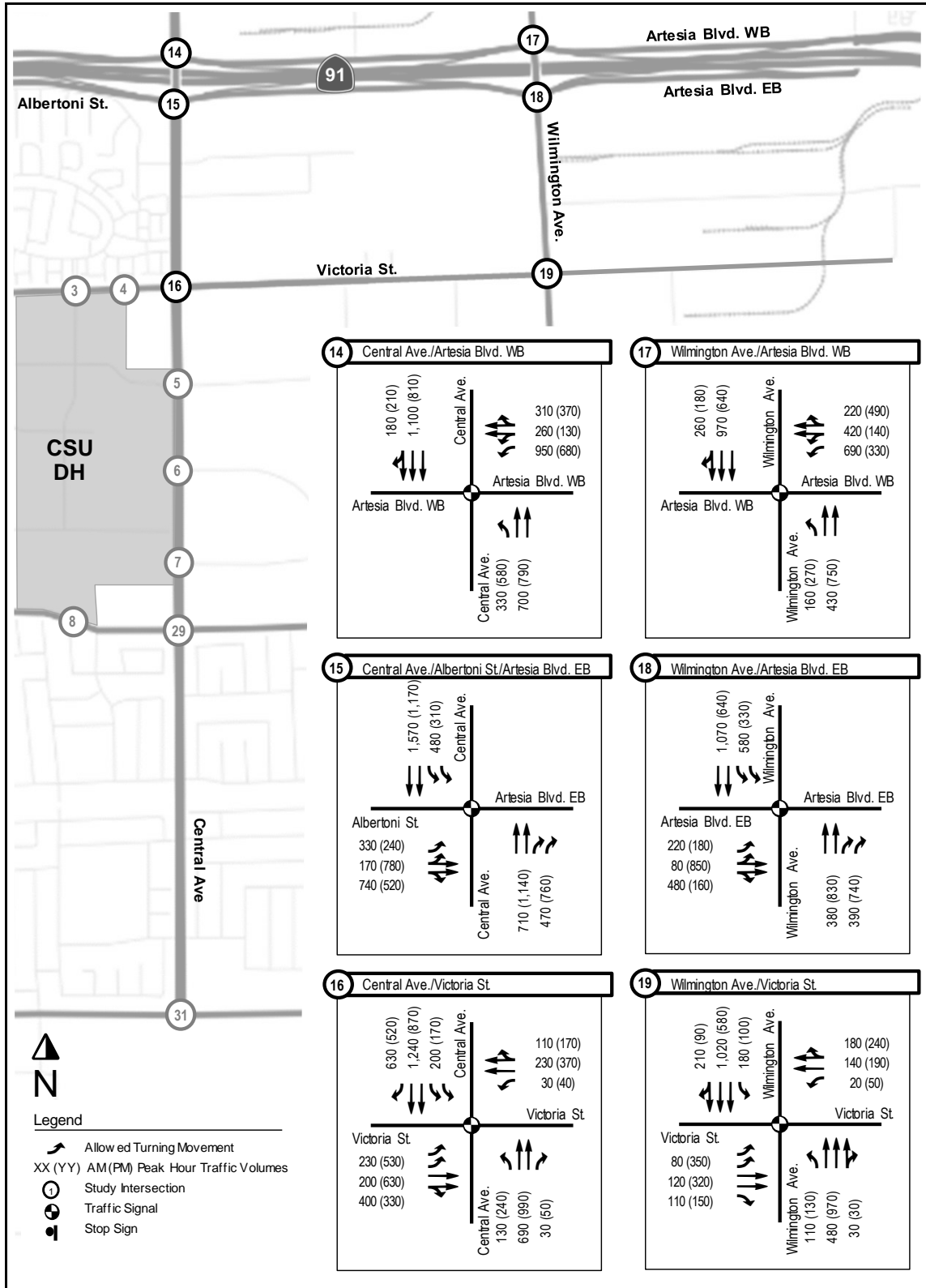


Exhibit 92: 2025 Weekday Plus Project Alternative 1 Traffic Volumes and Lane Configurations (Map C)

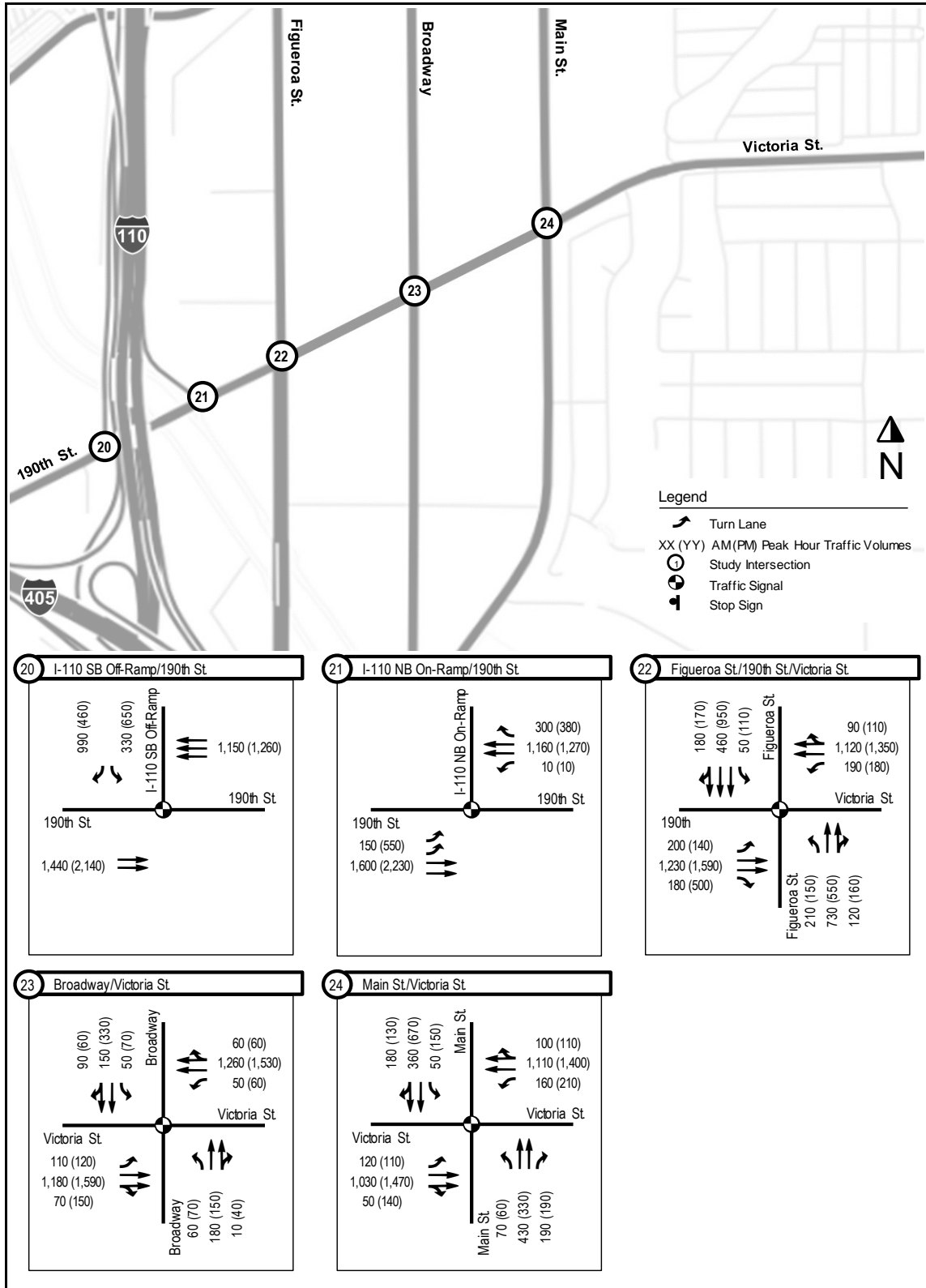


Exhibit 92: 2025 Weekday Plus Project Alternative 1 Traffic Volumes and Lane Configurations (Map D)

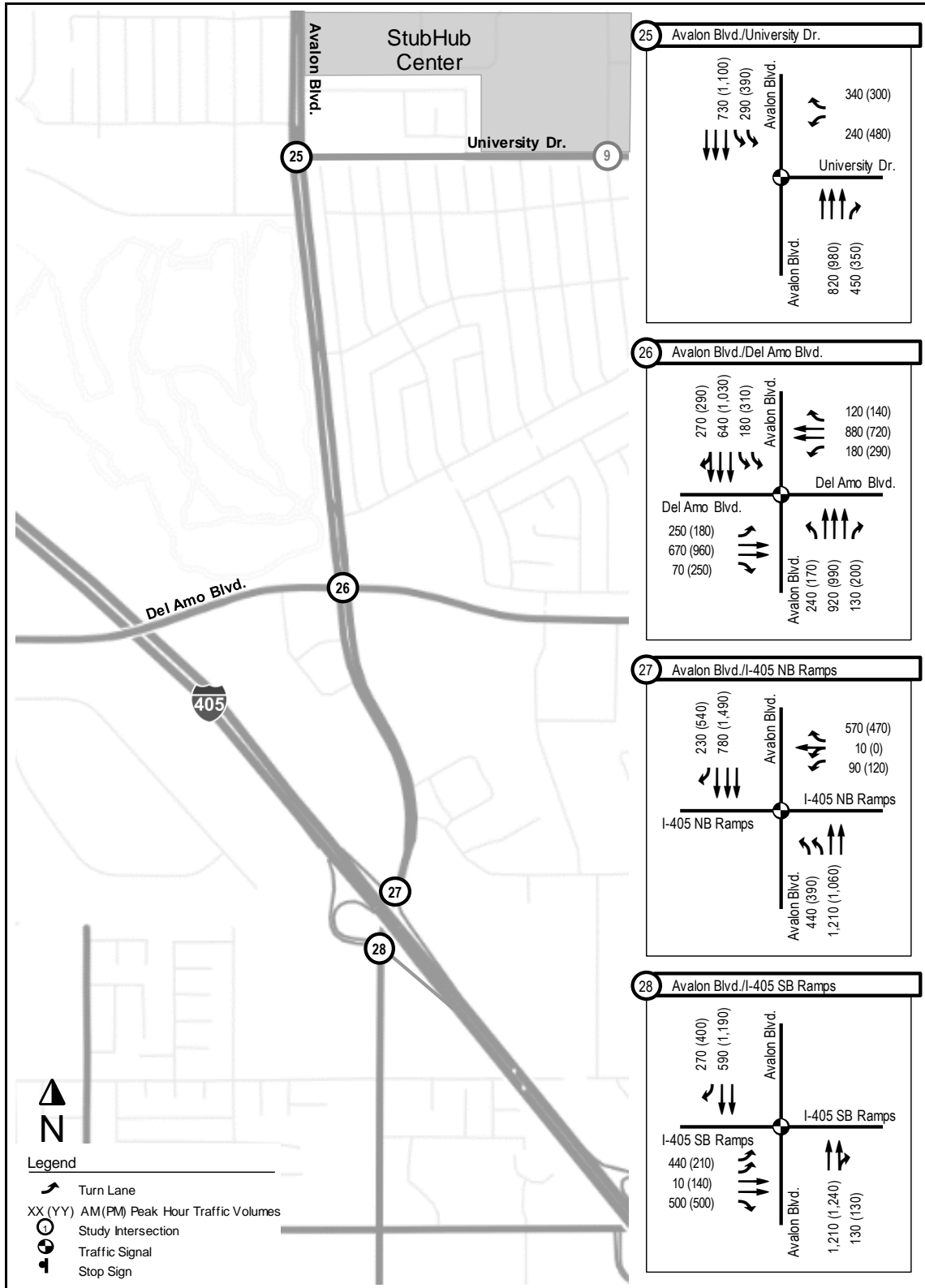


Exhibit 92: 2025 Weekday Plus Project Alternative 1 Traffic Volumes and Lane Configurations (Map E)

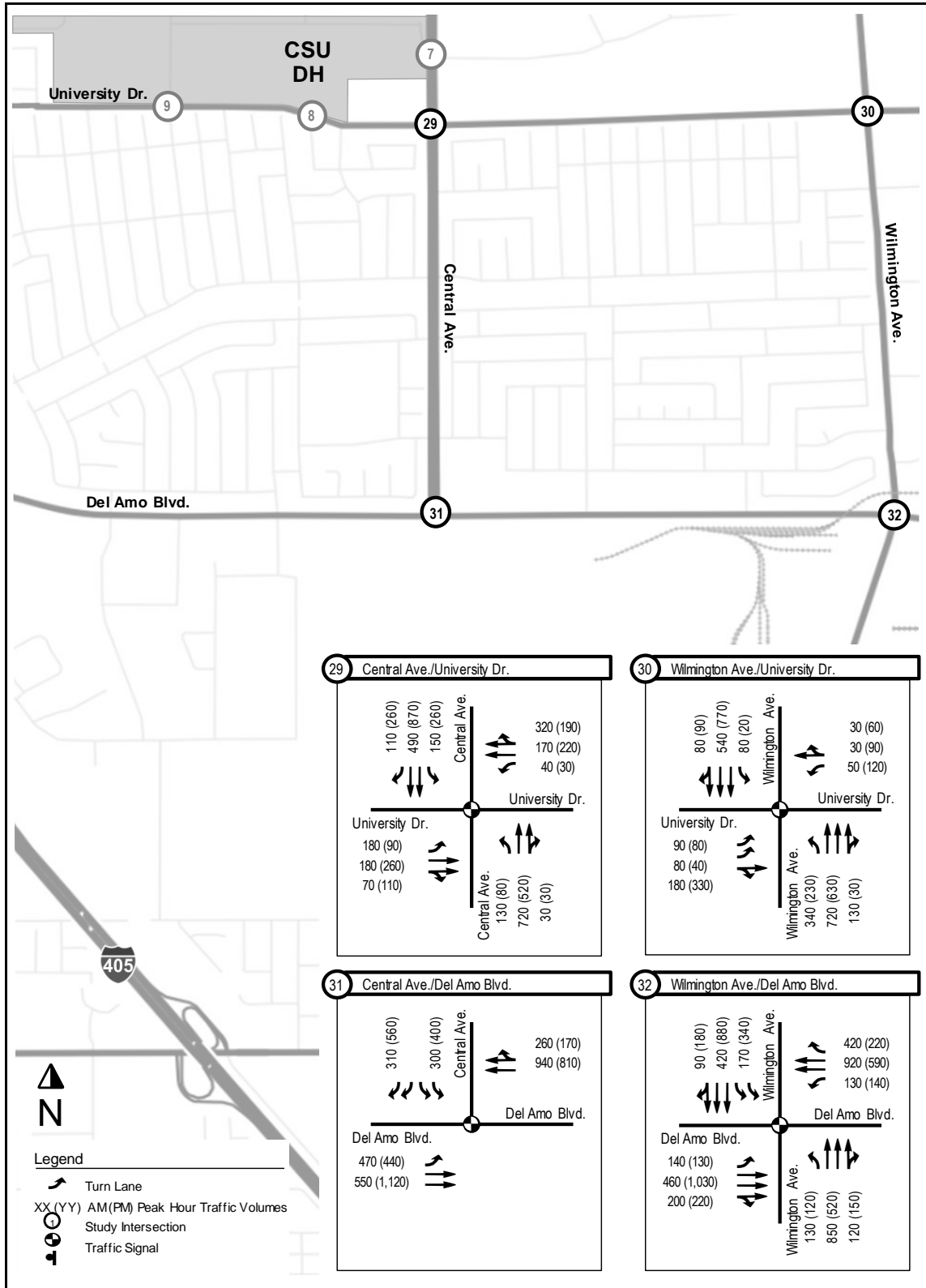


Exhibit 92: 2025 Weekday Plus Project Alternative 1 Traffic Volumes and Lane Configurations (Map F)

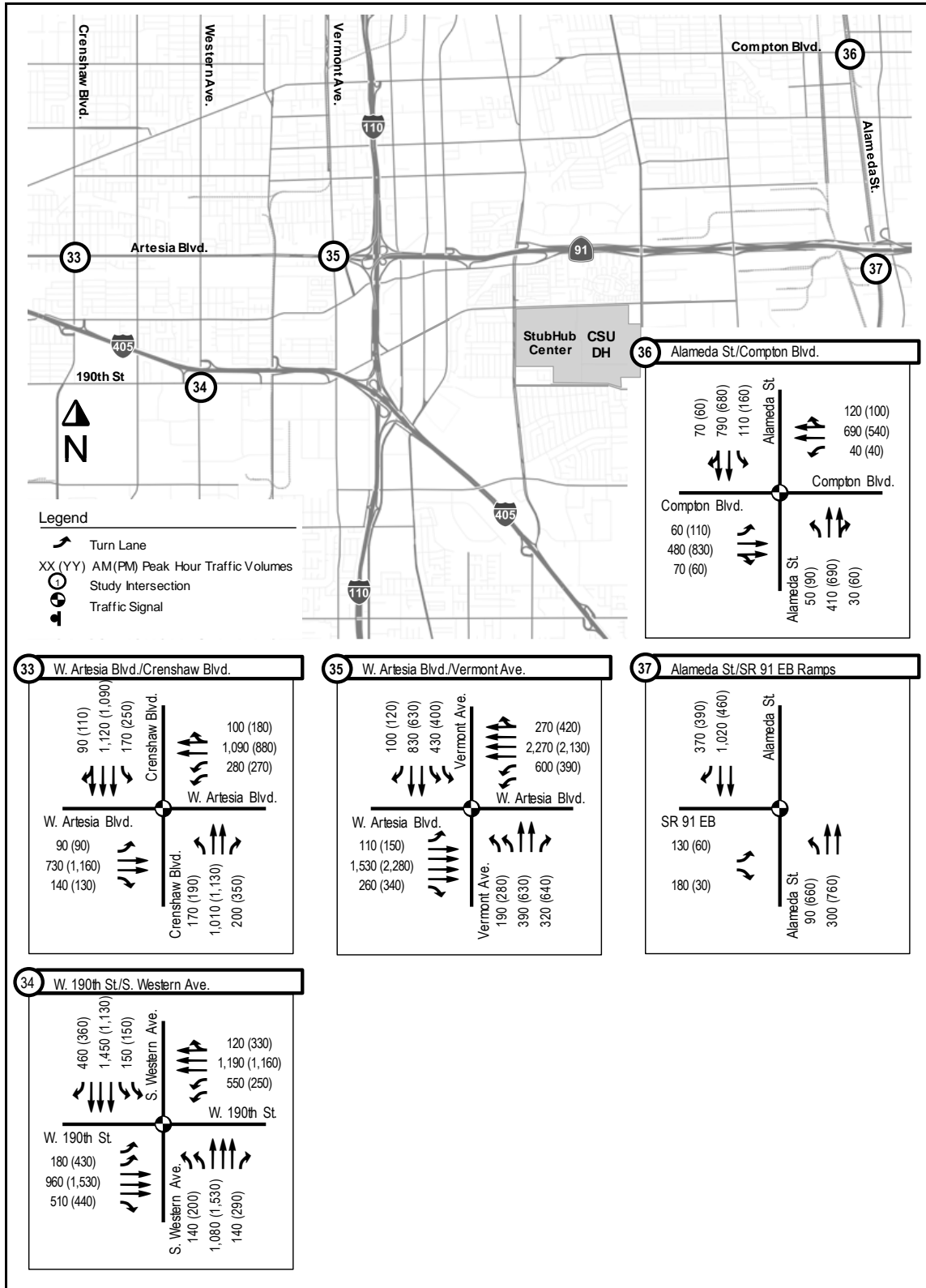


Exhibit 92: 2025 Weekday Plus Project Alternative 1 Traffic Volumes and Lane Configurations (Map G)

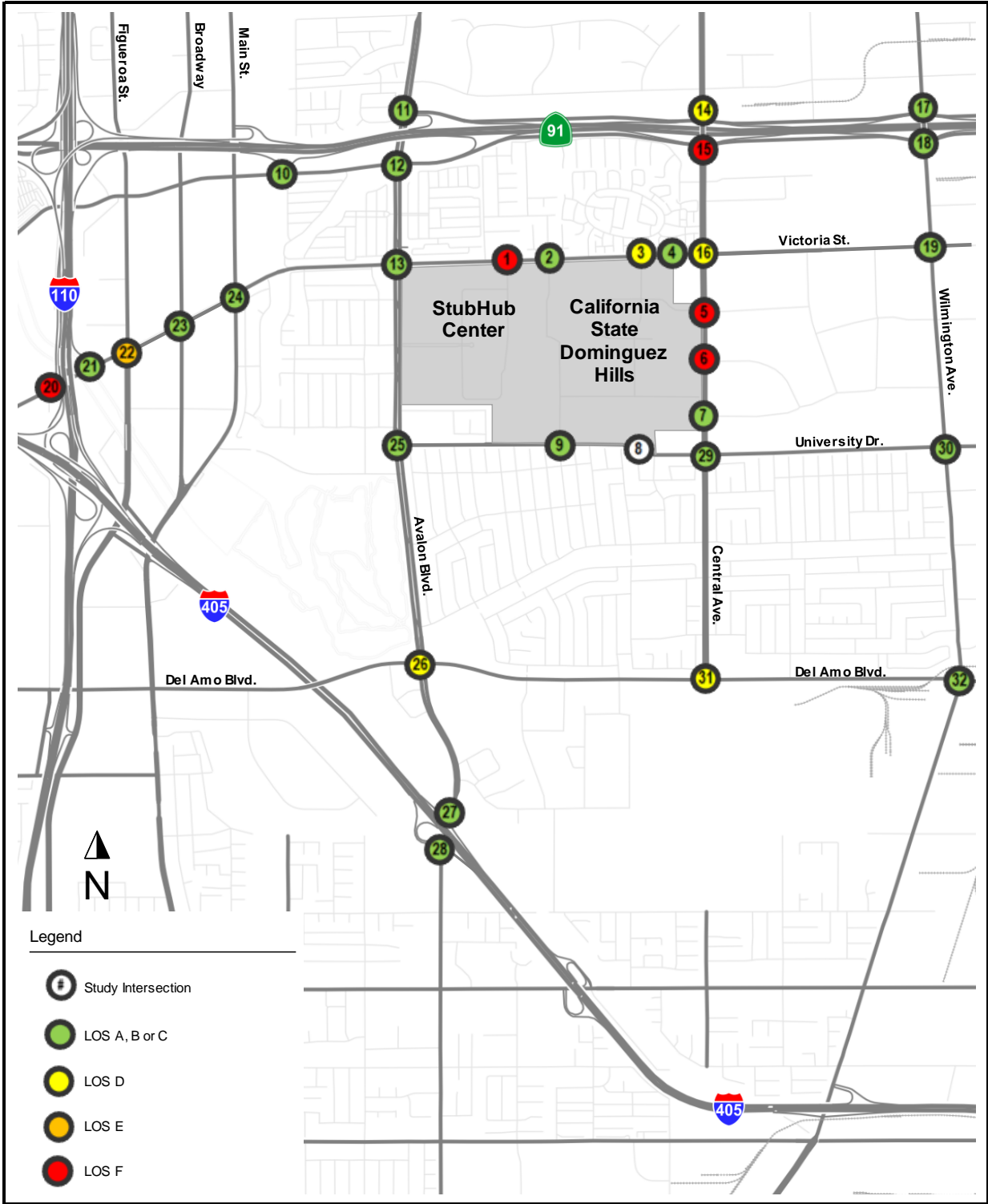


Exhibit 93: 2025 Weekday Plus Project Alternative 1 AM Peak Hour LOS (Map)

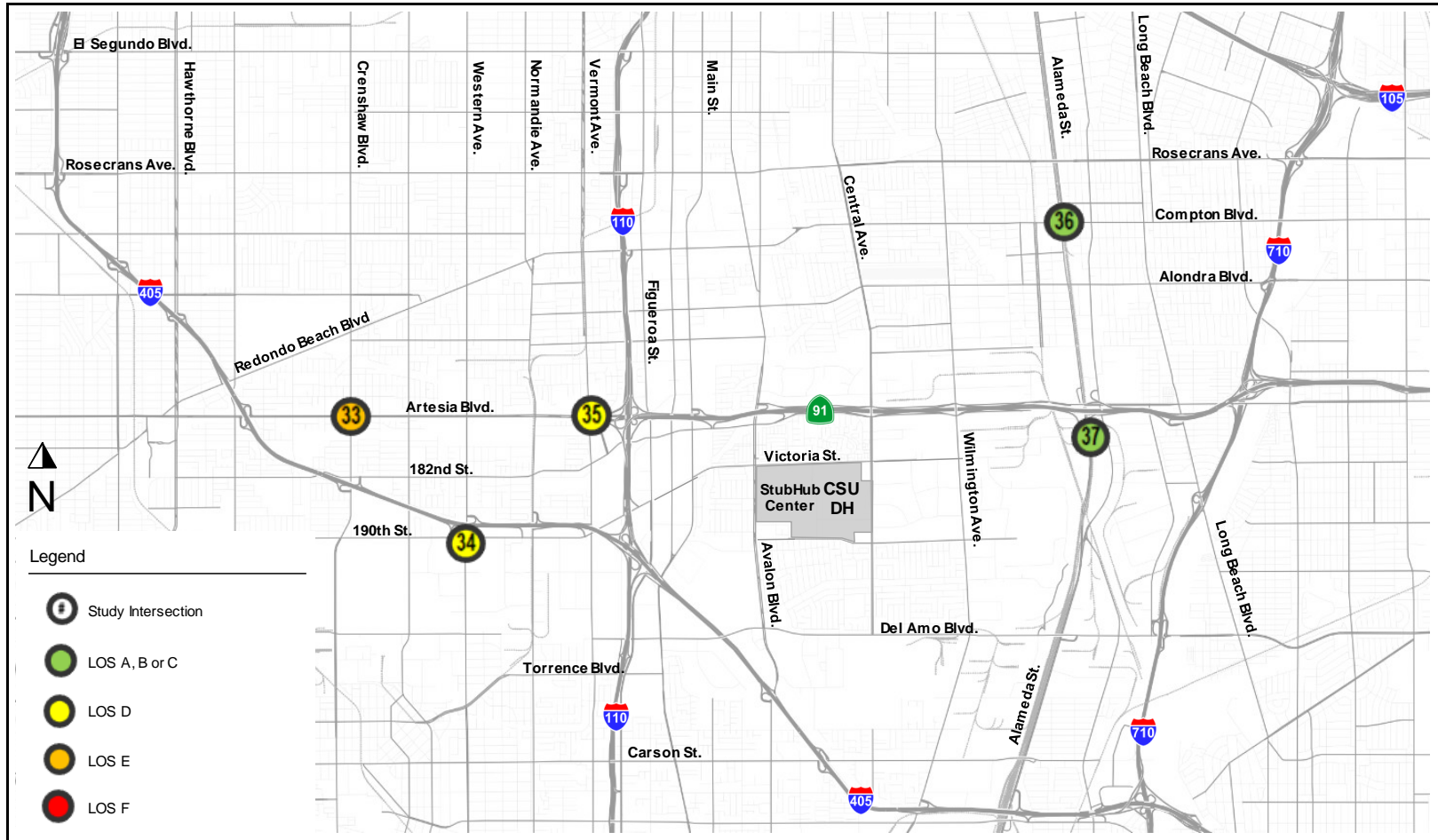


Exhibit 93: 2025 Weekday Plus Project Alternative 1 AM Peak Hour LOS (Map)

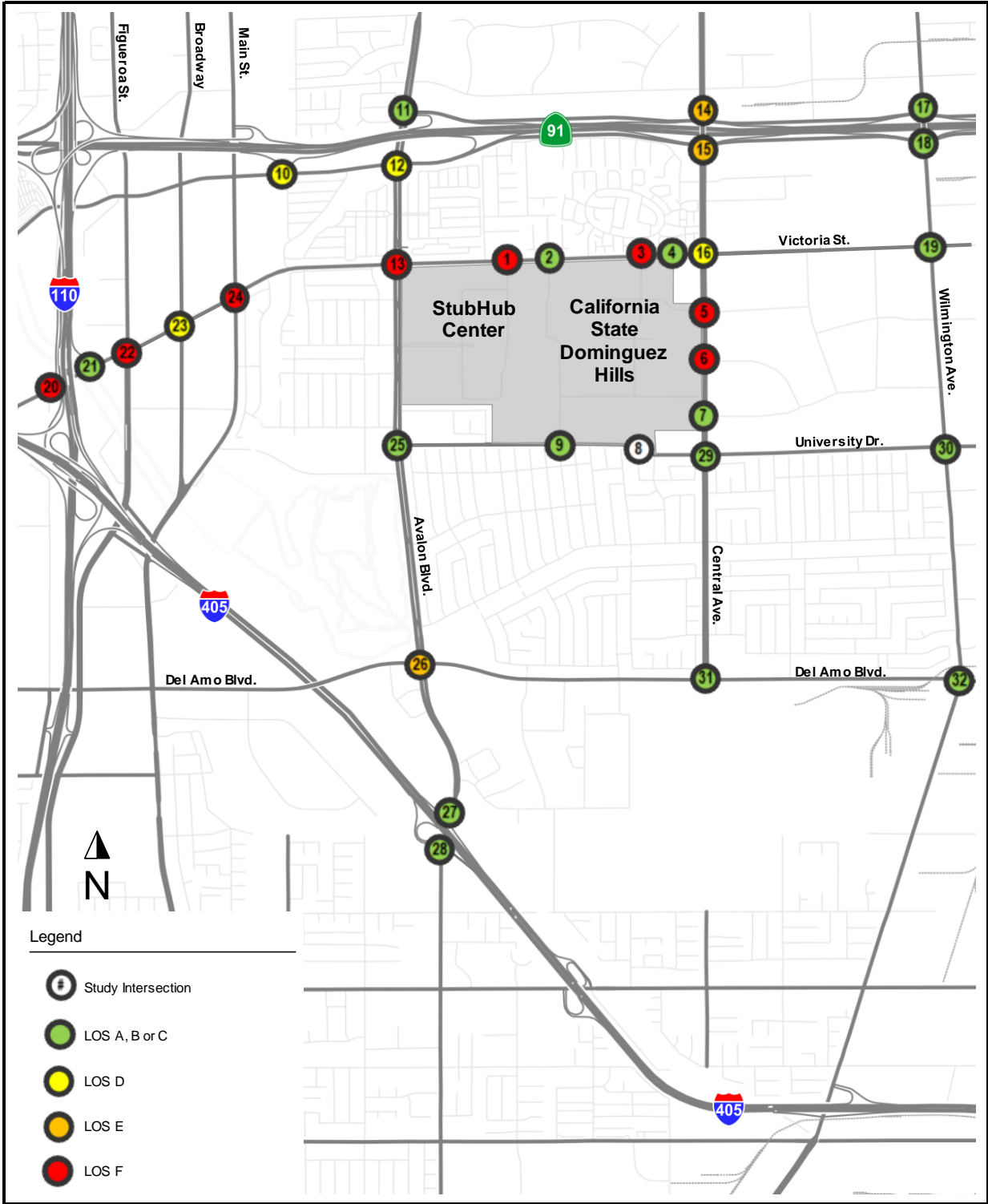


Exhibit 94: 2025 Weekday Plus Project Alternative 1 PM Peak Hour LOS (Map)

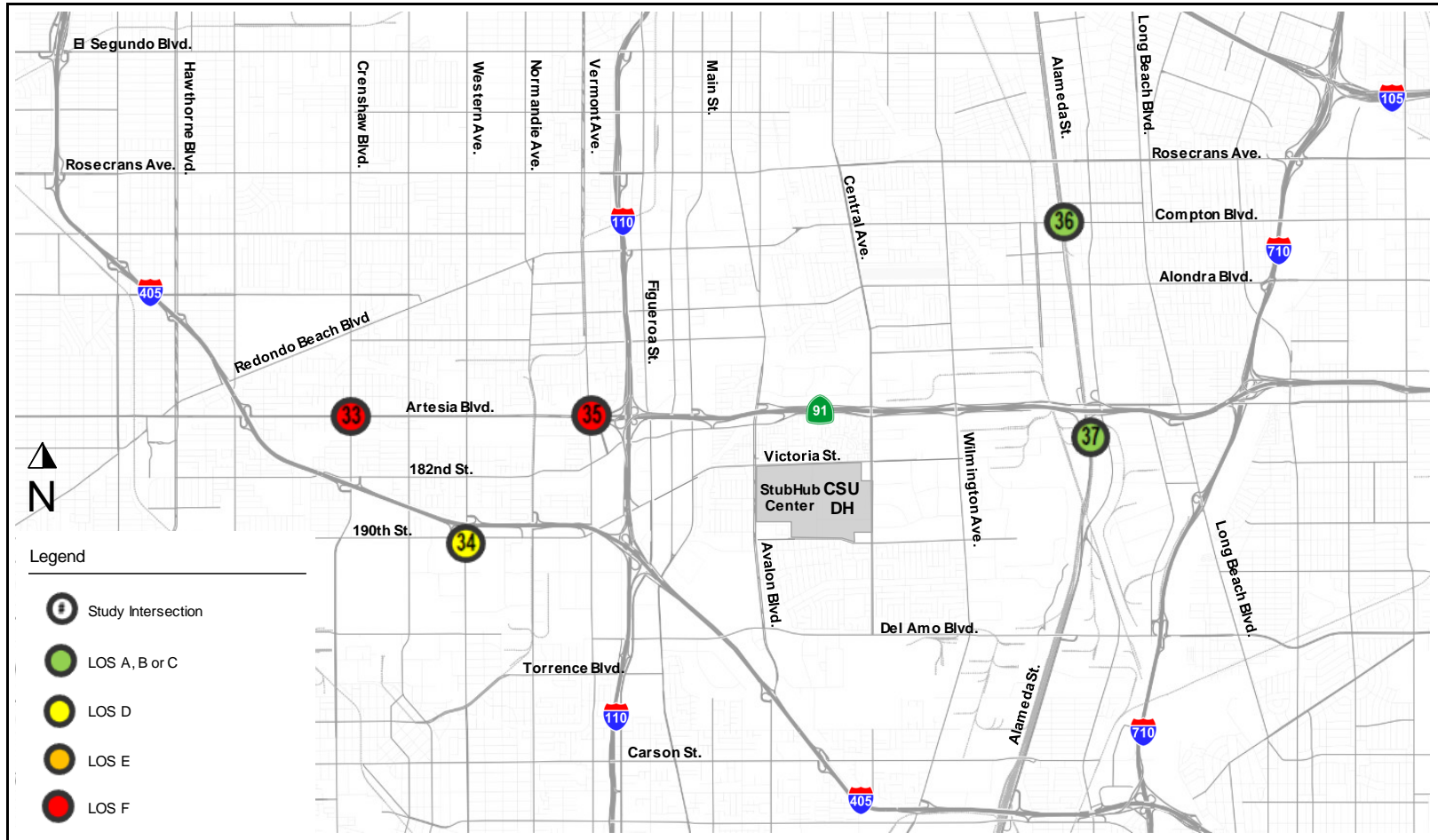


Exhibit 94: 2025 Weekday Plus Project Alternative 1 PM Peak Hour LOS (Map)

Study ID	Intersection Name	Control Type	2025 Scenarios					
			AM Peak Hour			PM Peak Hour		
			No Project LOS	Plus Project LOS	Project Has Significant Impact?	No Project LOS	Plus Project LOS	Project Has Significant Impact?
1	Victoria St./Drive D	TWSC	D	F	Yes	F	F	Yes
2	Victoria St./Tamcliff Ave.	Signalized	A	A	No	B	C	No
3	Victoria St./Birchknoll Dr.	Signalized	A	D	No	B	F	Yes
4	Victoria St./Project Service Rd.	TWSC	N/A	B	No	N/A	B	No
5	Central Ave./Charles Willard St.	TWSC	E	F	Yes	D	F	Yes
6	Central Ave./Beachey Pl.	TWSC	C	F	Yes	C	F	Yes
7	Central Ave./Glenn Curtiss St.	Signalized	A	B	No	A	B	No
8	University Dr./Birchknoll Dr. Ext.	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9	University Dr./Toro Center Dr.	TWSC	B	B	No	B	C	No
10	Albertoni St./SR 91 EB Ramps	Signalized	B	B	No	C	D	No
11	Avalon Blvd./SR 91 WB On-Ramp	Signalized	A	A	No	A	A	No
12	Avalon Blvd./Albertoni St.	Signalized	B	B	No	D	D	No
13	Avalon Blvd./Victoria St.	Signalized	B	C	No	D	F	Yes
14	Central Ave./Artesia Blvd. WB	Signalized	C	D	No	C	E	Yes
15	Central Ave./Albertoni St./Artesia Blvd. EB	Signalized	D	F	Yes	C	E	Yes
16	Central Ave./Victoria St.	Signalized	A	D	No	B	D	No
17	Wilmington Ave./Artesia Blvd. WB	Signalized	C	C	No	C	C	No
18	Wilmington Ave./Artesia Blvd. EB	Signalized	C	C	No	C	C	No
19	Wilmington Ave./Victoria St.	Signalized	A	A	No	A	A	No
20	I-110 SB Off-Ramp/190th St.	Signalized	F	F	Yes	F	F	Yes
21	I-110 NB On-Ramp/190th St.	Signalized	A	A	No	C	C	No
22	Figueroa St./190th St./Victoria St.	Signalized	D	E	Yes	D	F	Yes
23	Broadway/Victoria St.	Signalized	A	B	No	C	D	No
24	Main St./Victoria St.	Signalized	B	C	No	E	F	Yes
25	Avalon Blvd./University Dr.	Signalized	A	A	No	B	B	No
26	Avalon Blvd./Del Amo Blvd.	Signalized	D	D	No	E	E	No
27	Avalon Blvd./I-405 NB Ramps	Signalized	A	A	No	A	A	No
28	Avalon Blvd./I-405 SB Ramps	Signalized	A	A	No	A	A	No
29	Central Ave./University Dr.	Signalized	A	C	No	A	B	No
30	Wilmington Ave./University Dr.	Signalized	A	B	No	A	C	No
31	Central Ave./Del Amo Blvd.	Signalized	C	D	No	C	C	No
32	Wilmington Ave./Del Amo Blvd.	Signalized	B	C	No	C	C	No
33	W. Artesia Blvd./Crenshaw Blvd.	Signalized	E	E	No	F	F	No
34	W. 190th St./S. Western Ave.	Signalized	D	D	No	C	D	No
35	W. Artesia Blvd./Vermont Ave.	Signalized	D	D	No	F	F	No
36	Alameda St./Compton Blvd.	Signalized	B	B	No	C	C	No
37	Alameda St./SR 91 EB Ramps	Signalized	A	A	No	C	C	No

Exhibit 95: Determination of Intersection Impact for the 2025 Weekday Plus Project Alternative 1

10.1.3 2025 Weekday Plus Project Alternative 1 Freeway Level of Service

The Project LOS for the study freeway segments are shown in Exhibit 96. Exhibit 97 shows that the Project would have 33 freeway impacts in 2025, namely:

- SR-91 eastbound, Avalon Blvd. to Central Ave., during the PM peak hour
- SR-91 eastbound, Central Ave. to Wilmington Ave., during the PM peak hour
- SR-91 eastbound, Wilmington Ave. to Alameda St., during the PM peak hour
- SR-91 eastbound, Alameda St. to Alameda St./Santa Fe Ave., during the PM peak hour
- SR-91 eastbound, Alameda St./Santa Fe Ave. to Long Beach Blvd., during the PM peak hour
- SR-91 eastbound, Long Beach Blvd. to Jct. Rte. 710, during the PM peak hour
- I-110 northbound, Sepulveda Blvd. to Carson St., during the AM peak hour
- I-110 northbound, Carson St. to Torrance/Del Amo Blvd., during the both peak hours
- I-110 northbound, Torrance/Del Amo Blvd. to Jct. Rte. 405, during the both peak hours
- I-110 northbound, Jct. Rte. 405 to Jct. Rte. 91, during the AM peak hour
- I-405 northbound, Carson St. to Avalon Blvd., during the both peak hours
- I-405 northbound, Avalon Blvd. to Jct. Rte. 110, during the PM peak hour
- I-405 northbound, Jct. Rte. 110 to Vermont Ave., during the PM peak hour
- I-405 northbound, Normandie Ave. to Western Ave., during the PM peak hour
- I-405 northbound, Western Ave. to Crenshaw Blvd., during the PM peak hour
- I-405 northbound, Crenshaw Blvd. to Artesia Blvd., during the PM peak hour
- SR-91 westbound, Avalon Blvd. to Central Ave., during the AM peak hour
- SR-91 westbound, Central Ave. to Wilmington Ave., during the AM peak hour
- SR-91 westbound, Wilmington Ave. to Alameda St., during the AM peak hour
- SR-91 westbound, Alameda St. to Alameda St./Santa Fe Ave., during the AM peak hour
- SR-91 westbound, Long Beach Blvd. to Jct. Rte. 710, during the AM peak hour
- I-110 southbound, Sepulveda Blvd. to Carson St., during the PM peak hour
- I-110 southbound, Carson St. to Torrance/Del Amo Blvd., during the PM peak hour
- I-110 southbound, Torrance/Del Amo Blvd. to Jct. Rte. 405, during the both peak hours
- I-110 southbound, Jct. Rte. 405 to Jct. Rte. 91, during the both peak hours
- I-110 southbound, Redondo Beach Blvd. to Rosecrans Ave., during the AM peak hour
- I-110 southbound, Rosecrans Ave. to El Segundo Blvd., during the AM peak hour
- I-110 southbound, Century Blvd. to Manchester Ave., during the AM peak hour
- I-110 southbound, Slauson Ave. to 51st St., during the AM peak hour
- I-405 southbound, Carson St. to Avalon Blvd., during the PM peak hour
- I-405 southbound, Avalon Blvd. to Jct. Rte. 110, during the AM peak hour
- I-405 southbound, Jct. Rte. 110 to Vermont Ave., during the both peak hours
- I-405 southbound, Western Ave. to Crenshaw Blvd., during the AM peak hour

ID	CMP Station	Fwy Rte	Post Mile	Location	Northbound/Eastbound								Southbound/Westbound							
					AM Peak Hour				PM Peak Hour				AM Peak Hour				PM Peak Hour			
					Demand	Capacity	D/C	LOS	Demand	Capacity	D/C	LOS	Demand	Capacity	D/C	LOS	Demand	Capacity	D/C	LOS
91-1		91	6.344	Jct. Rte. 110 to Avalon Blvd.	7,060	12,000	0.59	C	14,530	12,000	1.21	F(0)	9,370	4,000	2.34	F(3)	6,340	4,000	1.59	F(3)
91-2		91	7.426	Avalon Blvd. to Central Ave.	7,280	10,000	0.73	C	14,870	10,000	1.49	F(3)	9,650	10,000	0.97	E	6,600	10,000	0.66	C
91-3		91	8.435	Central Ave. to Wilmington Ave.	7,400	10,000	0.74	C	15,120	10,000	1.51	F(3)	9,940	10,000	0.99	E	6,750	10,000	0.68	C
91-4		91	9.162	Wilmington Ave. to Alameda St.	7,700	10,000	0.77	C	15,720	10,000	1.57	F(3)	10,240	10,000	1.02	F(0)	6,950	10,000	0.70	C
91-5		91	10.271	Alameda St. to Alameda St./Santa Fe Ave.	7,990	8,000	1.00	E	16,400	8,000	2.05	F(3)	10,740	8,000	1.34	F(1)	7,250	8,000	0.91	D
91-6	1033	91	10.41	Alameda St./Santa Fe Ave. to Long Beach Blvd.	8,290	12,000	0.69	C	17,000	12,000	1.42	F(2)	11,150	12,000	0.93	D	7,550	12,000	0.63	C
91-7		91	11.096	Long Beach Blvd. to Jct. Rte. 710	8,290	12,000	0.69	C	17,000	12,000	1.42	F(2)	11,130	10,000	1.11	F(0)	7,550	10,000	0.76	C
91-8		91	11.681	Jct. Rte. 710 to Cherry Ave.	8,450	10,000	0.85	D	12,110	10,000	1.21	F(0)	13,630	10,000	1.36	F(2)	9,580	10,000	0.96	E
91-9	1034	91	13.094	Cherry Ave. to Paramount Blvd.	8,550	10,000	0.86	D	12,310	10,000	1.23	F(0)	13,820	12,000	1.15	F(0)	9,680	12,000	0.81	D
91-10		91	13.594	Paramount Blvd. to Downey Ave.	8,350	10,000	0.84	D	11,900	10,000	1.19	F(0)	13,420	10,000	1.34	F(1)	9,470	10,000	0.95	E
91-11		91	14.103	Downey Ave. to Jct. Rte. 19	8,340	12,000	0.70	C	11,900	12,000	0.99	E	13,310	10,000	1.33	F(1)	9,370	10,000	0.94	E
91-12		91	14.618	Jct. Rte. 19 to Clark Ave.	7,640	10,000	0.76	C	10,990	10,000	1.10	F(0)	12,400	8,000	1.55	F(3)	8,660	8,000	1.08	F(0)
91-13		91	15.105	Clark Ave. to Bellflower Blvd.	8,140	12,000	0.68	C	11,590	12,000	0.97	E	13,000	10,000	1.30	F(1)	9,160	10,000	0.92	D
91-14		91	15.614	Bellflower Blvd. to Jct. Rte. 605	8,040	12,000	0.67	C	11,480	12,000	0.96	E	12,890	10,000	1.29	F(1)	9,060	10,000	0.91	D
110-1	1045	110	1.23	Channel St. to C St.	4,610	8,000	0.58	C	3,300	8,000	0.41	B	3,670	8,000	0.46	B	4,420	8,000	0.55	C
110-2		110	2.771	C St. to Anaheim St.	4,810	10,000	0.48	B	3,500	10,000	0.35	A	3,880	8,000	0.49	B	4,630	8,000	0.58	C
110-3		110	3.264	Anaheim St. to Jct. Rte. 1	5,220	10,000	0.52	B	3,710	10,000	0.37	B	4,180	10,000	0.42	B	5,040	10,000	0.50	B
110-4		110	4.061	Jct. Rte. 1 to Sepulveda Blvd.	7,280	8,000	0.91	D	5,260	8,000	0.66	C	5,810	8,000	0.73	C	7,080	8,000	0.89	D
110-5		110	5.451	Sepulveda Blvd. to Carson St.	9,410	8,000	1.18	F(0)	6,780	8,000	0.85	D	7,530	8,000	0.94	E	9,220	8,000	1.15	F(0)
110-6		110	7.016	Carson St. to Torrance/Del Amo Blvd.	10,810	8,000	1.35	F(1)	7,880	8,000	0.99	E	8,740	8,000	1.09	F(0)	10,630	8,000	1.33	F(1)
110-7		110	8.028	Torrance/Del Amo Blvd. to Jct. Rte. 405	11,410	8,000	1.43	F(2)	8,280	8,000	1.04	F(0)	9,240	8,000	1.16	F(0)	11,230	8,000	1.40	F(2)
110-8		110	8.775	Jct. Rte. 405 to Jct. Rte. 91	14,010	12,000	1.17	F(0)	10,080	12,000	0.84	D	11,240	8,000	1.41	F(2)	13,730	8,000	1.72	F(3)
110-9		110	9.87	Jct. Rte. 91 to Redondo Beach Blvd.	9,200	12,000	0.77	C	9,400	12,000	0.78	D	10,110	12,000	0.84	D	9,740	12,000	0.81	D
110-10		110	11.239	Redondo Beach Blvd. to Rosecrans Ave.	9,500	11,000	0.86	D	9,800	11,000	0.89	D	10,510	11,000	0.96	E	10,040	11,000	0.91	D
110-11		110	11.891	Rosecrans Ave. to El Segundo Blvd.	9,900	11,000	0.90	D	10,190	11,000	0.93	D	11,010	11,000	1.00	E	10,540	11,000	0.96	E
110-12		110	12.898	El Segundo Blvd. to Jct. Rte. 105	10,090	11,000	0.92	D	10,380	11,000	0.94	E	11,210	13,000	0.86	D	10,740	13,000	0.83	D
110-13		110	13.82	Jct. Rte. 105 to Century Blvd.	11,280	14,000	0.81	D	11,560	14,000	0.83	D	12,400	14,000	0.89	D	11,940	14,000	0.85	D
110-14		110	14.967	Century Blvd. to Manchester Ave.	12,080	12,000	1.01	F(0)	12,360	12,000	1.03	F(0)	13,300	12,000	1.11	F(0)	12,840	12,000	1.07	F(0)
110-15	1046	110	15.976	Manchester Ave. to Florence Ave.	11,780	12,000	0.98	E	12,050	12,000	1.00	E	12,970	12,000	1.08	F(0)	12,420	12,000	1.04	F(0)
110-16		110	16.981	Florence Ave. to Gage Ave.	12,170	12,000	1.01	F(0)	12,430	12,000	1.04	F(0)	13,060	12,000	1.09	F(0)	12,610	12,000	1.05	F(0)
110-17	1047	110	17.514	Gage Ave. to Slauson Ave.	12,060	12,000	1.01	F(0)	12,320	12,000	1.03	F(0)	13,060	12,000	1.09	F(0)	12,510	12,000	1.04	F(0)
110-18		110	17.98	Slauson Ave. to 51st St.	11,660	10,000	1.17	F(0)	11,820	10,000	1.18	F(0)	12,550	10,000	1.26	F(1)	12,000	10,000	1.20	F(0)
110-19		110	18.495	51st St. to Vernon Ave.	11,860	10,000	1.19	F(0)	12,120	10,000	1.21	F(0)	12,750	12,000	1.06	F(0)	12,300	12,000	1.03	F(0)
110-20		110	18.998	Vernon Ave. to Martin Luther King Jr. Blvd.	11,860	12,000	0.99	E	12,110	12,000	1.01	F(0)	12,740	12,000	1.06	F(0)	12,300	12,000	1.03	F(0)
110-21		110	19.502	Martin Luther King Jr. Blvd. to Exposition Blvd.	10,750	12,000	0.90	D	10,910	12,000	0.91	D	11,530	10,000	1.15	F(0)	11,090	10,000	1.11	F(0)
110-22		110	19.996	Exposition Blvd. to Jct. Rte. 10	10,340	12,000	0.86	D	10,590	12,000	0.88	D	11,240	12,000	0.94	E	10,800	12,000	0.90	D
405-1		405	3.324	Lakewood Blvd. to Cherry Ave.	12,570	10,000	1.26	F(1)	10,750	10,000	1.08	F(0)	9,440	10,000	0.94	E	11,770	10,000	1.18	F(0)
405-2		405	4.879	Cherry Ave. to Orange Ave.	13,280	10,000	1.33	F(1)	11,260	10,000	1.13	F(0)	9,840	8,000	1.23	F(0)	12,370	8,000	1.55	F(3)
405-3		405	5.388	Orange Ave. to Atlantic Ave.	13,780	8,000	1.72	F(3)	11,760	8,000	1.47	F(3)	10,240	8,000	1.28	F(1)	12,880	8,000	1.61	F(3)
405-4		405	6.076	Atlantic Ave. to Long Beach Blvd	13,590	8,000	1.70	F(3)	11,560	8,000	1.45	F(2)	10,140	12,000	0.85	D	12,690	12,000	1.06	F(0)
405-5		405	6.34	Long Beach Blvd to Jct. Rte. 710	13,500	12,000	1.13	F(0)	11,470	12,000	0.96	E	10,050	10,000	1.01	F(0)	12,590	10,000	1.26	F(1)
405-6	1066	405	7.596	Jct. Rte. 710 to Alameda St.	12,330	10,000	1.23	F(0)	10,490	10,000	1.05	F(0)	9,160	10,000	0.92	D	11,520	10,000	1.15	F(0)
405-7		405	8.784	Alameda St. to Wilmington Ave.	11,940	10,000	1.19	F(0)	10,100	10,000	1.01	F(0)	8,870	10,000	0.89	D	11,140	10,000	1.11	F(0)
405-8		405	9.556	Wilmington Ave. to Carson St.	11,140	8,000	1.39	F(2)	9,600	8,000	1.20	F(0)	9,470	8,000	1.18	F(0)	11,540	8,000	1.44	F(2)
405-9		405	10.541	Carson St. to Avalon Blvd.	10,940	8,000	1.37	F(2)	9,400	8,000	1.18	F(0)	9,370	8,000	1.17	F(0)	11,340	8,000	1.42	F(2)
405-10	1067	405	11.224	Avalon Blvd. to Jct. Rte. 110	11,700	10,000	1.17	F(0)	10,170	10,000	1.02	F(0)	10,060	10,000	1.01	F(0)	12,130	10,000	1.21	F(0)
405-11		405	12.97	Jct. Rte. 110 to Vermont Ave.	11,500	10,000	1.15	F(0)	10,070	10,000	1.01	F(0)	8,660	8,000	1.08	F(0)	10,630	8,000	1.33	F(1)
405-12		405	13.28	Vermont Ave. to Normandie Ave.	12,000	12,000	1.00	E	10,570	12,000	0.88	D	9,040	10,000	0.90	D	11,120	10,000	1.11	F(0)
405-13		405	13.826	Normandie Ave. to Western Ave.	11,300	10,000	1.13	F(0)	9,870	10,000	0.99	E	8,420	8,000	1.05	F(0)	10,400	8,000	1.30	F(1)
405-14		405	14.398	Western Ave. to Crenshaw Blvd.	10,800	8,000	1.35	F(1)	9,470	8,000	1.18	F(0)	8,120	8,000	1.02	F(0)	10,000	8,000	1.25	F(0)
405-15		405	15.447	Crenshaw Blvd. to Artesia Blvd.	10,580	8,000	1.32	F(1)	9,240	8,000	1.16	F(0)	7,910	8,000	0.99	E	9,790	8,000	1.22	F(0)
405-16		405	16.573	Artesia Blvd. to Hawthorne Blvd.	10,670	10,000	1.07	F(0)	9,320	10,000	0.93	D	7,990	8,000	1.00	E	9,880	8,000	1.24	F(0)
405-17		405	17.589	Hawthorne Blvd. to Inglewood Ave.	11,160	10,000	1.12	F(0)	9,810	10,000	0.98	E	8,390	8,000	1.05	F(0)	10,270	8,000	1.28	F(1)
405-18	1068	405	18.233	Inglewood Ave. to Rosecrans Ave.	11,650	10,000	1.17	F(0)	10,190	10,000	1.02	F(0)	8,770	10,000	0.88	D	10,760	10,000	1.08	F(0)
710-1		710	12.97	Jct. Rte. 91 to Alondra Blvd.	11,440	12,000	0.95	E	17,780	12,000	1.48	F(3)	11,210	12,000	0.93	D	8,970	12,000	0.75	C
710-2		710	13.945	Alondra Blvd. to Jct. Rte. 105	11,830	12,000	0.99	E	18,370	12,000	1.53	F(3)	11,600	12,000	0.97	E	9,260	12,000	0.77	C

Note: D/C is demand-to-capacity ratio.

Exhibit 96: 2025 Weekday Plus Project Alternative 1 Level of Service (LOS) for Study Freeway Locations

Northbound/Eastbound

ID	CMP Station	Fwy Rte	Post Mile	Location	2025 No Project				2025 Plus Project				2025 Increase in D/C Ratio with Project		2025 Project Has Significant Cumulative Impact?	
					AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM	PM	AM	PM
					D/C	LOS	D/C	LOS	D/C	LOS	D/C	LOS				
91-1		91	6.344	Jct. Rte. 110 to Avalon Blvd.	0.58	C	1.20	F(0)	0.59	C	1.21	F(0)	0.01	0.01	No	No
91-2		91	7.426	Avalon Blvd. to Central Ave.	0.72	C	1.47	F(3)	0.73	C	1.49	F(3)	0.01	0.02	No	Yes
91-3		91	8.435	Central Ave. to Wilmington Ave.	0.73	C	1.49	F(3)	0.74	C	1.51	F(3)	0.01	0.02	No	Yes
91-4		91	9.162	Wilmington Ave. to Alameda St.	0.76	C	1.55	F(3)	0.77	C	1.57	F(3)	0.01	0.02	No	Yes
91-5		91	10.271	Alameda St. to Alameda St./Santa F	0.99	E	2.03	F(3)	1.00	E	2.05	F(3)	0.01	0.02	No	Yes
91-6	1033	91	10.41	Alameda St./Santa Fe Ave. to Long	0.68	C	1.40	F(2)	0.69	C	1.42	F(2)	0.01	0.02	No	Yes
91-7		91	11.096	Long Beach Blvd. to Jct. Rte. 710	0.68	C	1.40	F(2)	0.69	C	1.42	F(2)	0.01	0.02	No	Yes
91-8		91	11.681	Jct. Rte. 710 to Cherry Ave.	0.84	D	1.20	F(0)	0.85	D	1.21	F(0)	0.01	0.01	No	No
91-9	1034	91	13.094	Cherry Ave. to Paramount Blvd.	0.85	D	1.22	F(0)	0.86	D	1.23	F(0)	0.01	0.01	No	No
91-10		91	13.594	Paramount Blvd. to Downey Ave.	0.83	D	1.18	F(0)	0.84	D	1.19	F(0)	0.01	0.01	No	No
91-11		91	14.103	Downey Ave. to Jct. Rte. 19	0.69	C	0.98	E	0.70	C	0.99	E	0.01	0.01	No	No
91-12		91	14.618	Jct. Rte. 19 to Clark Ave.	0.76	C	1.09	F(0)	0.76	C	1.10	F(0)	0.00	0.01	No	No
91-13		91	15.105	Clark Ave. to Bellflower Blvd.	0.68	C	0.96	E	0.68	C	0.97	E	0.00	0.01	No	No
91-14		91	15.614	Bellflower Blvd. to Jct. Rte. 605	0.67	C	0.95	E	0.67	C	0.96	E	0.00	0.01	No	No
110-1	1045	110	1.23	Channel St. to C St.	0.56	C	0.40	B	0.58	C	0.41	B	0.02	0.01	No	No
110-2		110	2.771	C St. to Anaheim St.	0.47	B	0.34	A	0.48	B	0.35	A	0.01	0.01	No	No
110-3		110	3.264	Anaheim St. to Jct. Rte. 1	0.51	B	0.36	B	0.52	B	0.37	B	0.01	0.01	No	No
110-4		110	4.061	Jct. Rte. 1 to Sepulveda Blvd.	0.89	D	0.64	C	0.91	D	0.66	C	0.02	0.02	No	No
110-5		110	5.451	Sepulveda Blvd. to Carson St.	1.15	F(0)	0.83	D	1.18	F(0)	0.85	D	0.03	0.02	Yes	No
110-6		110	7.016	Carson St. to Torrance/Del Amo Blvd	1.33	F(1)	0.96	E	1.35	F(1)	0.99	E	0.02	0.03	Yes	Yes
110-7		110	8.028	Torrance/Del Amo Blvd. to Jct. Rte.	1.40	F(2)	1.01	F(0)	1.43	F(2)	1.04	F(0)	0.03	0.03	Yes	Yes
110-8		110	8.775	Jct. Rte. 405 to Jct. Rte. 91	1.15	F(0)	0.83	D	1.17	F(0)	0.84	D	0.02	0.01	Yes	No
110-9		110	9.87	Jct. Rte. 91 to Redondo Beach Blvd.	0.76	C	0.77	C	0.77	C	0.78	D	0.01	0.01	No	No
110-10		110	11.239	Redondo Beach Blvd. to Rosecrans	0.85	D	0.87	D	0.86	D	0.89	D	0.01	0.02	No	No
110-11		110	11.891	Rosecrans Ave. to El Segundo Blvd.	0.89	D	0.91	D	0.90	D	0.93	D	0.01	0.02	No	No
110-12		110	12.898	El Segundo Blvd. to Jct. Rte. 105	0.91	D	0.93	D	0.92	D	0.94	E	0.01	0.01	No	No
110-13		110	13.82	Jct. Rte. 105 to Century Blvd.	0.80	D	0.81	D	0.81	D	0.83	D	0.01	0.02	No	No
110-14		110	14.967	Century Blvd. to Manchester Ave.	1.00	E	1.02	F(0)	1.01	F(0)	1.03	F(0)	0.01	0.01	No	No
110-15	1046	110	15.976	Manchester Ave. to Florence Ave.	0.98	E	0.99	E	0.98	E	1.00	E	0.00	0.01	No	No
110-16		110	16.981	Florence Ave. to Gage Ave.	1.01	F(0)	1.03	F(0)	1.01	F(0)	1.04	F(0)	0.00	0.01	No	No
110-17	1047	110	17.514	Gage Ave. to Slauson Ave.	1.00	E	1.02	F(0)	1.01	F(0)	1.03	F(0)	0.01	0.01	No	No
110-18		110	17.98	Slauson Ave. to 51st St.	1.16	F(0)	1.17	F(0)	1.17	F(0)	1.18	F(0)	0.01	0.01	No	No
110-19		110	18.495	51st St. to Vernon Ave.	1.18	F(0)	1.20	F(0)	1.19	F(0)	1.21	F(0)	0.01	0.01	No	No
110-20		110	18.998	Vernon Ave. to Martin Luther King Jr	0.98	E	1.00	E	0.99	E	1.01	F(0)	0.01	0.01	No	No
110-21		110	19.502	Martin Luther King Jr. Blvd. to Expos	0.89	D	0.90	D	0.90	D	0.91	D	0.01	0.01	No	No
110-22		110	19.996	Exposition Blvd. to Jct. Rte. 10	0.86	D	0.88	D	0.86	D	0.88	D	0.00	0.00	No	No
405-1		405	3.324	Lakewood Blvd. to Cherry Ave.	1.25	F(0)	1.07	F(0)	1.26	F(1)	1.08	F(0)	0.01	0.01	No	No
405-2		405	4.879	Cherry Ave. to Orange Ave.	1.32	F(1)	1.12	F(0)	1.33	F(1)	1.13	F(0)	0.01	0.01	No	No
405-3		405	5.388	Orange Ave. to Atlantic Ave.	1.71	F(3)	1.46	F(3)	1.72	F(3)	1.47	F(3)	0.01	0.01	No	No
405-4		405	6.076	Atlantic Ave. to Long Beach Blvd	1.69	F(3)	1.44	F(2)	1.70	F(3)	1.45	F(2)	0.01	0.01	No	No
405-5		405	6.34	Long Beach Blvd to Jct. Rte. 710	1.12	F(0)	0.95	E	1.13	F(0)	0.96	E	0.01	0.01	No	No
405-6	1066	405	7.596	Jct. Rte. 710 to Alameda St.	1.22	F(0)	1.04	F(0)	1.23	F(0)	1.05	F(0)	0.01	0.01	No	No
405-7		405	8.784	Alameda St. to Wilmington Ave.	1.18	F(0)	1.00	E	1.19	F(0)	1.01	F(0)	0.01	0.01	No	No
405-8		405	9.556	Wilmington Ave. to Carson St.	1.38	F(2)	1.19	F(0)	1.39	F(2)	1.20	F(0)	0.01	0.01	No	No
405-9		405	10.541	Carson St. to Avalon Blvd.	1.35	F(1)	1.16	F(0)	1.37	F(2)	1.18	F(0)	0.02	0.02	Yes	Yes
405-10	1067	405	11.224	Avalon Blvd. to Jct. Rte. 110	1.16	F(0)	1.00	E	1.17	F(0)	1.02	F(0)	0.01	0.02	No	Yes
405-11		405	12.97	Jct. Rte. 110 to Vermont Ave.	1.14	F(0)	0.99	E	1.15	F(0)	1.01	F(0)	0.01	0.02	No	Yes
405-12		405	13.28	Vermont Ave. to Normandie Ave.	0.99	E	0.87	D	1.00	E	0.88	D	0.01	0.01	No	No
405-13		405	13.826	Normandie Ave. to Western Ave.	1.12	F(0)	0.97	E	1.13	F(0)	0.99	E	0.01	0.02	No	Yes
405-14		405	14.398	Western Ave. to Crenshaw Blvd.	1.34	F(1)	1.16	F(0)	1.35	F(1)	1.18	F(0)	0.01	0.02	No	Yes
405-15		405	15.447	Crenshaw Blvd. to Artesia Blvd.	1.31	F(1)	1.14	F(0)	1.32	F(1)	1.16	F(0)	0.01	0.02	No	Yes
405-16		405	16.573	Artesia Blvd. to Hawthorne Blvd.	1.06	F(0)	0.92	D	1.07	F(0)	0.93	D	0.01	0.01	No	No
405-17		405	17.589	Hawthorne Blvd. to Inglewood Ave.	1.11	F(0)	0.97	E	1.12	F(0)	0.98	E	0.01	0.01	No	No
405-18	1068	405	18.233	Inglewood Ave. to Rosecrans Ave.	1.16	F(0)	1.01	F(0)	1.17	F(0)	1.02	F(0)	0.01	0.01	No	No
710-1		710	12.97	Jct. Rte. 91 to Alondra Blvd.	0.95	E	1.48	F(3)	0.95	E	1.48	F(3)	0.00	0.00	No	No
710-2		710	13.945	Alondra Blvd. to Jct. Rte. 105	0.98	E	1.53	F(3)	0.99	E	1.53	F(3)	0.01	0.00	No	No

Note: D/C is demand-to-capacity ratio.

Exhibit 97: Determination of Freeway Impact for 2025 Weekday Plus Project Alternative 1

Southbound/Wesbound

ID	CMP Station	Fwy Rte	Post Mile	Location	2025 No Project				2025 Plus Project				2025 Increase in D/C Ratio with Project		2025 Project Has Significant Cumulative Impact?	
					AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM	PM	AM	PM
					D/C	LOS	D/C	LOS	D/C	LOS	D/C	LOS				
91-1		91	6.344	Jct. Rte. 110 to Avalon Blvd.	2.33	F(3)	1.58	F(3)	2.34	F(3)	1.59	F(3)	0.01	0.01	No	No
91-2		91	7.426	Avalon Blvd. to Central Ave.	0.95	E	0.65	C	0.97	E	0.66	C	0.02	0.01	Yes	No
91-3		91	8.435	Central Ave. to Wilmington Ave.	0.97	E	0.66	C	0.99	E	0.68	C	0.02	0.02	Yes	No
91-4		91	9.162	Wilmington Ave. to Alameda St.	1.00	E	0.68	C	1.02	F(0)	0.70	C	0.02	0.02	Yes	No
91-5		91	10.271	Alameda St. to Alameda St./Santa F	1.31	F(1)	0.89	D	1.34	F(1)	0.91	D	0.03	0.02	Yes	No
91-6	1033	91	10.41	Alameda St./Santa Fe Ave. to Long	0.91	D	0.62	C	0.93	D	0.63	C	0.02	0.01	No	No
91-7		91	11.096	Long Beach Blvd. to Jct. Rte. 710	1.09	F(0)	0.74	C	1.11	F(0)	0.76	C	0.02	0.02	Yes	No
91-8		91	11.681	Jct. Rte. 710 to Cherry Ave.	1.35	F(1)	0.95	E	1.36	F(2)	0.96	E	0.01	0.01	No	No
91-9	1034	91	13.094	Cherry Ave. to Paramount Blvd.	1.14	F(0)	0.80	D	1.15	F(0)	0.81	D	0.01	0.01	No	No
91-10		91	13.594	Paramount Blvd. to Downey Ave.	1.33	F(1)	0.94	E	1.34	F(1)	0.95	E	0.01	0.01	No	No
91-11		91	14.103	Downey Ave. to Jct. Rte. 19	1.32	F(1)	0.93	D	1.33	F(1)	0.94	E	0.01	0.01	No	No
91-12		91	14.618	Jct. Rte. 19 to Clark Ave.	1.54	F(3)	1.08	F(0)	1.55	F(3)	1.08	F(0)	0.01	0.00	No	No
91-13		91	15.105	Clark Ave. to Bellflower Blvd.	1.29	F(1)	0.91	D	1.30	F(1)	0.92	D	0.01	0.01	No	No
91-14		91	15.614	Bellflower Blvd. to Jct. Rte. 605	1.28	F(1)	0.90	D	1.29	F(1)	0.91	D	0.01	0.01	No	No
110-1	1045	110	1.23	Channel St. to C St.	0.45	B	0.54	B	0.46	B	0.55	C	0.01	0.01	No	No
110-2		110	2.771	C St. to Anaheim St.	0.48	B	0.56	C	0.49	B	0.58	C	0.01	0.02	No	No
110-3		110	3.264	Anaheim St. to Jct. Rte. 1	0.41	B	0.49	B	0.42	B	0.50	B	0.01	0.01	No	No
110-4		110	4.061	Jct. Rte. 1 to Sepulveda Blvd.	0.71	C	0.86	D	0.73	C	0.89	D	0.02	0.03	No	No
110-5		110	5.451	Sepulveda Blvd. to Carson St.	0.93	D	1.13	F(0)	0.94	E	1.15	F(0)	0.01	0.02	No	Yes
110-6		110	7.016	Carson St. to Torrance/Del Amo Blvd	1.08	F(0)	1.30	F(1)	1.09	F(0)	1.33	F(1)	0.01	0.03	No	Yes
110-7		110	8.028	Torrance/Del Amo Blvd. to Jct. Rte. 4	1.14	F(0)	1.38	F(2)	1.16	F(0)	1.40	F(2)	0.02	0.02	Yes	Yes
110-8		110	8.775	Jct. Rte. 405 to Jct. Rte. 91	1.39	F(2)	1.69	F(3)	1.41	F(2)	1.72	F(3)	0.02	0.03	Yes	Yes
110-9		110	9.87	Jct. Rte. 91 to Redondo Beach Blvd.	0.83	D	0.80	D	0.84	D	0.81	D	0.01	0.01	No	No
110-10		110	11.239	Redondo Beach Blvd. to Rosecrans	0.94	E	0.90	D	0.96	E	0.91	D	0.02	0.01	Yes	No
110-11		110	11.891	Rosecrans Ave. to El Segundo Blvd.	0.98	E	0.95	E	1.00	E	0.96	E	0.02	0.01	Yes	No
110-12		110	12.898	El Segundo Blvd. to Jct. Rte. 105	0.85	D	0.82	D	0.86	D	0.83	D	0.01	0.01	No	No
110-13		110	13.82	Jct. Rte. 105 to Century Blvd.	0.87	D	0.84	D	0.89	D	0.85	D	0.02	0.01	No	No
110-14		110	14.967	Century Blvd. to Manchester Ave.	1.09	F(0)	1.06	F(0)	1.11	F(0)	1.07	F(0)	0.02	0.01	Yes	No
110-15	1046	110	15.976	Manchester Ave. to Florence Ave.	1.07	F(0)	1.03	F(0)	1.08	F(0)	1.04	F(0)	0.01	0.01	No	No
110-16		110	16.981	Florence Ave. to Gage Ave.	1.08	F(0)	1.04	F(0)	1.09	F(0)	1.05	F(0)	0.01	0.01	No	No
110-17	1047	110	17.514	Gage Ave. to Slauson Ave.	1.08	F(0)	1.03	F(0)	1.09	F(0)	1.04	F(0)	0.01	0.01	No	No
110-18		110	17.98	Slauson Ave. to 51st St.	1.24	F(0)	1.19	F(0)	1.26	F(1)	1.20	F(0)	0.02	0.01	Yes	No
110-19		110	18.495	51st St. to Vernon Ave.	1.05	F(0)	1.02	F(0)	1.06	F(0)	1.03	F(0)	0.01	0.01	No	No
110-20		110	18.998	Vernon Ave. to Martin Luther King Jr	1.05	F(0)	1.02	F(0)	1.06	F(0)	1.03	F(0)	0.01	0.01	No	No
110-21		110	19.502	Martin Luther King Jr. Blvd. to Expos	1.14	F(0)	1.10	F(0)	1.15	F(0)	1.11	F(0)	0.01	0.01	No	No
110-22		110	19.996	Exposition Blvd. to Jct. Rte. 10	0.93	D	0.89	D	0.94	E	0.90	D	0.01	0.01	No	No
405-1		405	3.324	Lakewood Blvd. to Cherry Ave.	0.94	E	1.17	F(0)	0.94	E	1.18	F(0)	0.00	0.01	No	No
405-2		405	4.879	Cherry Ave. to Orange Ave.	1.23	F(0)	1.54	F(3)	1.23	F(0)	1.55	F(3)	0.00	0.01	No	No
405-3		405	5.388	Orange Ave. to Atlantic Ave.	1.28	F(1)	1.60	F(3)	1.28	F(1)	1.61	F(3)	0.00	0.01	No	No
405-4		405	6.076	Atlantic Ave. to Long Beach Blvd	0.84	D	1.05	F(0)	0.85	D	1.06	F(0)	0.01	0.01	No	No
405-5		405	6.34	Long Beach Blvd to Jct. Rte. 710	1.00	E	1.25	F(0)	1.01	F(0)	1.26	F(1)	0.01	0.01	No	No
405-6	1066	405	7.596	Jct. Rte. 710 to Alameda St.	0.91	D	1.14	F(0)	0.92	D	1.15	F(0)	0.01	0.01	No	No
405-7		405	8.784	Alameda St. to Wilmington Ave.	0.88	D	1.10	F(0)	0.89	D	1.11	F(0)	0.01	0.01	No	No
405-8		405	9.556	Wilmington Ave. to Carson St.	1.18	F(0)	1.43	F(2)	1.18	F(0)	1.44	F(2)	0.00	0.01	No	No
405-9		405	10.541	Carson St. to Avalon Blvd.	1.16	F(0)	1.40	F(2)	1.17	F(0)	1.42	F(2)	0.01	0.02	No	Yes
405-10	1067	405	11.224	Avalon Blvd. to Jct. Rte. 110	0.99	E	1.20	F(0)	1.01	F(0)	1.21	F(0)	0.02	0.01	Yes	No
405-11		405	12.97	Jct. Rte. 110 to Vermont Ave.	1.06	F(0)	1.31	F(1)	1.08	F(0)	1.33	F(1)	0.02	0.02	Yes	Yes
405-12		405	13.28	Vermont Ave. to Normandie Ave.	0.89	D	1.10	F(0)	0.90	D	1.11	F(0)	0.01	0.01	No	No
405-13		405	13.826	Normandie Ave. to Western Ave.	1.04	F(0)	1.29	F(1)	1.05	F(0)	1.30	F(1)	0.01	0.01	No	No
405-14		405	14.398	Western Ave. to Crenshaw Blvd.	1.00	E	1.24	F(0)	1.02	F(0)	1.25	F(0)	0.02	0.01	Yes	No
405-15		405	15.447	Crenshaw Blvd. to Artesia Blvd.	0.98	E	1.21	F(0)	0.99	E	1.22	F(0)	0.01	0.01	No	No
405-16		405	16.573	Artesia Blvd. to Hawthorne Blvd.	0.99	E	1.23	F(0)	1.00	E	1.24	F(0)	0.01	0.01	No	No
405-17		405	17.589	Hawthorne Blvd. to Inglewood Ave.	1.04	F(0)	1.28	F(1)	1.05	F(0)	1.28	F(1)	0.01	0.00	No	No
405-18	1068	405	18.233	Inglewood Ave. to Rosecrans Ave.	0.87	D	1.07	F(0)	0.88	D	1.08	F(0)	0.01	0.01	No	No
710-1		710	12.97	Jct. Rte. 91 to Alondra Blvd.	0.93	D	0.74	C	0.93	D	0.75	C	0.00	0.01	No	No
710-2		710	13.945	Alondra Blvd. to Jct. Rte. 105	0.96	E	0.77	C	0.97	E	0.77	C	0.01	0.00	No	No

Note: D/C is demand-to-capacity ratio.

Exhibit 97: Determination of Freeway Impact for 2025 Weekday Plus Project Alternative 1 (continued)

10.1.4 Determination of Pedestrian Impacts

The CSU system has defined a significant pedestrian impact as a situation where,

- *“A project fails to provide safe pedestrian connections between campus buildings and adjacent streets and transit facilities. Or*
- *A project significantly disrupts existing or planned pedestrian facilities or significantly conflicts with applicable non-automotive transportation plans, guidelines, policies, or standards.”*

Based on this standard, the Project would not impose such disruptions and so would not have any significant pedestrian impacts in 2025.

10.1.5 Determination of Bicycle Impacts

The CSU system has defined a significant bicycle impact as a situation where, *“A project significantly disrupts existing or planned bicycle facilities or significantly conflicts with applicable non-automotive transportation plans, guidelines, policies, or standards.”* Based on this standard, the Project would not impose such disruptions and so would not have any significant bicycle impacts in 2025.

10.1.6 Determination of Transit Impacts

CSU guideline state that a significant transit impact would occur if, *“A project significantly disrupts existing or planned transit facilities and services or significantly conflicts with applicable transit plans, guidelines, policies, or standards.”* Based on this standard, the Project would not impose such disruptions and so would not have any significant transit impacts in 2025. The Project would also not have any transit capacity impacts, as was shown earlier in Section 6.1.6.

10.2 2025 Plus Project Alternative 2 Conditions

10.2.1 Forecasting 2025 Weekday Plus Project Alternative 2 Traffic

Traffic volumes for the 2025 Plus Project condition were developed by factoring up the existing weekday traffic counts using the growth factor from the LA-CMP and then adding in the traffic for existing, known, and reasonably foreseeable projects, part of the University Village portion of the Master Plan and the two percent increase in students. The resulting 2025 Plus Project traffic volumes are shown in Exhibit 99.

10.2.2 2025 Weekday Plus Project Alternative 2 Intersection Level of Service

Exhibit 98 shows in tabular format the 2025 Plus Project weekday level of service (LOS) based on the traffic volumes shown in Exhibit 99 (also see Appendix N). The LOS is also shown on maps in Exhibit 100 for the AM peak hour condition, and Exhibit 101 for the PM peak hour condition. Exhibit 102 shows the intersection impacts of the Project. The Project would have significant impacts at 11 study intersections, namely:

- Intersection #1, Victoria St./Drive D, during the AM peak hour
- Intersection #3, Victoria St./Birchknoll Dr., during the PM peak hour
- Intersection #5, Central Ave./Charles Willard St., during the PM peak hour
- Intersection #6, Central Ave./Project Driveway/Beachey Pl., during both peak hours
- Intersection #13, Avalon Blvd./Victoria St., during the PM peak hour
- Intersection #14, Central Ave./Artesia Blvd. WB, during the PM peak hour
- Intersection #15, Central Ave./Albertoni St./Artesia Blvd. EB, during both peak hours
- Intersection #20, I-110 SB Off-Ramp/190th St., during both peak hours
- Intersection #22, Figueroa St./190th St./Victoria St., during the PM peak hour
- Intersection #24, Main St./Victoria St., During the PM peak hour
- Intersection #26, Avalon Blvd./Del Amo Blvd., During the PM peak hour

Study ID	Intersection Name	Control Type	AM Peak Hour		PM Peak Hour	
			V/C Ratio or Delay	LOS (ICU or HCM)	V/C Ratio or Delay	LOS (ICU or HCM)
1	Victoria St./Drive D	TWSC	87.2	F	>180	F
2	Victoria St./Tamcliff Ave.	Signalized	0.55	A	0.728	C
3	Victoria St./Birchknoll Dr.	Signalized	0.791	C	1.016	F
4	Victoria St./Project Service Rd.	TWSC	11.3	B	14.9	B
5	Central Ave./Charles Willard St.	TWSC	>180	F	>180	F
6	Central Ave./Beachey Pl.	TWSC	94.1	F	>180	F
7	Central Ave./Glenn Curtiss St.	Signalized	0.647	B	0.7	B
8	University Dr./Birchknoll Dr. Ext.	N/A	N/A	N/A	N/A	N/A
9	University Dr./Toro Center Dr.	TWSC	14.1	B	16.7	C
10	Albertoni St./SR 91 EB Ramps	Signalized	0.645	B	0.825	D
11	Avalon Blvd./SR 91 WB On-Ramp	Signalized	0.524	A	0.529	A
12	Avalon Blvd./Albertoni St.	Signalized	0.621	B	0.835	D
13	Avalon Blvd./Victoria St.	Signalized	0.747	C	1.026	F
14	Central Ave./Artesia Blvd. WB	Signalized	0.882	D	0.924	E
15	Central Ave./Albertoni St./Artesia Blvd. EB	Signalized	1.038	F	1.001	F
16	Central Ave./Victoria St.	Signalized	0.828	D	0.834	D
17	Wilmington Ave./Artesia Blvd. WB	Signalized	0.734	C	0.746	C
18	Wilmington Ave./Artesia Blvd. EB	Signalized	0.734	C	0.749	C
19	Wilmington Ave./Victoria St.	Signalized	0.551	A	0.582	A
20	I-110 SB Off-Ramp/190th St.	Signalized	1.166	F	1.175	F
21	I-110 NB On-Ramp/190th St.	Signalized	0.597	A	0.797	C
22	Figueroa St./190th St./Victoria St.	Signalized	0.897	D	1.036	F
23	Broadway/Victoria St.	Signalized	0.691	B	0.847	D
24	Main St./Victoria St.	Signalized	0.766	C	1.016	F
25	Avalon Blvd./University Dr.	Signalized	0.475	A	0.672	B
26	Avalon Blvd./Del Amo Blvd.	Signalized	0.869	D	0.968	E
27	Avalon Blvd./I-405 NB Ramps	Signalized	0.509	A	0.516	A
28	Avalon Blvd./I-405 SB Ramps	Signalized	0.595	A	0.565	A
29	Central Ave./University Dr.	Signalized	0.731	C	0.619	B
30	Wilmington Ave./University Dr.	Signalized	0.642	B	0.735	C
31	Central Ave./Del Amo Blvd.	Signalized	0.815	D	0.757	C
32	Wilmington Ave./Del Amo Blvd.	Signalized	0.707	C	0.746	C
33	W. Artesia Blvd./Crenshaw Blvd.	Signalized	0.95	E	1.019	F
34	W. 190th St./S. Western Ave.	Signalized	0.841	D	0.828	D
35	W. Artesia Blvd./Vermont Ave.	Signalized	0.858	D	1.062	F
36	Alameda St./Compton Blvd.	Signalized	0.691	B	0.738	C
37	Alameda St./SR 91 EB Ramps	Signalized	0.588	A	0.794	C

*Intersection LOS was calculated using HCM 2000 Delay Method, because ICU cannot be calculated for TWSC intersections.

Exhibit 98: 2025 Weekday Plus Project Alternative 2 Level of Service (LOS) at Study Intersections (Table)

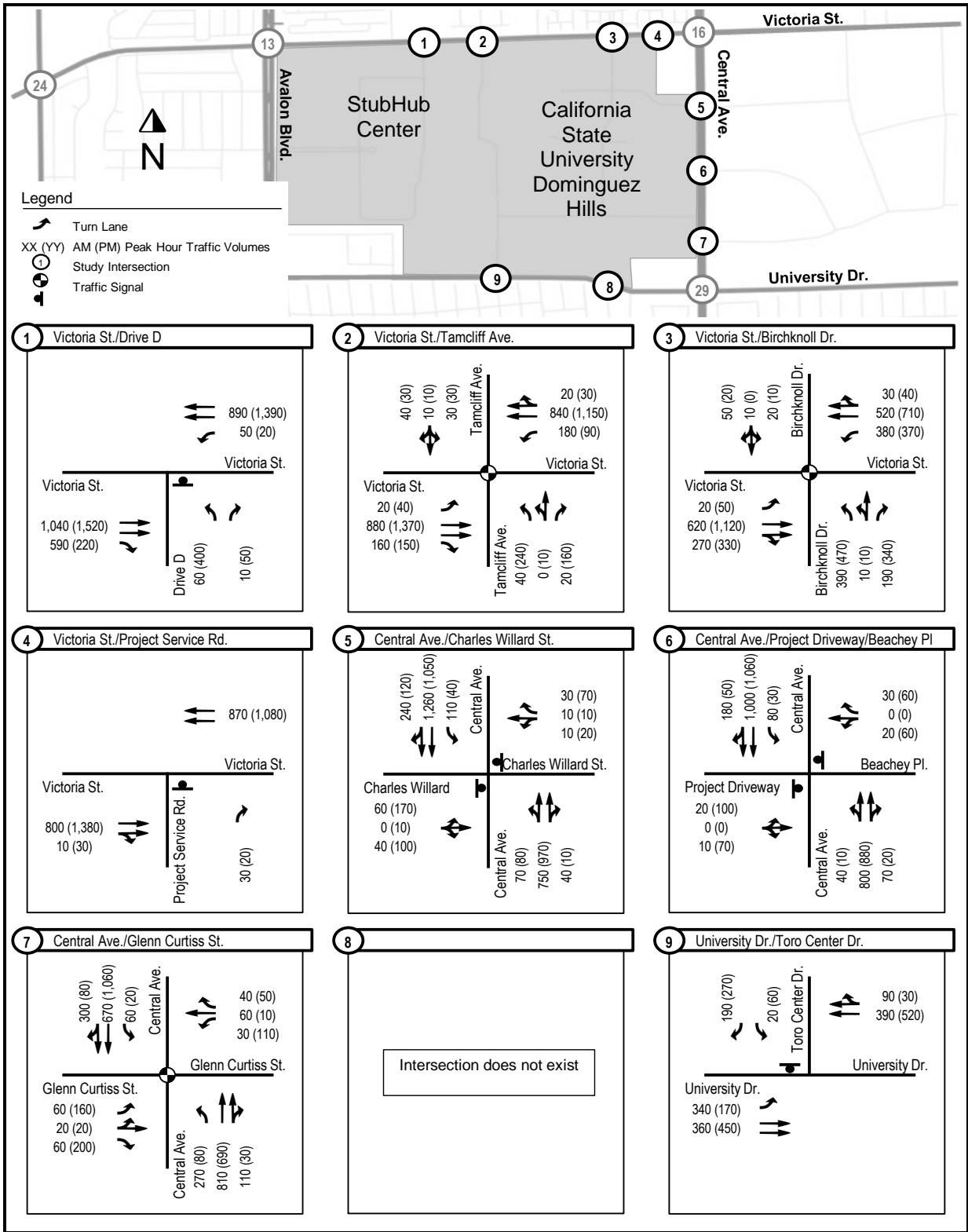


Exhibit 99: 2025 Weekday Plus Project Alternative 2 Traffic Volumes and Lane Configurations

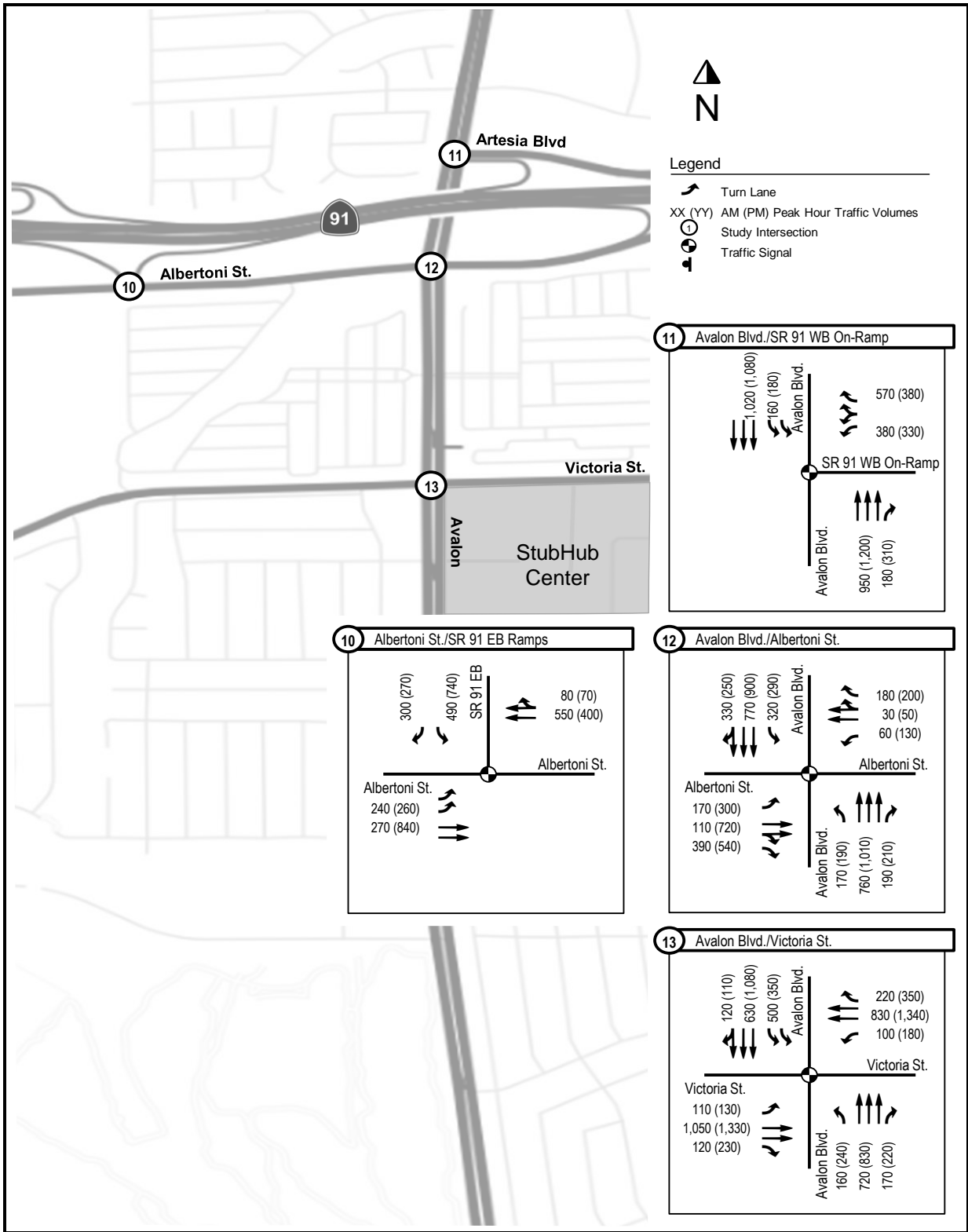


Exhibit 99: 2025 Weekday Plus Project Alternative 2 Traffic Volumes and Lane Configurations (Map B)

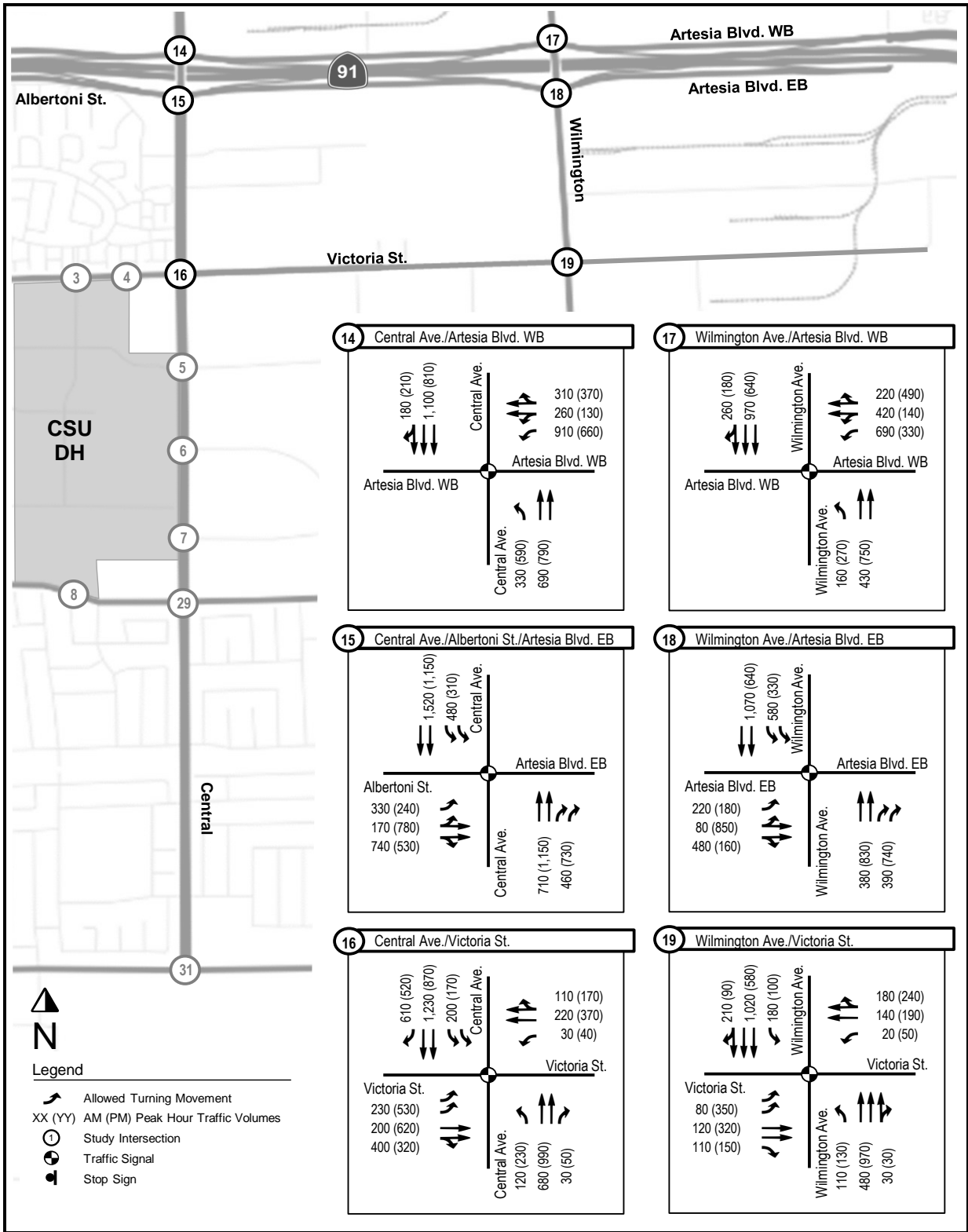


Exhibit 99: 2025 Weekday Plus Project Alternative 2 Traffic Volumes and Lane Configurations (Map C)

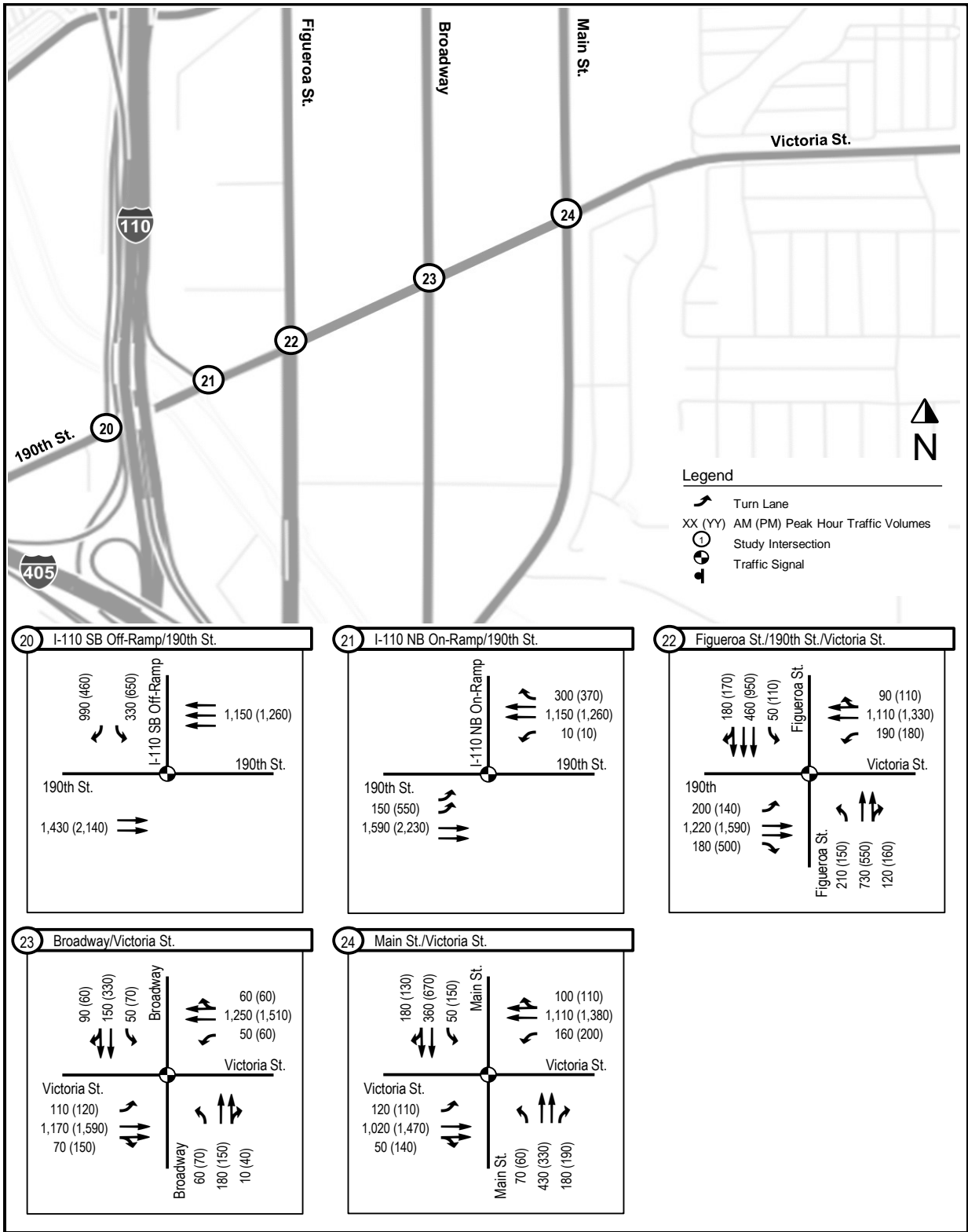


Exhibit 99: 2025 Weekday Plus Project Alternative 2 Traffic Volumes and Lane Configurations (Map D)

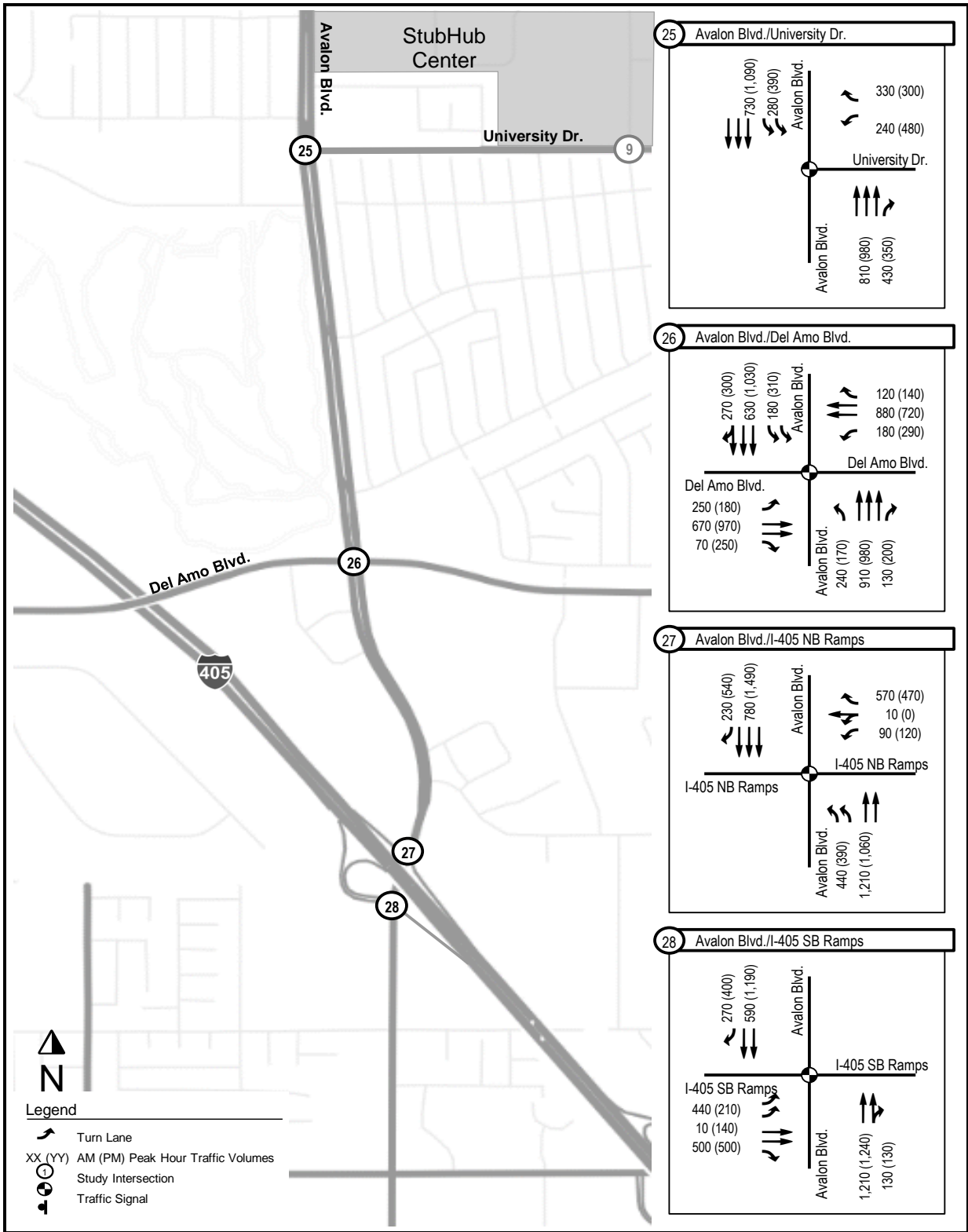


Exhibit 99: 2025 Weekday Plus Project Alternative 2 Traffic Volumes and Lane Configurations (Map E)

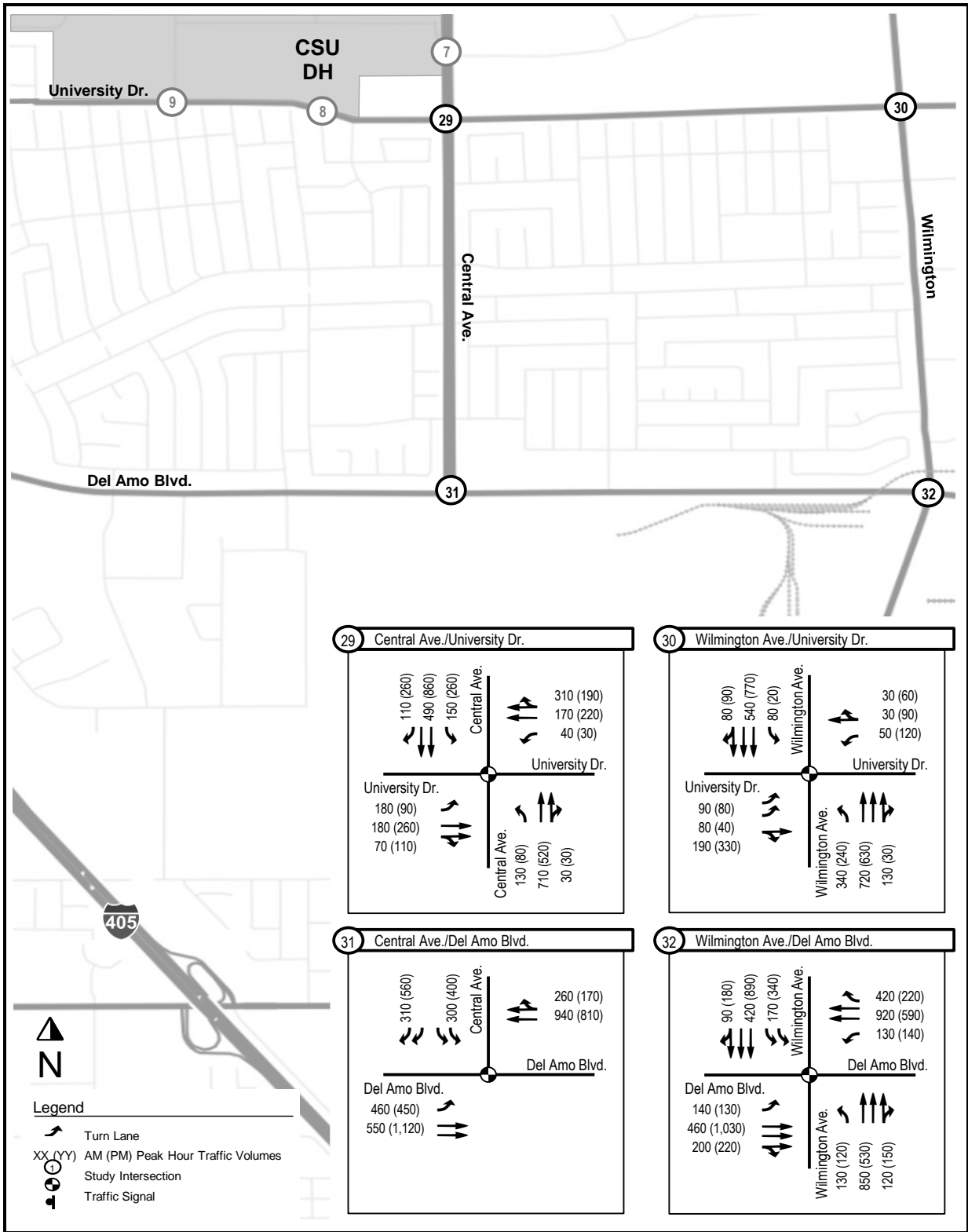


Exhibit 99: 2025 Weekday Plus Project Alternative 2 Traffic Volumes and Lane Configurations (Map F)

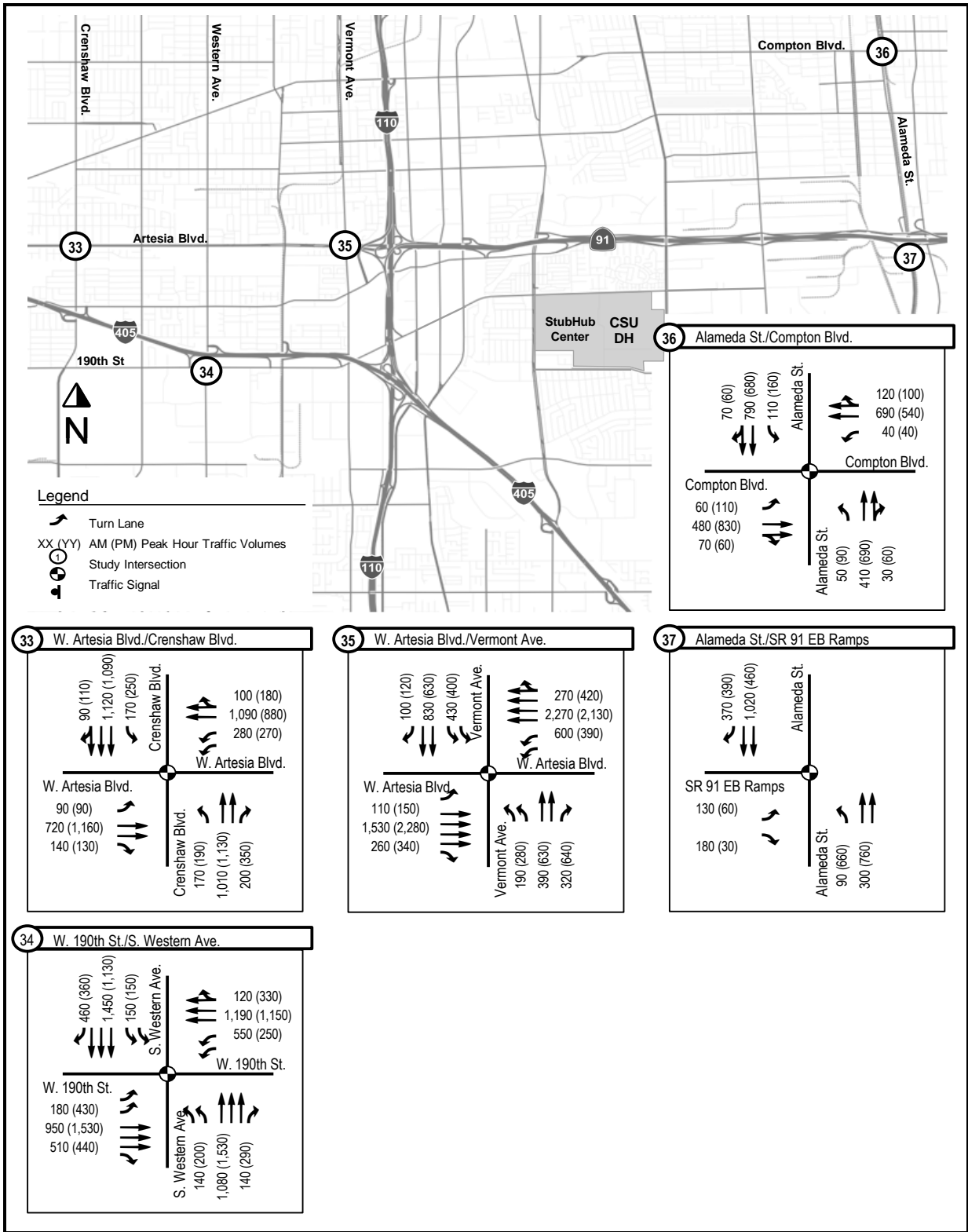


Exhibit 99: 2025 Weekday Plus Project Alternative 2 Traffic Volumes and Lane Configurations (Map G)

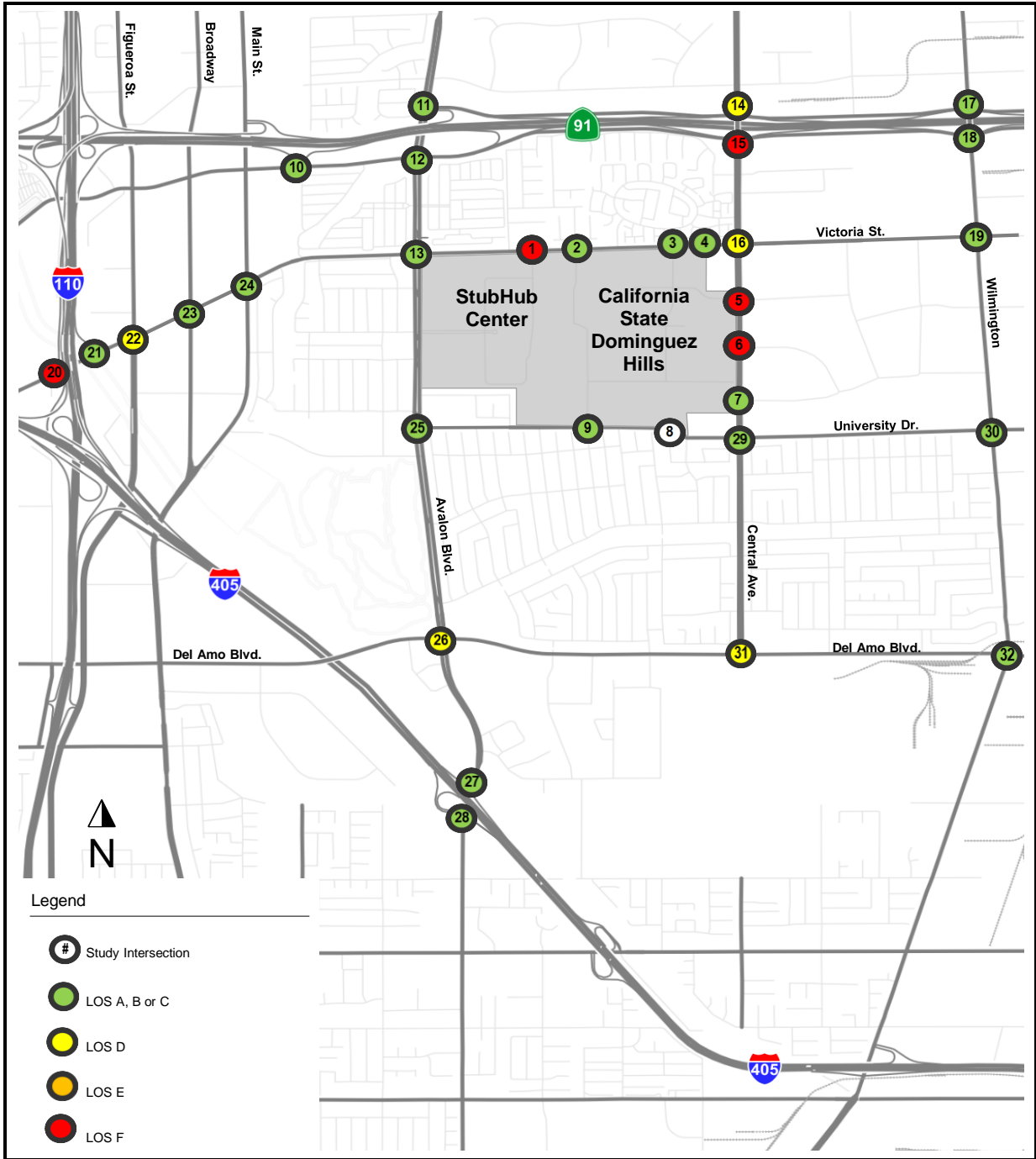


Exhibit 100: 2025 Weekday Plus Project Alternative 2 AM Peak Hour LOS (Map)

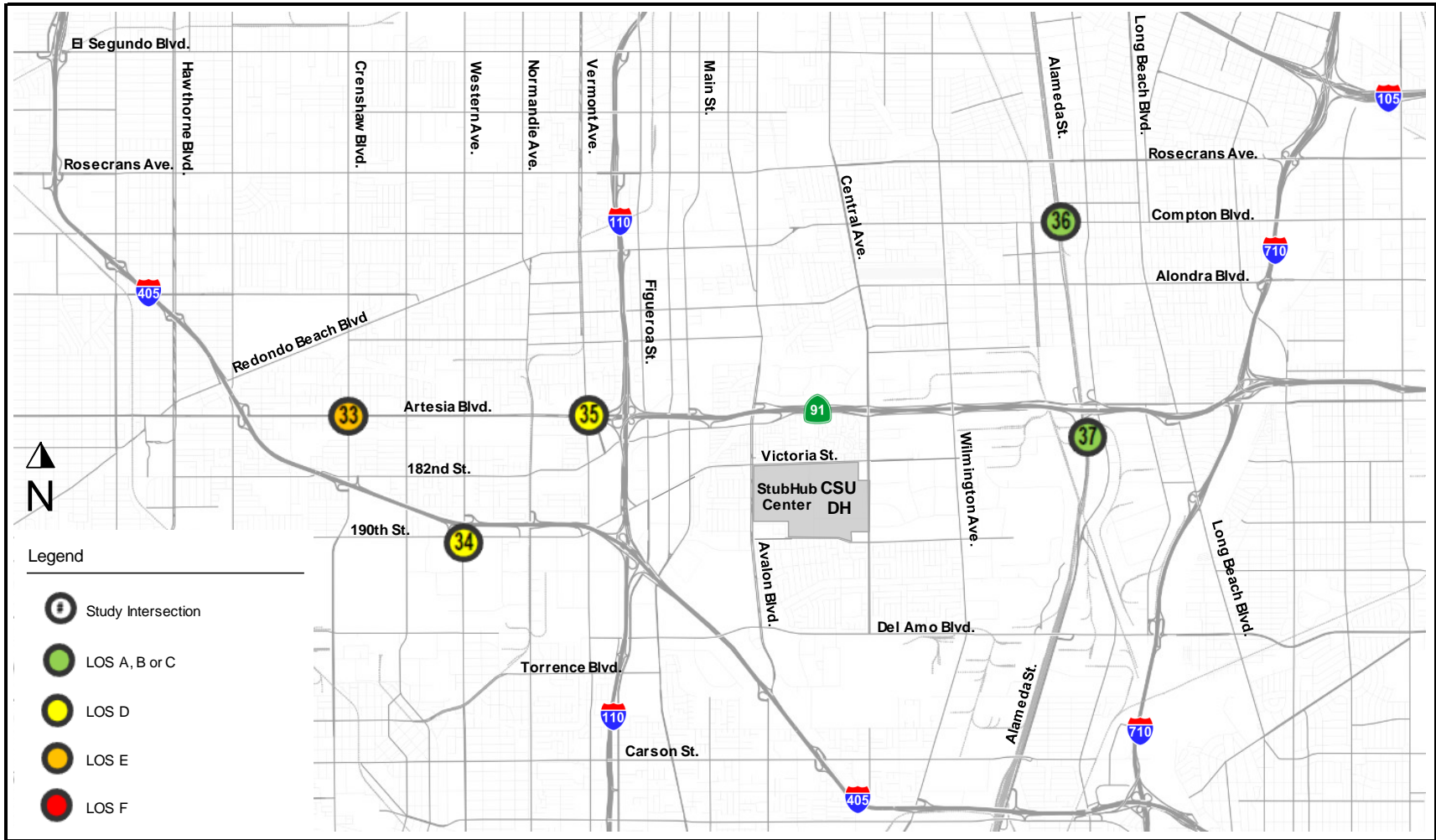


Exhibit 100: 2025 Weekday Plus Project Alternative 2 AM Peak Hour LOS (Map)

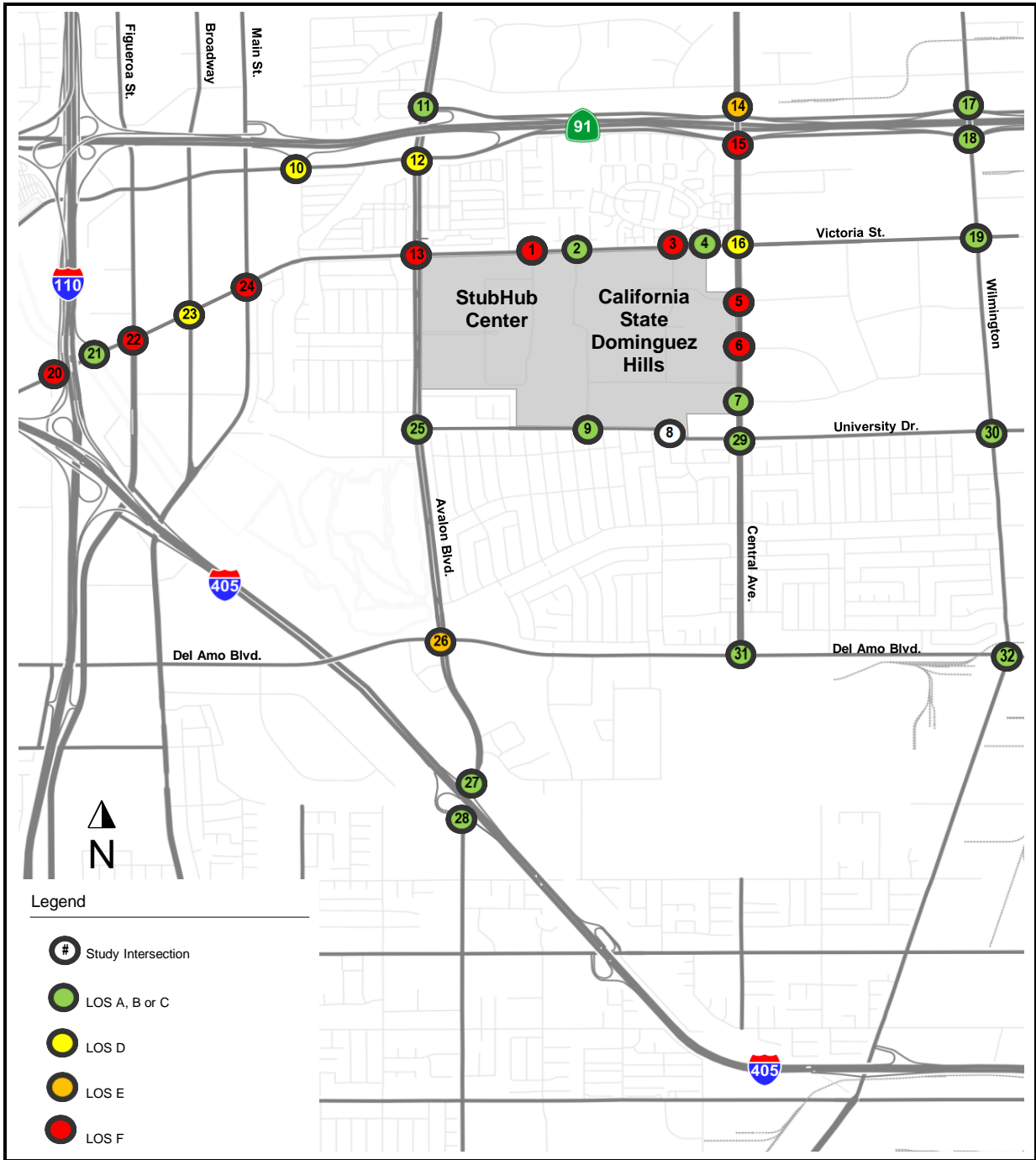


Exhibit 101: 2025 Weekday Plus Project Alternative 2 PM Peak Hour LOS (Map)

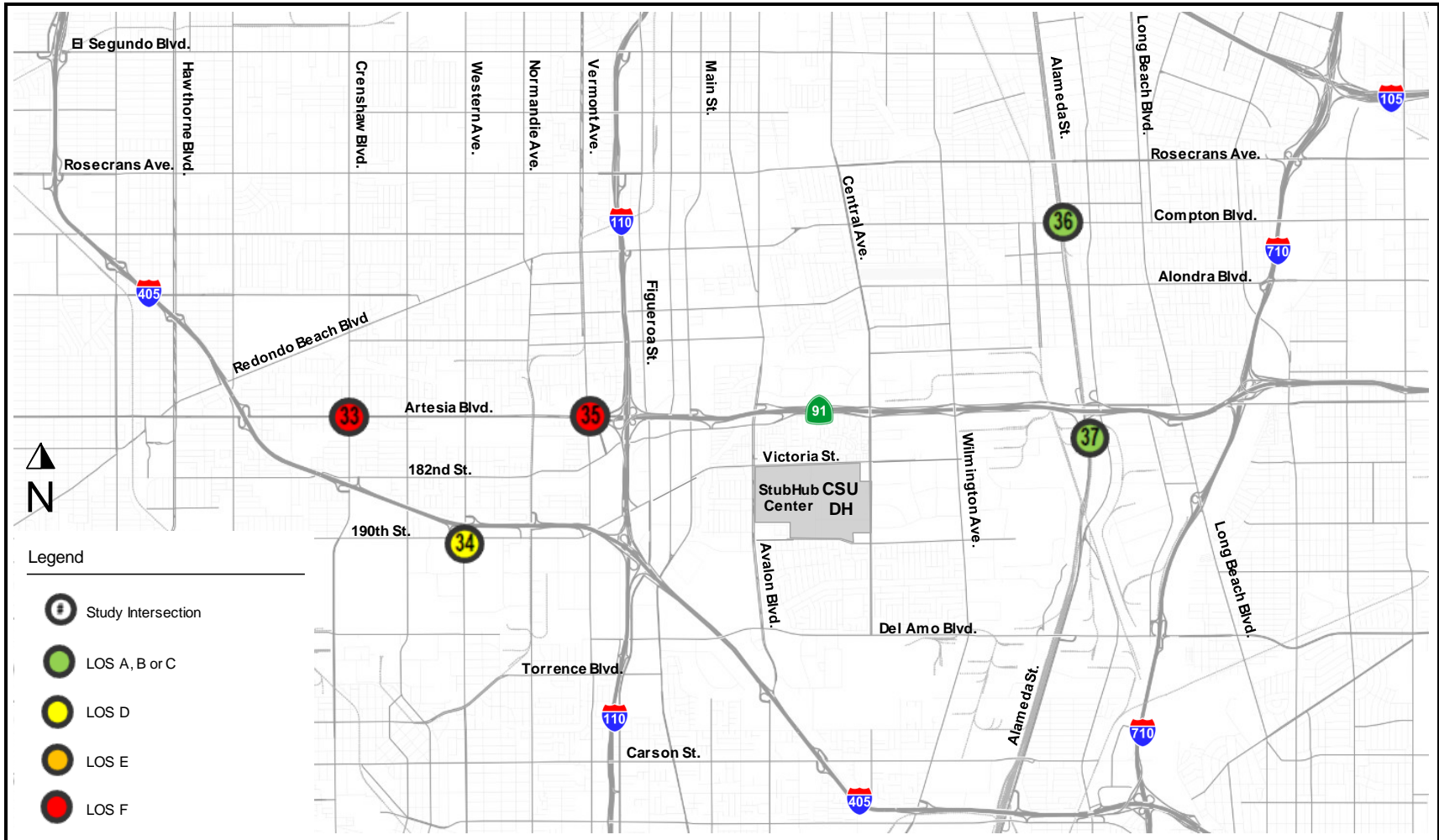


Exhibit 101: 2025 Weekday Plus Project Alternative 2 PM Peak Hour LOS (Map)

Study ID	Intersection Name	Control Type	2025 Scenarios					
			AM Peak Hour			PM Peak Hour		
			No Project LOS	Plus Project LOS	Project Has Significant Impact?	No Project LOS	Plus Project LOS	Project Has Significant Impact?
1	Victoria St./Drive D	TWSC	D	F	Yes	F	F	Yes
2	Victoria St./Tamcliff Ave.	Signalized	A	A	No	B	C	No
3	Victoria St./Birchknoll Dr.	Signalized	A	C	No	B	F	Yes
4	Victoria St./Project Service Rd.	TWSC	N/A	B	No	N/A	B	No
5	Central Ave./Charles Willard St.	TWSC	E	F	Yes	D	F	Yes
6	Central Ave./Beachey Pl.	TWSC	C	F	Yes	C	F	Yes
7	Central Ave./Glenn Curtiss St.	Signalized	A	B	No	A	B	No
8	University Dr./Birchknoll Dr. Ext.	N/A	N/A	N/A	N/A	N/A	N/A	N/A
9	University Dr./Toro Center Dr.	TWSC	B	B	No	B	C	No
10	Albertoni St./SR 91 EB Ramps	Signalized	B	B	No	C	D	No
11	Avalon Blvd./SR 91 WB On-Ramp	Signalized	A	A	No	A	A	No
12	Avalon Blvd./Albertoni St.	Signalized	B	B	No	D	D	No
13	Avalon Blvd./Victoria St.	Signalized	B	C	No	D	F	Yes
14	Central Ave./Artesia Blvd. WB	Signalized	C	D	No	C	E	Yes
15	Central Ave./Albertoni St./Artesia Blvd. EB	Signalized	D	F	Yes	C	F	Yes
16	Central Ave./Victoria St.	Signalized	A	D	No	B	D	No
17	Wilmington Ave./Artesia Blvd. WB	Signalized	C	C	No	C	C	No
18	Wilmington Ave./Artesia Blvd. EB	Signalized	C	C	No	C	C	No
19	Wilmington Ave./Victoria St.	Signalized	A	A	No	A	A	No
20	I-110 SB Off-Ramp/190th St.	Signalized	F	F	Yes	F	F	Yes
21	I-110 NB On-Ramp/190th St.	Signalized	A	A	No	C	C	No
22	Figueroa St./190th St./Victoria St.	Signalized	D	D	No	D	F	Yes
23	Broadway/Victoria St.	Signalized	A	B	No	C	D	No
24	Main St./Victoria St.	Signalized	B	C	No	E	F	Yes
25	Avalon Blvd./University Dr.	Signalized	A	A	No	B	B	No
26	Avalon Blvd./Del Amo Blvd.	Signalized	D	D	No	E	E	Yes
27	Avalon Blvd./I-405 NB Ramps	Signalized	A	A	No	A	A	No
28	Avalon Blvd./I-405 SB Ramps	Signalized	A	A	No	A	A	No
29	Central Ave./University Dr.	Signalized	A	C	No	A	B	No
30	Wilmington Ave./University Dr.	Signalized	A	B	No	A	C	No
31	Central Ave./Del Amo Blvd.	Signalized	C	D	No	C	C	No
32	Wilmington Ave./Del Amo Blvd.	Signalized	B	C	No	C	C	No
33	W. Artesia Blvd./Crenshaw Blvd.	Signalized	E	E	No	F	F	No
34	W. 190th St./S. Western Ave.	Signalized	D	D	No	C	D	No
35	W. Artesia Blvd./Vermont Ave.	Signalized	D	D	No	F	F	No
36	Alameda St./Compton Blvd.	Signalized	B	B	No	C	C	No
37	Alameda St./SR 91 EB Ramps	Signalized	A	A	No	C	C	No

Exhibit 102: Determination of Intersection Impact for the 2025 Weekday Plus Project Alternative 2

10.2.3 2025 Weekday Plus Project Alternative 2 Freeway Level of Service

The Project LOS for the study freeway segments are shown in Exhibit 103. Exhibit 104 shows that the Project would have 27 freeway impacts in 2025, namely:

- SR-91 eastbound, Avalon Blvd. to Central Ave., during the PM peak hour
- SR-91 eastbound, Central Ave. to Wilmington Ave., during the PM peak hour
- SR-91 eastbound, Wilmington Ave. to Alameda St., during the PM peak hour
- SR-91 eastbound, Alameda St. to Alameda St./Santa Fe Ave., during the PM peak hour
- I-110 northbound, Sepulveda Blvd. to Carson St., during the AM peak hour
- I-110 northbound, Carson St. to Torrance/Del Amo Blvd., during the both peak hours
- I-110 northbound, Torrance/Del Amo Blvd. to Jct. Rte. 405, during the both peak hours
- I-110 northbound, Jct. Rte. 405 to Jct. Rte. 91, during the AM peak hour
- I-405 northbound, Carson St. to Avalon Blvd., during the AM peak hour
- I-405 northbound, Avalon Blvd. to Jct. Rte. 110, during the PM peak hour
- I-405 northbound, Jct. Rte. 110 to Vermont Ave., during the PM peak hour
- I-405 northbound, Normandie Ave. to Western Ave., during the PM peak hour
- I-405 northbound, Western Ave. to Crenshaw Blvd., during the PM peak hour
- I-405 northbound, Crenshaw Blvd. to Artesia Blvd., during the PM peak hour
- SR-91 westbound, Central Ave. to Wilmington Ave., during the AM peak hour
- SR-91 westbound, Wilmington Ave. to Alameda St., during the AM peak hour
- SR-91 westbound, Alameda St. to Alameda St./Santa Fe Ave., during the AM peak hour
- SR-91 westbound, Long Beach Blvd. to Jct. Rte. 710, during the AM peak hour
- I-110 southbound, Sepulveda Blvd. to Carson St., during the PM peak hour
- I-110 southbound, Carson St. to Torrance/Del Amo Blvd., during the PM peak hour
- I-110 southbound, Torrance/Del Amo Blvd. to Jct. Rte. 405, during the both peak hours
- I-110 southbound, Jct. Rte. 405 to Jct. Rte. 91, during the both peak hours
- I-110 southbound, Rosecrans Ave. to El Segundo Blvd., during the AM peak hour
- I-110 southbound, Century Blvd. to Manchester Ave., during the AM peak hour
- I-405 southbound, Carson St. to Avalon Blvd., during the PM peak hour
- I-405 southbound, Avalon Blvd. to Jct. Rte. 110, during the AM peak hour
- I-405 southbound, Jct. Rte. 110 to Vermont Ave., during the both peak hours

10.2.4 Determination of Pedestrian Impacts

The CSU system has defined a significant pedestrian impact as a situation where,

- *“A project fails to provide safe pedestrian connections between campus buildings and adjacent streets and transit facilities. Or*
- *A project significantly disrupts existing or planned pedestrian facilities or significantly conflicts with applicable non-automotive transportation plans, guidelines, policies, or standards.”*

Based on this standard, the Project would not impose such disruptions and so would not have any significant pedestrian impacts in 2025.

10.2.5 Determination of Bicycle Impacts

The CSU system has defined a significant bicycle impact as a situation where, “*A project significantly disrupts existing or planned bicycle facilities or significantly conflicts with applicable non-automotive transportation plans, guidelines, policies, or standards.*” Based on this standard, the Project would not impose such disruptions and so would not have any significant bicycle impacts in 2025.

10.2.6 Determination of Transit Impacts

CSU guideline state that a significant transit impact would occur if, “*A project significantly disrupts existing or planned transit facilities and services or significantly conflicts with applicable transit plans, guidelines, policies, or standards.*” Based on this standard, the Project would not impose such disruptions and so would not have any significant transit impacts in 2025. The Project would also not have any transit capacity impacts, as was shown earlier in Section 6.1.6.

ID	CMP Station	Fwy Rte	Post Mile	Location	Northbound/Eastbound						Southbound/Westbound									
					AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour						
					Demand	Capacity	D/C	LOS	Demand	Capacity	D/C	LOS	Demand	Capacity	D/C	LOS	Demand	Capacity	D/C	LOS
91-1		91	6.344	Jct. Rte. 110 to Avalon Blvd.	7,050	12,000	0.59	C	14,510	12,000	1.21	F(0)	9,350	4,000	2.34	F(3)	6,340	4,000	1.59	F(3)
91-2		91	7.426	Avalon Blvd. to Central Ave.	7,270	10,000	0.73	C	14,850	10,000	1.49	F(3)	9,630	10,000	0.96	E	6,580	10,000	0.66	C
91-3		91	8.435	Central Ave. to Wilmington Ave.	7,380	10,000	0.74	C	15,090	10,000	1.51	F(3)	9,900	10,000	0.99	E	6,730	10,000	0.67	C
91-4		91	9.162	Wilmington Ave. to Alameda St.	7,690	10,000	0.77	C	15,690	10,000	1.57	F(3)	10,200	10,000	1.02	F(0)	6,930	10,000	0.69	C
91-5		91	10.271	Alameda St. to Alameda St./Santa Fe Ave.	7,980	8,000	1.00	E	16,370	8,000	2.05	F(3)	10,700	8,000	1.34	F(1)	7,230	8,000	0.90	D
91-6	1033	91	10.41	Alameda St./Santa Fe Ave. to Long Beach Blvd.	8,280	12,000	0.69	C	16,970	12,000	1.41	F(2)	11,100	12,000	0.93	D	7,530	12,000	0.63	C
91-7		91	11.096	Long Beach Blvd. to Jct. Rte. 710	8,280	12,000	0.69	C	16,970	12,000	1.41	F(2)	11,090	10,000	1.11	F(0)	7,520	10,000	0.75	C
91-8		91	11.681	Jct. Rte. 710 to Cherry Ave.	8,440	10,000	0.84	D	12,090	10,000	1.21	F(0)	13,600	10,000	1.36	F(2)	9,570	10,000	0.96	E
91-9	1034	91	13.094	Cherry Ave. to Paramount Blvd.	8,540	10,000	0.85	D	12,290	10,000	1.23	F(0)	13,800	12,000	1.15	F(0)	9,670	12,000	0.81	D
91-10		91	13.594	Paramount Blvd. to Downey Ave.	8,340	10,000	0.83	D	11,890	10,000	1.19	F(0)	13,400	10,000	1.34	F(1)	9,460	10,000	0.95	E
91-11		91	14.103	Downey Ave. to Jct. Rte. 19	8,340	10,000	0.70	C	11,880	12,000	0.99	E	13,290	10,000	1.33	F(1)	9,360	10,000	0.94	E
91-12		91	14.618	Jct. Rte. 19 to Clark Ave.	7,640	10,000	0.76	C	10,980	10,000	1.10	F(0)	12,380	8,000	1.55	F(3)	8,650	8,000	1.08	F(0)
91-13		91	15.105	Clark Ave. to Bellflower Blvd.	8,140	12,000	0.68	C	11,580	12,000	0.97	E	12,980	10,000	1.30	F(1)	9,150	10,000	0.92	D
91-14		91	15.614	Bellflower Blvd. to Jct. Rte. 605	8,030	12,000	0.67	C	11,470	12,000	0.96	E	12,870	10,000	1.29	F(1)	9,050	10,000	0.91	D
110-1	1045	110	1.23	Channel St. to C St.	4,610	8,000	0.58	C	3,300	8,000	0.41	B	3,670	8,000	0.46	B	4,420	8,000	0.55	C
110-2		110	2.771	C St. to Anaheim St.	4,810	10,000	0.48	B	3,500	10,000	0.35	A	3,880	8,000	0.49	B	4,630	8,000	0.58	C
110-3		110	3.264	Anaheim St. to Jct. Rte. 1	5,220	10,000	0.52	B	3,710	10,000	0.37	B	4,180	10,000	0.42	B	5,040	10,000	0.50	B
110-4		110	4.061	Jct. Rte. 1 to Sepulveda Blvd.	7,280	8,000	0.91	D	5,270	8,000	0.66	C	5,810	8,000	0.73	C	7,080	8,000	0.89	D
110-5		110	5.451	Sepulveda Blvd. to Carson St.	9,410	8,000	1.18	F(0)	6,790	8,000	0.85	D	7,530	8,000	0.94	E	9,220	8,000	1.15	F(0)
110-6		110	7.016	Carson St. to Torrance/Del Arno Blvd.	10,810	8,000	1.35	F(1)	7,890	8,000	0.99	E	8,740	8,000	1.09	F(0)	10,630	8,000	1.33	F(1)
110-7		110	8.028	Torrance/Del Arno Blvd. to Jct. Rte. 405	11,410	8,000	1.43	F(2)	8,290	8,000	1.04	F(0)	9,240	8,000	1.16	F(0)	11,230	8,000	1.40	F(2)
110-8		110	8.775	Jct. Rte. 405 to Jct. Rte. 91	14,010	12,000	1.17	F(0)	10,090	12,000	0.84	D	11,240	8,000	1.41	F(2)	13,730	8,000	1.72	F(3)
110-9		110	9.87	Jct. Rte. 91 to Redondo Beach Blvd.	9,200	12,000	0.77	C	9,390	12,000	0.78	D	10,090	12,000	0.84	D	9,740	12,000	0.81	D
110-10		110	11.239	Redondo Beach Blvd. to Rosecrans Ave.	9,500	11,000	0.86	D	9,790	11,000	0.89	D	10,490	11,000	0.95	E	10,030	11,000	0.91	D
110-11		110	11.891	Rosecrans Ave. to El Segundo Blvd.	9,890	11,000	0.90	D	10,180	11,000	0.93	D	10,990	11,000	1.00	E	10,530	11,000	0.96	E
110-12		110	12.898	El Segundo Blvd. to Jct. Rte. 105	10,090	11,000	0.92	D	10,360	11,000	0.94	E	11,190	13,000	0.86	D	10,730	13,000	0.83	D
110-13		110	13.82	Jct. Rte. 105 to Century Blvd.	11,280	14,000	0.81	D	11,550	14,000	0.83	D	12,380	14,000	0.88	D	11,930	14,000	0.85	D
110-14		110	14.967	Century Blvd. to Manchester Ave.	12,080	12,000	1.01	F(0)	12,350	12,000	1.03	F(0)	13,280	12,000	1.11	F(0)	12,830	12,000	1.07	F(0)
110-15	1046	110	15.976	Manchester Ave. to Florence Ave.	11,770	12,000	0.98	E	12,040	12,000	1.00	E	12,960	12,000	1.08	F(0)	12,410	12,000	1.03	F(0)
110-16		110	16.981	Florence Ave. to Gage Ave.	12,160	12,000	1.01	F(0)	12,420	12,000	1.04	F(0)	13,050	12,000	1.09	F(0)	12,610	12,000	1.05	F(0)
110-17	1047	110	17.514	Gage Ave. to Slauson Ave.	12,060	12,000	1.01	F(0)	12,320	12,000	1.03	F(0)	13,050	12,000	1.09	F(0)	12,500	12,000	1.04	F(0)
110-18		110	17.98	Slauson Ave. to 51st St.	11,660	10,000	1.17	F(0)	11,810	10,000	1.18	F(0)	12,540	10,000	1.25	F(0)	12,000	10,000	1.20	F(0)
110-19		110	18.495	51st St. to Vernon Ave.	11,860	10,000	1.19	F(0)	12,110	10,000	1.21	F(0)	12,740	12,000	1.06	F(0)	12,300	12,000	1.03	F(0)
110-20		110	18.998	Vernon Ave. to Martin Luther King Jr. Blvd.	11,850	12,000	0.99	E	12,100	12,000	1.01	F(0)	12,730	12,000	1.06	F(0)	12,290	12,000	1.02	F(0)
110-21		110	19.502	Martin Luther King Jr. Blvd. to Exposition Blvd.	10,750	12,000	0.90	D	10,900	12,000	0.91	D	11,520	10,000	1.15	F(0)	11,090	10,000	1.11	F(0)
110-22		110	19.996	Exposition Blvd. to Jct. Rte. 10	10,340	12,000	0.86	D	10,580	12,000	0.88	D	11,230	12,000	0.94	E	10,790	12,000	0.90	D
405-1		405	3.324	Lakewood Blvd. to Cherry Ave.	12,570	10,000	1.26	F(1)	10,750	10,000	1.08	F(0)	9,430	10,000	0.94	E	11,760	10,000	1.18	F(0)
405-2		405	4.879	Cherry Ave. to Orange Ave.	13,280	10,000	1.33	F(1)	11,250	10,000	1.13	F(0)	9,840	8,000	1.23	F(0)	12,370	8,000	1.55	F(3)
405-3		405	5.388	Orange Ave. to Atlantic Ave.	13,780	8,000	1.72	F(3)	11,750	8,000	1.47	F(3)	10,240	8,000	1.28	F(1)	12,880	8,000	1.61	F(3)
405-4		405	6.076	Atlantic Ave. to Long Beach Blvd	13,580	8,000	1.70	F(3)	11,550	8,000	1.44	F(2)	10,140	12,000	0.85	D	12,680	12,000	1.06	F(0)
405-5		405	6.34	Long Beach Blvd to Jct. Rte. 710	13,490	12,000	1.12	F(0)	11,460	12,000	0.96	E	10,040	10,000	1.00	E	12,580	10,000	1.26	F(1)
405-6	1066	405	7.596	Jct. Rte. 710 to Alameda St.	12,320	10,000	1.23	F(0)	10,480	10,000	1.05	F(0)	9,150	10,000	0.92	D	11,510	10,000	1.15	F(0)
405-7		405	8.784	Alameda St. to Wilmington Ave.	11,930	10,000	1.19	F(0)	10,990	10,000	1.01	F(0)	8,860	10,000	0.89	D	11,130	10,000	1.11	F(0)
405-8		405	9.556	Wilmington Ave. to Carson St.	11,130	8,000	1.39	F(2)	9,590	8,000	1.20	F(0)	9,460	8,000	1.18	F(0)	11,530	8,000	1.44	F(2)
405-9		405	10.541	Carson St. to Avalon Blvd.	10,930	8,000	1.37	F(2)	9,390	8,000	1.17	F(0)	9,360	8,000	1.17	F(0)	11,330	8,000	1.42	F(2)
405-10	1067	405	11.224	Avalon Blvd. to Jct. Rte. 110	11,690	10,000	1.17	F(0)	10,160	10,000	1.02	F(0)	10,050	10,000	1.01	F(0)	12,130	10,000	1.21	F(0)
405-11		405	12.97	Jct. Rte. 110 to Vermont Ave.	11,490	10,000	1.15	F(0)	10,060	10,000	1.01	F(0)	8,650	8,000	1.08	F(0)	10,630	8,000	1.33	F(1)
405-12		405	13.28	Vermont Ave. to Normandie Ave.	11,990	12,000	1.00	E	10,560	12,000	0.88	D	9,030	10,000	0.90	D	11,110	10,000	1.11	F(0)
405-13		405	13.826	Normandie Ave. to Western Ave.	11,290	10,000	1.13	F(0)	9,860	10,000	0.99	E	8,410	8,000	1.05	F(0)	10,390	8,000	1.30	F(1)
405-14		405	14.398	Western Ave. to Crenshaw Blvd.	10,790	8,000	1.35	F(1)	9,460	8,000	1.18	F(0)	8,110	8,000	1.01	F(0)	9,990	8,000	1.25	F(0)
405-15		405	15.447	Crenshaw Blvd. to Artesia Blvd.	10,580	8,000	1.32	F(1)	9,240	8,000	1.16	F(0)	7,900	8,000	0.99	E	9,790	8,000	1.22	F(0)
405-16		405	16.573	Artesia Blvd. to Hawthorne Blvd.	10,670	10,000	1.07	F(0)	9,320	10,000	0.93	D	7,980	8,000	1.00	E	9,870	8,000	1.23	F(0)
405-17		405	17.589	Hawthorne Blvd. to Inglewood Ave.	11,160	10,000	1.12	F(0)	9,800	10,000	0.98	E	8,380	8,000	1.05	F(0)	10,270	8,000	1.28	F(1)
405-18	1068	405	18.233	Inglewood Ave. to Rosecrans Ave.	11,650	10,000	1.17	F(0)	10,190	10,000	1.02	F(0)	8,770	10,000	0.88	D	10,760	10,000	1.08	F(0)
710-1		710	12.97	Jct. Rte. 91 to Alondra Blvd.	11,430	12,000	0.95	E	17,770	12,000	1.48	F(3)	11,190	12,000	0.93	D	8,960	12,000	0.75	C
710-2		710	13.945	Alondra Blvd. to Jct. Rte. 105	11,830	12,000	0.99	E	18,360	12,000	1.53	F(3)	11,580	12,000	0.97	E	9,250	12,000	0.77	C

Note: D/C is demand-to-capacity ratio.

Exhibit 103: 2025 Weekday Plus Project Alternative 2 Level of Service (LOS) for Study Freeway Locations

Northbound/Eastbound

ID	CMP Station	Fwy Rte	Post Mile	Location	2025 No Project				2025 Plus Project				2025 Increase in D/C Ratio with Project		2025 Project Has Significant Cumulative Impact?	
					AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM	PM	AM	PM
					D/C	LOS	D/C	LOS	D/C	LOS	D/C	LOS				
91-1		91	6.344	Jct. Rte. 110 to Avalon Blvd.	0.58	C	1.20	F(0)	0.59	C	1.21	F(0)	0.01	0.01	No	No
91-2		91	7.426	Avalon Blvd. to Central Ave.	0.72	C	1.47	F(3)	0.73	C	1.49	F(3)	0.01	0.02	No	Yes
91-3		91	8.435	Central Ave. to Wilmington Ave.	0.73	C	1.49	F(3)	0.74	C	1.51	F(3)	0.01	0.02	No	Yes
91-4		91	9.162	Wilmington Ave. to Alameda St.	0.76	C	1.55	F(3)	0.77	C	1.57	F(3)	0.01	0.02	No	Yes
91-5		91	10.271	Alameda St. to Alameda St./Santa F	0.99	E	2.03	F(3)	1.00	E	2.05	F(3)	0.01	0.02	No	Yes
91-6	1033	91	10.41	Alameda St./Santa Fe Ave. to Long	0.68	C	1.40	F(2)	0.69	C	1.41	F(2)	0.01	0.01	No	No
91-7		91	11.096	Long Beach Blvd. to Jct. Rte. 710	0.68	C	1.40	F(2)	0.69	C	1.41	F(2)	0.01	0.01	No	No
91-8		91	11.681	Jct. Rte. 710 to Cherry Ave.	0.84	D	1.20	F(0)	0.84	D	1.21	F(0)	0.00	0.01	No	No
91-9	1034	91	13.094	Cherry Ave. to Paramount Blvd.	0.85	D	1.22	F(0)	0.85	D	1.23	F(0)	0.00	0.01	No	No
91-10		91	13.594	Paramount Blvd. to Downey Ave.	0.83	D	1.18	F(0)	0.83	D	1.19	F(0)	0.00	0.01	No	No
91-11		91	14.103	Downey Ave. to Jct. Rte. 19	0.69	C	0.98	E	0.70	C	0.99	E	0.01	0.01	No	No
91-12		91	14.618	Jct. Rte. 19 to Clark Ave.	0.76	C	1.09	F(0)	0.76	C	1.10	F(0)	0.00	0.01	No	No
91-13		91	15.105	Clark Ave. to Bellflower Blvd.	0.68	C	0.96	E	0.68	C	0.97	E	0.00	0.01	No	No
91-14		91	15.614	Bellflower Blvd. to Jct. Rte. 605	0.67	C	0.95	E	0.67	C	0.96	E	0.00	0.01	No	No
110-1	1045	110	1.23	Channel St. to C St.	0.56	C	0.40	B	0.58	C	0.41	B	0.02	0.01	No	No
110-2		110	2.771	C St. to Anaheim St.	0.47	B	0.34	A	0.48	B	0.35	A	0.01	0.01	No	No
110-3		110	3.264	Anaheim St. to Jct. Rte. 1	0.51	B	0.36	B	0.52	B	0.37	B	0.01	0.01	No	No
110-4		110	4.061	Jct. Rte. 1 to Sepulveda Blvd.	0.89	D	0.64	C	0.91	D	0.66	C	0.02	0.02	No	No
110-5		110	5.451	Sepulveda Blvd. to Carson St.	1.15	F(0)	0.83	D	1.18	F(0)	0.85	D	0.03	0.02	Yes	No
110-6		110	7.016	Carson St. to Torrance/Del Amo Blvd	1.33	F(1)	0.96	E	1.35	F(1)	0.99	E	0.02	0.03	Yes	Yes
110-7		110	8.028	Torrance/Del Amo Blvd. to Jct. Rte.	1.40	F(2)	1.01	F(0)	1.43	F(2)	1.04	F(0)	0.03	0.03	Yes	Yes
110-8		110	8.775	Jct. Rte. 405 to Jct. Rte. 91	1.15	F(0)	0.83	D	1.17	F(0)	0.84	D	0.02	0.01	Yes	No
110-9		110	9.87	Jct. Rte. 91 to Redondo Beach Blvd.	0.76	C	0.77	C	0.77	C	0.78	D	0.01	0.01	No	No
110-10		110	11.239	Redondo Beach Blvd. to Rosecrans	0.85	D	0.87	D	0.86	D	0.89	D	0.01	0.02	No	No
110-11		110	11.891	Rosecrans Ave. to El Segundo Blvd.	0.89	D	0.91	D	0.90	D	0.93	D	0.01	0.02	No	No
110-12		110	12.898	El Segundo Blvd. to Jct. Rte. 105	0.91	D	0.93	D	0.92	D	0.94	E	0.01	0.01	No	No
110-13		110	13.82	Jct. Rte. 105 to Century Blvd.	0.80	D	0.81	D	0.81	D	0.83	D	0.01	0.02	No	No
110-14		110	14.967	Century Blvd. to Manchester Ave.	1.00	E	1.02	F(0)	1.01	F(0)	1.03	F(0)	0.01	0.01	No	No
110-15	1046	110	15.976	Manchester Ave. to Florence Ave.	0.98	E	0.99	E	0.98	E	1.00	E	0.00	0.01	No	No
110-16		110	16.981	Florence Ave. to Gage Ave.	1.01	F(0)	1.03	F(0)	1.01	F(0)	1.04	F(0)	0.00	0.01	No	No
110-17	1047	110	17.514	Gage Ave. to Slauson Ave.	1.00	E	1.02	F(0)	1.01	F(0)	1.03	F(0)	0.01	0.01	No	No
110-18		110	17.98	Slauson Ave. to 51st St.	1.16	F(0)	1.17	F(0)	1.17	F(0)	1.18	F(0)	0.01	0.01	No	No
110-19		110	18.495	51st St. to Vernon Ave.	1.18	F(0)	1.20	F(0)	1.19	F(0)	1.21	F(0)	0.01	0.01	No	No
110-20		110	18.998	Vernon Ave. to Martin Luther King Jr	0.98	E	1.00	E	0.99	E	1.01	F(0)	0.01	0.01	No	No
110-21		110	19.502	Martin Luther King Jr. Blvd. to Expos	0.89	D	0.90	D	0.90	D	0.91	D	0.01	0.01	No	No
110-22		110	19.996	Exposition Blvd. to Jct. Rte. 10	0.86	D	0.88	D	0.86	D	0.88	D	0.00	0.00	No	No
405-1		405	3.324	Lakewood Blvd. to Cherry Ave.	1.25	F(0)	1.07	F(0)	1.26	F(1)	1.08	F(0)	0.01	0.01	No	No
405-2		405	4.879	Cherry Ave. to Orange Ave.	1.32	F(1)	1.12	F(0)	1.33	F(1)	1.13	F(0)	0.01	0.01	No	No
405-3		405	5.388	Orange Ave. to Atlantic Ave.	1.71	F(3)	1.46	F(3)	1.72	F(3)	1.47	F(3)	0.01	0.01	No	No
405-4		405	6.076	Atlantic Ave. to Long Beach Blvd	1.69	F(3)	1.44	F(2)	1.70	F(3)	1.44	F(2)	0.01	0.00	No	No
405-5		405	6.34	Long Beach Blvd to Jct. Rte. 710	1.12	F(0)	0.95	E	1.12	F(0)	0.96	E	0.00	0.01	No	No
405-6	1066	405	7.596	Jct. Rte. 710 to Alameda St.	1.22	F(0)	1.04	F(0)	1.23	F(0)	1.05	F(0)	0.01	0.01	No	No
405-7		405	8.784	Alameda St. to Wilmington Ave.	1.18	F(0)	1.00	E	1.19	F(0)	1.01	F(0)	0.01	0.01	No	No
405-8		405	9.556	Wilmington Ave. to Carson St.	1.38	F(2)	1.19	F(0)	1.39	F(2)	1.20	F(0)	0.01	0.01	No	No
405-9		405	10.541	Carson St. to Avalon Blvd.	1.35	F(1)	1.16	F(0)	1.37	F(2)	1.17	F(0)	0.02	0.01	Yes	No
405-10	1067	405	11.224	Avalon Blvd. to Jct. Rte. 110	1.16	F(0)	1.00	E	1.17	F(0)	1.02	F(0)	0.01	0.02	No	Yes
405-11		405	12.97	Jct. Rte. 110 to Vermont Ave.	1.14	F(0)	0.99	E	1.15	F(0)	1.01	F(0)	0.01	0.02	No	Yes
405-12		405	13.28	Vermont Ave. to Normandie Ave.	0.99	E	0.87	D	1.00	E	0.88	D	0.01	0.01	No	No
405-13		405	13.826	Normandie Ave. to Western Ave.	1.12	F(0)	0.97	E	1.13	F(0)	0.99	E	0.01	0.02	No	Yes
405-14		405	14.398	Western Ave. to Crenshaw Blvd.	1.34	F(1)	1.16	F(0)	1.35	F(1)	1.18	F(0)	0.01	0.02	No	Yes
405-15		405	15.447	Crenshaw Blvd. to Artesia Blvd.	1.31	F(1)	1.14	F(0)	1.32	F(1)	1.16	F(0)	0.01	0.02	No	Yes
405-16		405	16.573	Artesia Blvd. to Hawthorne Blvd.	1.06	F(0)	0.92	D	1.07	F(0)	0.93	D	0.01	0.01	No	No
405-17		405	17.589	Hawthorne Blvd. to Inglewood Ave.	1.11	F(0)	0.97	E	1.12	F(0)	0.98	E	0.01	0.01	No	No
405-18	1068	405	18.233	Inglewood Ave. to Rosecrans Ave.	1.16	F(0)	1.01	F(0)	1.17	F(0)	1.02	F(0)	0.01	0.01	No	No
710-1		710	12.97	Jct. Rte. 91 to Alondra Blvd.	0.95	E	1.48	F(3)	0.95	E	1.48	F(3)	0.00	0.00	No	No
710-2		710	13.945	Alondra Blvd. to Jct. Rte. 105	0.98	E	1.53	F(3)	0.99	E	1.53	F(3)	0.01	0.00	No	No

Note: D/C is demand-to-capacity ratio.

Exhibit 104: Determination of Freeway Impact for 2025 Weekday Plus Project Alternative 2

Southbound/Wesbound

ID	CMP Station	Fwy Rte	Post Mile	Location	2025 No Project				2025 Plus Project				2025 Increase in D/C Ratio with Project		2025 Project Has Significant Cumulative Impact?	
					AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM	PM	AM	PM
					D/C	LOS	D/C	LOS	D/C	LOS	D/C	LOS				
91-1		91	6.344	Jct. Rte. 110 to Avalon Blvd.	2.33	F(3)	1.58	F(3)	2.34	F(3)	1.59	F(3)	0.01	0.01	No	No
91-2		91	7.426	Avalon Blvd. to Central Ave.	0.95	E	0.65	C	0.96	E	0.66	C	0.01	0.01	No	No
91-3		91	8.435	Central Ave. to Wilmington Ave.	0.97	E	0.66	C	0.99	E	0.67	C	0.02	0.01	Yes	No
91-4		91	9.162	Wilmington Ave. to Alameda St.	1.00	E	0.68	C	1.02	F(0)	0.69	C	0.02	0.01	Yes	No
91-5		91	10.271	Alameda St. to Alameda St./Santa F	1.31	F(1)	0.89	D	1.34	F(1)	0.90	D	0.03	0.01	Yes	No
91-6	1033	91	10.41	Alameda St./Santa Fe Ave. to Long	0.91	D	0.62	C	0.93	D	0.63	C	0.02	0.01	No	No
91-7		91	11.096	Long Beach Blvd. to Jct. Rte. 710	1.09	F(0)	0.74	C	1.11	F(0)	0.75	C	0.02	0.01	Yes	No
91-8		91	11.681	Jct. Rte. 710 to Cherry Ave.	1.35	F(1)	0.95	E	1.36	F(2)	0.96	E	0.01	0.01	No	No
91-9	1034	91	13.094	Cherry Ave. to Paramount Blvd.	1.14	F(0)	0.80	D	1.15	F(0)	0.81	D	0.01	0.01	No	No
91-10		91	13.594	Paramount Blvd. to Downey Ave.	1.33	F(1)	0.94	E	1.34	F(1)	0.95	E	0.01	0.01	No	No
91-11		91	14.103	Downey Ave. to Jct. Rte. 19	1.32	F(1)	0.93	D	1.33	F(1)	0.94	E	0.01	0.01	No	No
91-12		91	14.618	Jct. Rte. 19 to Clark Ave.	1.54	F(3)	1.08	F(0)	1.55	F(3)	1.08	F(0)	0.01	0.00	No	No
91-13		91	15.105	Clark Ave. to Bellflower Blvd.	1.29	F(1)	0.91	D	1.30	F(1)	0.92	D	0.01	0.01	No	No
91-14		91	15.614	Bellflower Blvd. to Jct. Rte. 605	1.28	F(1)	0.90	D	1.29	F(1)	0.91	D	0.01	0.01	No	No
110-1	1045	110	1.23	Channel St. to C St.	0.45	B	0.54	B	0.46	B	0.55	C	0.01	0.01	No	No
110-2		110	2.771	C St. to Anaheim St.	0.48	B	0.56	C	0.49	B	0.58	C	0.01	0.02	No	No
110-3		110	3.264	Anaheim St. to Jct. Rte. 1	0.41	B	0.49	B	0.42	B	0.50	B	0.01	0.01	No	No
110-4		110	4.061	Jct. Rte. 1 to Sepulveda Blvd.	0.71	C	0.86	D	0.73	C	0.89	D	0.02	0.03	No	No
110-5		110	5.451	Sepulveda Blvd. to Carson St.	0.93	D	1.13	F(0)	0.94	E	1.15	F(0)	0.01	0.02	No	Yes
110-6		110	7.016	Carson St. to Torrance/Del Amo Blvd	1.08	F(0)	1.30	F(1)	1.09	F(0)	1.33	F(1)	0.01	0.03	No	Yes
110-7		110	8.028	Torrance/Del Amo Blvd. to Jct. Rte. 4	1.14	F(0)	1.38	F(2)	1.16	F(0)	1.40	F(2)	0.02	0.02	Yes	Yes
110-8		110	8.775	Jct. Rte. 405 to Jct. Rte. 91	1.39	F(2)	1.69	F(3)	1.41	F(2)	1.72	F(3)	0.02	0.03	Yes	Yes
110-9		110	9.87	Jct. Rte. 91 to Redondo Beach Blvd.	0.83	D	0.80	D	0.84	D	0.81	D	0.01	0.01	No	No
110-10		110	11.239	Redondo Beach Blvd. to Rosecrans	0.94	E	0.90	D	0.95	E	0.91	D	0.01	0.01	No	No
110-11		110	11.891	Rosecrans Ave. to El Segundo Blvd.	0.98	E	0.95	E	1.00	E	0.96	E	0.02	0.01	Yes	No
110-12		110	12.898	El Segundo Blvd. to Jct. Rte. 105	0.85	D	0.82	D	0.86	D	0.83	D	0.01	0.01	No	No
110-13		110	13.82	Jct. Rte. 105 to Century Blvd.	0.87	D	0.84	D	0.88	D	0.85	D	0.01	0.01	No	No
110-14		110	14.967	Century Blvd. to Manchester Ave.	1.09	F(0)	1.06	F(0)	1.11	F(0)	1.07	F(0)	0.02	0.01	Yes	No
110-15	1046	110	15.976	Manchester Ave. to Florence Ave.	1.07	F(0)	1.03	F(0)	1.08	F(0)	1.03	F(0)	0.01	0.00	No	No
110-16		110	16.981	Florence Ave. to Gage Ave.	1.08	F(0)	1.04	F(0)	1.09	F(0)	1.05	F(0)	0.01	0.01	No	No
110-17	1047	110	17.514	Gage Ave. to Slauson Ave.	1.08	F(0)	1.03	F(0)	1.09	F(0)	1.04	F(0)	0.01	0.01	No	No
110-18		110	17.98	Slauson Ave. to 51st St.	1.24	F(0)	1.19	F(0)	1.25	F(0)	1.20	F(0)	0.01	0.01	No	No
110-19		110	18.495	51st St. to Vernon Ave.	1.05	F(0)	1.02	F(0)	1.06	F(0)	1.03	F(0)	0.01	0.01	No	No
110-20		110	18.998	Vernon Ave. to Martin Luther King Jr	1.05	F(0)	1.02	F(0)	1.06	F(0)	1.02	F(0)	0.01	0.00	No	No
110-21		110	19.502	Martin Luther King Jr. Blvd. to Expos	1.14	F(0)	1.10	F(0)	1.15	F(0)	1.11	F(0)	0.01	0.01	No	No
110-22		110	19.996	Exposition Blvd. to Jct. Rte. 10	0.93	D	0.89	D	0.94	E	0.90	D	0.01	0.01	No	No
405-1		405	3.324	Lakewood Blvd. to Cherry Ave.	0.94	E	1.17	F(0)	0.94	E	1.18	F(0)	0.00	0.01	No	No
405-2		405	4.879	Cherry Ave. to Orange Ave.	1.23	F(0)	1.54	F(3)	1.23	F(0)	1.55	F(3)	0.00	0.01	No	No
405-3		405	5.388	Orange Ave. to Atlantic Ave.	1.28	F(1)	1.60	F(3)	1.28	F(1)	1.61	F(3)	0.00	0.01	No	No
405-4		405	6.076	Atlantic Ave. to Long Beach Blvd	0.84	D	1.05	F(0)	0.85	D	1.06	F(0)	0.01	0.01	No	No
405-5		405	6.34	Long Beach Blvd to Jct. Rte. 710	1.00	E	1.25	F(0)	1.00	E	1.26	F(1)	0.00	0.01	No	No
405-6	1066	405	7.596	Jct. Rte. 710 to Alameda St.	0.91	D	1.14	F(0)	0.92	D	1.15	F(0)	0.01	0.01	No	No
405-7		405	8.784	Alameda St. to Wilmington Ave.	0.88	D	1.10	F(0)	0.89	D	1.11	F(0)	0.01	0.01	No	No
405-8		405	9.556	Wilmington Ave. to Carson St.	1.18	F(0)	1.43	F(2)	1.18	F(0)	1.44	F(2)	0.00	0.01	No	No
405-9		405	10.541	Carson St. to Avalon Blvd.	1.16	F(0)	1.40	F(2)	1.17	F(0)	1.42	F(2)	0.01	0.02	No	Yes
405-10	1067	405	11.224	Avalon Blvd. to Jct. Rte. 110	0.99	E	1.20	F(0)	1.01	F(0)	1.21	F(0)	0.02	0.01	Yes	No
405-11		405	12.97	Jct. Rte. 110 to Vermont Ave.	1.06	F(0)	1.31	F(1)	1.08	F(0)	1.33	F(1)	0.02	0.02	Yes	Yes
405-12		405	13.28	Vermont Ave. to Normandie Ave.	0.89	D	1.10	F(0)	0.90	D	1.11	F(0)	0.01	0.01	No	No
405-13		405	13.826	Normandie Ave. to Western Ave.	1.04	F(0)	1.29	F(1)	1.05	F(0)	1.30	F(1)	0.01	0.01	No	No
405-14		405	14.398	Western Ave. to Crenshaw Blvd.	1.00	E	1.24	F(0)	1.01	F(0)	1.25	F(0)	0.01	0.01	No	No
405-15		405	15.447	Crenshaw Blvd. to Artesia Blvd.	0.98	E	1.21	F(0)	0.99	E	1.22	F(0)	0.01	0.01	No	No
405-16		405	16.573	Artesia Blvd. to Hawthorne Blvd.	0.99	E	1.23	F(0)	1.00	E	1.23	F(0)	0.01	0.00	No	No
405-17		405	17.589	Hawthorne Blvd. to Inglewood Ave.	1.04	F(0)	1.28	F(1)	1.05	F(0)	1.28	F(1)	0.01	0.00	No	No
405-18	1068	405	18.233	Inglewood Ave. to Rosecrans Ave.	0.87	D	1.07	F(0)	0.88	D	1.08	F(0)	0.01	0.01	No	No
710-1		710	12.97	Jct. Rte. 91 to Alondra Blvd.	0.93	D	0.74	C	0.93	D	0.75	C	0.00	0.01	No	No
710-2		710	13.945	Alondra Blvd. to Jct. Rte. 105	0.96	E	0.77	C	0.97	E	0.77	C	0.01	0.00	No	No

Note: D/C is demand-to-capacity ratio.

Exhibit 104: Determination of Freeway Impact for 2025 Weekday Plus Project Alternative 2 (continued)

11 2035 No Project Conditions

11.1 2035 Weekday No Project Conditions

11.1.1 Forecasting 2035 Weekday No Project Traffic

Traffic volumes for the 2035 No Project condition were developed by factoring up the existing weekday traffic counts using the growth factor from the LA-CMP and then adding in the traffic for existing, known, and reasonably foreseeable projects. The resulting 2035 No Project traffic volumes are shown in Exhibit 106.

11.1.2 2035 Weekday No Project Intersection Level of Service

Exhibit 105 shows in tabular format the 2035 No Project weekday level of service (LOS) based on the traffic volumes shown in Exhibit 106 (also see Appendix O). The LOS is also shown on maps in Exhibit 107 for the AM peak hour condition, and Exhibit 108 and for the PM peak hour condition. Seven intersections would not meet the target LOS of D or better under 2035 No Project conditions, namely:

- Intersection #1, Victoria Ave./Drive D, during the PM peak hours
- Intersection #5, Central Ave./Charles Willard St., during both peak hours
- Intersection #20, I-110 SB Off-Ramp/190th St., during both peak hours
- Intersection #24, Main St./Victoria St., during the PM peak hour
- Intersection #26, Avalon Blvd./Del Amo Blvd., during the PM peak hour
- Intersection #33, W. Artesia Blvd./Crenshaw Blvd., during both peak hours
- Intersection #35, W. Artesia Blvd./Vermont Ave., during the PM peak hour

Note that Intersections 1, 20, 33, and 35 already have LOS worse than D under Existing Conditions. Additional deficiencies would develop by 2025 at Intersections 5, 24, and 26 caused by the growth in background (i.e. non-Project) traffic (see Section 9.2) and would worsen by 2035.

Study ID	Intersection Name	Control Type	AM Peak Hour		PM Peak Hour	
			V/C Ratio or Delay	LOS (ICU or HCM)	V/C Ratio or Delay	LOS (ICU or HCM)
1	Victoria St./Drive D	TWSC	26	D	>180	F
2	Victoria St./Tamcliff Ave.	Signalized	0.441	A	0.606	B
3	Victoria St./Birchknoll Dr.	Signalized	0.569	A	0.691	B
4	Victoria St./Project Service Rd.	N/A	N/A	N/A	N/A	N/A
5	Central Ave./Charles Willard St.	TWSC	39.8	E	34.2	D
6	Central Ave./Beachey Pl.	TWSC	19.3	C	22.8	C
7	Central Ave./Glenn Curtiss St.	Signalized	0.453	A	0.509	A
8	University Dr./Birchknoll Dr. Ext.	N/A	N/A	N/A	N/A	N/A
9	University Dr./Toro Center Dr.	TWSC	13.6	B	14.8	B
10	Albertoni St./SR 91 EB Ramps	Signalized	0.617	B	0.816	D
11	Avalon Blvd./SR 91 WB On-Ramp	Signalized	0.53	A	0.532	A
12	Avalon Blvd./Albertoni St.	Signalized	0.621	B	0.829	D
13	Avalon Blvd./Victoria St.	Signalized	0.623	B	0.893	D
14	Central Ave./Artesia Blvd. WB	Signalized	0.804	D	0.771	C
15	Central Ave./Albertoni St./Artesia Blvd. EB	Signalized	0.816	D	0.796	C
16	Central Ave./Victoria St.	Signalized	0.575	A	0.7	B
17	Wilmington Ave./Artesia Blvd. WB	Signalized	0.737	C	0.748	C
18	Wilmington Ave./Artesia Blvd. EB	Signalized	0.738	C	0.759	C
19	Wilmington Ave./Victoria St.	Signalized	0.549	A	0.58	A
20	I-110 SB Off-Ramp/190th St.	Signalized	1.081	F	1.109	F
21	I-110 NB On-Ramp/190th St.	Signalized	0.506	A	0.725	C
22	Figueroa St./190th St./Victoria St.	Signalized	0.831	D	0.882	D
23	Broadway/Victoria St.	Signalized	0.587	A	0.759	C
24	Main St./Victoria St.	Signalized	0.669	B	0.909	E
25	Avalon Blvd./University Dr.	Signalized	0.469	A	0.655	B
26	Avalon Blvd./Del Amo Blvd.	Signalized	0.868	D	0.952	E
27	Avalon Blvd./I-405 NB Ramps	Signalized	0.512	A	0.518	A
28	Avalon Blvd./I-405 SB Ramps	Signalized	0.6	B	0.571	A
29	Central Ave./University Dr.	Signalized	0.588	A	0.525	A
30	Wilmington Ave./University Dr.	Signalized	0.504	A	0.594	A
31	Central Ave./Del Amo Blvd.	Signalized	0.756	C	0.734	C
32	Wilmington Ave./Del Amo Blvd.	Signalized	0.678	B	0.713	C
33	W. Artesia Blvd./Crenshaw Blvd.	Signalized	0.956	E	1.028	F
34	W. 190th St./S. Western Ave.	Signalized	0.851	D	0.803	D
35	W. Artesia Blvd./Vermont Ave.	Signalized	0.863	D	1.076	F
36	Alameda St./Compton Blvd.	Signalized	0.697	B	0.744	C
37	Alameda St./SR 91 EB Ramps	Signalized	0.591	A	0.794	C

*Intersection LOS was calculated using HCM 2000 Delay Method, because ICU cannot be calculated for TWSC intersections.

Exhibit 105: 2035 Weekday No Project Level of Service (LOS) at Study Intersections (Table)

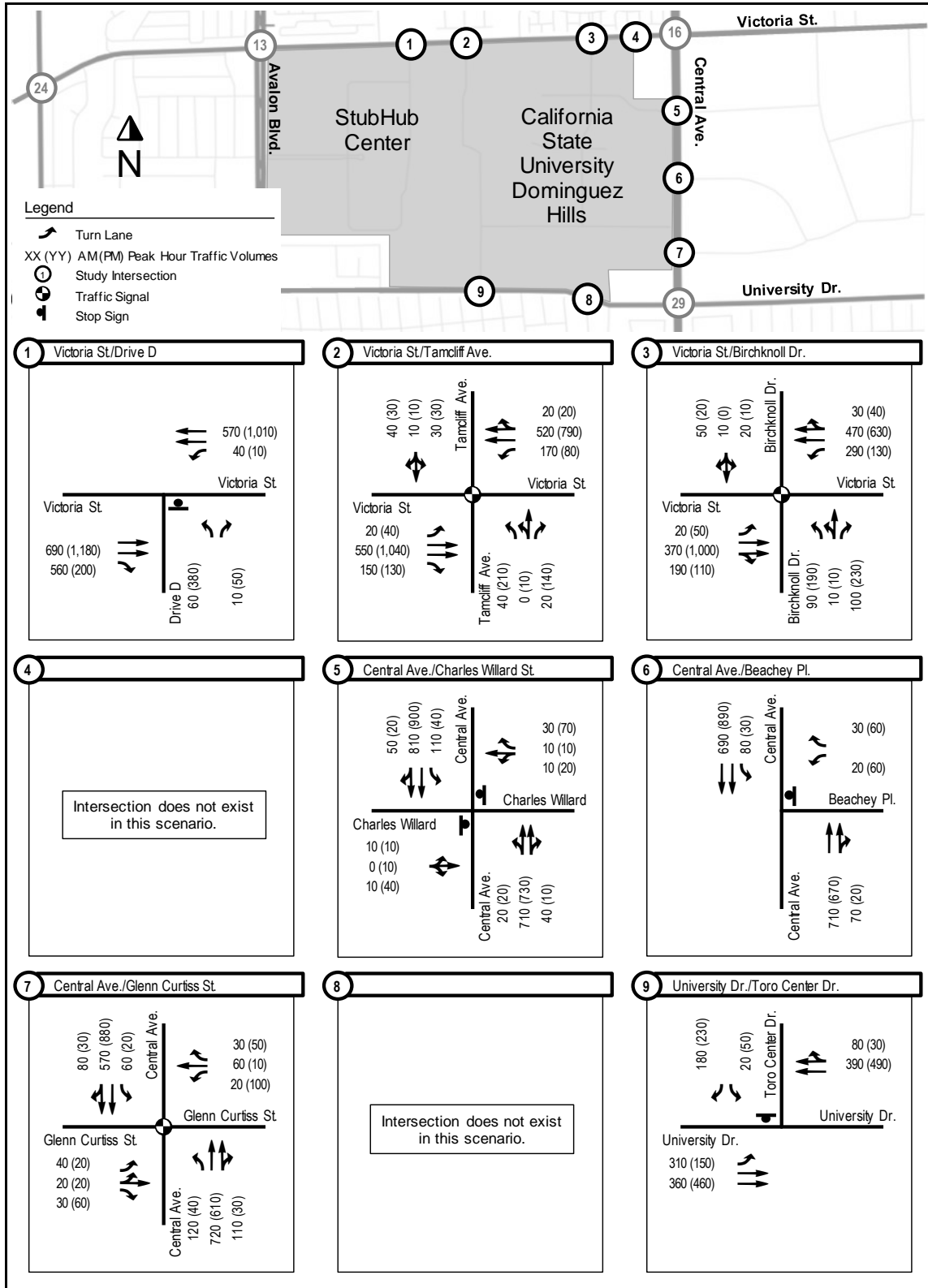


Exhibit 106: 2035 Weekday No Project Traffic Volumes and Lane Configurations

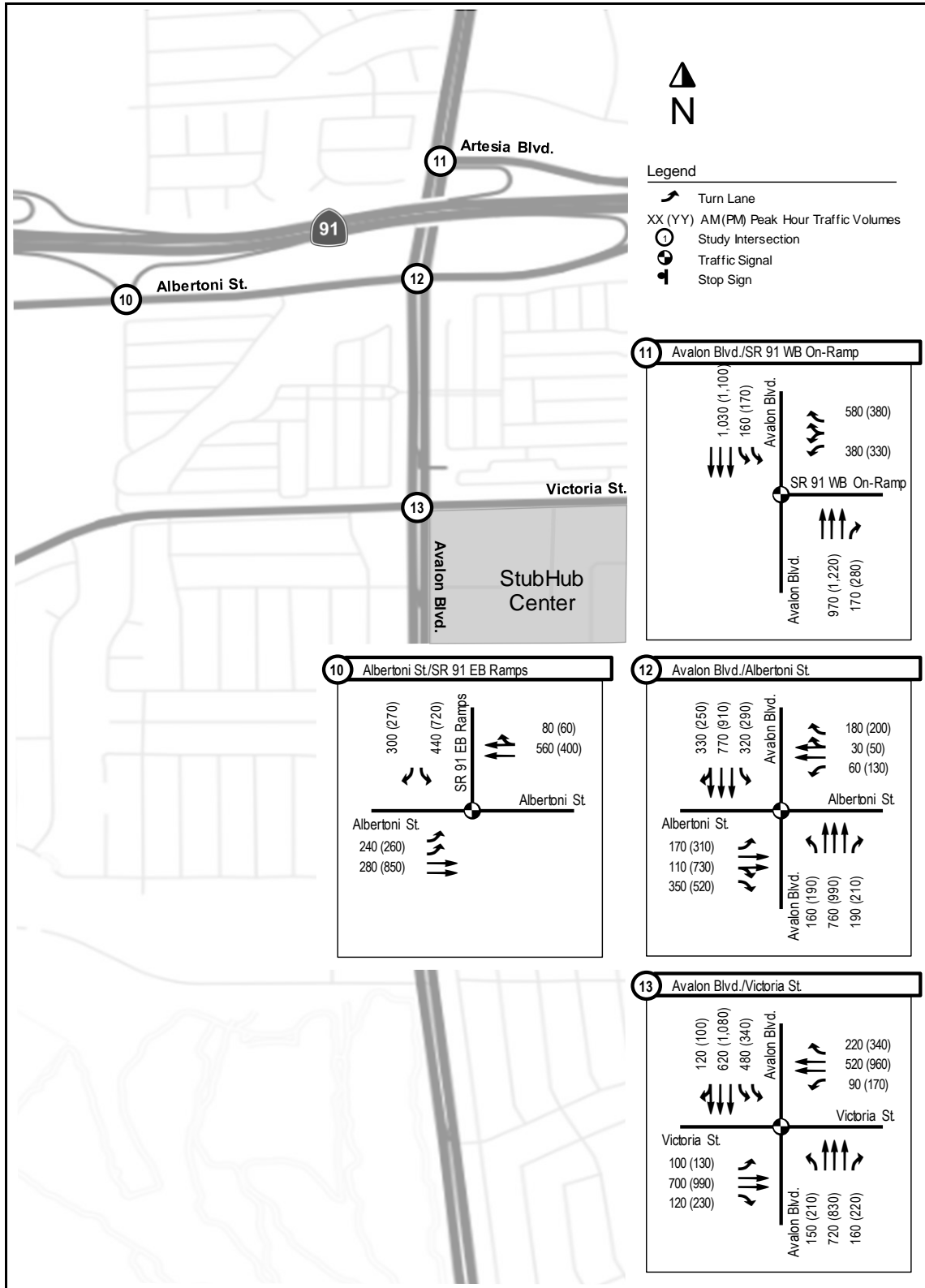


Exhibit 106: 2035 Weekday No Project Traffic Volumes and Lane Configurations (Map B)

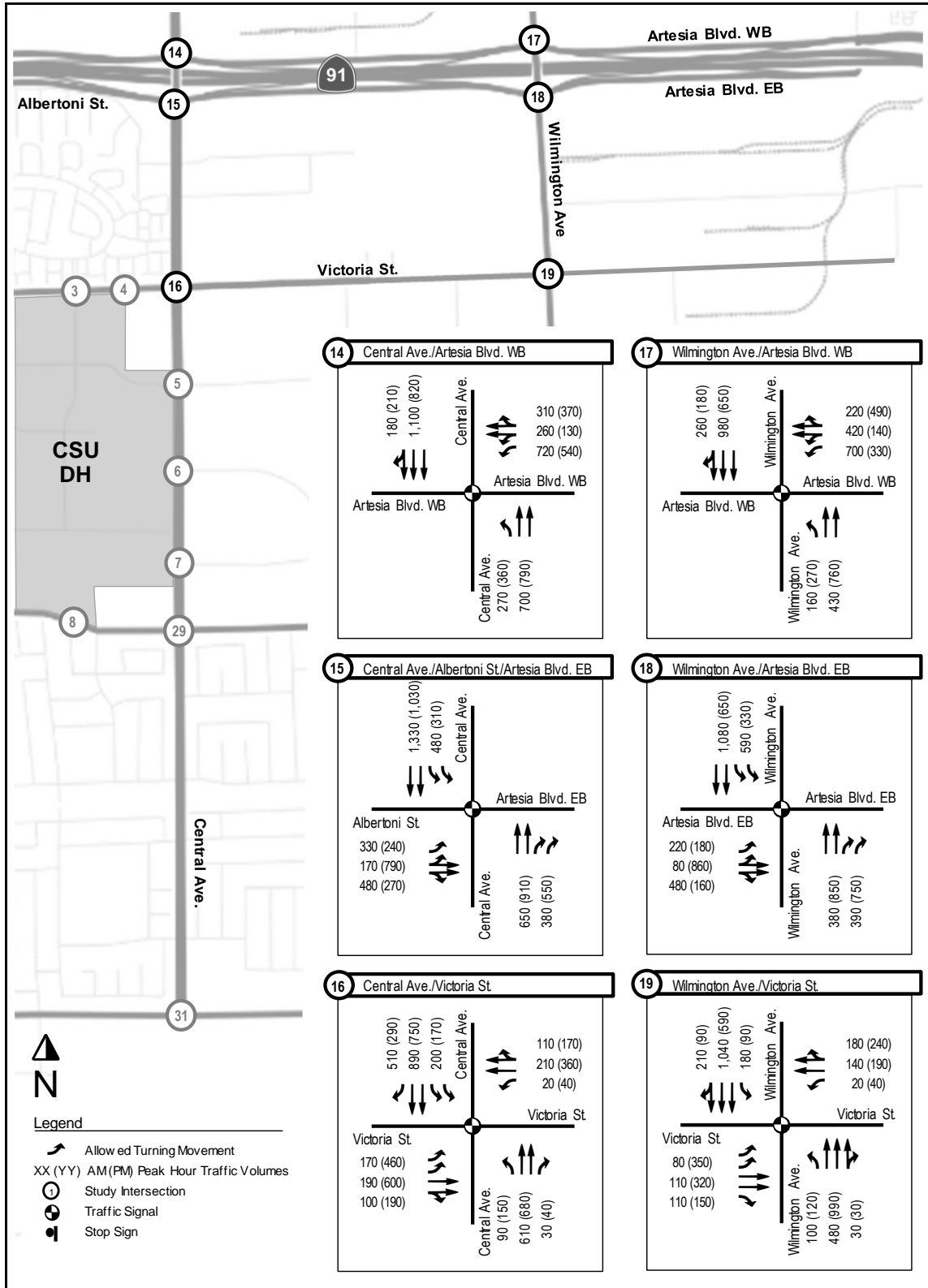


Exhibit 106: 2035 Weekday No Project Traffic Volumes and Lane Configurations (Map C)

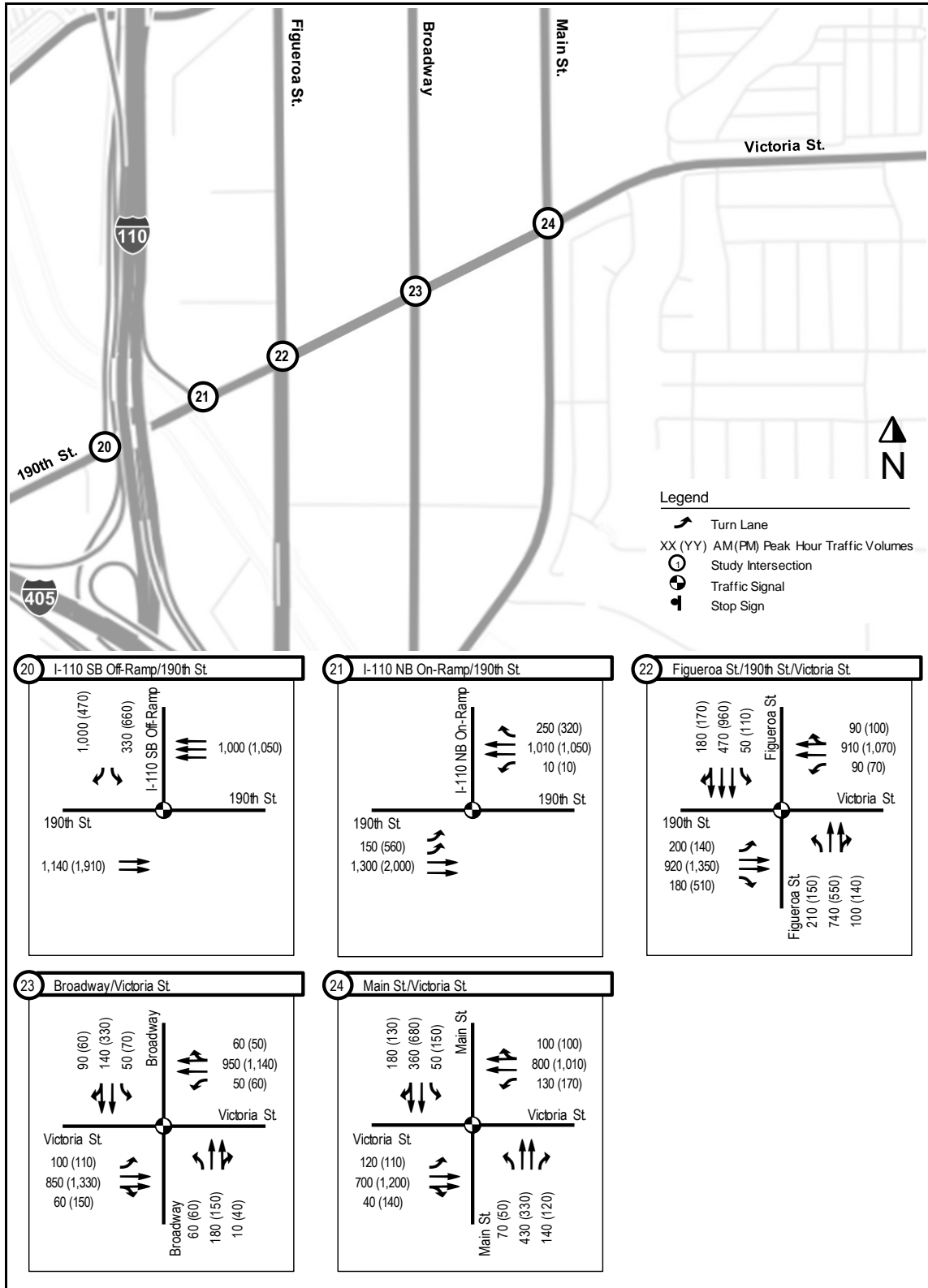


Exhibit 106: 2035 Weekday No Project Traffic Volumes and Lane Configurations (Map D)

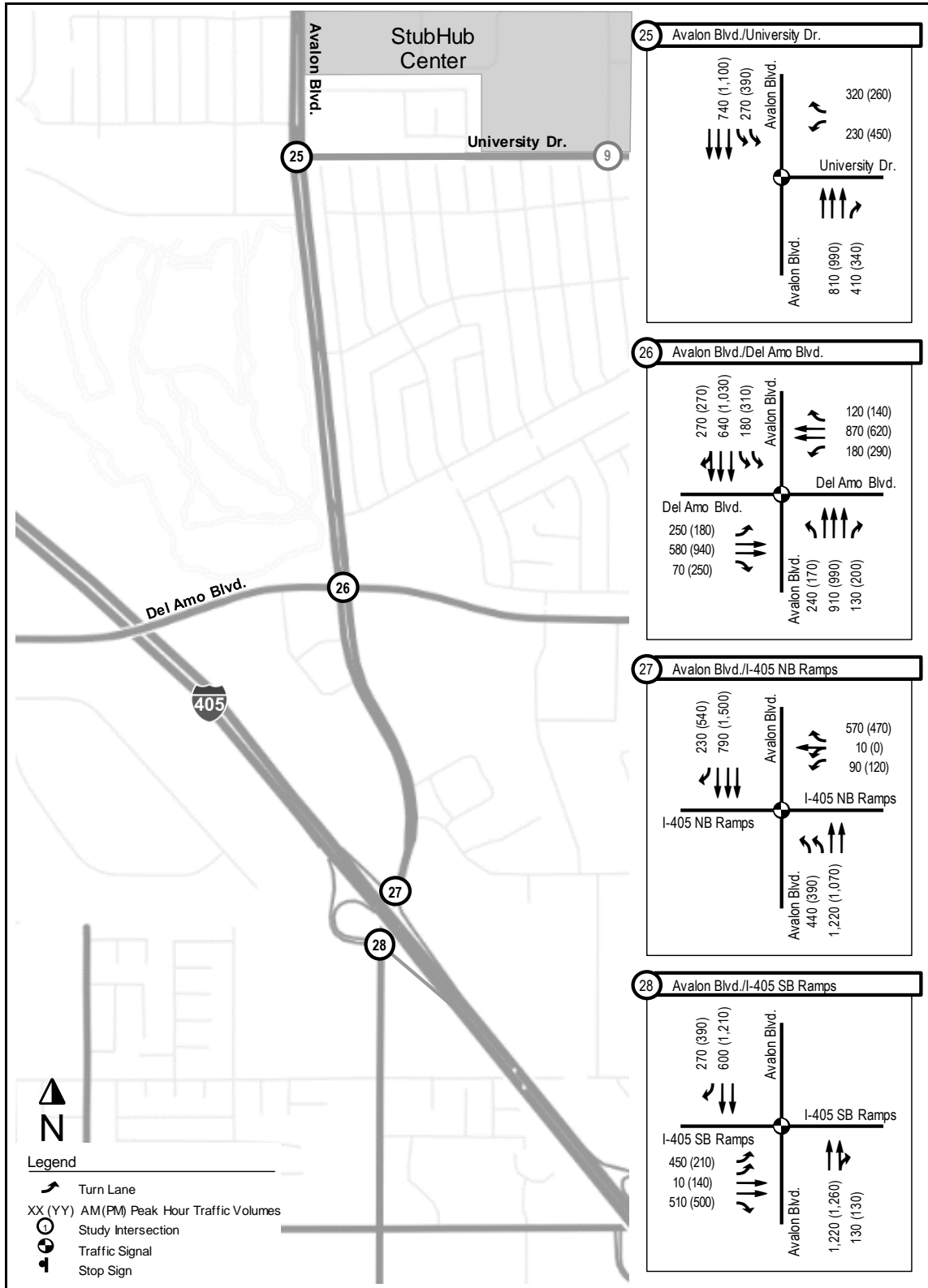


Exhibit 106: 2035 Weekday No Project Traffic Volumes and Lane Configurations (Map E)

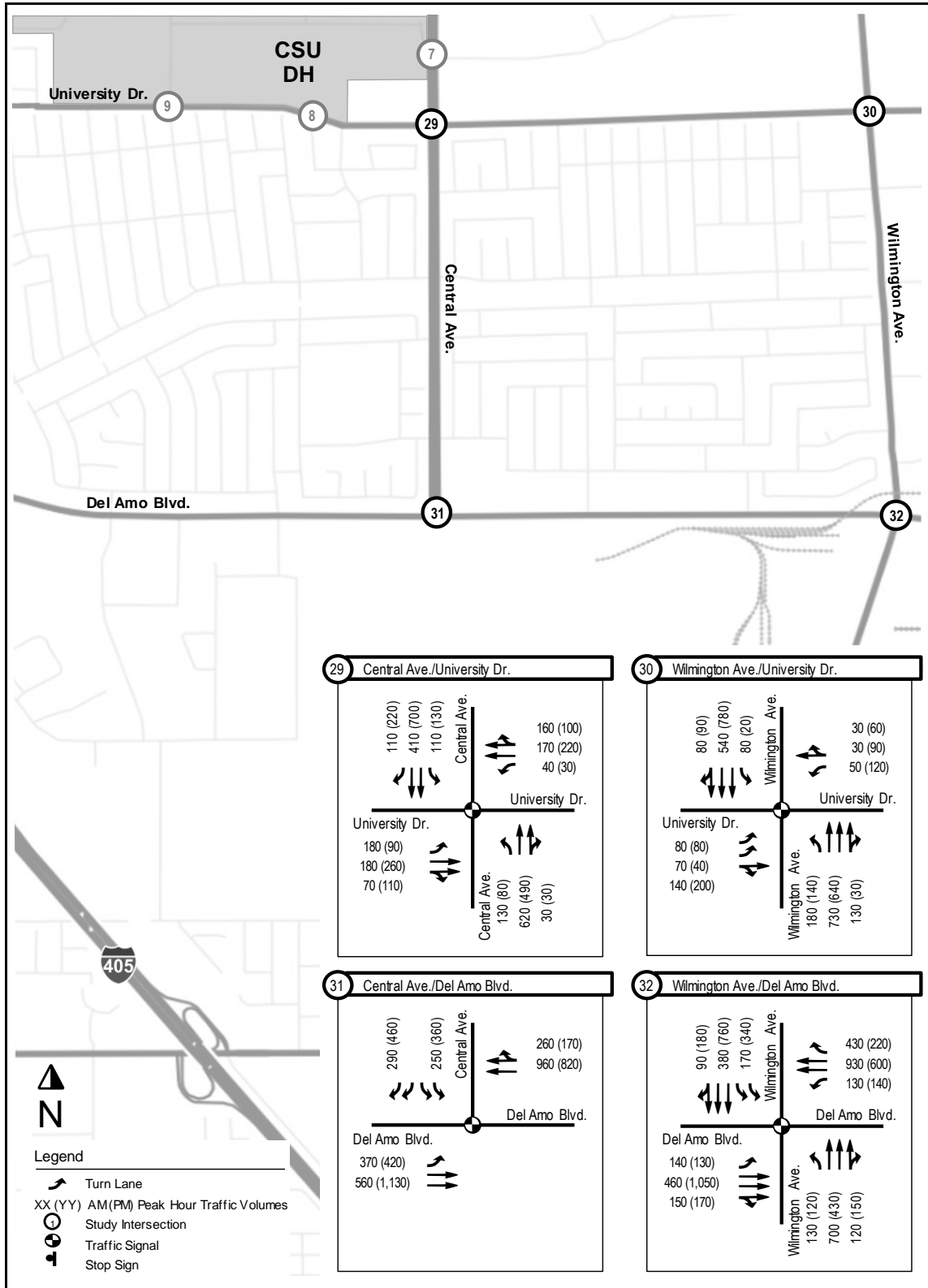


Exhibit 106: 2035 Weekday No Project Traffic Volumes and Lane Configurations (Map F)

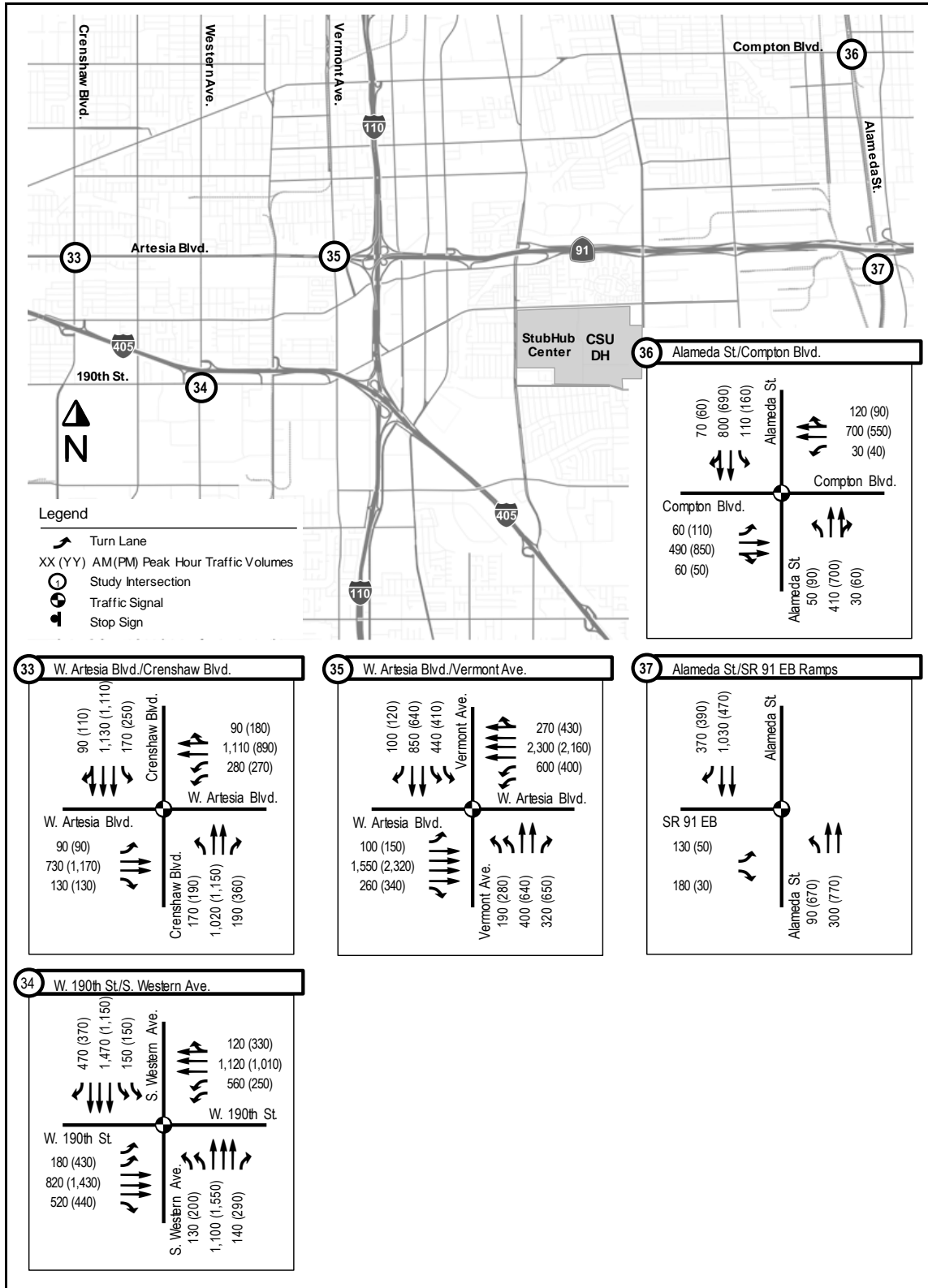


Exhibit 106: 2035 Weekday No Project Traffic Volumes and Lane Configurations (Map G)

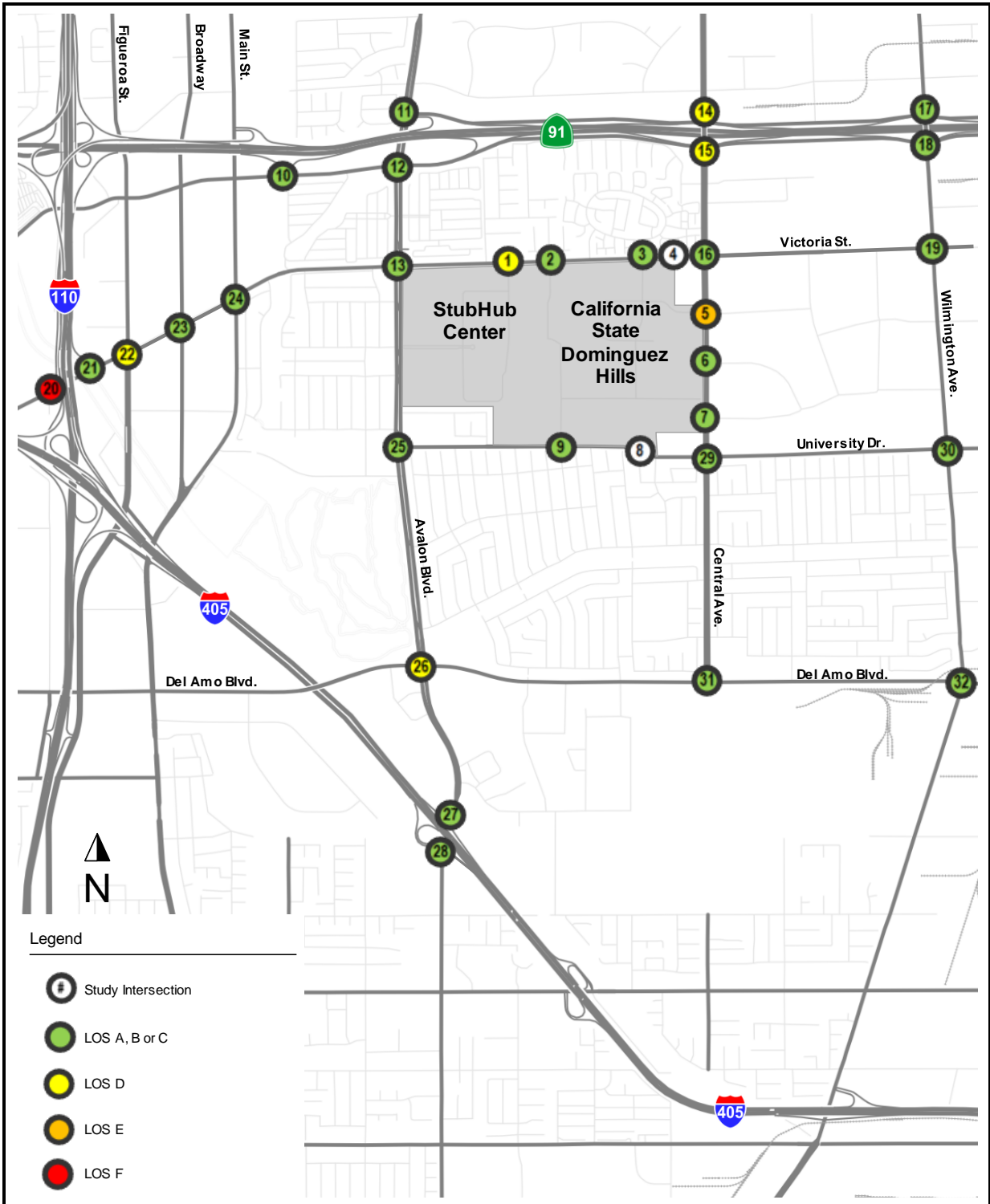


Exhibit 107: 2035 Weekday No Project AM Peak Hour LOS (Map)

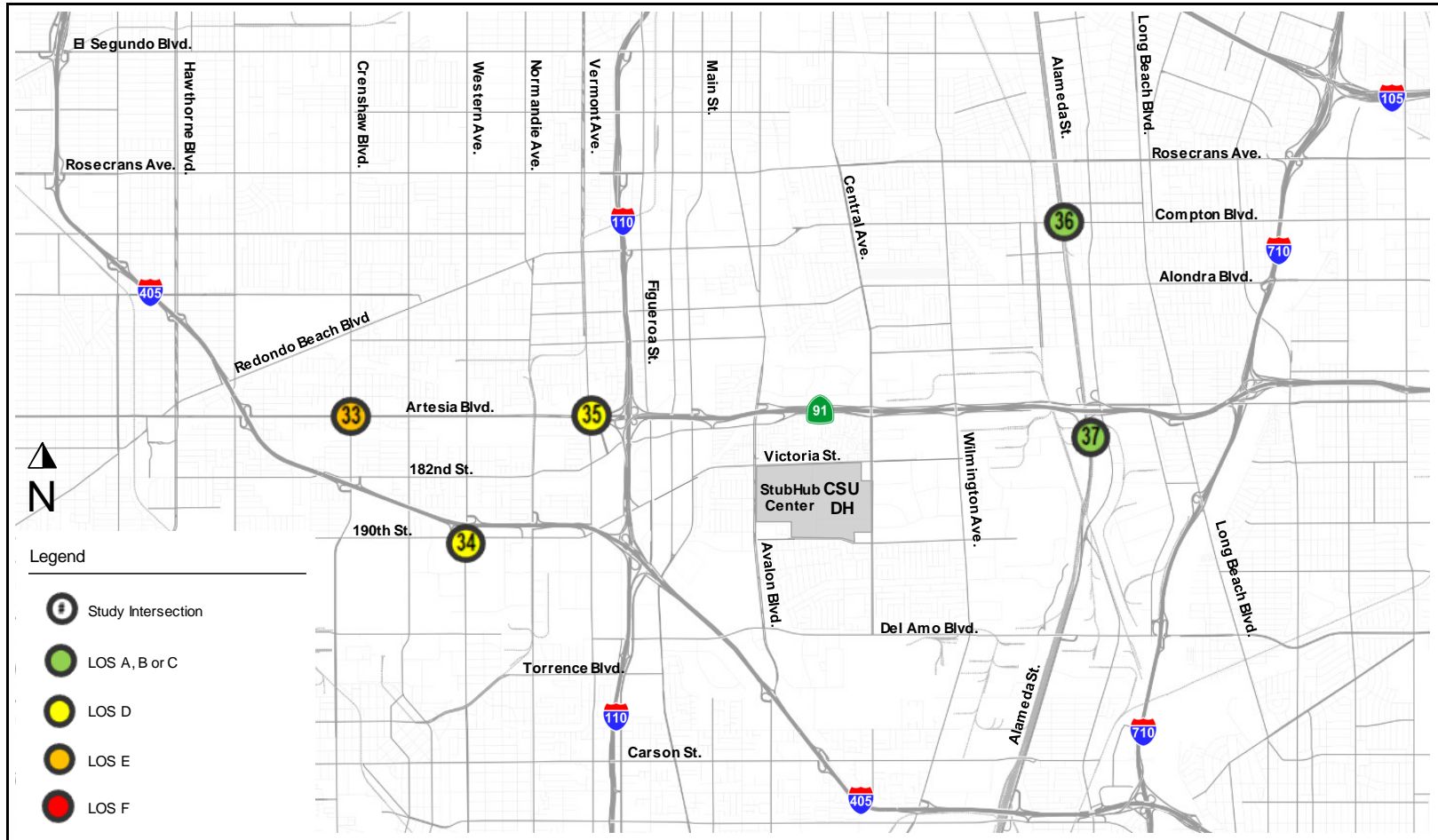


Exhibit 107: 2035 Weekday No Project AM Peak Hour LOS (Map)

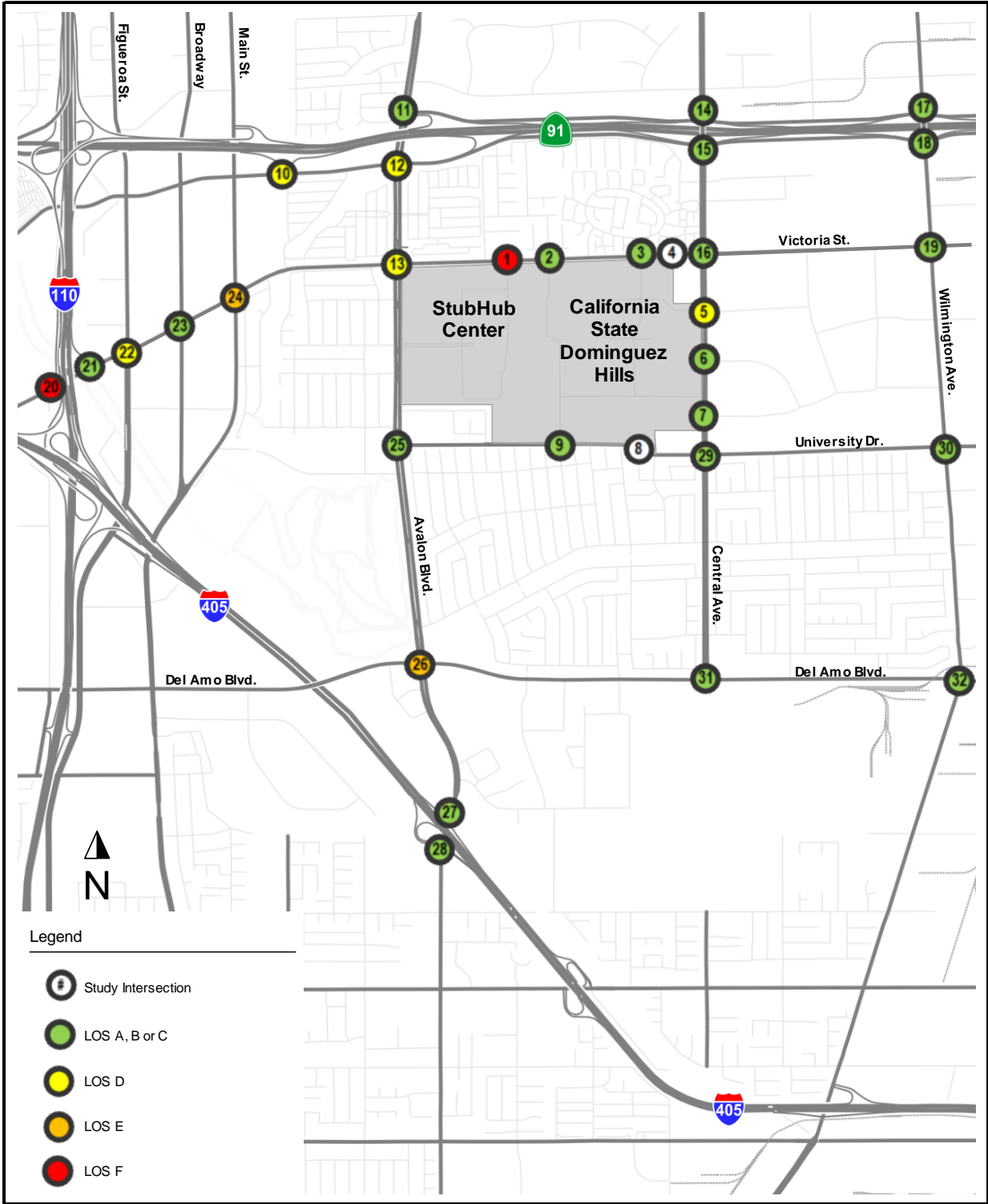


Exhibit 108: 2035 Weekday No Project PM Peak Hour LOS (Map)

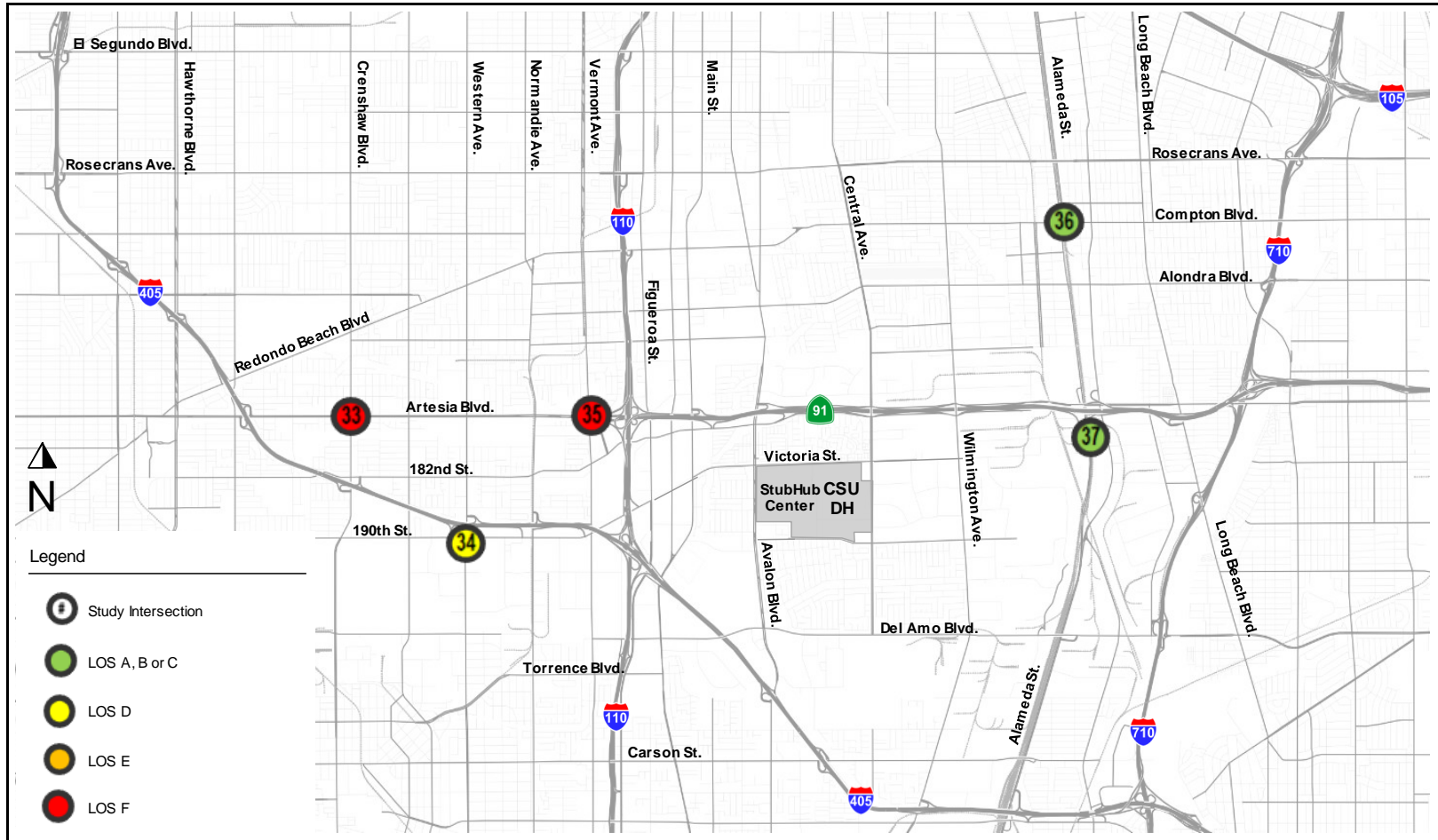


Exhibit 108: 2035 Weekday No Project PM Peak Hour LOS (Map)

11.1.3 2035 Weekday No Project Freeway Level of Service

The forecast 2035 No Project LOS for the study freeway segments are shown in Exhibit 109. Seven CMP freeway monitoring stations are forecast to have an LOS worse than D. These are the same seven locations with poor LOS under Existing Conditions, namely:

- CMP Station #1033, SR-91 East of Alameda St./Santa Fe Ave., Eastbound, during the PM peak hour
- CMP Station #1034, SR-91 East of Cherry Ave., Eastbound, during the PM peak hour and Westbound, during the AM peak hour
- CMP Station #1046, I-110 at Manchester Blvd., Northbound , during both peak hours and Southbound , during both peak hours
- CMP Station #1047, I-110 at Slauson Ave., Northbound and Southbound during both peak hours
- CMP Station #1066, I-405 at Santa Fe Ave., Northbound, during both peak hours and Southbound, during the PM peak hour
- CMP Station #1067, I-405 South of I-110 at the Carson Scales, Northbound, during both peak hours and Southbound, during both peak hours
- CMP Station #1068, I-405 North of Inglewood Ave. at Compton Blvd., Northbound, during both peak hours and Southbound, during the PM peak hour

Altogether 112 freeway segments are forecast to have an LOS worse than D, including those that are not CMP monitoring stations. These additional locations are:

- SR-91 eastbound, Jct. Rte. 110 to Avalon Blvd., during the PM peak hour
- SR-91 eastbound, Avalon Blvd. to Central Ave., during the PM peak hour
- SR-91 eastbound, Central Ave. to Wilmington Ave., during the PM peak hour
- SR-91 eastbound, Wilmington Ave. to Alameda St., during the PM peak hour
- SR-91 eastbound, Alameda St. to Alameda St./Santa Fe Ave., during the both peak hours
- SR-91 eastbound, Alameda St./Santa Fe Ave. to Long Beach Blvd., during the PM peak hour
- SR-91 eastbound, Long Beach Blvd. to Jct. Rte. 710, during the PM peak hour
- SR-91 eastbound, Jct. Rte. 710 to Cherry Ave., during the PM peak hour
- SR-91 eastbound, Cherry Ave. to Paramount Blvd., during the PM peak hour
- SR-91 eastbound, Paramount Blvd. to Downey Ave., during the PM peak hour
- SR-91 eastbound, Downey Ave. to Jct. Rte. 19, during the PM peak hour
- SR-91 eastbound, Jct. Rte. 19 to Clark Ave., during the PM peak hour
- SR-91 eastbound, Clark Ave. to Bellflower Blvd., during the PM peak hour
- SR-91 eastbound, Bellflower Blvd. to Jct. Rte. 605, during the PM peak hour
- I-110 northbound, Sepulveda Blvd. to Carson St., during the AM peak hour
- I-110 northbound, Carson St. to Torrance/Del Amo Blvd., during the both peak hours
- I-110 northbound, Torrance/Del Amo Blvd. to Jct. Rte. 405, during the both peak hours
- I-110 northbound, Jct. Rte. 405 to Jct. Rte. 91, during the AM peak hour
- I-110 northbound, Century Blvd. to Manchester Ave., during the both peak hours

- I-110 northbound, Manchester Ave. to Florence Ave., during the both peak hours
- I-110 northbound, Florence Ave. to Gage Ave., during the both peak hours
- I-110 northbound, Gage Ave. to Slauson Ave., during the both peak hours
- I-110 northbound, Slauson Ave. to 51st St., during the both peak hours
- I-110 northbound, 51st St. to Vernon Ave., during the both peak hours
- I-110 northbound, Vernon Ave. to Martin Luther King Jr. Blvd., during the both peak hours
- I-405 northbound, Lakewood Blvd. to Cherry Ave., during the both peak hours
- I-405 northbound, Cherry Ave. to Orange Ave., during the both peak hours
- I-405 northbound, Orange Ave. to Atlantic Ave., during the both peak hours
- I-405 northbound, Atlantic Ave. to Long Beach Blvd, during the both peak hours
- I-405 northbound, Long Beach Blvd to Jct. Rte. 710, during the both peak hours
- I-405 northbound, Jct. Rte. 710 to Alameda St., during the both peak hours
- I-405 northbound, Alameda St. to Wilmington Ave., during the both peak hours
- I-405 northbound, Wilmington Ave. to Carson St., during the both peak hours
- I-405 northbound, Carson St. to Avalon Blvd., during the both peak hours
- I-405 northbound, Avalon Blvd. to Jct. Rte. 110, during the both peak hours
- I-405 northbound, Jct. Rte. 110 to Vermont Ave., during the both peak hours
- I-405 northbound, Vermont Ave. to Normandie Ave., during the AM peak hour
- I-405 northbound, Normandie Ave. to Western Ave., during the both peak hours
- I-405 northbound, Western Ave. to Crenshaw Blvd., during the both peak hours
- I-405 northbound, Crenshaw Blvd. to Artesia Blvd., during the both peak hours
- I-405 northbound, Artesia Blvd. to Hawthorne Blvd., during the AM peak hour
- I-405 northbound, Hawthorne Blvd. to Inglewood Ave., during the both peak hours
- I-405 northbound, Inglewood Ave. to Rosecrans Ave., during the both peak hours
- I-710 northbound, Jct. Rte. 91 to Alondra Blvd., during the both peak hours
- I-710 northbound, Alondra Blvd. to Jct. Rte. 105, during the both peak hours
- SR-91 westbound, Jct. Rte. 110 to Avalon Blvd., during the both peak hours
- SR-91 westbound, Avalon Blvd. to Central Ave., during the AM peak hour
- SR-91 westbound, Central Ave. to Wilmington Ave., during the AM peak hour
- SR-91 westbound, Wilmington Ave. to Alameda St., during the AM peak hour
- SR-91 westbound, Alameda St. to Alameda St./Santa Fe Ave., during the AM peak hour
- SR-91 westbound, Long Beach Blvd. to Jct. Rte. 710, during the AM peak hour
- SR-91 westbound, Jct. Rte. 710 to Cherry Ave., during the both peak hours
- SR-91 westbound, Cherry Ave. to Paramount Blvd., during the AM peak hour
- SR-91 westbound, Paramount Blvd. to Downey Ave., during the both peak hours

- SR-91 westbound, Downey Ave. to Jct. Rte. 19, during the AM peak hour
- SR-91 westbound, Jct. Rte. 19 to Clark Ave., during the both peak hours
- SR-91 westbound, Clark Ave. to Bellflower Blvd., during the AM peak hour
- SR-91 westbound, Bellflower Blvd. to Jct. Rte. 605, during the AM peak hour
- I-110 southbound, Sepulveda Blvd. to Carson St., during the PM peak hour
- I-110 southbound, Carson St. to Torrance/Del Amo Blvd., during the both peak hours
- I-110 southbound, Torrance/Del Amo Blvd. to Jct. Rte. 405, during the both peak hours
- I-110 southbound, Jct. Rte. 405 to Jct. Rte. 91, during the both peak hours
- I-110 southbound, Redondo Beach Blvd. to Rosecrans Ave., during the AM peak hour
- I-110 southbound, Rosecrans Ave. to El Segundo Blvd., during the both peak hours
- I-110 southbound, Century Blvd. to Manchester Ave., during the both peak hours
- I-110 southbound, Manchester Ave. to Florence Ave., during the both peak hours
- I-110 southbound, Florence Ave. to Gage Ave., during the both peak hours
- I-110 southbound, Gage Ave. to Slauson Ave., during the both peak hours
- I-110 southbound, Slauson Ave. to 51st St., during the both peak hours
- I-110 southbound, 51st St. to Vernon Ave., during the both peak hours
- I-110 southbound, Vernon Ave. to Martin Luther King Jr. Blvd., during the both peak hours
- I-110 southbound, Martin Luther King Jr. Blvd. to Exposition Blvd., during the both peak hours
- I-405 southbound, Lakewood Blvd. to Cherry Ave., during the both peak hours
- I-405 southbound, Cherry Ave. to Orange Ave., during the both peak hours
- I-405 southbound, Orange Ave. to Atlantic Ave., during the both peak hours
- I-405 southbound, Atlantic Ave. to Long Beach Blvd, during the PM peak hour
- I-405 southbound, Long Beach Blvd to Jct. Rte. 710, during the both peak hours
- I-405 southbound, Jct. Rte. 710 to Alameda St., during the PM peak hour
- I-405 southbound, Alameda St. to Wilmington Ave., during the PM peak hour
- I-405 southbound, Wilmington Ave. to Carson St., during the both peak hours
- I-405 southbound, Carson St. to Avalon Blvd., during the both peak hours
- I-405 southbound, Avalon Blvd. to Jct. Rte. 110, during the both peak hours
- I-405 southbound, Jct. Rte. 110 to Vermont Ave., during the both peak hours
- I-405 southbound, Vermont Ave. to Normandie Ave., during the PM peak hour
- I-405 southbound, Normandie Ave. to Western Ave., during the both peak hours
- I-405 southbound, Western Ave. to Crenshaw Blvd., during the both peak hours
- I-405 southbound, Crenshaw Blvd. to Artesia Blvd., during the both peak hours
- I-405 southbound, Artesia Blvd. to Hawthorne Blvd., during the both peak hours
- I-405 southbound, Hawthorne Blvd. to Inglewood Ave., during the both peak hours

- I-405 southbound, Inglewood Ave. to Rosecrans Ave., during the PM peak hour
- I-710 southbound, Alondra Blvd. to Jct. Rte. 105, during the AM peak hour

ID	CMP Station	Fwy Rte	Post Mile	Location	Northbound/Eastbound								Southbound/Westbound							
					AM Peak Hour				PM Peak Hour				AM Peak Hour				PM Peak Hour			
					Demand	Capacity	D/C	LOS	Demand	Capacity	D/C	LOS	Demand	Capacity	D/C	LOS	Demand	Capacity	D/C	LOS
91-1		91	6.344	Jct. Rte. 110 to Avalon Blvd.	7,000	12,000	0.58	C	14,400	12,000	1.20	F(0)	9,300	4,000	2.33	F(3)	6,300	4,000	1.58	F(3)
91-2		91	7.426	Avalon Blvd. to Central Ave.	7,200	10,000	0.72	C	14,700	10,000	1.47	F(3)	9,500	10,000	0.95	E	6,500	10,000	0.65	C
91-3		91	8.435	Central Ave. to Wilmington Ave.	7,300	10,000	0.73	C	14,900	10,000	1.49	F(3)	9,700	10,000	0.97	E	6,600	10,000	0.66	C
91-4		91	9.162	Wilmington Ave. to Alameda St.	7,600	10,000	0.76	C	15,500	10,000	1.55	F(3)	10,000	10,000	1.00	E	6,800	10,000	0.68	C
91-5		91	10.271	Alameda St. to Alameda St./Santa Fe Ave.	7,900	8,000	0.99	E	16,200	8,000	2.03	F(3)	10,500	8,000	1.31	F(1)	7,100	8,000	0.89	D
91-6	1033	91	10.41	Alameda St./Santa Fe Ave. to Long Beach Blvd.	8,200	12,000	0.68	C	16,800	12,000	1.40	F(2)	10,900	12,000	0.91	D	7,400	12,000	0.62	C
91-7		91	11.096	Long Beach Blvd. to Jct. Rte. 710	8,200	12,000	0.68	C	16,800	12,000	1.40	F(2)	10,900	10,000	1.09	F(0)	7,400	10,000	0.74	C
91-8		91	11.681	Jct. Rte. 710 to Cherry Ave.	8,400	10,000	0.84	D	12,000	10,000	1.20	F(0)	13,500	10,000	1.35	F(1)	9,500	10,000	0.95	E
91-9	1034	91	13.094	Cherry Ave. to Paramount Blvd.	8,500	10,000	0.85	D	12,200	10,000	1.22	F(0)	13,700	12,000	1.14	F(0)	9,600	12,000	0.80	D
91-10		91	13.594	Paramount Blvd. to Downey Ave.	8,300	10,000	0.83	D	11,800	10,000	1.18	F(0)	13,300	10,000	1.33	F(1)	9,400	10,000	0.94	E
91-11		91	14.103	Downey Ave. to Jct. Rte. 19	8,300	12,000	0.69	C	11,800	12,000	0.98	E	13,200	10,000	1.32	F(1)	9,300	10,000	0.93	D
91-12		91	14.618	Jct. Rte. 19 to Clark Ave.	7,600	10,000	0.76	C	10,900	10,000	1.09	F(0)	12,300	8,000	1.54	F(3)	8,600	8,000	1.08	F(0)
91-13		91	15.105	Clark Ave. to Bellflower Blvd.	8,100	12,000	0.68	C	11,500	12,000	0.96	E	12,900	10,000	1.29	F(1)	9,100	10,000	0.91	D
91-14		91	15.614	Bellflower Blvd. to Jct. Rte. 605	8,000	12,000	0.67	C	11,400	12,000	0.95	E	12,800	10,000	1.28	F(1)	9,000	10,000	0.90	D
110-1	1045	110	1.23	Channel St. to C St.	4,500	8,000	0.56	C	3,200	8,000	0.40	B	3,600	8,000	0.45	B	4,300	8,000	0.54	B
110-2		110	2.771	C St. to Anaheim St.	4,700	10,000	0.47	B	3,400	10,000	0.34	A	3,800	8,000	0.48	B	4,500	8,000	0.56	C
110-3		110	3.264	Anaheim St. to Jct. Rte. 1	5,100	10,000	0.51	B	3,600	10,000	0.36	B	4,100	10,000	0.41	B	4,900	10,000	0.49	B
110-4		110	4.061	Jct. Rte. 1 to Sepulveda Blvd.	7,100	8,000	0.89	D	5,100	8,000	0.64	C	5,700	8,000	0.71	C	6,900	8,000	0.86	D
110-5		110	5.451	Sepulveda Blvd. to Carson St.	9,200	8,000	1.15	F(0)	6,600	8,000	0.83	D	7,400	8,000	0.93	D	9,000	8,000	1.13	F(0)
110-6		110	7.016	Carson St. to Torrance/Del Amo Blvd.	10,600	8,000	1.33	F(1)	7,700	8,000	0.96	E	8,600	8,000	1.08	F(0)	10,400	8,000	1.30	F(1)
110-7		110	8.028	Torrance/Del Amo Blvd. to Jct. Rte. 405	11,200	8,000	1.40	F(2)	8,100	8,000	1.01	F(0)	9,100	8,000	1.14	F(0)	11,000	8,000	1.38	F(2)
110-8		110	8.775	Jct. Rte. 405 to Jct. Rte. 91	13,800	12,000	1.15	F(0)	9,900	12,000	0.83	D	11,100	8,000	1.39	F(2)	13,500	8,000	1.69	F(3)
110-9		110	9.87	Jct. Rte. 91 to Redondo Beach Blvd.	9,100	12,000	0.76	C	9,200	12,000	0.77	C	9,900	12,000	0.83	D	9,600	12,000	0.80	D
110-10		110	11.239	Redondo Beach Blvd. to Rosecrans Ave.	9,400	11,000	0.85	D	9,600	11,000	0.87	D	10,300	11,000	0.94	E	9,900	11,000	0.90	D
110-11		110	11.891	Rosecrans Ave. to El Segundo Blvd.	9,800	11,000	0.89	D	10,000	11,000	0.91	D	10,800	11,000	0.98	E	10,400	11,000	0.95	E
110-12		110	12.898	El Segundo Blvd. to Jct. Rte. 105	10,000	11,000	0.91	D	10,200	11,000	0.93	D	11,000	13,000	0.85	D	10,600	13,000	0.82	D
110-13		110	13.82	Jct. Rte. 105 to Century Blvd.	11,200	14,000	0.80	D	11,400	14,000	0.81	D	12,200	14,000	0.87	D	11,800	14,000	0.84	D
110-14		110	14.967	Century Blvd. to Manchester Ave.	12,000	12,000	1.00	E	12,200	12,000	1.02	F(0)	13,100	12,000	1.09	F(0)	12,700	12,000	1.06	F(0)
110-15	1046	110	15.976	Manchester Ave. to Florence Ave.	11,700	12,000	0.98	E	11,900	12,000	0.99	E	12,800	12,000	1.07	F(0)	12,300	12,000	1.03	F(0)
110-16		110	16.981	Florence Ave. to Gage Ave.	12,100	12,000	1.01	F(0)	12,300	12,000	1.03	F(0)	12,900	12,000	1.08	F(0)	12,500	12,000	1.04	F(0)
110-17	1047	110	17.514	Gage Ave. to Slauson Ave.	12,000	12,000	1.00	E	12,200	12,000	1.02	F(0)	12,900	12,000	1.08	F(0)	12,400	12,000	1.03	F(0)
110-18		110	17.98	Slauson Ave. to 51st St.	11,600	10,000	1.16	F(0)	11,700	10,000	1.17	F(0)	12,400	10,000	1.24	F(0)	11,900	10,000	1.19	F(0)
110-19		110	18.495	51st St. to Vernon Ave.	11,800	10,000	1.18	F(0)	12,000	10,000	1.20	F(0)	12,600	12,000	1.05	F(0)	12,200	12,000	1.02	F(0)
110-20		110	18.998	Vernon Ave. to Martin Luther King Jr. Blvd.	11,800	12,000	0.98	E	12,000	12,000	1.00	E	12,600	12,000	1.05	F(0)	12,200	12,000	1.02	F(0)
110-21		110	19.502	Martin Luther King Jr. Blvd. to Exposition Blvd.	10,700	12,000	0.89	D	10,800	12,000	0.90	D	11,400	10,000	1.14	F(0)	11,000	10,000	1.10	F(0)
110-22		110	19.996	Exposition Blvd. to Jct. Rte. 10	10,300	12,000	0.86	D	10,500	12,000	0.88	D	11,100	12,000	0.93	D	10,700	12,000	0.89	D
405-1		405	3.324	Lakewood Blvd. to Cherry Ave.	12,500	10,000	1.25	F(0)	10,700	10,000	1.07	F(0)	9,400	10,000	0.94	E	11,700	10,000	1.17	F(0)
405-2		405	4.879	Cherry Ave. to Orange Ave.	13,200	10,000	1.32	F(1)	11,200	10,000	1.12	F(0)	9,800	8,000	1.23	F(1)	12,300	8,000	1.54	F(3)
405-3		405	5.388	Orange Ave. to Atlantic Ave.	13,700	8,000	1.71	F(3)	11,700	8,000	1.46	F(3)	10,200	8,000	1.28	F(1)	12,800	8,000	1.60	F(3)
405-4		405	6.076	Atlantic Ave. to Long Beach Blvd	13,500	8,000	1.69	F(3)	11,500	8,000	1.44	F(2)	10,100	12,000	0.84	D	12,600	12,000	1.05	F(0)
405-5		405	6.34	Long Beach Blvd to Jct. Rte. 710	13,400	12,000	1.12	F(0)	11,400	12,000	0.95	E	10,000	10,000	1.00	E	12,500	10,000	1.25	F(0)
405-6	1066	405	7.596	Jct. Rte. 710 to Alameda St.	12,200	10,000	1.22	F(0)	10,400	10,000	1.04	F(0)	9,100	10,000	0.91	D	11,400	10,000	1.14	F(0)
405-7		405	8.784	Alameda St. to Wilmington Ave.	11,800	10,000	1.18	F(0)	10,000	10,000	1.00	E	8,800	10,000	0.88	D	11,000	10,000	1.10	F(0)
405-8		405	9.556	Wilmington Ave. to Carson St.	11,000	8,000	1.38	F(2)	9,500	8,000	1.19	F(0)	9,400	8,000	1.18	F(0)	11,400	8,000	1.43	F(2)
405-9		405	10.541	Carson St. to Avalon Blvd.	10,800	8,000	1.35	F(1)	9,300	8,000	1.16	F(0)	9,300	8,000	1.16	F(0)	11,200	8,000	1.40	F(2)
405-10	1067	405	11.224	Avalon Blvd. to Jct. Rte. 110	11,600	10,000	1.16	F(0)	10,000	10,000	1.00	E	9,900	10,000	0.99	E	12,000	10,000	1.20	F(0)
405-11		405	12.97	Jct. Rte. 110 to Vermont Ave.	11,400	10,000	1.14	F(0)	9,900	10,000	0.99	E	8,500	8,000	1.06	F(0)	10,500	8,000	1.31	F(1)
405-12		405	13.28	Vermont Ave. to Normandie Ave.	11,900	12,000	0.99	E	10,400	12,000	0.87	D	8,900	10,000	0.89	D	11,000	10,000	1.10	F(0)
405-13		405	13.826	Normandie Ave. to Western Ave.	11,200	10,000	1.12	F(0)	9,700	10,000	0.97	E	8,300	8,000	1.04	F(0)	10,300	8,000	1.29	F(1)
405-14		405	14.398	Western Ave. to Crenshaw Blvd.	10,700	8,000	1.34	F(1)	9,300	8,000	1.16	F(0)	8,000	8,000	1.00	E	9,900	8,000	1.24	F(0)
405-15		405	15.447	Crenshaw Blvd. to Artesia Blvd.	10,500	8,000	1.31	F(1)	9,100	8,000	1.14	F(0)	7,800	8,000	0.98	E	9,700	8,000	1.21	F(0)
405-16		405	16.573	Artesia Blvd. to Hawthorne Blvd.	10,600	10,000	1.06	F(0)	9,200	10,000	0.92	D	7,900	8,000	0.99	E	9,800	8,000	1.23	F(0)
405-17		405	17.589	Hawthorne Blvd. to Inglewood Ave.	11,100	10,000	1.11	F(0)	9,700	10,000	0.97	E	8,300	8,000	1.04	F(0)	10,200	8,000	1.28	F(1)
405-18	1068	405	18.233	Inglewood Ave. to Rosecrans Ave.	11,600	10,000	1.16	F(0)	10,100	10,000	1.01	F(0)	8,700	10,000	0.87	D	10,700	10,000	1.07	F(0)
710-1		710	12.97	Jct. Rte. 91 to Alondra Blvd.	11,400	12,000	0.95	E	17,700	12,000	1.48	F(3)	11,100	12,000	0.93	D	8,900	12,000	0.74	C
710-2		710	13.945	Alondra Blvd. to Jct. Rte. 105	11,800	12,000	0.98	E	18,300	12,000	1.53	F(3)	11,500	12,000	0.96	E	9,200	12,000	0.77	C

Note: D/C is demand-to-capacity ratio.

Exhibit 109: 2035 Weekday No Projects Level of Service (LOS) for Study Freeway Locations

11.2 2035 Sunday (27,000 Seats) Conditions

11.2.1 Forecasting 2035 Sunday (27,000 Seats) Traffic

Traffic volumes for the 2035 No Project condition were developed by factoring up the existing Sunday traffic counts using the growth factor from the LA-CMP and then adding in the traffic for a 27,000-seat event. The resulting 2035 No Project traffic volumes are shown in Exhibit 111 for pre-event hour and Exhibit 112 for the post event hour.

11.2.2 2035 Sunday (27,000 Seats) Level of Service

Exhibit 110 shows in tabular format the 2035 Sunday No Project level of service (LOS) based on the traffic volumes shown in Exhibit 111 and Exhibit 112 (also see Appendix P). The LOS is also shown on maps in Exhibit 113, for the pre-game peak hour condition, and Exhibit 114 for the post-game peak hour condition. The LOS is forecast to be D or better at all study intersections.

Study ID	Intersection Name	Control Type	Pre-Game Peak Hour		Post-Game Peak Hour	
			V/C Ratio	ICU LOS	V/C Ratio	ICU LOS
1	Victoria St./Drive D	TWSC	0.600	A	0.522	A
2	Victoria St./Tamcliff Ave.	Signalized	0.319	A	0.625	B
3	Victoria St./Birchknoll Dr.	Signalized	0.209	A	0.666	B
9	University Dr./Toro Center Dr.	TWSC	0.544	A	0.675	B
10	Albertoni St./SR 91 EB Ramps	Signalized	0.595	A	0.336	A
11	Avalon Blvd./SR 91 WB On-Ramp	Signalized	0.641	B	0.766	C
12	Avalon Blvd./Albertoni St.	Signalized	0.801	D	0.609	B
13	Avalon Blvd./Victoria St.	Signalized	0.734	C	0.559	A
14	Central Ave./Artesia Blvd. WB	Signalized	0.551	A	0.544	A
15	Central Ave./Albertoni St./Artesia Blvd. EB	Signalized	0.522	A	0.477	A
16	Central Ave./Victoria St.	Signalized	0.759	C	0.572	A
17	Wilmington Ave./Artesia Blvd. WB	Signalized	0.525	A	0.552	A
18	Wilmington Ave./Artesia Blvd. EB	Signalized	0.384	A	0.761	C
19	Wilmington Ave./Victoria St.	Signalized	0.511	A	0.595	A
22	Figuroa St./190th St./Victoria St.	Signalized	0.481	A	0.334	A
24	Main St./Victoria St.	Signalized	0.472	A	0.319	A
25	Avalon Blvd./University Dr.	Signalized	0.619	B	0.850	D
26	Avalon Blvd./Del Amo Blvd.	Signalized	0.755	C	0.820	D
27	Avalon Blvd./I-405 NB Ramps	Signalized	0.684	B	0.557	A
28	Avalon Blvd./I-405 SB Ramps	Signalized	0.644	B	0.523	A
29	Central Ave./University Dr.	Signalized	0.812	D	0.659	B
30	Wilmington Ave./University Dr.	Signalized	0.750	C	0.436	A
31	Central Ave./Del Amo Blvd.	Signalized	0.510	A	0.474	A
32	Wilmington Ave./Del Amo Blvd.	Signalized	0.529	A	0.526	A
38	Avalon Blvd./184th St.	Signalized	0.458	A	0.386	A
39	Avalon Blvd./182nd St.	TWSC	0.375	A	0.615	B
40	Victoria St./Drive C	TWSC	0.681	B	0.356	A
41	Victoria St./Rainsbury Ave.	TWSC	0.813	D	0.391	A
42	Avalon Blvd./Harbor Village/Colony Cove	Signalized	0.673	B	0.554	A

Exhibit 110: 2035 Sunday (27,000-Seats) Level of Service (LOS) at Study Intersections (Table)

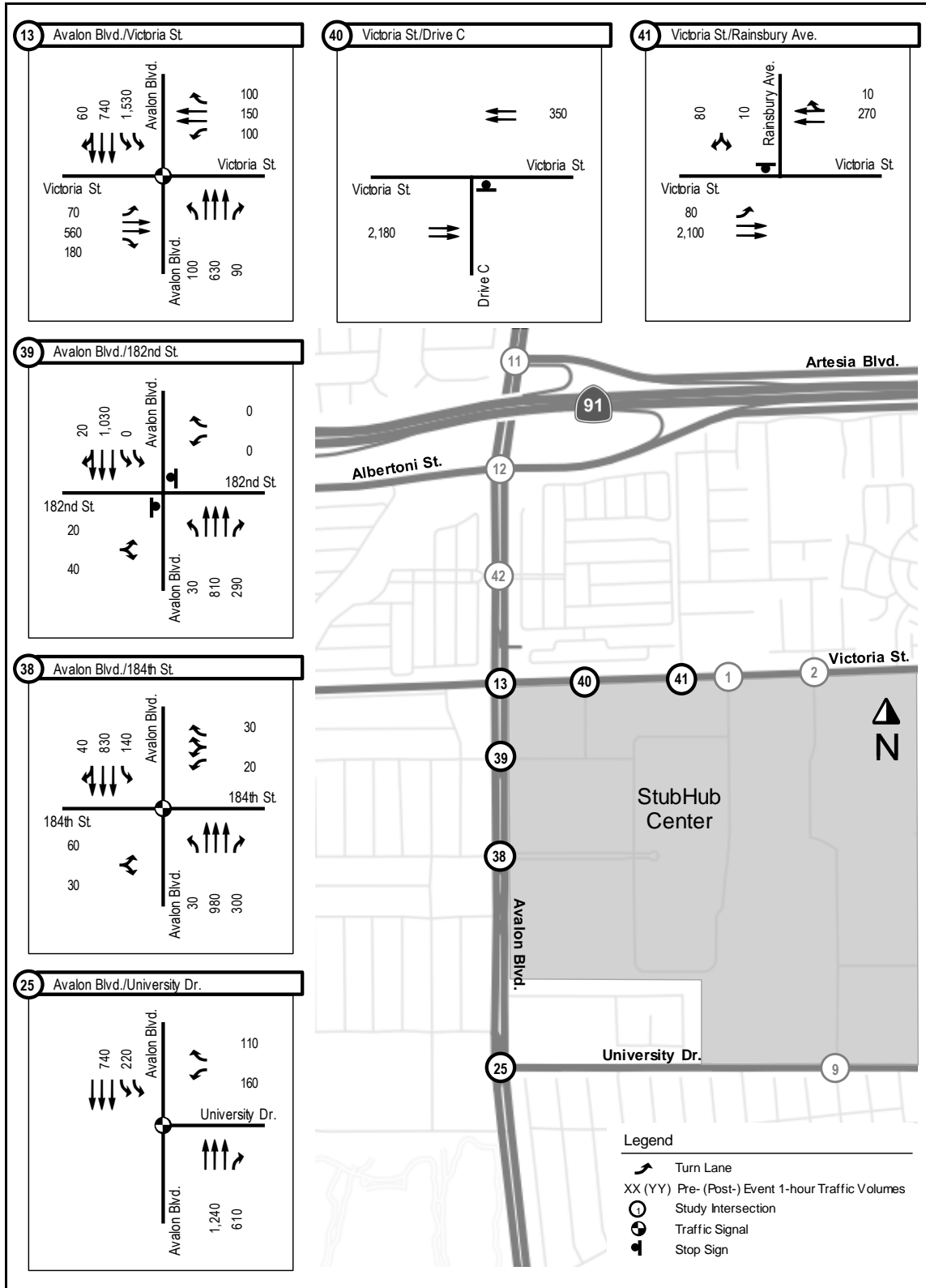


Exhibit 111: 2035 Sunday (27,000-Seats) Pre-Game Volumes and Lane Configurations

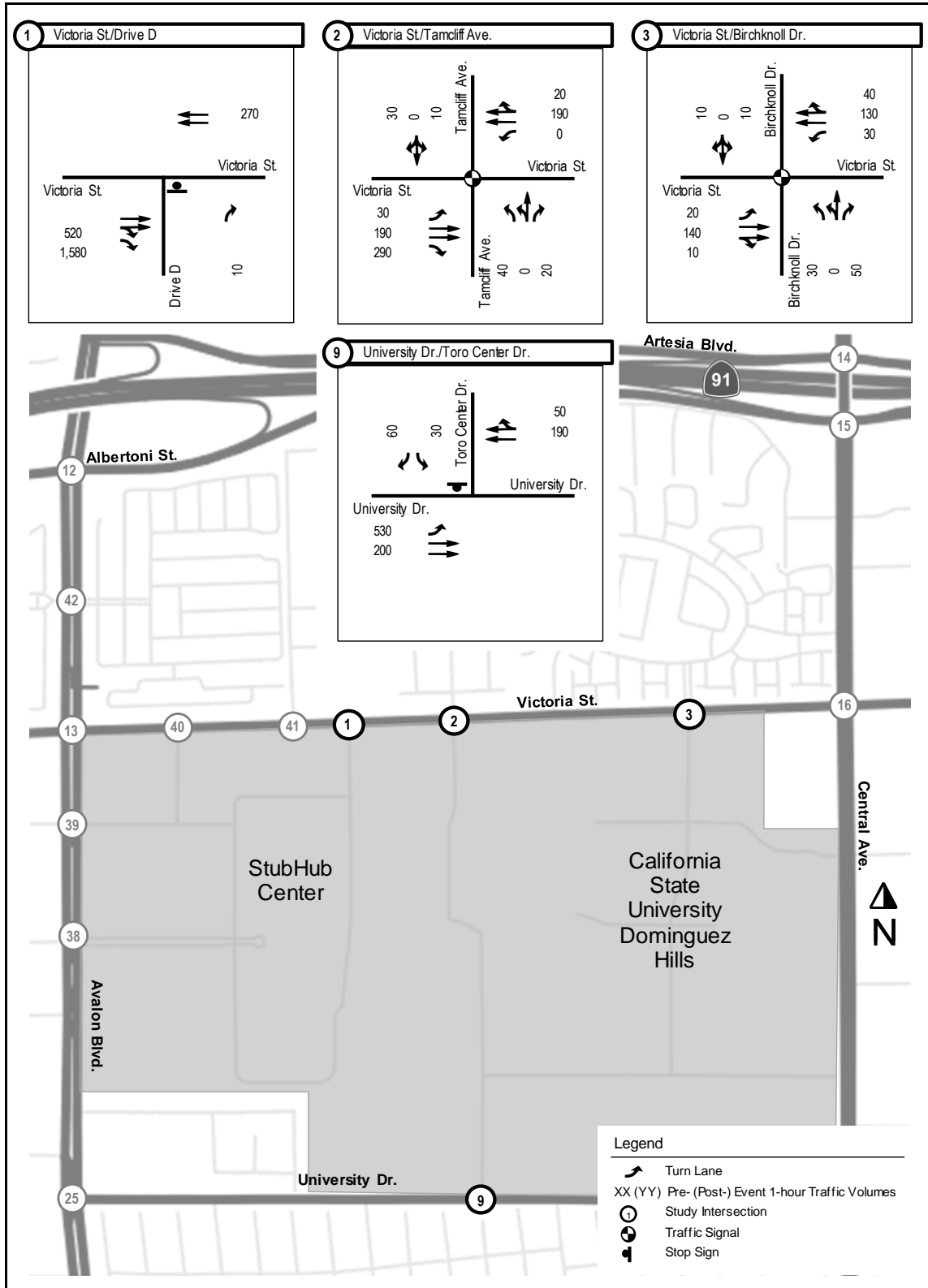


Exhibit 111: 2035 Sunday (27,000-Seats) Pre-Game Volumes and Lane Configurations (Map B)

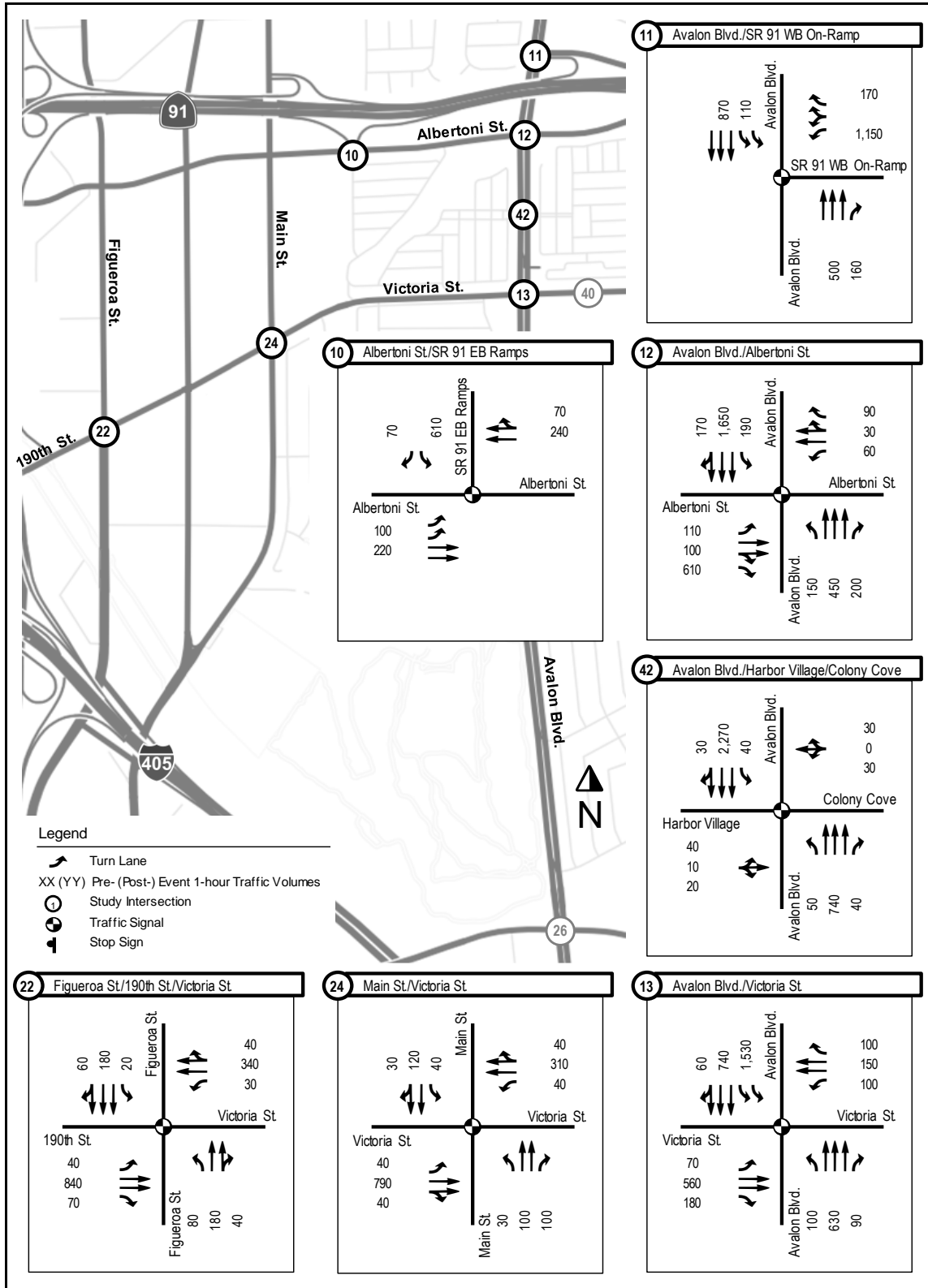


Exhibit 111: 2035 Sunday (27,000-Seats) Pre-Game Volumes and Lane Configurations (Map C)

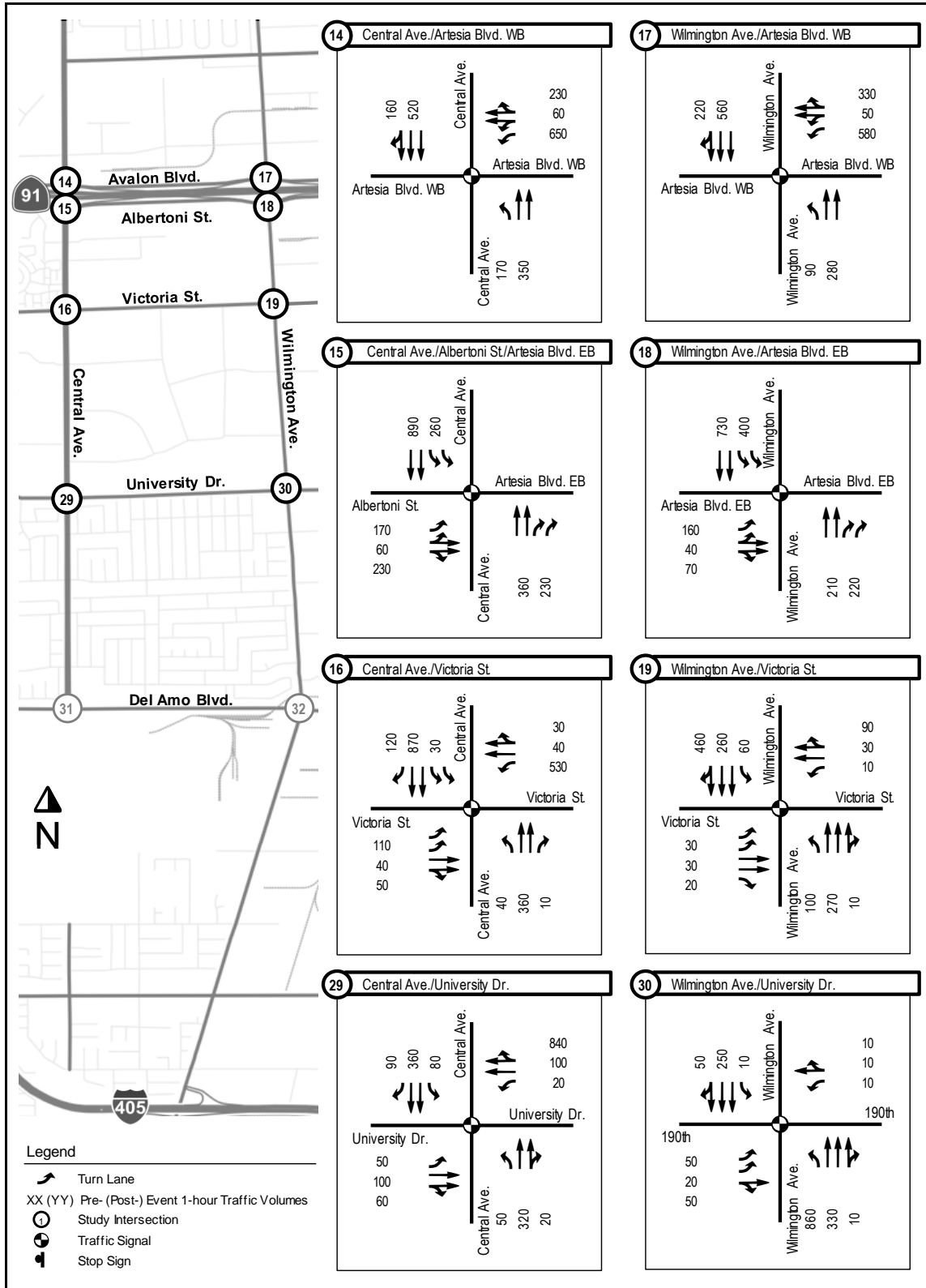


Exhibit 111: 2035 Sunday (27,000-Seats) Pre-Game Volumes and Lane Configurations (Map D)

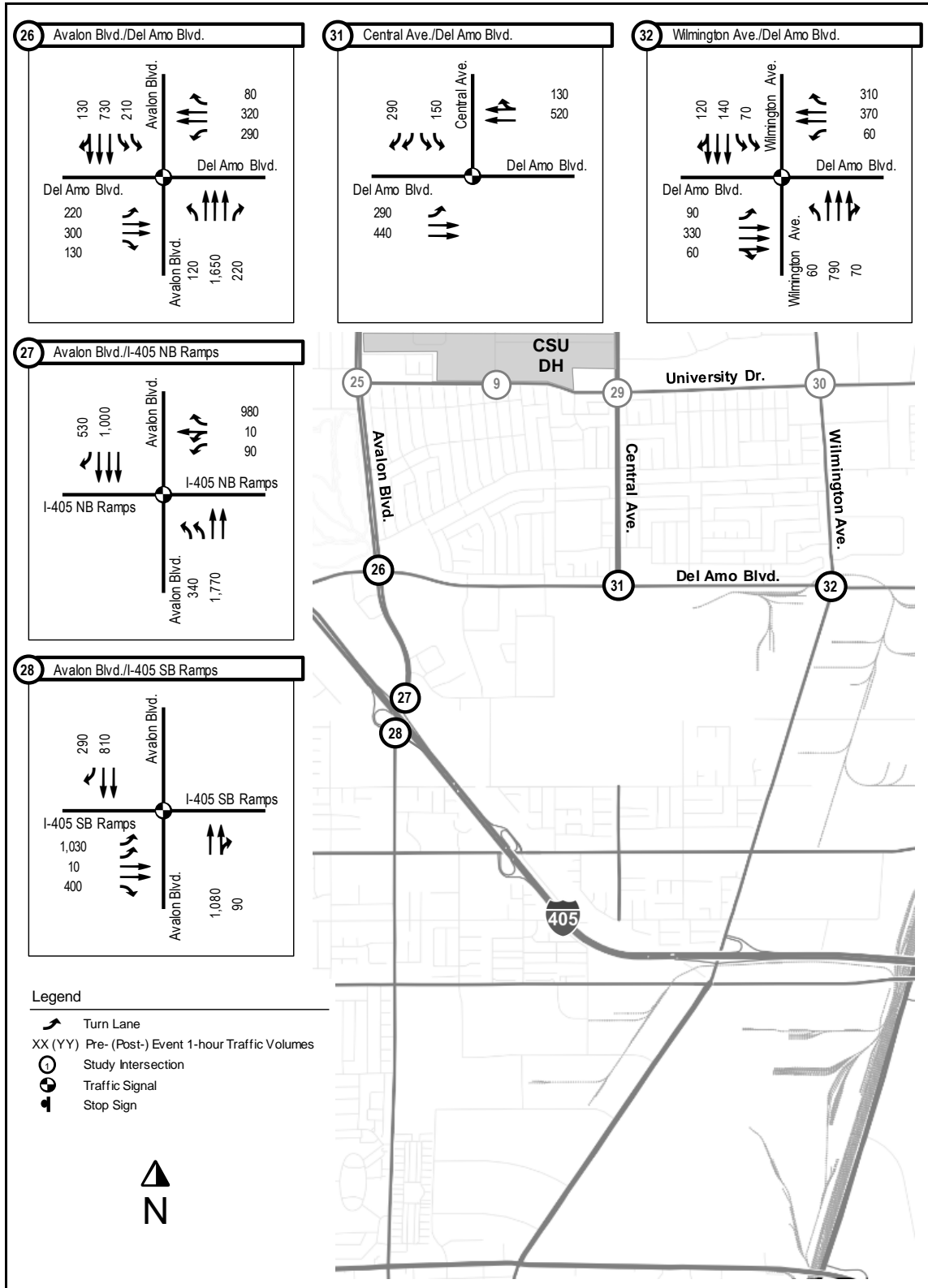


Exhibit 111: 2035 Sunday (27,000-Seats) Pre-Game Volumes and Lane Configurations (Map E)

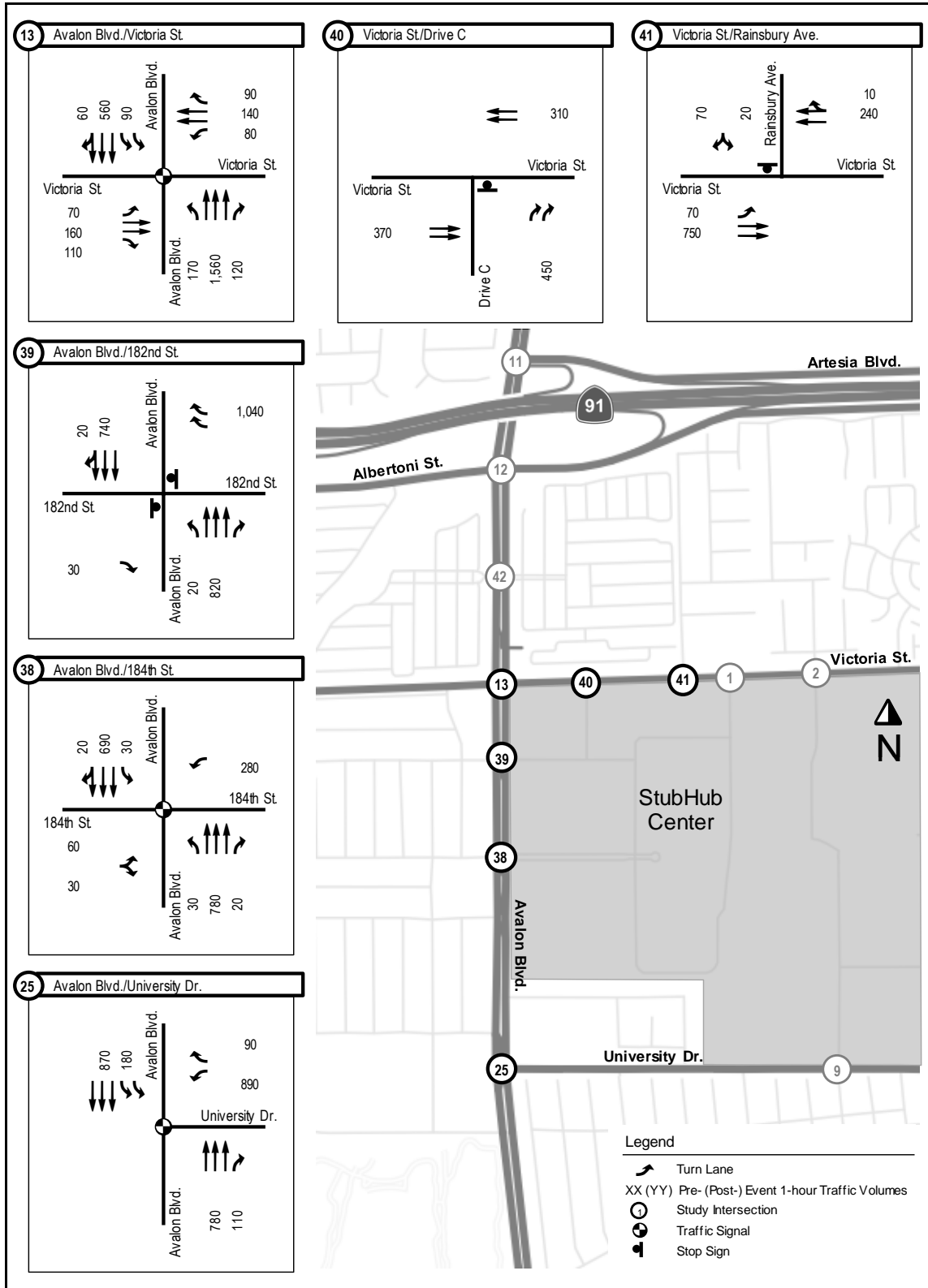


Exhibit 112: 2035 Sunday (27,000-Seats) Post-Game Volumes and Lane Configurations

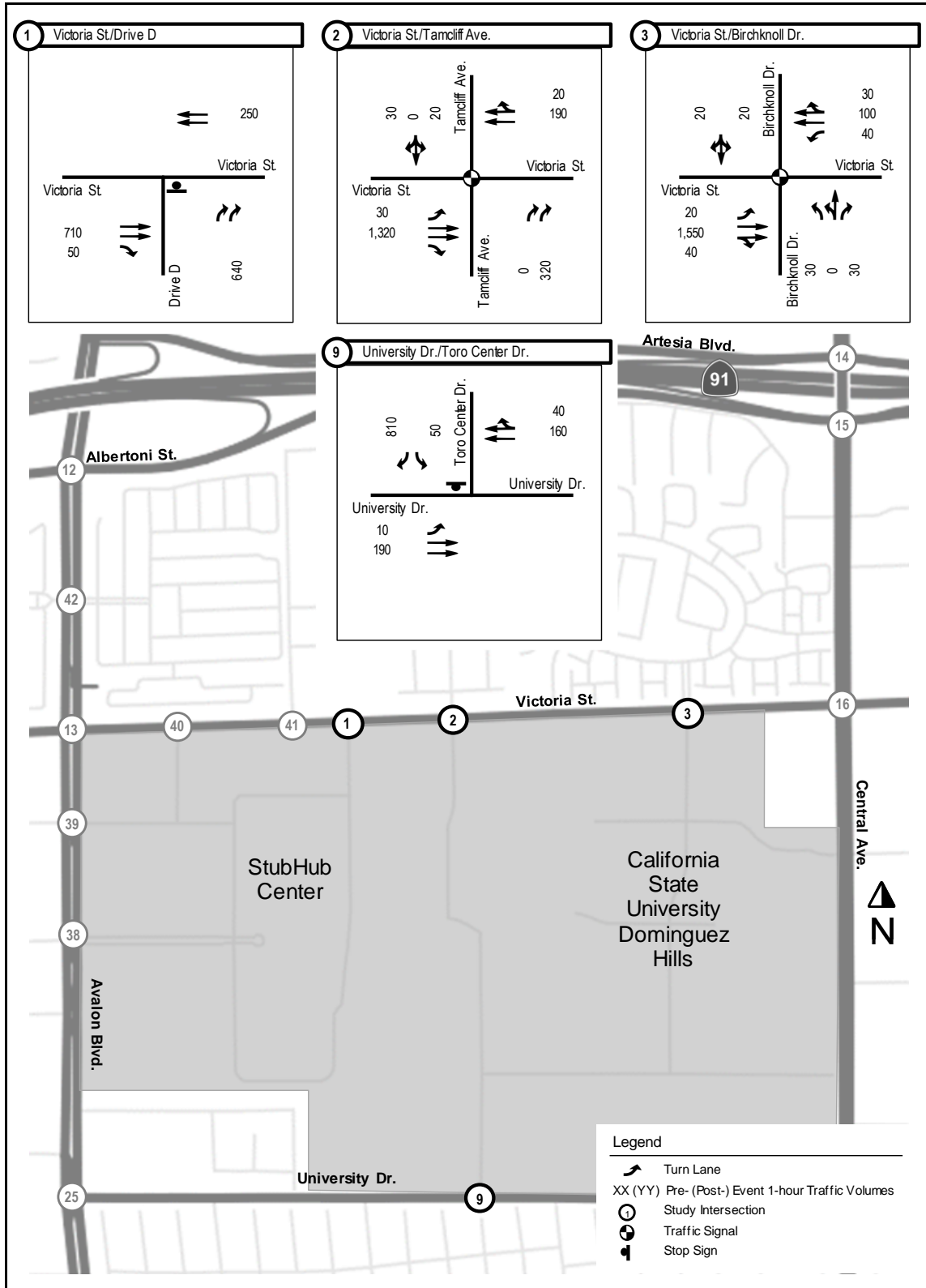


Exhibit 112: 2035 Sunday (27,000-Seats) Post-Game Volumes and Lane Configurations (Map B)

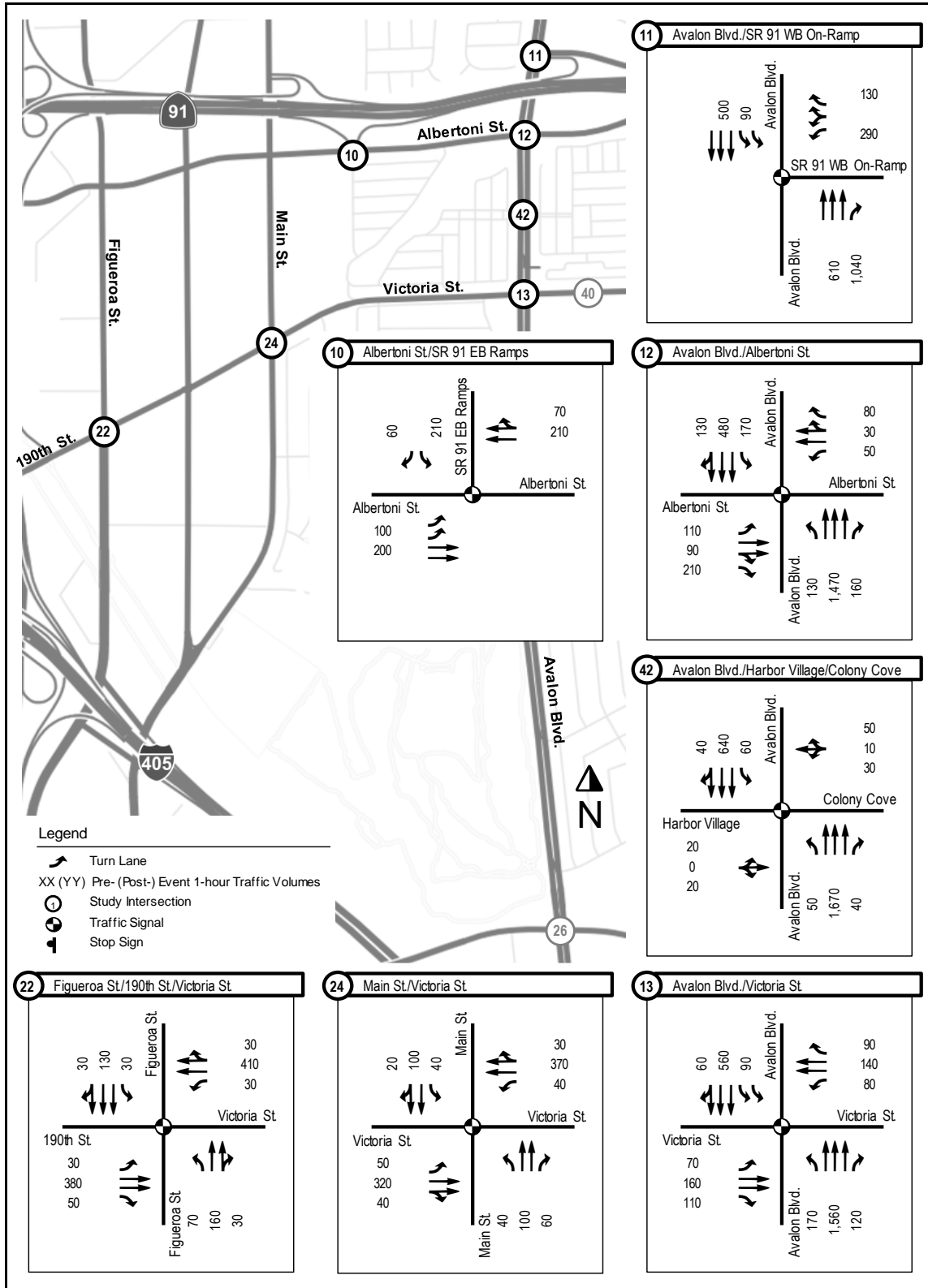


Exhibit 112: 2035 Sunday (27,000-Seats) Post-Game Volumes and Lane Configurations (Map C)

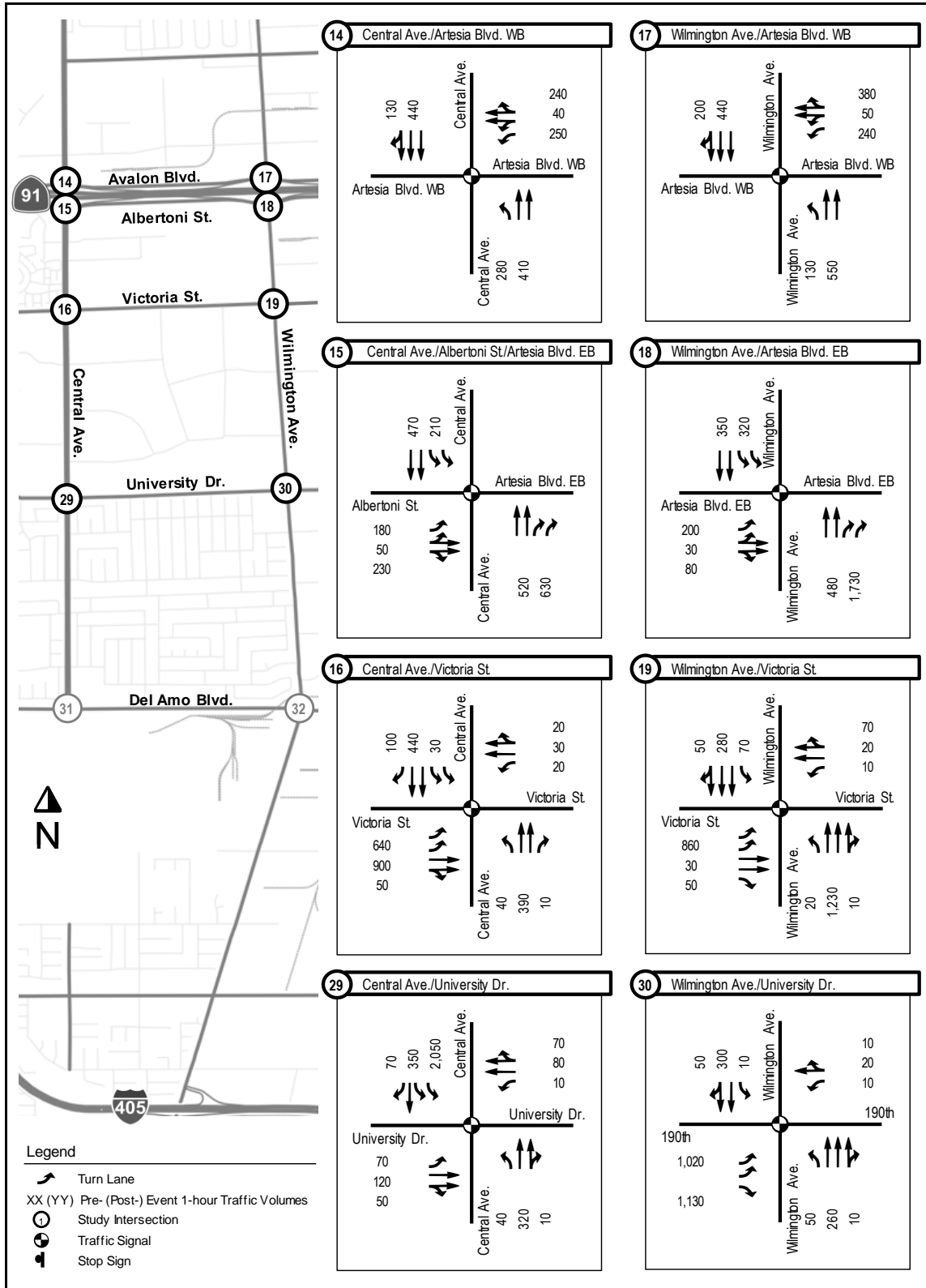


Exhibit 112: 2035 Sunday (27,000-Seats) Post-Game Volumes and Lane Configurations (Map D)

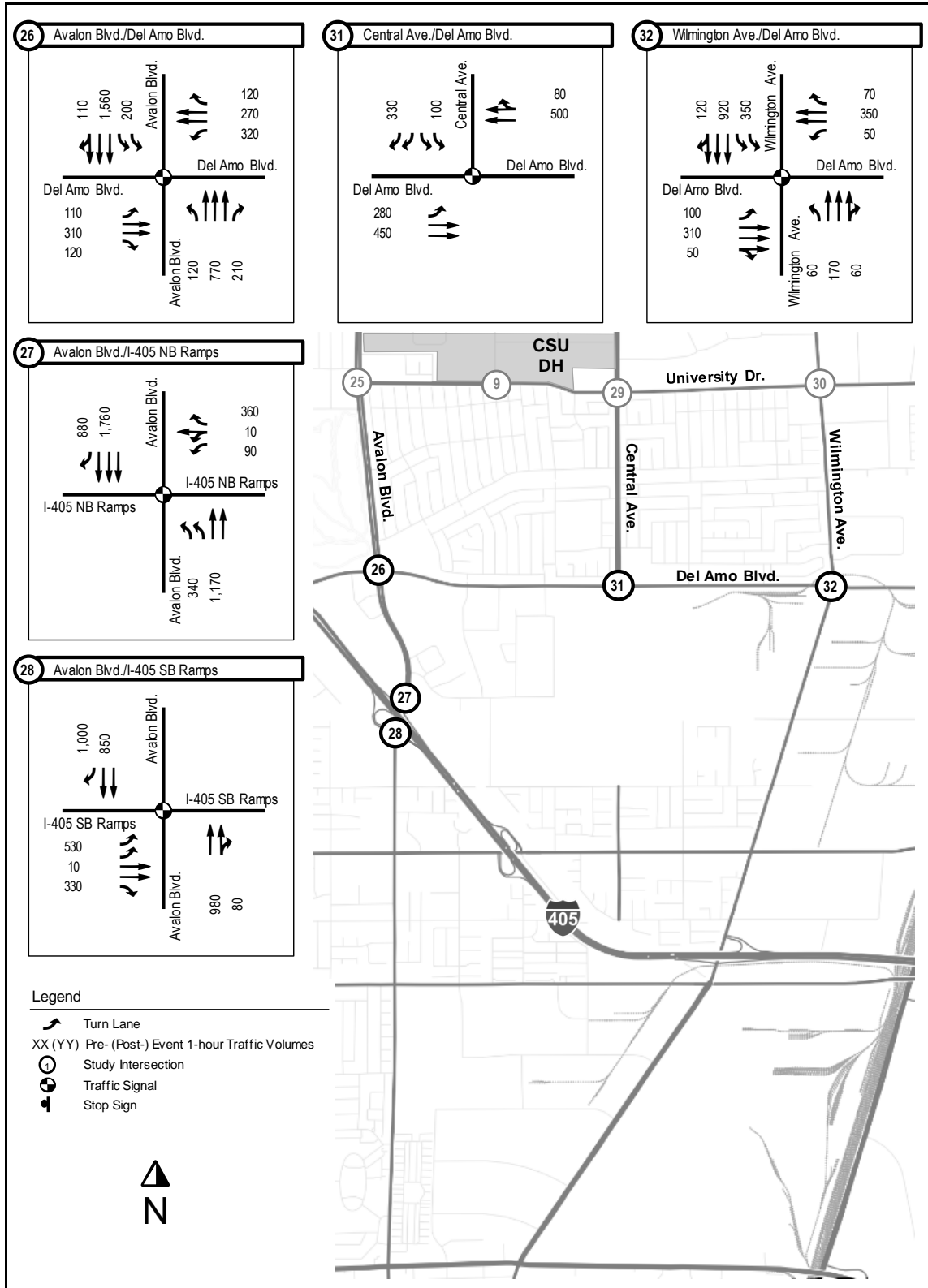


Exhibit 112: 2035 Sunday (27,000-Seats) Post-Game Volumes and Lane Configurations (Map E)

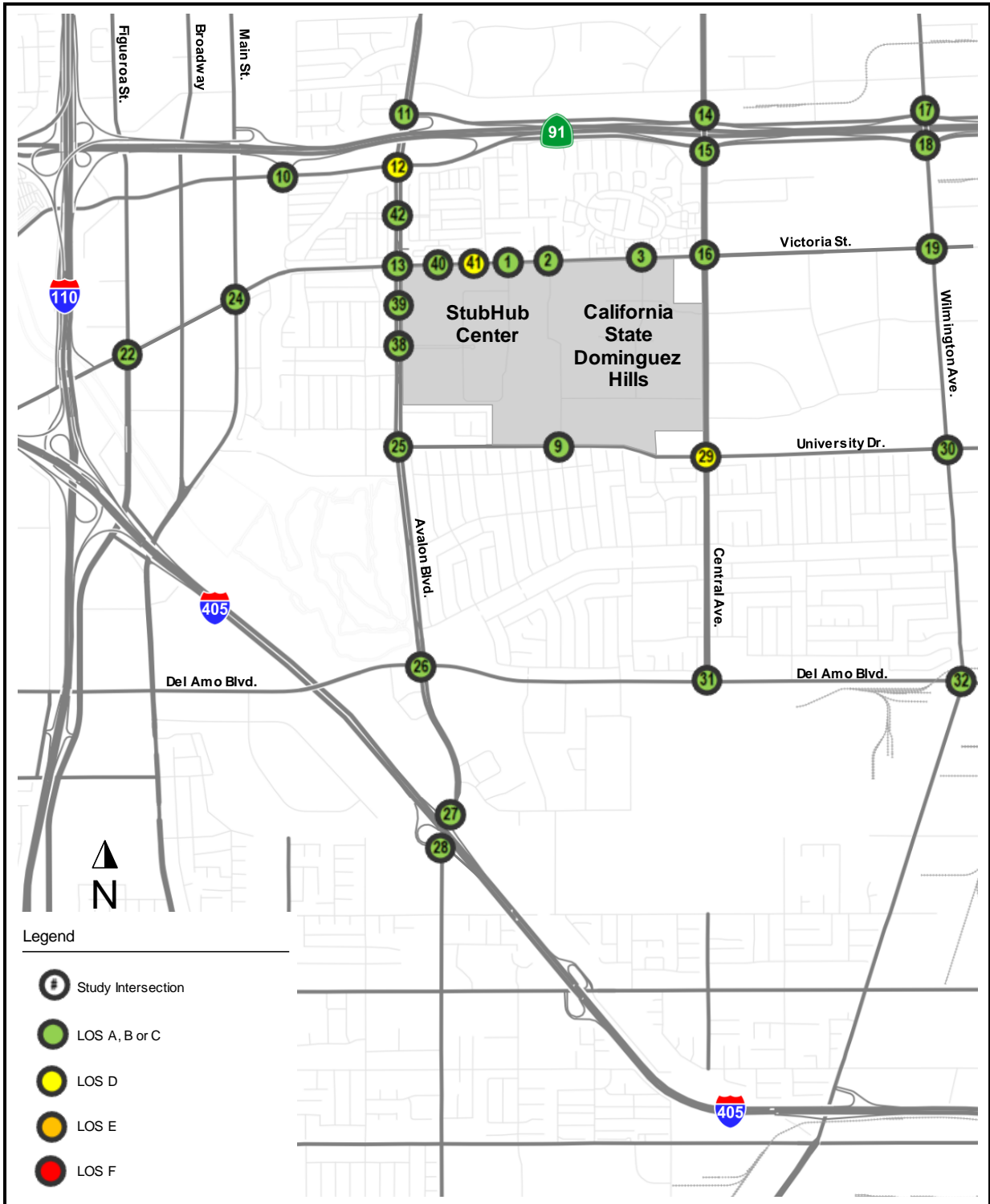


Exhibit 113: 2035 Sunday (27,000-Seats) Pre-Game Peak Hour LOS (Map)

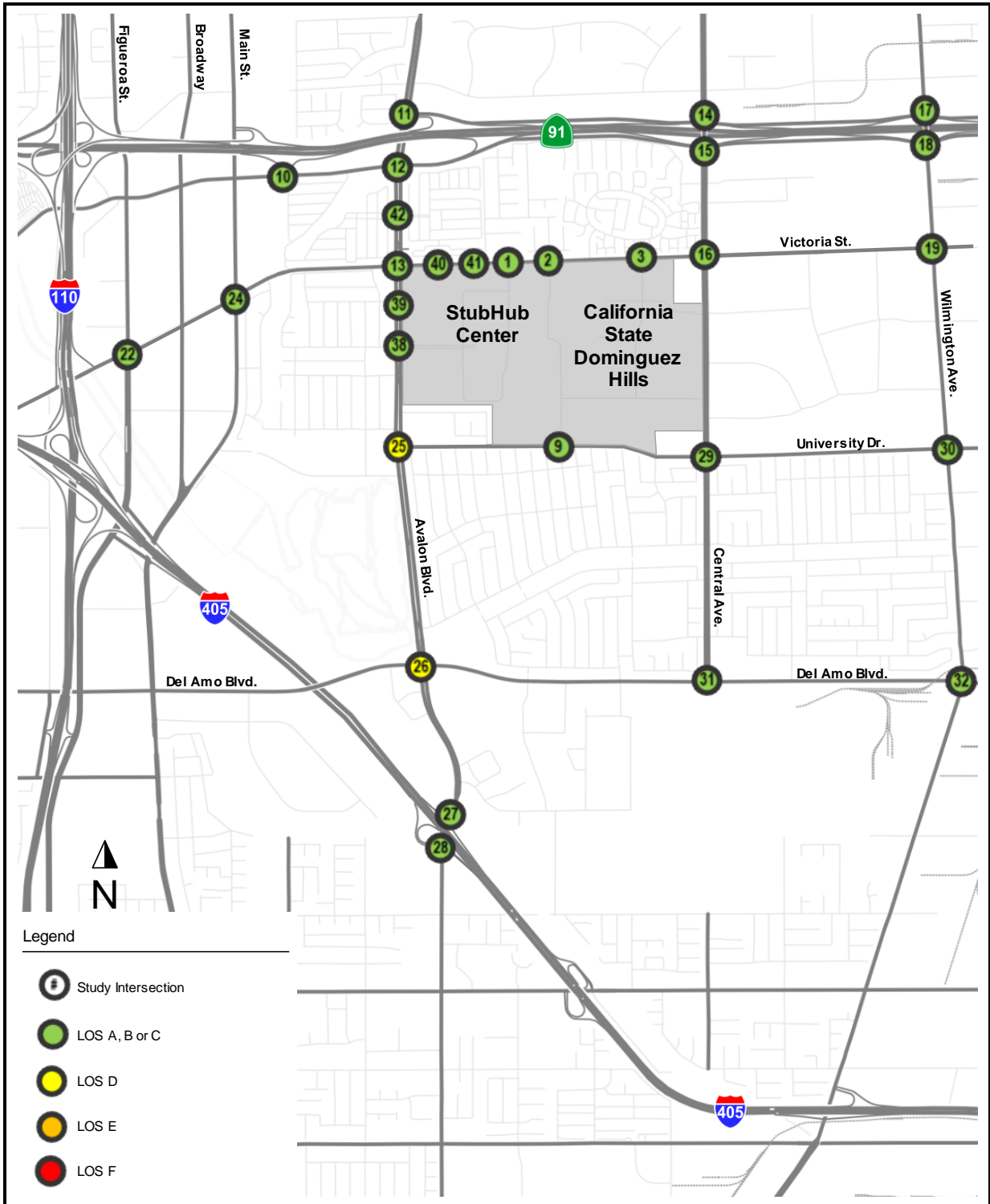


Exhibit 114: 2035 Sunday (27,000-Seats) Post-Game Peak Hour LOS (Map)

12 2035 Plus Project Conditions

12.1 2035 Weekday Plus Project Alternative 1 Conditions

12.1.1 Forecasting 2035 Weekday plus Project Alternative 1 Traffic

Traffic volumes for the 2035 Plus Project condition were developed by factoring up the existing weekday traffic counts using the growth factor from the LA-CMP and then adding in the traffic for existing, known, and reasonably foreseeable projects, and full build-out of the Master Plan. The resulting 2035 Plus Project traffic volumes are shown in Exhibit 116.

12.1.2 2035 Weekday Plus Project Alternative 1 Level of Service

Exhibit 115 shows in tabular format the 2035 Plus Project weekday level of service (LOS) based on the traffic volumes shown in Exhibit 116 (also see Appendix Q). The LOS is also shown on maps in Exhibit 117 for the AM peak hour condition, and Exhibit 118 for the PM peak hour condition. Exhibit 119 shows the intersection impacts of the Project. The Project would have significant impacts at 17 intersections, namely:

- Intersection #1, Victoria St./Drive D, during the AM peak hour
- Intersection #3, Victoria St./Birchknoll Dr., during the PM peak hour
- Intersection #5, Central Ave./Charles Willard St., during the PM peak hour
- Intersection #6, Central Ave./Project Driveway/Beachey Pl., during both peak hours
- Intersection #9, University Dr./Toro Center Dr., during both peak hours
- Intersection #10, Albertoni St./SR-91 EB Ramps, during the PM peak hour
- Intersection #12, Avalon Blvd./Albertoni St., during the PM peak hour
- Intersection #13, Avalon Blvd./Victoria St., during both peak hours
- Intersection #14, Central Ave./Artesia Blvd. WB, during both peak hours
- Intersection #15, Central Ave./Albertoni St./Artesia Blvd. EB, during both peak hours
- Intersection #16, Central Ave./Victoria St., during both peak hours
- Intersection #20, I-110 SB Off-Ramp/190th St., during both peak hours
- Intersection #22, Figueroa St./190th St./Victoria St., during both peak hours
- Intersection #23, Broadway/Victoria St., during the PM peak hour
- Intersection #24, Main St./Victoria St., during the PM peak hour
- Intersection #26, Avalon Blvd./Del Amo Blvd., during the both peak hours
- Intersection #29, Central Ave./University Dr., during both peak hours.

Study ID	Intersection Name	Control Type	AM Peak Hour		PM Peak Hour	
			V/C Ratio or Delay	LOS (ICU or HCM)	V/C Ratio or Delay	LOS (ICU or HCM)
1	Victoria St./Drive D	TWSC	>180	F	>180	F
2	Victoria St./Tamcliff Ave.	Signalized	0.581	A	0.794	C
3	Victoria St./Birchknoll Dr.	Signalized	0.678	B	0.991	E
4	Victoria St./Project Service Rd.	TWSC	14.6	B	19.9	C
5	Central Ave./Charles Willard St.	TWSC	>180	F	>180	F
6	Central Ave./Beachey Pl.	TWSC	>180	F	>180	F
7	Central Ave./Glenn Curtiss St.	Signalized	0.863	D	0.881	D
8	University Dr./Birchknoll Dr. Ext.	TWSC	21.3	C	17.3	C
9	University Dr./Toro Center Dr.	TWSC	>180	F	>180	F
10	Albertoni St./SR 91 EB Ramps	Signalized	0.787	C	0.931	E
11	Avalon Blvd./SR 91 WB On-Ramp	Signalized	0.53	A	0.535	A
12	Avalon Blvd./Albertoni St.	Signalized	0.709	C	0.91	E
13	Avalon Blvd./Victoria St.	Signalized	0.95	E	1.216	F
14	Central Ave./Artesia Blvd. WB	Signalized	1.059	F	1.029	F
15	Central Ave./Albertoni St./Artesia Blvd. EB	Signalized	1.209	F	1.043	F
16	Central Ave./Victoria St.	Signalized	1.138	F	0.975	E
17	Wilmington Ave./Artesia Blvd. WB	Signalized	0.74	C	0.754	C
18	Wilmington Ave./Artesia Blvd. EB	Signalized	0.744	C	0.761	C
19	Wilmington Ave./Victoria St.	Signalized	0.558	A	0.587	A
20	I-110 SB Off-Ramp/190th St.	Signalized	1.234	F	1.259	F
21	I-110 NB On-Ramp/190th St.	Signalized	0.659	B	0.875	D
22	Figueroa St./190th St./Victoria St.	Signalized	0.988	E	1.128	F
23	Broadway/Victoria St.	Signalized	0.756	C	0.928	E
24	Main St./Victoria St.	Signalized	0.831	D	1.144	F
25	Avalon Blvd./University Dr.	Signalized	0.538	A	0.788	C
26	Avalon Blvd./Del Amo Blvd.	Signalized	0.918	E	1.034	F
27	Avalon Blvd./I-405 NB Ramps	Signalized	0.519	A	0.532	A
28	Avalon Blvd./I-405 SB Ramps	Signalized	0.605	B	0.576	A
29	Central Ave./University Dr.	Signalized	1.3	F	1.166	F
30	Wilmington Ave./University Dr.	Signalized	0.687	B	0.788	C
31	Central Ave./Del Amo Blvd.	Signalized	0.876	D	0.81	D
32	Wilmington Ave./Del Amo Blvd.	Signalized	0.726	C	0.763	C
33	W. Artesia Blvd./Crenshaw Blvd.	Signalized	0.972	E	1.042	F
34	W. 190th St./S. Western Ave.	Signalized	0.855	D	0.871	D
35	W. Artesia Blvd./Vermont Ave.	Signalized	0.87	D	1.079	F
36	Alameda St./Compton Blvd.	Signalized	0.697	B	0.756	C
37	Alameda St./SR 91 EB Ramps	Signalized	0.594	A	0.806	D

*Intersection LOS was calculated using HCM 2000 Delay Method, because ICU cannot be calculated for TWSC intersections.

Exhibit 115: 2035 Weekday Plus Project Alternative 1 Level of Service (LOS) at Study Intersections (Table)

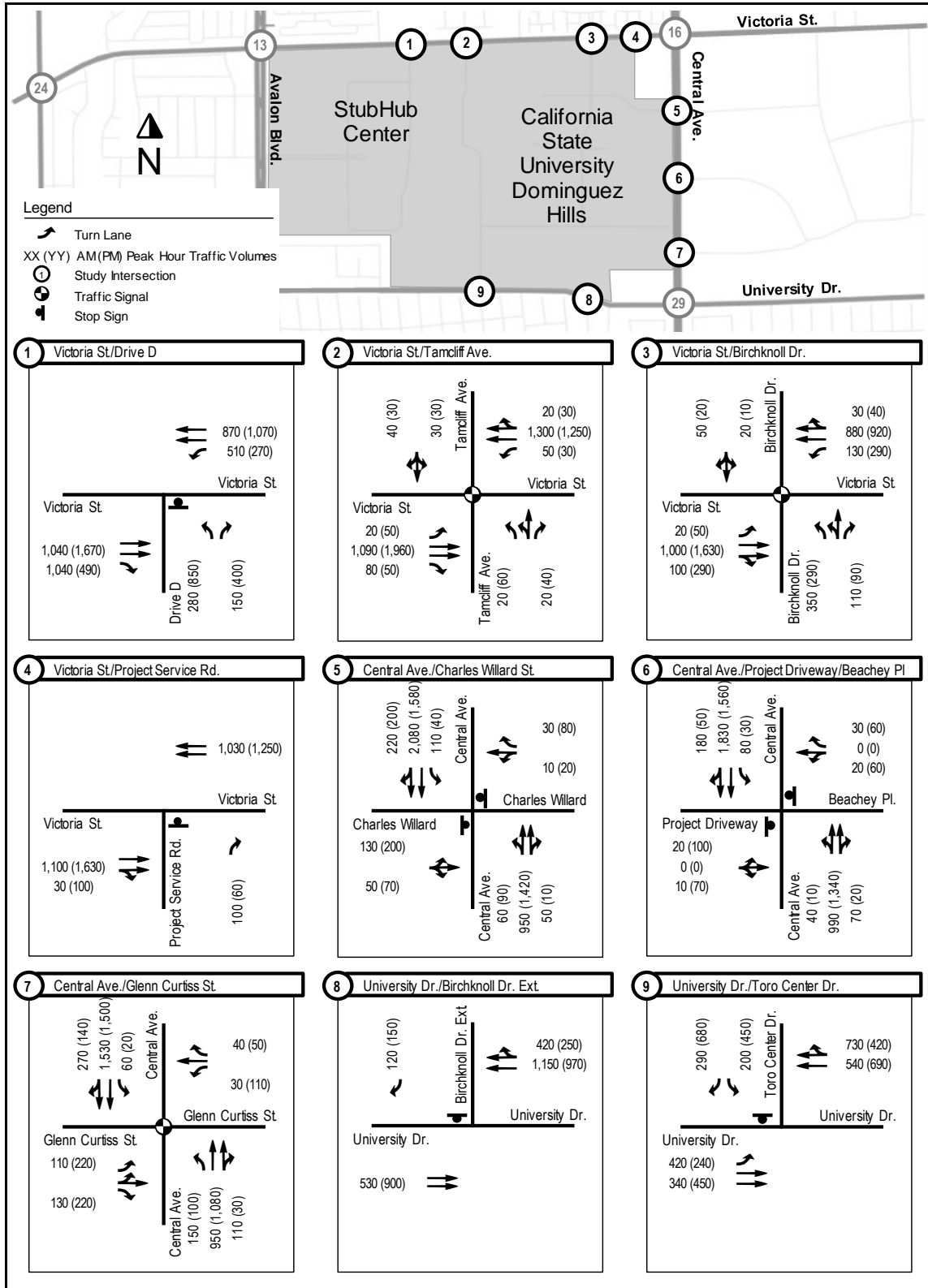


Exhibit 116: 2035 Weekday Plus Project Alternative 1 Traffic Volumes and Lane Configurations

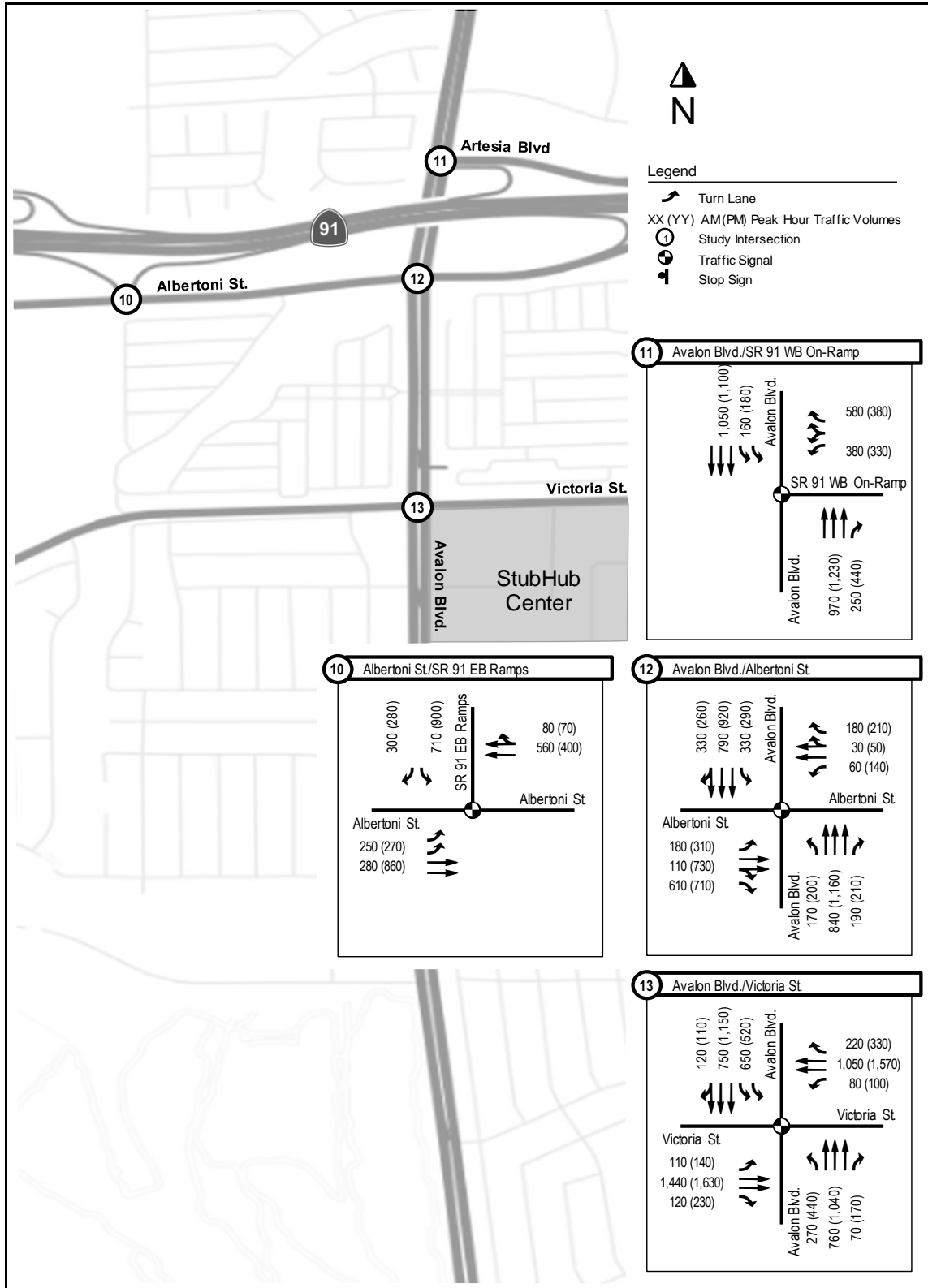


Exhibit 116: 2035 Weekday Plus Project Alternative 1 Traffic Volumes and Lane Configurations (Map B)

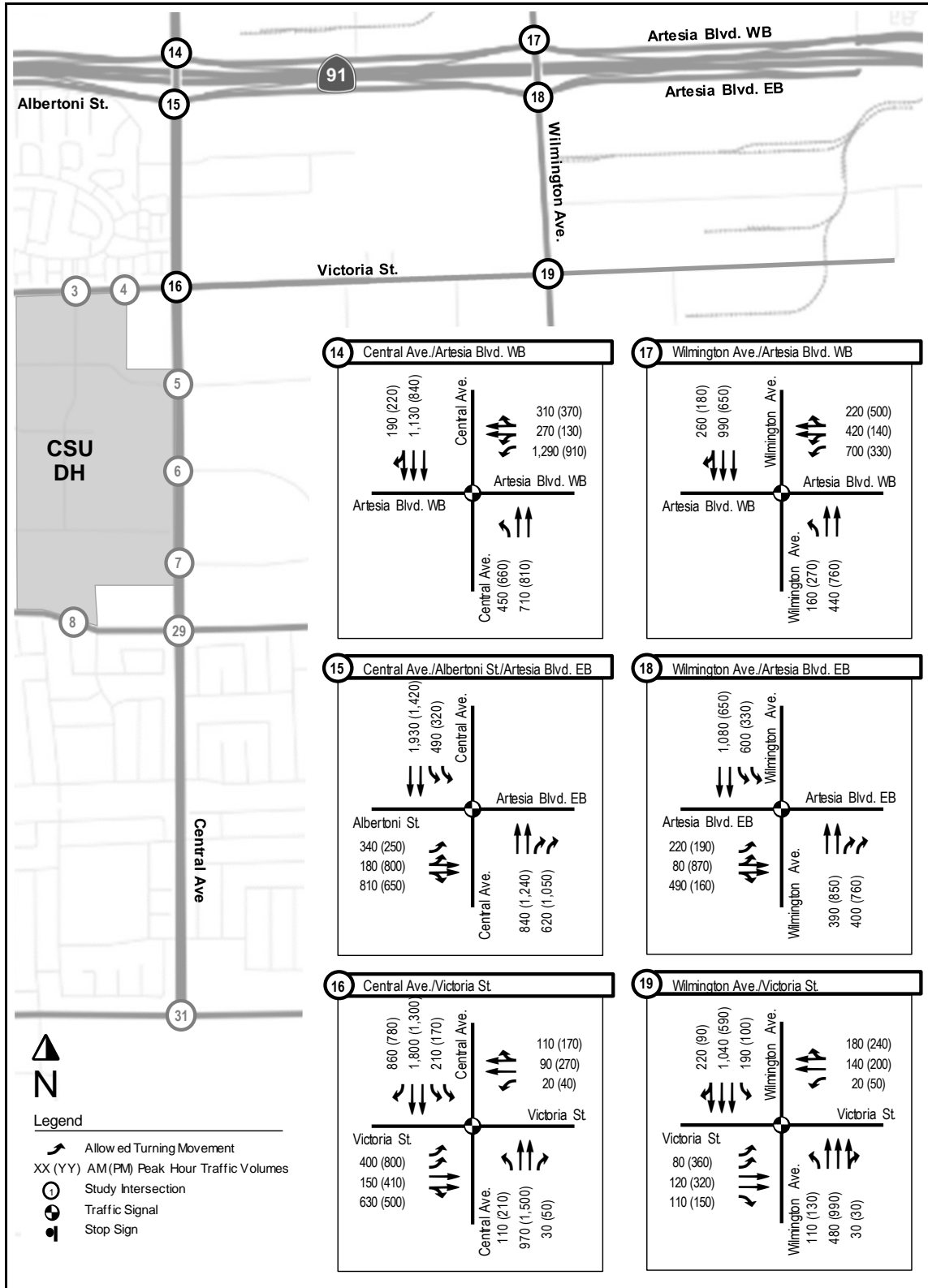


Exhibit 116: 2035 Weekday Plus Project Alternative 1 Traffic Volumes and Lane Configurations (Map C)

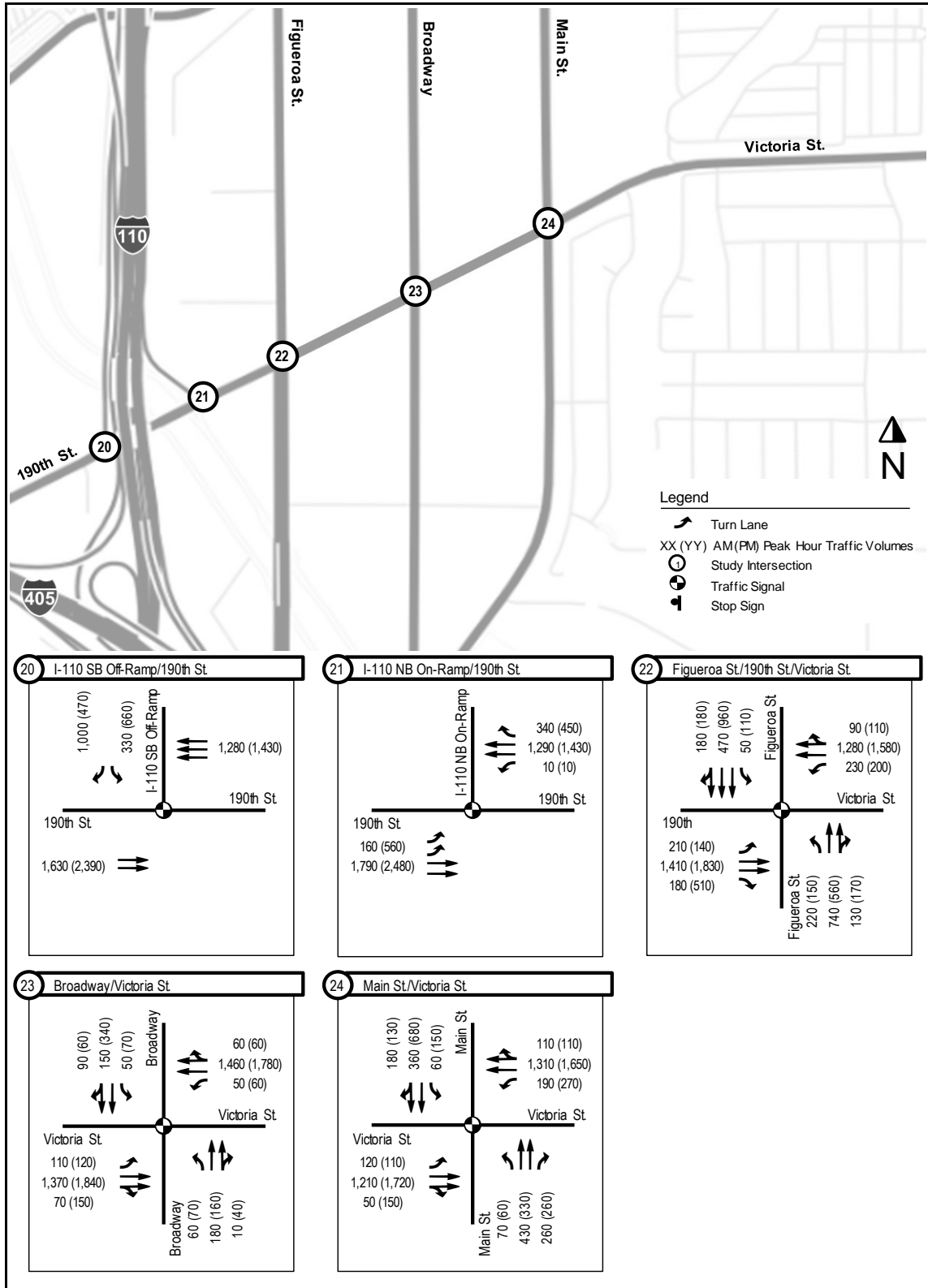


Exhibit 116: 2035 Weekday Plus Project Alternative 1 Traffic Volumes and Lane Configurations (Map D)

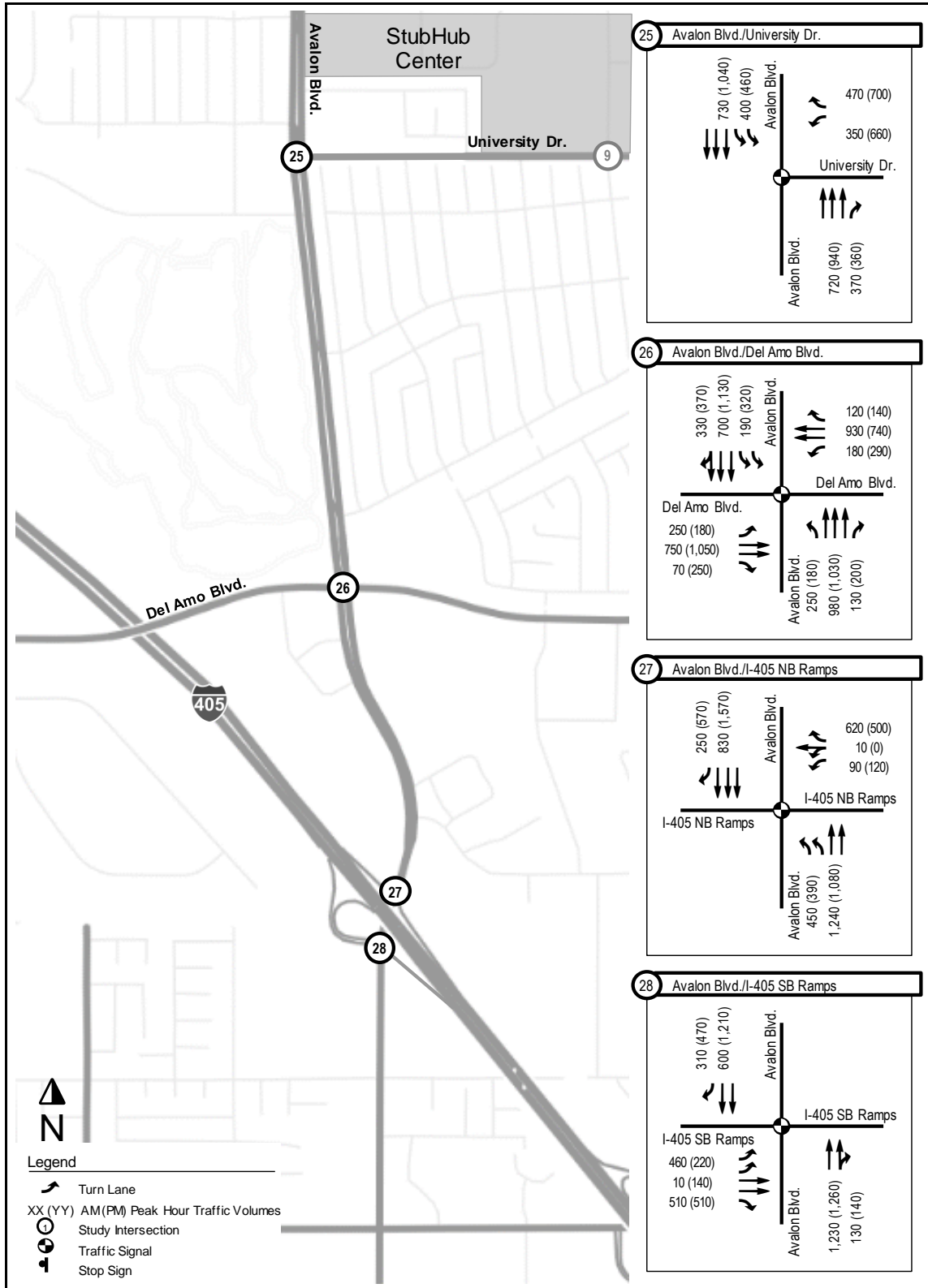


Exhibit 116: 2035 Weekday Plus Project Alternative 1 Traffic Volumes and Lane Configurations (Map E)

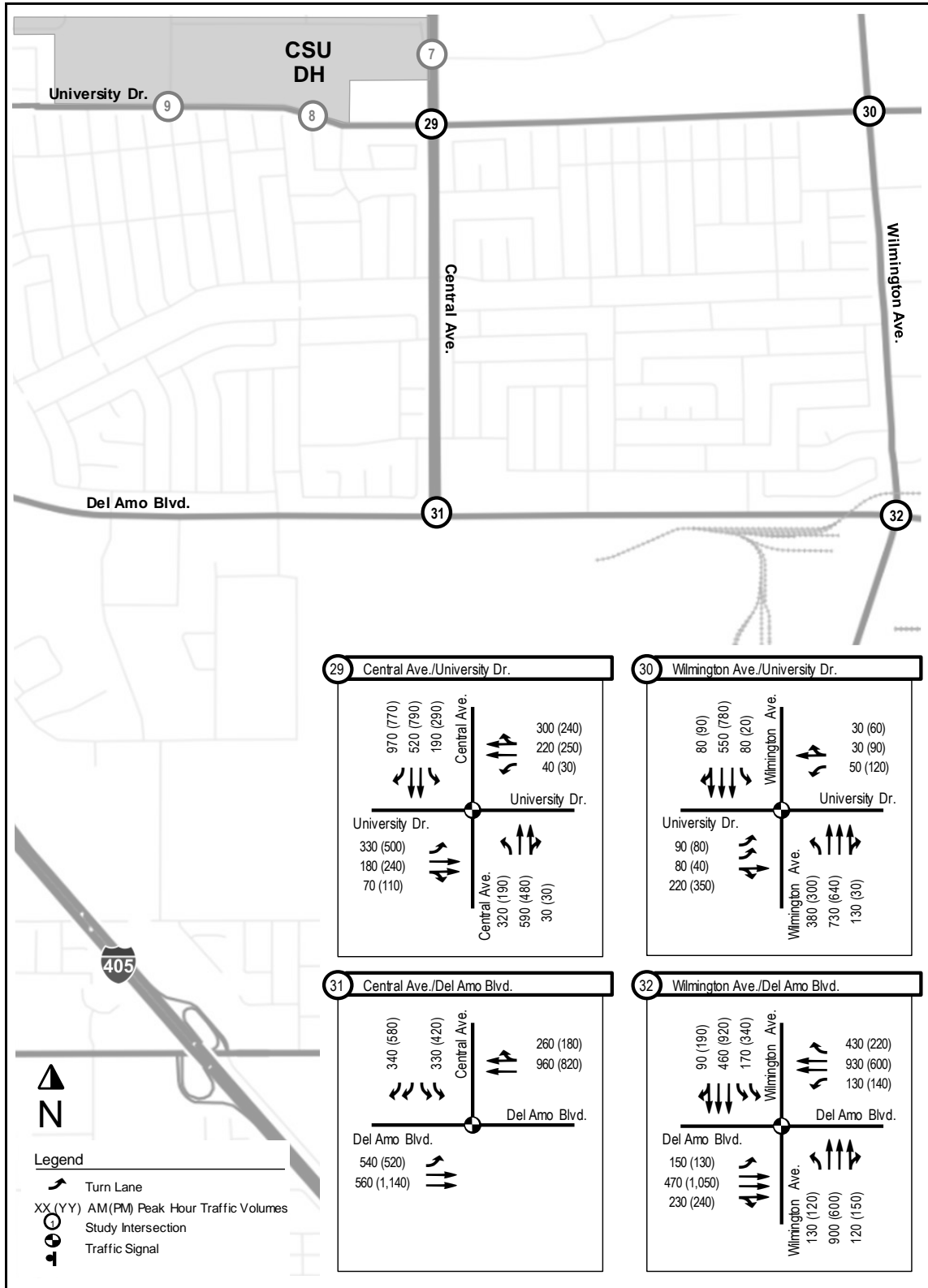


Exhibit 116: 2035 Weekday Plus Project Alternative 1 Traffic Volumes and Lane Configurations (Map F)

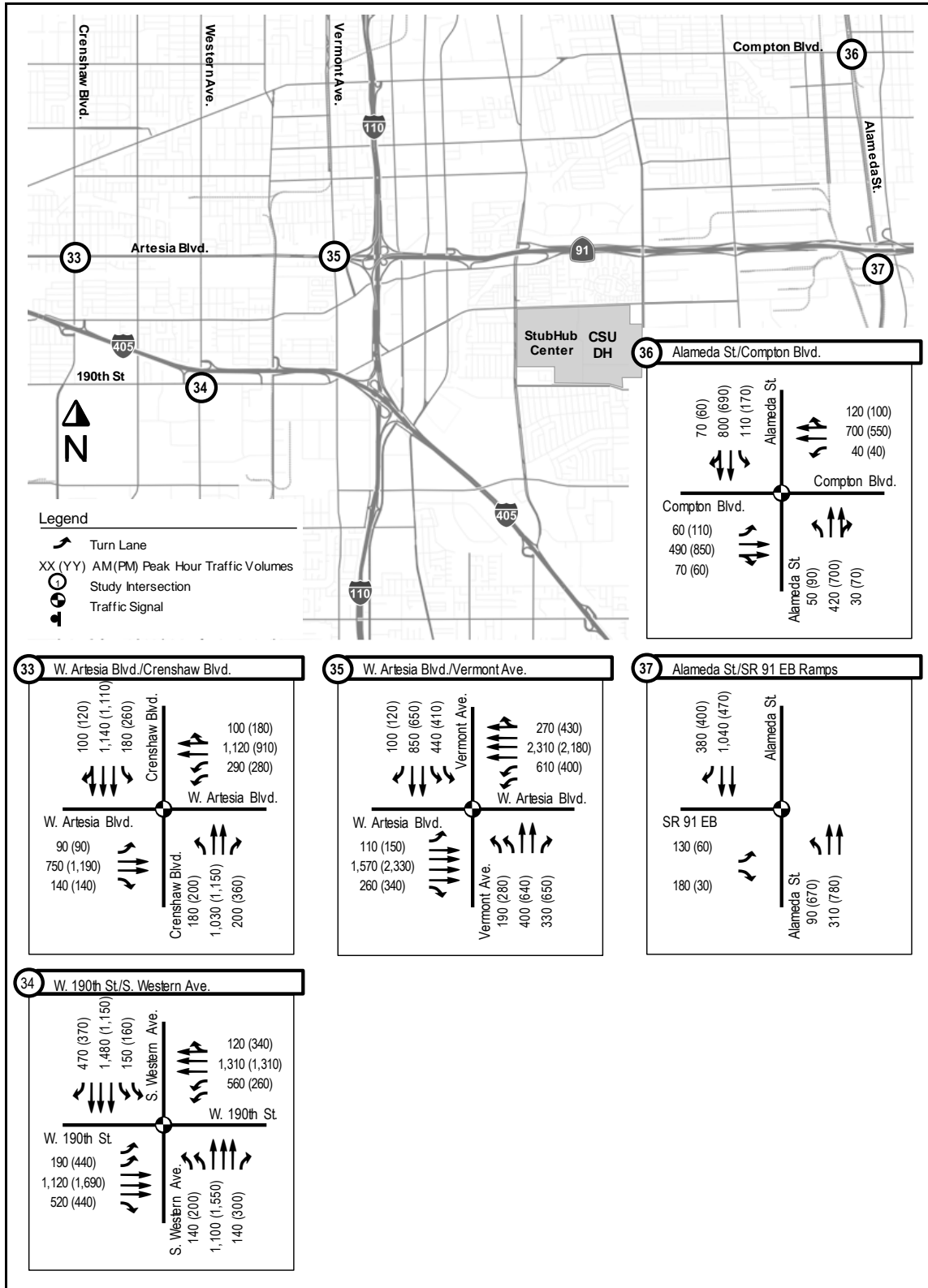


Exhibit 116: 2035 Weekday Plus Project Alternative 1 Traffic Volumes and Lane Configurations (Map G)

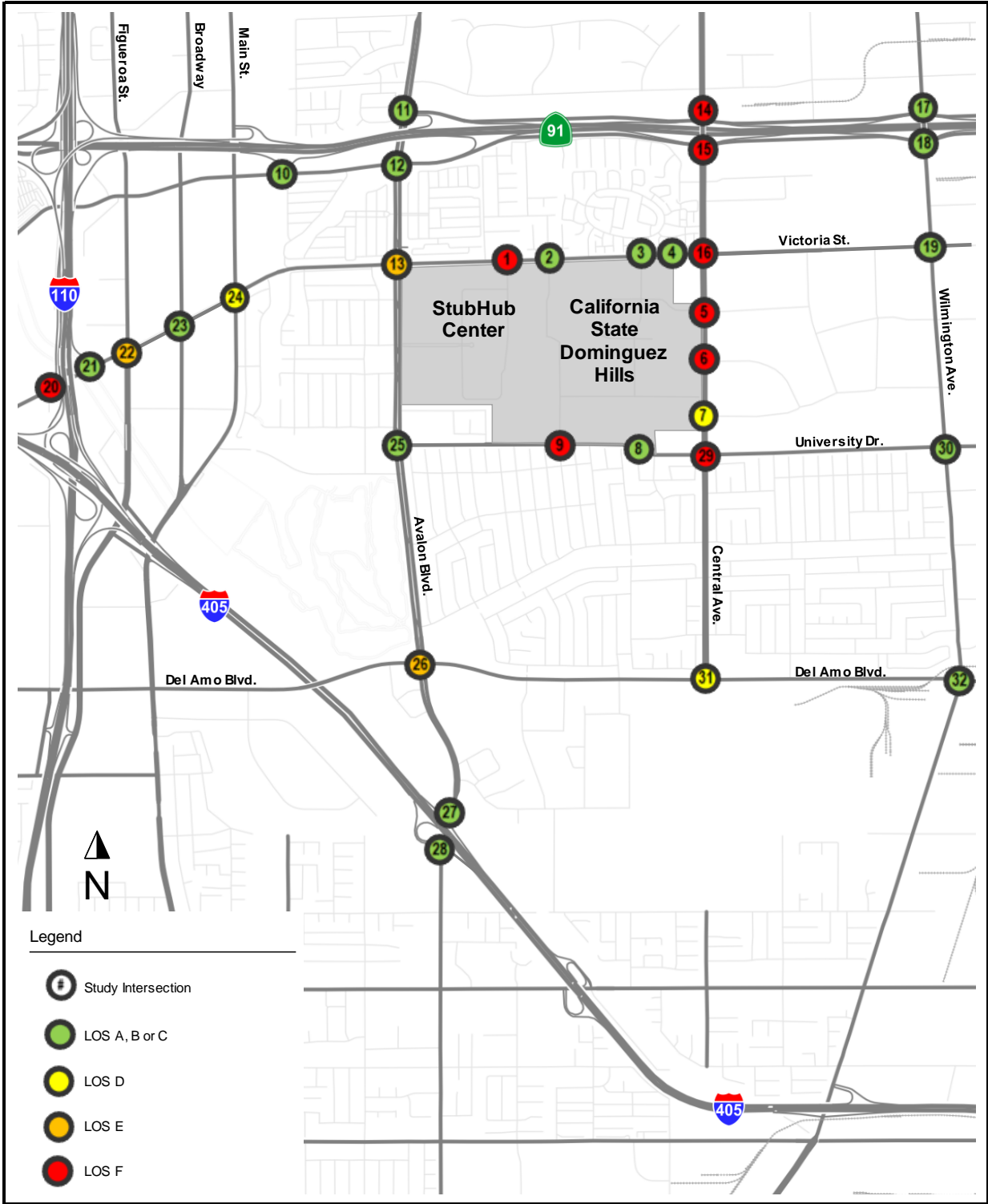


Exhibit 117: 2035 Weekday Plus Project Alternative 1 AM Peak Hour LOS (Map)

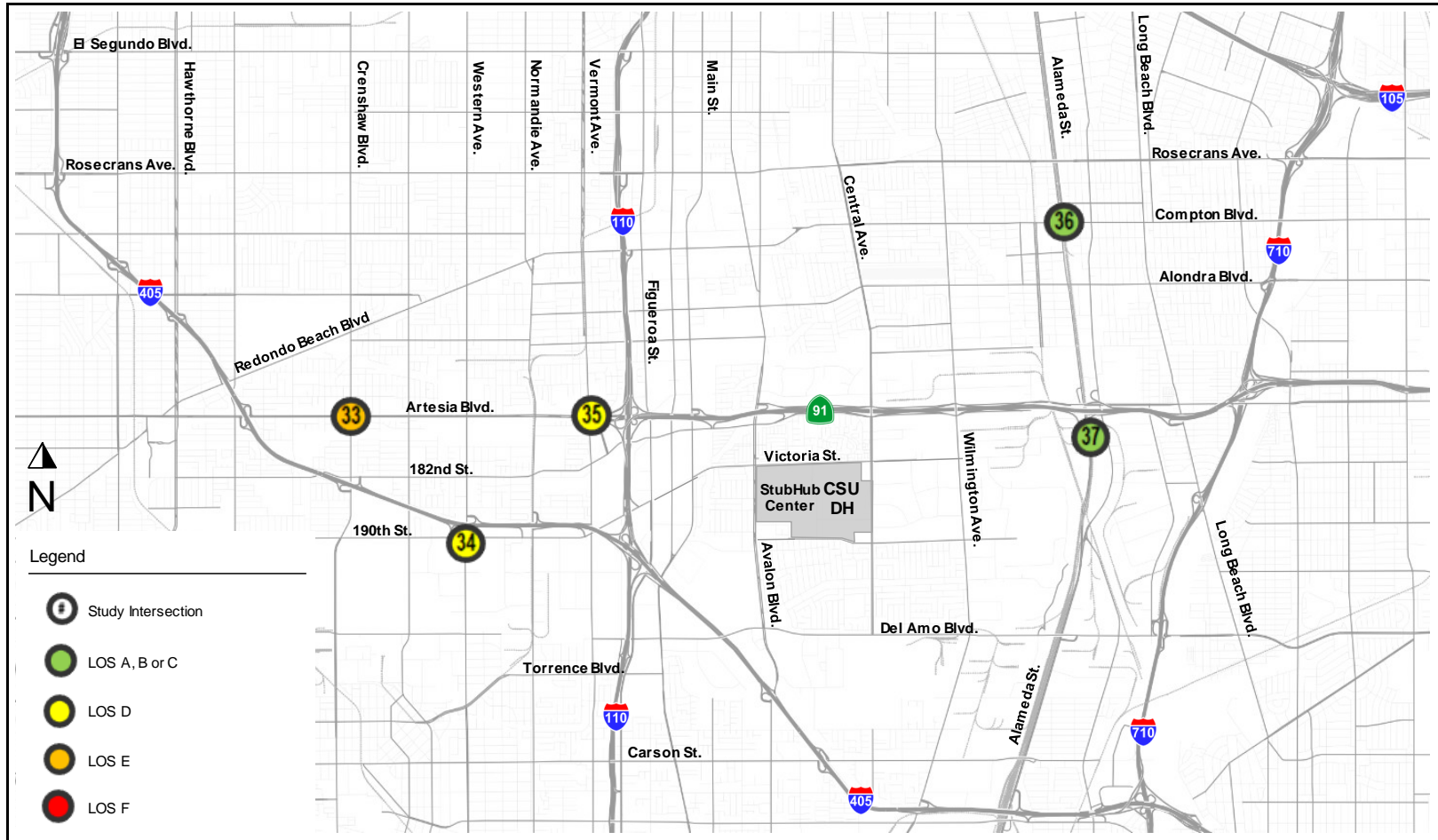


Exhibit 117: 2035 Weekday Plus Project Alternative 1 AM Peak Hour LOS (Map)

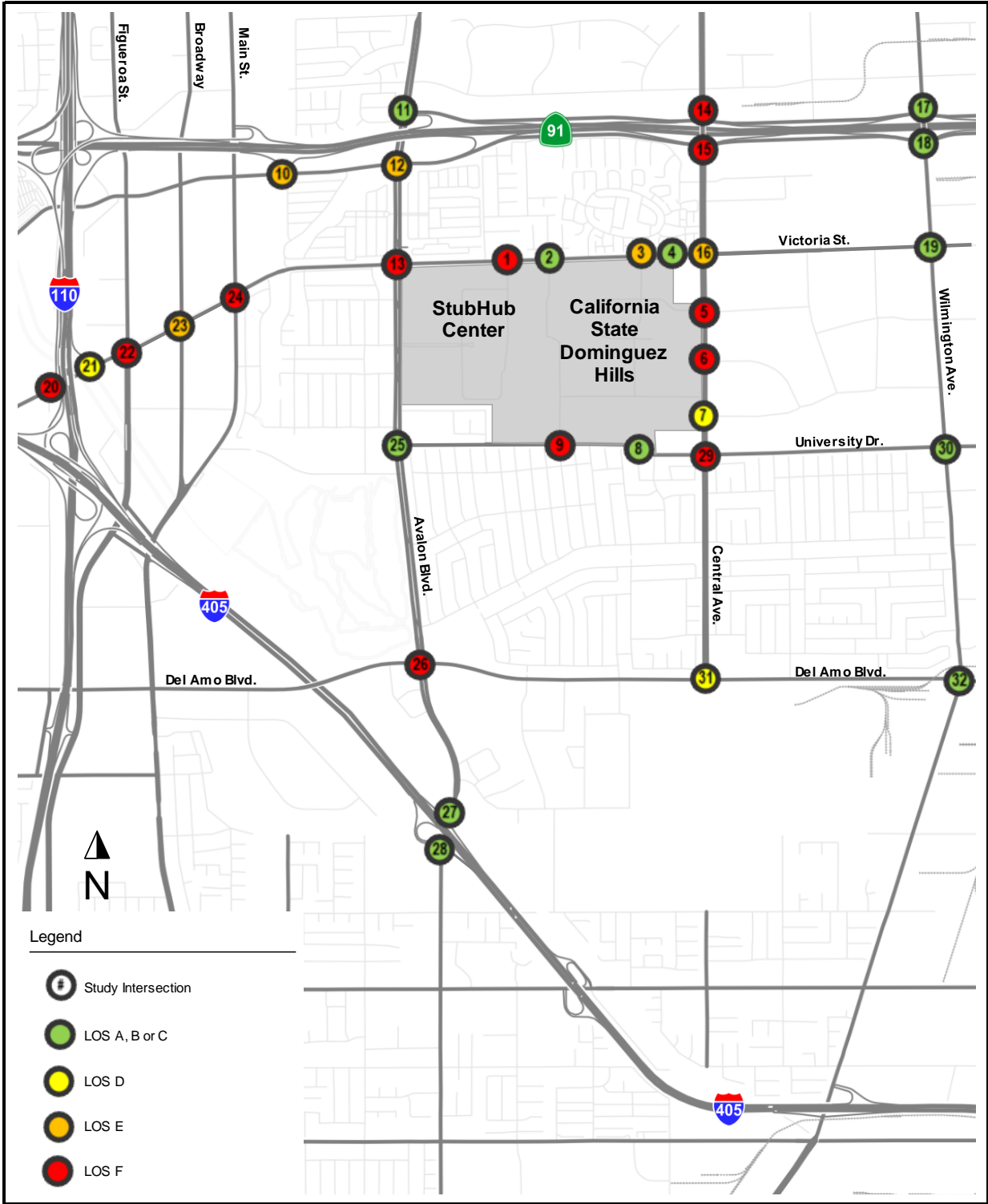


Exhibit 118: 2035 Weekday Plus Project Alternative 1 PM Peak Hour LOS (Map)

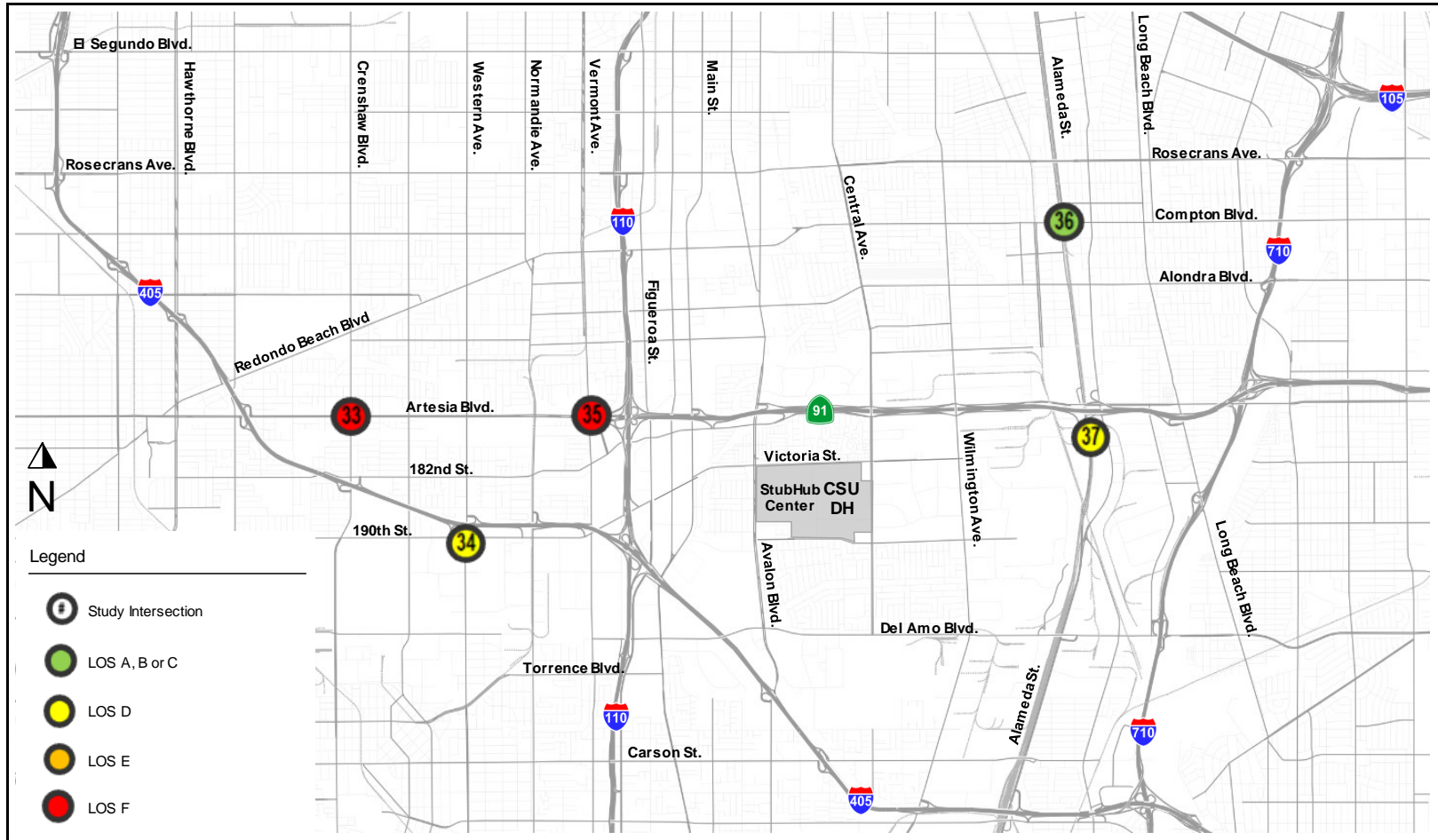


Exhibit 118: 2035 Weekday Plus Project Alternative 1 PM Peak Hour LOS (Map)

Study ID	Intersection Name	Control Type	2035 Scenarios					
			AM Peak Hour			PM Peak Hour		
			No Project LOS	Plus Project LOS	Project Has Significant Impact?	No Project LOS	Plus Project LOS	Project Has Significant Impact?
1	Victoria St./Drive D	TWSC	D	F	Yes	F	F	Yes
2	Victoria St./Tamcliff Ave.	Signalized	A	A	No	B	C	No
3	Victoria St./Birchknoll Dr.	Signalized	A	B	No	B	E	Yes
4	Victoria St./Project Service Rd.	TWSC	N/A	B	No	N/A	C	No
5	Central Ave./Charles Willard St.	TWSC	E	F	Yes	D	F	Yes
6	Central Ave./Beachey Pl.	TWSC	C	F	Yes	C	F	Yes
7	Central Ave./Glenn Curtiss St.	Signalized	A	D	No	A	D	No
8	University Dr./Birchknoll Dr. Ext.	TWSC	N/A	C	No	N/A	C	No
9	University Dr./Toro Center Dr.	TWSC	B	F	Yes	B	F	Yes
10	Albertoni St./SR 91 EB Ramps	Signalized	B	C	No	D	E	Yes
11	Avalon Blvd./SR 91 WB On-Ramp	Signalized	A	A	No	A	A	No
12	Avalon Blvd./Albertoni St.	Signalized	B	C	No	D	E	Yes
13	Avalon Blvd./Victoria St.	Signalized	B	E	Yes	D	F	Yes
14	Central Ave./Artesia Blvd. WB	Signalized	D	F	Yes	C	F	Yes
15	Central Ave./Albertoni St./Artesia Blvd. EB	Signalized	D	F	Yes	C	F	Yes
16	Central Ave./Victoria St.	Signalized	A	F	Yes	B	E	Yes
17	Wilmington Ave./Artesia Blvd. WB	Signalized	C	C	No	C	C	No
18	Wilmington Ave./Artesia Blvd. EB	Signalized	C	C	No	C	C	No
19	Wilmington Ave./Victoria St.	Signalized	A	A	No	A	A	No
20	I-110 SB Off-Ramp/190th St.	Signalized	F	F	Yes	F	F	Yes
21	I-110 NB On-Ramp/190th St.	Signalized	A	B	No	C	D	No
22	Figueroa St./190th St./Victoria St.	Signalized	D	E	Yes	D	F	Yes
23	Broadway/Victoria St.	Signalized	A	C	No	C	E	Yes
24	Main St./Victoria St.	Signalized	B	D	No	E	F	Yes
25	Avalon Blvd./University Dr.	Signalized	A	A	No	B	C	No
26	Avalon Blvd./Del Amo Blvd.	Signalized	D	E	Yes	E	F	Yes
27	Avalon Blvd./I-405 NB Ramps	Signalized	A	A	No	A	A	No
28	Avalon Blvd./I-405 SB Ramps	Signalized	B	B	No	A	A	No
29	Central Ave./University Dr.	Signalized	A	F	Yes	A	F	Yes
30	Wilmington Ave./University Dr.	Signalized	A	B	No	A	C	No
31	Central Ave./Del Amo Blvd.	Signalized	C	D	No	C	D	No
32	Wilmington Ave./Del Amo Blvd.	Signalized	B	C	No	C	C	No
33	W. Artesia Blvd./Crenshaw Blvd.	Signalized	E	E	No	F	F	No
34	W. 190th St./S. Western Ave.	Signalized	D	D	No	D	D	No
35	W. Artesia Blvd./Vermont Ave.	Signalized	D	D	No	F	F	No
36	Alameda St./Compton Blvd.	Signalized	B	B	No	C	C	No
37	Alameda St./SR 91 EB Ramps	Signalized	A	A	No	C	D	No

Exhibit 119: Determination of Intersection Impacts for the 2035 Weekday Plus Project Alternative 1

12.1.3 2035 Weekday Plus Project Alternative 1 Freeway Level of Service

The forecast LOS for the study freeway segments for the 2035 Plus Project condition are shown in Exhibit 120. Exhibit 121 shows the freeway impacts of the Project. The Project would have significant impacts on 13 CMP freeway monitoring stations, namely:

- CMP Station #1033, SR-91 East of Alameda St./Santa Fe Ave., Eastbound, during the PM peak hour
- CMP Station #1033, SR-91 East of Alameda St./Santa Fe Ave., Westbound, during the AM peak hour
- CMP Station #1034, SR-91 East of Cherry Ave., Eastbound, during the PM peak hour
- CMP Station #1034, SR-91 East of Cherry Ave., Southbound, during the AM peak hour
- CMP Station #1046, I-110 at Manchester Blvd., Northbound, during the PM peak hour
- CMP Station #1046, I-110 at Manchester Blvd., Southbound, during both peak hours
- CMP Station #1047, I-110 at Slauson Ave., Northbound, during the PM peak hour
- CMP Station #1047, I-110 at Slauson Ave., Southbound, during both peak hours
- CMP Station #1066, I-405 at Santa Fe Ave., Northbound, during the both peak hours
- CMP Station #1066, I-405 at Santa Fe Ave., Southbound, during the PM peak hour
- CMP Station #1067, I-405 South of I-110 at the Carson Scales, Northbound, during both peak hours
- CMP Station #1067, I-405 South of I-110 at the Carson Scales, Southbound, during the PM peak hour
- CMT Station #1068, I-405 North of Inglewood Ave., Northbound during the PM peak hour

Altogether 84 freeway segments would have significant impacts, including those that are not CMP monitoring stations. These additional locations are:

- SR-91 eastbound, Jct. Rte. 110 to Avalon Blvd., during the PM peak hour
- SR-91 eastbound, Avalon Blvd. to Central Ave., during the PM peak hour
- SR-91 eastbound, Central Ave. to Wilmington Ave., during the PM peak hour
- SR-91 eastbound, Wilmington Ave. to Alameda St., during the PM peak hour
- SR-91 eastbound, Alameda St. to Alameda St./Santa Fe Ave., during the both peak hours
- SR-91 eastbound, Long Beach Blvd. to Jct. Rte. 710, during the PM peak hour
- SR-91 eastbound, Jct. Rte. 710 to Cherry Ave., during the PM peak hour
- SR-91 eastbound, Paramount Blvd. to Downey Ave., during the PM peak hour
- SR-91 eastbound, Downey Ave. to Jct. Rte. 19, during the PM peak hour
- SR-91 eastbound, Jct. Rte. 19 to Clark Ave., during the PM peak hour
- SR-91 eastbound, Clark Ave. to Bellflower Blvd., during the PM peak hour
- I-110 northbound, Sepulveda Blvd. to Carson St., during the AM peak hour
- I-110 northbound, Carson St. to Torrance/Del Amo Blvd., during the both peak hours
- I-110 northbound, Torrance/Del Amo Blvd. to Jct. Rte. 405, during the both peak hours

- I-110 northbound, Jct. Rte. 405 to Jct. Rte. 91, during the AM peak hour
- I-110 northbound, Rosecrans Ave. to El Segundo Blvd., during the PM peak hour
- I-110 northbound, El Segundo Blvd. to Jct. Rte. 105, during the PM peak hour
- I-110 northbound, Century Blvd. to Manchester Ave., during the PM peak hour
- I-110 northbound, Florence Ave. to Gage Ave., during the PM peak hour
- I-110 northbound, Slauson Ave. to 51st St., during the PM peak hour
- I-110 northbound, 51st St. to Vernon Ave., during the PM peak hour
- I-110 northbound, Vernon Ave. to Martin Luther King Jr. Blvd., during the PM peak hour
- I-405 northbound, Cherry Ave. to Orange Ave., during the AM peak hour
- I-405 northbound, Orange Ave. to Atlantic Ave., during the both peak hours
- I-405 northbound, Atlantic Ave. to Long Beach Blvd, during the AM peak hour
- I-405 northbound, Alameda St. to Wilmington Ave., during the both peak hours
- I-405 northbound, Wilmington Ave. to Carson St., during the both peak hours
- I-405 northbound, Carson St. to Avalon Blvd., during the both peak hours
- I-405 northbound, Jct. Rte. 110 to Vermont Ave., during the both peak hours
- I-405 northbound, Vermont Ave. to Normandie Ave., during the AM peak hour
- I-405 northbound, Normandie Ave. to Western Ave., during the PM peak hour
- I-405 northbound, Western Ave. to Crenshaw Blvd., during the both peak hours
- I-405 northbound, Crenshaw Blvd. to Artesia Blvd., during the both peak hours
- I-405 northbound, Hawthorne Blvd. to Inglewood Ave., during the PM peak hour
- SR-91 westbound, Jct. Rte. 110 to Avalon Blvd., during the both peak hours
- SR-91 westbound, Avalon Blvd. to Central Ave., during the AM peak hour
- SR-91 westbound, Central Ave. to Wilmington Ave., during the AM peak hour
- SR-91 westbound, Wilmington Ave. to Alameda St., during the AM peak hour
- SR-91 westbound, Alameda St. to Alameda St./Santa Fe Ave., during the AM peak hour
- SR-91 westbound, Long Beach Blvd. to Jct. Rte. 710, during the AM peak hour
- SR-91 westbound, Jct. Rte. 710 to Cherry Ave., during the both peak hours
- SR-91 westbound, Paramount Blvd. to Downey Ave., during the both peak hours
- SR-91 westbound, Downey Ave. to Jct. Rte. 19, during the AM peak hour
- SR-91 westbound, Jct. Rte. 19 to Clark Ave., during the AM peak hour
- SR-91 westbound, Clark Ave. to Bellflower Blvd., during the AM peak hour
- SR-91 westbound, Bellflower Blvd. to Jct. Rte. 605, during the AM peak hour
- I-110 southbound, Sepulveda Blvd. to Carson St., during the both peak hours
- I-110 southbound, Carson St. to Torrance/Del Amo Blvd., during the both peak hours
- I-110 southbound, Torrance/Del Amo Blvd. to Jct. Rte. 405, during the both peak hours

- I-110 southbound, Jct. Rte. 405 to Jct. Rte. 91, during the both peak hours
- I-110 southbound, Redondo Beach Blvd. to Rosecrans Ave., during the AM peak hour
- I-110 southbound, Rosecrans Ave. to El Segundo Blvd., during the both peak hours
- I-110 southbound, Century Blvd. to Manchester Ave., during the both peak hours
- I-110 southbound, Florence Ave. to Gage Ave., during the both peak hours
- I-110 southbound, Slauson Ave. to 51st St., during the both peak hours
- I-110 southbound, 51st St. to Vernon Ave., during the AM peak hour
- I-110 southbound, Vernon Ave. to Martin Luther King Jr. Blvd., during the AM peak hour
- I-110 southbound, Martin Luther King Jr. Blvd. to Exposition Blvd., during the both peak hours
- I-405 southbound, Orange Ave. to Atlantic Ave., during the PM peak hour
- I-405 southbound, Long Beach Blvd to Jct. Rte. 710, during the PM peak hour
- I-405 southbound, Alameda St. to Wilmington Ave., during the PM peak hour
- I-405 southbound, Wilmington Ave. to Carson St., during the PM peak hour
- I-405 southbound, Carson St. to Avalon Blvd., during the both peak hours
- I-405 southbound, Jct. Rte. 110 to Vermont Ave., during the both peak hours
- I-405 southbound, Vermont Ave. to Normandie Ave., during the PM peak hour
- I-405 southbound, Normandie Ave. to Western Ave., during the both peak hours
- I-405 southbound, Western Ave. to Crenshaw Blvd., during the both peak hours
- I-405 southbound, Crenshaw Blvd. to Artesia Blvd., during the both peak hours
- I-405 southbound, Artesia Blvd. to Hawthorne Blvd., during the AM peak hour
- I-405 southbound, Hawthorne Blvd. to Inglewood Ave., during the AM peak hour
- I-710 southbound, Alondra Blvd. to Jct. Rte. 105, during the AM peak hour

ID	CMP Station	Fwy Rte	Post Mile	Location	Northbound/Eastbound								Southbound/Westbound							
					AM Peak Hour				PM Peak Hour				AM Peak Hour				PM Peak Hour			
					Demand	Capacity	D/C	LOS	Demand	Capacity	D/C	LOS	Demand	Capacity	D/C	LOS	Demand	Capacity	D/C	LOS
91-1		91	6.344	Jct. Rte. 110 to Avalon Blvd.	7,150	12,000	0.60	C	14,690	12,000	1.22	F(0)	9,450	4,000	2.36	F(3)	6,400	4,000	1.60	F(3)
91-2		91	7.426	Avalon Blvd. to Central Ave.	7,390	10,000	0.74	C	15,090	10,000	1.51	F(3)	9,850	10,000	0.99	E	6,730	10,000	0.67	C
91-3		91	8.435	Central Ave. to Wilmington Ave.	7,540	10,000	0.75	C	15,390	10,000	1.54	F(3)	10,260	10,000	1.03	F(0)	6,970	10,000	0.70	C
91-4		91	9.162	Wilmington Ave. to Alameda St.	7,850	10,000	0.79	D	16,000	10,000	1.60	F(3)	10,560	10,000	1.06	F(0)	7,170	10,000	0.72	C
91-5		91	10.271	Alameda St. to Alameda St./Santa Fe Ave.	8,120	8,000	1.02	F(0)	16,650	8,000	2.08	F(3)	11,060	8,000	1.38	F(2)	7,470	8,000	0.93	D
91-6	1033	91	10.41	Alameda St./Santa Fe Ave. to Long Beach Blvd.	8,420	12,000	0.70	C	17,260	12,000	1.44	F(2)	11,470	12,000	0.96	E	7,780	12,000	0.65	C
91-7		91	11.096	Long Beach Blvd. to Jct. Rte. 710	8,420	12,000	0.70	C	17,240	12,000	1.44	F(2)	11,440	10,000	1.14	F(0)	7,750	10,000	0.78	D
91-8		91	11.681	Jct. Rte. 710 to Cherry Ave.	8,520	10,000	0.85	D	12,240	10,000	1.22	F(0)	13,790	10,000	1.38	F(2)	9,690	10,000	0.97	E
91-9	1034	91	13.094	Cherry Ave. to Paramount Blvd.	8,620	10,000	0.86	D	12,430	10,000	1.24	F(0)	13,980	12,000	1.17	F(0)	9,780	12,000	0.82	D
91-10		91	13.594	Paramount Blvd. to Downey Ave.	8,410	10,000	0.84	D	12,020	10,000	1.20	F(0)	13,570	10,000	1.36	F(2)	9,580	10,000	0.96	E
91-11		91	14.103	Downey Ave. to Jct. Rte. 19	8,400	12,000	0.70	C	12,010	12,000	1.00	E	13,450	10,000	1.35	F(1)	9,470	10,000	0.95	E
91-12		91	14.618	Jct. Rte. 19 to Clark Ave.	7,700	10,000	0.77	C	11,090	10,000	1.11	F(0)	12,520	8,000	1.57	F(3)	8,750	8,000	1.09	F(0)
91-13		91	15.105	Clark Ave. to Bellflower Blvd.	8,200	12,000	0.68	C	11,700	12,000	0.98	E	13,120	10,000	1.31	F(1)	9,250	10,000	0.93	D
91-14		91	15.614	Bellflower Blvd. to Jct. Rte. 605	8,090	12,000	0.67	C	11,570	12,000	0.96	E	13,000	10,000	1.30	F(1)	9,130	10,000	0.91	D
110-1	1045	110	1.23	Channel St. to C St.	4,660	8,000	0.58	C	3,370	8,000	0.42	B	3,740	8,000	0.47	B	4,480	8,000	0.56	C
110-2		110	2.771	C St. to Anaheim St.	4,860	10,000	0.49	B	3,580	10,000	0.36	B	3,940	8,000	0.49	B	4,690	8,000	0.59	C
110-3		110	3.264	Anaheim St. to Jct. Rte. 1	5,280	10,000	0.53	B	3,790	10,000	0.38	B	4,250	10,000	0.43	B	5,100	10,000	0.51	B
110-4		110	4.061	Jct. Rte. 1 to Sepulveda Blvd.	7,360	8,000	0.92	D	5,390	8,000	0.67	C	5,900	8,000	0.74	C	7,160	8,000	0.90	D
110-5		110	5.451	Sepulveda Blvd. to Carson St.	9,500	8,000	1.19	F(0)	6,930	8,000	0.87	D	7,650	8,000	0.96	E	9,330	8,000	1.17	F(0)
110-6		110	7.016	Carson St. to Torrance/Del Amo Blvd.	10,900	8,000	1.36	F(2)	8,030	8,000	1.00	E	8,860	8,000	1.11	F(0)	10,740	8,000	1.34	F(1)
110-7		110	8.028	Torrance/Del Amo Blvd. to Jct. Rte. 405	11,500	8,000	1.44	F(2)	8,430	8,000	1.05	F(0)	9,360	8,000	1.17	F(0)	11,340	8,000	1.42	F(2)
110-8		110	8.775	Jct. Rte. 405 to Jct. Rte. 91	14,100	12,000	1.18	F(0)	10,230	12,000	0.85	D	11,360	8,000	1.42	F(2)	13,840	8,000	1.73	F(3)
110-9		110	9.87	Jct. Rte. 91 to Redondo Beach Blvd.	9,310	12,000	0.78	D	9,570	12,000	0.80	D	10,290	12,000	0.86	D	9,900	12,000	0.83	D
110-10		110	11.239	Redondo Beach Blvd. to Rosecrans Ave.	9,610	11,000	0.87	D	9,970	11,000	0.91	D	10,690	11,000	0.97	E	10,200	11,000	0.93	D
110-11		110	11.891	Rosecrans Ave. to El Segundo Blvd.	10,000	11,000	0.91	D	10,350	11,000	0.94	E	11,190	11,000	1.02	F(0)	10,700	11,000	0.97	E
110-12		110	12.898	El Segundo Blvd. to Jct. Rte. 105	10,180	11,000	0.93	D	10,520	11,000	0.96	E	11,380	13,000	0.88	D	10,890	13,000	0.84	D
110-13		110	13.82	Jct. Rte. 105 to Century Blvd.	11,360	14,000	0.81	D	11,690	14,000	0.84	D	12,560	14,000	0.90	D	12,090	14,000	0.86	D
110-14		110	14.967	Century Blvd. to Manchester Ave.	12,160	12,000	1.01	F(0)	12,490	12,000	1.04	F(0)	13,460	12,000	1.12	F(0)	12,980	12,000	1.08	F(0)
110-15	1046	110	15.976	Manchester Ave. to Florence Ave.	11,860	12,000	0.99	E	12,180	12,000	1.02	F(0)	13,120	12,000	1.09	F(0)	12,540	12,000	1.05	F(0)
110-16		110	16.981	Florence Ave. to Gage Ave.	12,230	12,000	1.02	F(0)	12,540	12,000	1.05	F(0)	13,200	12,000	1.10	F(0)	12,730	12,000	1.06	F(0)
110-17	1047	110	17.514	Gage Ave. to Slauson Ave.	12,130	12,000	1.01	F(0)	12,430	12,000	1.04	F(0)	13,200	12,000	1.10	F(0)	12,630	12,000	1.05	F(0)
110-18		110	17.98	Slauson Ave. to 51st St.	11,730	10,000	1.17	F(0)	11,920	10,000	1.19	F(0)	12,680	10,000	1.27	F(1)	12,110	10,000	1.21	F(0)
110-19		110	18.495	51st St. to Vernon Ave.	11,930	10,000	1.19	F(0)	12,220	10,000	1.22	F(0)	12,880	12,000	1.07	F(0)	12,410	12,000	1.03	F(0)
110-20		110	18.998	Vernon Ave. to Martin Luther King Jr. Blvd.	11,910	12,000	0.99	E	12,200	12,000	1.02	F(0)	12,860	12,000	1.07	F(0)	12,400	12,000	1.03	F(0)
110-21		110	19.502	Martin Luther King Jr. Blvd. to Exposition Blvd.	10,810	12,000	0.90	D	10,990	12,000	0.92	D	11,650	10,000	1.17	F(0)	11,190	10,000	1.12	F(0)
110-22		110	19.996	Exposition Blvd. to Jct. Rte. 10	10,390	12,000	0.87	D	10,660	12,000	0.89	D	11,360	12,000	0.95	E	10,900	12,000	0.91	D
405-1		405	3.324	Lakewood Blvd. to Cherry Ave.	12,630	10,000	1.26	F(1)	10,800	10,000	1.08	F(0)	9,470	10,000	0.95	E	11,820	10,000	1.18	F(0)
405-2		405	4.879	Cherry Ave. to Orange Ave.	13,350	10,000	1.34	F(1)	11,310	10,000	1.13	F(0)	9,870	8,000	1.23	F(0)	12,430	8,000	1.55	F(3)
405-3		405	5.388	Orange Ave. to Atlantic Ave.	13,850	8,000	1.73	F(3)	11,810	8,000	1.48	F(3)	10,280	8,000	1.29	F(1)	12,940	8,000	1.62	F(3)
405-4		405	6.076	Atlantic Ave. to Long Beach Blvd	13,650	8,000	1.71	F(3)	11,610	8,000	1.45	F(2)	10,180	12,000	0.85	D	12,750	12,000	1.06	F(0)
405-5		405	6.34	Long Beach Blvd to Jct. Rte. 710	13,570	12,000	1.13	F(0)	11,530	12,000	0.96	E	10,090	10,000	1.01	F(0)	12,660	10,000	1.27	F(1)
405-6	1066	405	7.596	Jct. Rte. 710 to Alameda St.	12,430	10,000	1.24	F(0)	10,570	10,000	1.06	F(0)	9,210	10,000	0.92	D	11,600	10,000	1.16	F(0)
405-7		405	8.784	Alameda St. to Wilmington Ave.	12,060	10,000	1.21	F(0)	10,190	10,000	1.02	F(0)	8,930	10,000	0.89	D	11,240	10,000	1.12	F(0)
405-8		405	9.556	Wilmington Ave. to Carson St.	11,260	8,000	1.41	F(2)	9,690	8,000	1.21	F(0)	9,530	8,000	1.19	F(0)	11,640	8,000	1.46	F(3)
405-9		405	10.541	Carson St. to Avalon Blvd.	11,060	8,000	1.38	F(2)	9,490	8,000	1.19	F(0)	9,430	8,000	1.18	F(0)	11,440	8,000	1.43	F(2)
405-10	1067	405	11.224	Avalon Blvd. to Jct. Rte. 110	11,860	10,000	1.19	F(0)	10,190	10,000	1.02	F(0)	10,030	10,000	1.00	E	12,240	10,000	1.22	F(0)
405-11		405	12.97	Jct. Rte. 110 to Vermont Ave.	11,600	10,000	1.16	F(0)	10,200	10,000	1.02	F(0)	8,800	8,000	1.10	F(0)	10,770	8,000	1.35	F(1)
405-12		405	13.28	Vermont Ave. to Normandie Ave.	12,100	12,000	1.01	F(0)	10,700	12,000	0.89	D	9,160	10,000	0.92	D	11,230	10,000	1.12	F(0)
405-13		405	13.826	Normandie Ave. to Western Ave.	11,400	10,000	1.14	F(0)	10,000	10,000	1.00	E	8,510	8,000	1.06	F(0)	10,490	8,000	1.31	F(1)
405-14		405	14.398	Western Ave. to Crenshaw Blvd.	10,900	8,000	1.36	F(2)	9,600	8,000	1.20	F(0)	8,210	8,000	1.03	F(0)	10,090	8,000	1.26	F(1)
405-15		405	15.447	Crenshaw Blvd. to Artesia Blvd.	10,670	8,000	1.33	F(1)	9,360	8,000	1.17	F(0)	8,000	8,000	1.00	E	9,870	8,000	1.23	F(0)
405-16		405	16.573	Artesia Blvd. to Hawthorne Blvd.	10,740	10,000	1.07	F(0)	9,420	10,000	0.94	E	8,070	8,000	1.01	F(0)	9,950	8,000	1.24	F(0)
405-17		405	17.589	Hawthorne Blvd. to Inglewood Ave.	11,220	10,000	1.12	F(0)	9,890	10,000	0.99	E	8,460	8,000	1.06	F(0)	10,350	8,000	1.29	F(1)
405-18	1068	405	18.233	Inglewood Ave. to Rosecrans Ave.	11,710	10,000	1.17	F(0)	10,260	10,000	1.03	F(0)	8,840	10,000	0.88	D	10,820	10,000	1.08	F(0)
710-1		710	12.97	Jct. Rte. 91 to Alondra Blvd.	11,490	12,000	0.96	E	17,870	12,000	1.49	F(3)	11,350	12,000	0.95	E	9,070	12,000	0.76	C
710-2		710	13.945	Alondra Blvd. to Jct. Rte. 105	11,880	12,000	0.99	E	18,450	12,000	1.54	F(3)	11,730	12,000	0.98	E	9,350	12,000	0.78	D

Note: D/C is demand-to-capacity ratio.

Exhibit 120: 2035 Weekday Plus Project Alternative 1 Level of Service (LOS) for Study Freeway Locations

Northbound/Eastbound

ID	CMP Station	Fwy Rte	Post Mile	Location	2035 No Project				2035 Plus Project				2035 Increase in D/C Ratio with Project		2035 Project Has Significant Cumulative Impact?	
					AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM	PM	AM	PM
					D/C	LOS	D/C	LOS	D/C	LOS	D/C	LOS				
91-1		91	6.344	Jct. Rte. 110 to Avalon Blvd.	0.58	C	1.20	F(0)	0.60	C	1.22	F(0)	0.02	0.02	No	Yes
91-2		91	7.426	Avalon Blvd. to Central Ave.	0.72	C	1.47	F(3)	0.74	C	1.51	F(3)	0.02	0.04	No	Yes
91-3		91	8.435	Central Ave. to Wilmington Ave.	0.73	C	1.49	F(3)	0.75	C	1.54	F(3)	0.02	0.05	No	Yes
91-4		91	9.162	Wilmington Ave. to Alameda St.	0.76	C	1.55	F(3)	0.79	D	1.60	F(3)	0.03	0.05	No	Yes
91-5		91	10.271	Alameda St. to Alameda St./Santa F	0.99	E	2.03	F(3)	1.02	F(0)	2.08	F(3)	0.03	0.05	Yes	Yes
91-6	1033	91	10.41	Alameda St./Santa Fe Ave. to Long	0.68	C	1.40	F(2)	0.70	C	1.44	F(2)	0.02	0.04	No	Yes
91-7		91	11.096	Long Beach Blvd. to Jct. Rte. 710	0.68	C	1.40	F(2)	0.70	C	1.44	F(2)	0.02	0.04	No	Yes
91-8		91	11.681	Jct. Rte. 710 to Cherry Ave.	0.84	D	1.20	F(0)	0.85	D	1.22	F(0)	0.01	0.02	No	Yes
91-9	1034	91	13.094	Cherry Ave. to Paramount Blvd.	0.85	D	1.22	F(0)	0.86	D	1.24	F(0)	0.01	0.02	No	Yes
91-10		91	13.594	Paramount Blvd. to Downey Ave.	0.83	D	1.18	F(0)	0.84	D	1.20	F(0)	0.01	0.02	No	Yes
91-11		91	14.103	Downey Ave. to Jct. Rte. 19	0.69	C	0.98	E	0.70	C	1.00	E	0.01	0.02	No	Yes
91-12		91	14.618	Jct. Rte. 19 to Clark Ave.	0.76	C	1.09	F(0)	0.77	C	1.11	F(0)	0.01	0.02	No	Yes
91-13		91	15.105	Clark Ave. to Bellflower Blvd.	0.68	C	0.96	E	0.68	C	0.98	E	0.00	0.02	No	Yes
91-14		91	15.614	Bellflower Blvd. to Jct. Rte. 605	0.67	C	0.95	E	0.67	C	0.96	E	0.00	0.01	No	No
110-1	1045	110	1.23	Channel St. to C St.	0.56	C	0.40	B	0.58	C	0.42	B	0.02	0.02	No	No
110-2		110	2.771	C St. to Anaheim St.	0.47	B	0.34	A	0.49	B	0.36	B	0.02	0.02	No	No
110-3		110	3.264	Anaheim St. to Jct. Rte. 1	0.51	B	0.36	B	0.53	B	0.38	B	0.02	0.02	No	No
110-4		110	4.061	Jct. Rte. 1 to Sepulveda Blvd.	0.89	D	0.64	C	0.92	D	0.67	C	0.03	0.03	No	No
110-5		110	5.451	Sepulveda Blvd. to Carson St.	1.15	F(0)	0.83	D	1.19	F(0)	0.87	D	0.04	0.04	Yes	No
110-6		110	7.016	Carson St. to Torrance/Del Amo Blvd	1.33	F(1)	0.96	E	1.36	F(2)	1.00	E	0.03	0.04	Yes	Yes
110-7		110	8.028	Torrance/Del Amo Blvd. to Jct. Rte.	1.40	F(2)	1.01	F(0)	1.44	F(2)	1.05	F(0)	0.04	0.04	Yes	Yes
110-8		110	8.775	Jct. Rte. 405 to Jct. Rte. 91	1.15	F(0)	0.83	D	1.18	F(0)	0.85	D	0.03	0.02	Yes	No
110-9		110	9.87	Jct. Rte. 91 to Redondo Beach Blvd.	0.76	C	0.77	C	0.78	D	0.80	D	0.02	0.03	No	No
110-10		110	11.239	Redondo Beach Blvd. to Rosecrans	0.85	D	0.87	D	0.87	D	0.91	D	0.02	0.04	No	No
110-11		110	11.891	Rosecrans Ave. to El Segundo Blvd.	0.89	D	0.91	D	0.91	D	0.94	E	0.02	0.03	No	Yes
110-12		110	12.898	El Segundo Blvd. to Jct. Rte. 105	0.91	D	0.93	D	0.93	D	0.96	E	0.02	0.03	No	Yes
110-13		110	13.82	Jct. Rte. 105 to Century Blvd.	0.80	D	0.81	D	0.81	D	0.84	D	0.01	0.03	No	No
110-14		110	14.967	Century Blvd. to Manchester Ave.	1.00	E	1.02	F(0)	1.01	F(0)	1.04	F(0)	0.01	0.02	No	Yes
110-15	1046	110	15.976	Manchester Ave. to Florence Ave.	0.98	E	0.99	E	0.99	E	1.02	F(0)	0.01	0.03	No	Yes
110-16		110	16.981	Florence Ave. to Gage Ave.	1.01	F(0)	1.03	F(0)	1.02	F(0)	1.05	F(0)	0.01	0.02	No	Yes
110-17	1047	110	17.514	Gage Ave. to Slauson Ave.	1.00	E	1.02	F(0)	1.01	F(0)	1.04	F(0)	0.01	0.02	No	Yes
110-18		110	17.98	Slauson Ave. to 51st St.	1.16	F(0)	1.17	F(0)	1.17	F(0)	1.19	F(0)	0.01	0.02	No	Yes
110-19		110	18.495	51st St. to Vernon Ave.	1.18	F(0)	1.20	F(0)	1.19	F(0)	1.22	F(0)	0.01	0.02	No	Yes
110-20		110	18.998	Vernon Ave. to Martin Luther King Jr	0.98	E	1.00	E	0.99	E	1.02	F(0)	0.01	0.02	No	Yes
110-21		110	19.502	Martin Luther King Jr. Blvd. to Expos	0.89	D	0.90	D	0.90	D	0.92	D	0.01	0.02	No	No
110-22		110	19.996	Exposition Blvd. to Jct. Rte. 10	0.86	D	0.88	D	0.87	D	0.89	D	0.01	0.01	No	No
405-1		405	3.324	Lakewood Blvd. to Cherry Ave.	1.25	F(0)	1.07	F(0)	1.26	F(1)	1.08	F(0)	0.01	0.01	No	No
405-2		405	4.879	Cherry Ave. to Orange Ave.	1.32	F(1)	1.12	F(0)	1.34	F(1)	1.13	F(0)	0.02	0.01	Yes	No
405-3		405	5.388	Orange Ave. to Atlantic Ave.	1.71	F(3)	1.46	F(3)	1.73	F(3)	1.48	F(3)	0.02	0.02	Yes	Yes
405-4		405	6.076	Atlantic Ave. to Long Beach Blvd	1.69	F(3)	1.44	F(2)	1.71	F(3)	1.45	F(2)	0.02	0.01	Yes	No
405-5		405	6.34	Long Beach Blvd to Jct. Rte. 710	1.12	F(0)	0.95	E	1.13	F(0)	0.96	E	0.01	0.01	No	No
405-6	1066	405	7.596	Jct. Rte. 710 to Alameda St.	1.22	F(0)	1.04	F(0)	1.24	F(0)	1.06	F(0)	0.02	0.02	Yes	Yes
405-7		405	8.784	Alameda St. to Wilmington Ave.	1.18	F(0)	1.00	E	1.21	F(0)	1.02	F(0)	0.03	0.02	Yes	Yes
405-8		405	9.556	Wilmington Ave. to Carson St.	1.38	F(2)	1.19	F(0)	1.41	F(2)	1.21	F(0)	0.03	0.02	Yes	Yes
405-9		405	10.541	Carson St. to Avalon Blvd.	1.35	F(1)	1.16	F(0)	1.38	F(2)	1.19	F(0)	0.03	0.03	Yes	Yes
405-10	1067	405	11.224	Avalon Blvd. to Jct. Rte. 110	1.16	F(0)	1.00	E	1.19	F(0)	1.02	F(0)	0.03	0.02	Yes	Yes
405-11		405	12.97	Jct. Rte. 110 to Vermont Ave.	1.14	F(0)	0.99	E	1.16	F(0)	1.02	F(0)	0.02	0.03	Yes	Yes
405-12		405	13.28	Vermont Ave. to Normandie Ave.	0.99	E	0.87	D	1.01	F(0)	0.89	D	0.02	0.02	Yes	No
405-13		405	13.826	Normandie Ave. to Western Ave.	1.12	F(0)	0.97	E	1.14	F(0)	1.00	E	0.02	0.03	No	Yes
405-14		405	14.398	Western Ave. to Crenshaw Blvd.	1.34	F(1)	1.16	F(0)	1.36	F(2)	1.20	F(0)	0.02	0.04	Yes	Yes
405-15		405	15.447	Crenshaw Blvd. to Artesia Blvd.	1.31	F(1)	1.14	F(0)	1.33	F(1)	1.17	F(0)	0.02	0.03	Yes	Yes
405-16		405	16.573	Artesia Blvd. to Hawthorne Blvd.	1.06	F(0)	0.92	D	1.07	F(0)	0.94	E	0.01	0.02	No	No
405-17		405	17.589	Hawthorne Blvd. to Inglewood Ave.	1.11	F(0)	0.97	E	1.12	F(0)	0.99	E	0.01	0.02	No	Yes
405-18	1068	405	18.233	Inglewood Ave. to Rosecrans Ave.	1.16	F(0)	1.01	F(0)	1.17	F(0)	1.03	F(0)	0.01	0.02	No	Yes
710-1		710	12.97	Jct. Rte. 91 to Alondra Blvd.	0.95	E	1.48	F(3)	0.96	E	1.49	F(3)	0.01	0.01	No	No
710-2		710	13.945	Alondra Blvd. to Jct. Rte. 105	0.98	E	1.53	F(3)	0.99	E	1.54	F(3)	0.01	0.01	No	No

Note: D/C is demand-to-capacity ratio.

Exhibit 121: Determination of Freeway Impacts for 2035 Weekday Plus Project Alternative 1

Southbound/Wesbound

ID	CMP Station	Fwy Rte	Post Mile	Location	2035 No Project				2035 Plus Project				2035 Increase in D/C Ratio with Project		2035 Project Has Significant Cumulative Impact?	
					AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM	PM	AM	PM
					D/C	LOS	D/C	LOS	D/C	LOS	D/C	LOS				
91-1		91	6.344	Jct. Rte. 110 to Avalon Blvd.	2.33	F(3)	1.58	F(3)	2.36	F(3)	1.60	F(3)	0.03	0.02	Yes	Yes
91-2		91	7.426	Avalon Blvd. to Central Ave.	0.95	E	0.65	C	0.99	E	0.67	C	0.04	0.02	Yes	No
91-3		91	8.435	Central Ave. to Wilmington Ave.	0.97	E	0.66	C	1.03	F(0)	0.70	C	0.06	0.04	Yes	No
91-4		91	9.162	Wilmington Ave. to Alameda St.	1.00	E	0.68	C	1.06	F(0)	0.72	C	0.06	0.04	Yes	No
91-5		91	10.271	Alameda St. to Alameda St./Santa F	1.31	F(1)	0.89	D	1.38	F(2)	0.93	D	0.07	0.04	Yes	No
91-6	1033	91	10.41	Alameda St./Santa Fe Ave. to Long	0.91	D	0.62	C	0.96	E	0.65	C	0.05	0.03	Yes	No
91-7		91	11.096	Long Beach Blvd. to Jct. Rte. 710	1.09	F(0)	0.74	C	1.14	F(0)	0.78	D	0.05	0.04	Yes	No
91-8		91	11.681	Jct. Rte. 710 to Cherry Ave.	1.35	F(1)	0.95	E	1.38	F(2)	0.97	E	0.03	0.02	Yes	Yes
91-9	1034	91	13.094	Cherry Ave. to Paramount Blvd.	1.14	F(0)	0.80	D	1.17	F(0)	0.82	D	0.03	0.02	Yes	No
91-10		91	13.594	Paramount Blvd. to Downey Ave.	1.33	F(1)	0.94	E	1.36	F(2)	0.96	E	0.03	0.02	Yes	Yes
91-11		91	14.103	Downey Ave. to Jct. Rte. 19	1.32	F(1)	0.93	D	1.35	F(1)	0.95	E	0.03	0.02	Yes	No
91-12		91	14.618	Jct. Rte. 19 to Clark Ave.	1.54	F(3)	1.08	F(0)	1.57	F(3)	1.09	F(0)	0.03	0.01	Yes	No
91-13		91	15.105	Clark Ave. to Bellflower Blvd.	1.29	F(1)	0.91	D	1.31	F(1)	0.93	D	0.02	0.02	Yes	No
91-14		91	15.614	Bellflower Blvd. to Jct. Rte. 605	1.28	F(1)	0.90	D	1.30	F(1)	0.91	D	0.02	0.01	Yes	No
110-1	1045	110	1.23	Channel St. to C St.	0.45	B	0.54	B	0.47	B	0.56	C	0.02	0.02	No	No
110-2		110	2.771	C St. to Anaheim St.	0.48	B	0.56	C	0.49	B	0.59	C	0.01	0.03	No	No
110-3		110	3.264	Anaheim St. to Jct. Rte. 1	0.41	B	0.49	B	0.43	B	0.51	B	0.02	0.02	No	No
110-4		110	4.061	Jct. Rte. 1 to Sepulveda Blvd.	0.71	C	0.86	D	0.74	C	0.90	D	0.03	0.04	No	No
110-5		110	5.451	Sepulveda Blvd. to Carson St.	0.93	D	1.13	F(0)	0.96	E	1.17	F(0)	0.03	0.04	Yes	Yes
110-6		110	7.016	Carson St. to Torrance/Del Amo Blvd	1.08	F(0)	1.30	F(1)	1.11	F(0)	1.34	F(1)	0.03	0.04	Yes	Yes
110-7		110	8.028	Torrance/Del Amo Blvd. to Jct. Rte. 4	1.14	F(0)	1.38	F(2)	1.17	F(0)	1.42	F(2)	0.03	0.04	Yes	Yes
110-8		110	8.775	Jct. Rte. 405 to Jct. Rte. 91	1.39	F(2)	1.69	F(3)	1.42	F(2)	1.73	F(3)	0.03	0.04	Yes	Yes
110-9		110	9.87	Jct. Rte. 91 to Redondo Beach Blvd.	0.83	D	0.80	D	0.86	D	0.83	D	0.03	0.03	No	No
110-10		110	11.239	Redondo Beach Blvd. to Rosecrans	0.94	E	0.90	D	0.97	E	0.93	D	0.03	0.03	Yes	No
110-11		110	11.891	Rosecrans Ave. to El Segundo Blvd.	0.98	E	0.95	E	1.02	F(0)	0.97	E	0.04	0.02	Yes	Yes
110-12		110	12.898	El Segundo Blvd. to Jct. Rte. 105	0.85	D	0.82	D	0.88	D	0.84	D	0.03	0.02	No	No
110-13		110	13.82	Jct. Rte. 105 to Century Blvd.	0.87	D	0.84	D	0.90	D	0.86	D	0.03	0.02	No	No
110-14		110	14.967	Century Blvd. to Manchester Ave.	1.09	F(0)	1.06	F(0)	1.12	F(0)	1.08	F(0)	0.03	0.02	Yes	Yes
110-15	1046	110	15.976	Manchester Ave. to Florence Ave.	1.07	F(0)	1.03	F(0)	1.09	F(0)	1.05	F(0)	0.02	0.02	Yes	Yes
110-16		110	16.981	Florence Ave. to Gage Ave.	1.08	F(0)	1.04	F(0)	1.10	F(0)	1.06	F(0)	0.02	0.02	Yes	Yes
110-17	1047	110	17.514	Gage Ave. to Slauson Ave.	1.08	F(0)	1.03	F(0)	1.10	F(0)	1.05	F(0)	0.02	0.02	Yes	Yes
110-18		110	17.98	Slauson Ave. to 51st St.	1.24	F(0)	1.19	F(0)	1.27	F(1)	1.21	F(0)	0.03	0.02	Yes	Yes
110-19		110	18.495	51st St. to Vernon Ave.	1.05	F(0)	1.02	F(0)	1.07	F(0)	1.03	F(0)	0.02	0.01	Yes	No
110-20		110	18.998	Vernon Ave. to Martin Luther King Jr	1.05	F(0)	1.02	F(0)	1.07	F(0)	1.03	F(0)	0.02	0.01	Yes	No
110-21		110	19.502	Martin Luther King Jr. Blvd. to Expos	1.14	F(0)	1.10	F(0)	1.17	F(0)	1.12	F(0)	0.03	0.02	Yes	Yes
110-22		110	19.996	Exposition Blvd. to Jct. Rte. 10	0.93	D	0.89	D	0.95	E	0.91	D	0.02	0.02	No	No
405-1		405	3.324	Lakewood Blvd. to Cherry Ave.	0.94	E	1.17	F(0)	0.95	E	1.18	F(0)	0.01	0.01	No	No
405-2		405	4.879	Cherry Ave. to Orange Ave.	1.23	F(0)	1.54	F(3)	1.23	F(0)	1.55	F(3)	0.00	0.01	No	No
405-3		405	5.388	Orange Ave. to Atlantic Ave.	1.28	F(1)	1.60	F(3)	1.29	F(1)	1.62	F(3)	0.01	0.02	No	Yes
405-4		405	6.076	Atlantic Ave. to Long Beach Blvd	0.84	D	1.05	F(0)	0.85	D	1.06	F(0)	0.01	0.01	No	No
405-5		405	6.34	Long Beach Blvd to Jct. Rte. 710	1.00	E	1.25	F(0)	1.01	F(0)	1.27	F(1)	0.01	0.02	No	Yes
405-6	1066	405	7.596	Jct. Rte. 710 to Alameda St.	0.91	D	1.14	F(0)	0.92	D	1.16	F(0)	0.01	0.02	No	Yes
405-7		405	8.784	Alameda St. to Wilmington Ave.	0.88	D	1.10	F(0)	0.89	D	1.12	F(0)	0.01	0.02	No	Yes
405-8		405	9.556	Wilmington Ave. to Carson St.	1.18	F(0)	1.43	F(2)	1.19	F(0)	1.46	F(3)	0.01	0.03	No	Yes
405-9		405	10.541	Carson St. to Avalon Blvd.	1.16	F(0)	1.40	F(2)	1.18	F(0)	1.43	F(2)	0.02	0.03	Yes	Yes
405-10	1067	405	11.224	Avalon Blvd. to Jct. Rte. 110	0.99	E	1.20	F(0)	1.00	E	1.22	F(0)	0.01	0.02	No	Yes
405-11		405	12.97	Jct. Rte. 110 to Vermont Ave.	1.06	F(0)	1.31	F(1)	1.10	F(0)	1.35	F(1)	0.04	0.04	Yes	Yes
405-12		405	13.28	Vermont Ave. to Normandie Ave.	0.89	D	1.10	F(0)	0.92	D	1.12	F(0)	0.03	0.02	No	Yes
405-13		405	13.826	Normandie Ave. to Western Ave.	1.04	F(0)	1.29	F(1)	1.06	F(0)	1.31	F(1)	0.02	0.02	Yes	Yes
405-14		405	14.398	Western Ave. to Crenshaw Blvd.	1.00	E	1.24	F(0)	1.03	F(0)	1.26	F(1)	0.03	0.02	Yes	Yes
405-15		405	15.447	Crenshaw Blvd. to Artesia Blvd.	0.98	E	1.21	F(0)	1.00	E	1.23	F(0)	0.02	0.02	Yes	Yes
405-16		405	16.573	Artesia Blvd. to Hawthorne Blvd.	0.99	E	1.23	F(0)	1.01	F(0)	1.24	F(0)	0.02	0.01	Yes	No
405-17		405	17.589	Hawthorne Blvd. to Inglewood Ave.	1.04	F(0)	1.28	F(1)	1.06	F(0)	1.29	F(1)	0.02	0.01	Yes	No
405-18	1068	405	18.233	Inglewood Ave. to Rosecrans Ave.	0.87	D	1.07	F(0)	0.88	D	1.08	F(0)	0.01	0.01	No	No
710-1		710	12.97	Jct. Rte. 91 to Alondra Blvd.	0.93	D	0.74	C	0.95	E	0.76	C	0.02	0.02	No	No
710-2		710	13.945	Alondra Blvd. to Jct. Rte. 105	0.96	E	0.77	C	0.98	E	0.78	D	0.02	0.01	Yes	No

Note: D/C is demand-to-capacity ratio.

Exhibit 120: 2035 Weekday Plus Project Alternative 1 Level of Service (LOS) for Study Freeway Locations (continued)

12.1.4 Determination of Pedestrian Impacts

The CSU system has defined a significant pedestrian impact as a situation where,

- “A project fails to provide safe pedestrian connections between campus buildings and adjacent streets and transit facilities. Or
- A project significantly disrupts existing or planned pedestrian facilities or significantly conflicts with applicable non-automotive transportation plans, guidelines, policies, or standards.”

Based on this standard, the Project would not impose such disruptions and so would not have any significant pedestrian impacts in 2035.

12.1.5 Determination of Bicycle Impacts

The CSU system has defined a significant bicycle impact as a situation where, “A project significantly disrupts existing or planned bicycle facilities or significantly conflicts with applicable non-automotive transportation plans, guidelines, policies, or standards.” Based on this standard, the Project would not impose such disruptions and so would not have any significant bicycle impacts in 2035.

12.1.6 Determination of Transit Impacts

CSU guideline state that a significant transit impact would occur if, “A project significantly disrupts existing or planned transit facilities and services or significantly conflicts with applicable transit plans, guidelines, policies, or standards.” Based on this standard, the Project would not impose such disruptions and so would not have any significant transit impacts in 2035. The Project would also not have any transit capacity impacts, as was shown earlier in Section 6.1.6.

12.2 2035 Weekday Plus Project Alternative 2 Conditions

12.2.1 Forecasting 2035 Weekday plus Project Alternative 2 Traffic

Traffic volumes for the 2035 Plus Project condition were developed by factoring up the existing weekday traffic counts using the growth factor from the LA-CMP and then adding in the traffic for existing, known, and reasonably foreseeable projects, and full build-out of the Master Plan. The resulting 2035 Plus Project traffic volumes are shown in Exhibit 123.

12.2.2 2035 Weekday Plus Project Alternative 2 Level of Service

Exhibit 122 shows in tabular format the 2035 Plus Project weekday level of service (LOS) based on the traffic volumes shown in Exhibit 123 (also see Appendix R). The LOS is also shown on maps in Exhibit 124 for the AM peak hour condition, and Exhibit 125 for the PM peak hour condition. Exhibit 126 shows the intersection impacts of the Project. The Project would have significant impacts at 17 intersections, namely:

- Intersection #1, Victoria St./Drive D, during the AM peak hour
- Intersection #3, Victoria St./Birchknoll Dr., during the PM peak hour
- Intersection #5, Central Ave./Charles Willard St., during the PM peak hour
- Intersection #6, Central Ave./Project Driveway/Beachey Pl., during both peak hours
- Intersection #9, University Dr./Toro Center Dr., during both peak hours

- Intersection #10, Albertoni St./SR-91 EB Ramps, during the PM peak hour
- Intersection #12, Avalon Blvd./Albertoni St., during the PM peak hour
- Intersection #13, Avalon Blvd./Victoria St., during both peak hours
- Intersection #14, Central Ave./Artesia Blvd. WB, during both peak hours
- Intersection #15, Central Ave./Albertoni St./Artesia Blvd. EB, during both peak hours
- Intersection #16, Central Ave./Victoria St., during both peak hours
- Intersection #20, I-110 SB Off-Ramp/190th St., during both peak hours
- Intersection #22, Figueroa St./190th St./Victoria St., during both peak hours
- Intersection #23, Broadway/Victoria St., during the PM peak hour
- Intersection #24, Main St./Victoria St., during the PM peak hour
- Intersection #26, Avalon Blvd./Del Amo Blvd., during the both peak hours
- Intersection #29, Central Ave./University Dr., during both peak hours.

Study ID	Intersection Name	Control Type	AM Peak Hour		PM Peak Hour	
			V/C Ratio or Delay	LOS (ICU or HCM)	V/C Ratio or Delay	LOS (ICU or HCM)
1	Victoria St./Drive D	TWSC	>180	F	>180	F
2	Victoria St./Tamcliff Ave.	Signalized	0.566	A	0.778	C
3	Victoria St./Birchknoll Dr.	Signalized	0.672	B	0.969	E
4	Victoria St./Project Service Rd.	TWSC	14.1	B	19.4	C
5	Central Ave./Charles Willard St.	TWSC	>180	F	>180	F
6	Central Ave./Beachey Pl.	TWSC	>180	F	>180	F
7	Central Ave./Glenn Curtiss St.	Signalized	0.834	D	0.878	D
8	University Dr./Birchknoll Dr. Ext.	TWSC	19.9	C	17.8	C
9	University Dr./Toro Center Dr.	TWSC	>180	F	>180	F
10	Albertoni St./SR 91 EB Ramps	Signalized	0.775	C	0.925	E
11	Avalon Blvd./SR 91 WB On-Ramp	Signalized	0.53	A	0.535	A
12	Avalon Blvd./Albertoni St.	Signalized	0.701	C	0.904	E
13	Avalon Blvd./Victoria St.	Signalized	0.938	E	1.2	F
14	Central Ave./Artesia Blvd. WB	Signalized	1.034	F	1.024	F
15	Central Ave./Albertoni St./Artesia Blvd. EB	Signalized	1.181	F	1.043	F
16	Central Ave./Victoria St.	Signalized	1.106	F	0.947	E
17	Wilmington Ave./Artesia Blvd. WB	Signalized	0.74	C	0.754	C
18	Wilmington Ave./Artesia Blvd. EB	Signalized	0.744	C	0.761	C
19	Wilmington Ave./Victoria St.	Signalized	0.558	A	0.587	A
20	I-110 SB Off-Ramp/190th St.	Signalized	1.228	F	1.253	F
21	I-110 NB On-Ramp/190th St.	Signalized	0.653	B	0.869	D
22	Figueroa St./190th St./Victoria St.	Signalized	0.975	E	1.122	F
23	Broadway/Victoria St.	Signalized	0.747	C	0.922	E
24	Main St./Victoria St.	Signalized	0.822	D	1.128	F
25	Avalon Blvd./University Dr.	Signalized	0.538	A	0.788	C
26	Avalon Blvd./Del Amo Blvd.	Signalized	0.91	E	1.034	F
27	Avalon Blvd./I-405 NB Ramps	Signalized	0.519	A	0.532	A
28	Avalon Blvd./I-405 SB Ramps	Signalized	0.607	B	0.576	A
29	Central Ave./University Dr.	Signalized	1.25	F	1.144	F
30	Wilmington Ave./University Dr.	Signalized	0.681	B	0.788	C
31	Central Ave./Del Amo Blvd.	Signalized	0.876	D	0.81	D
32	Wilmington Ave./Del Amo Blvd.	Signalized	0.724	C	0.76	C
33	W. Artesia Blvd./Crenshaw Blvd.	Signalized	0.972	E	1.042	F
34	W. 190th St./S. Western Ave.	Signalized	0.855	D	0.869	D
35	W. Artesia Blvd./Vermont Ave.	Signalized	0.87	D	1.079	F
36	Alameda St./Compton Blvd.	Signalized	0.697	B	0.756	C
37	Alameda St./SR 91 EB Ramps	Signalized	0.594	A	0.806	D

*Intersection LOS was calculated using HCM 2000 Delay Method, because ICU cannot be calculated for TWSC intersections.

Exhibit 122: 2035 Weekday Plus Project Alternative 2 Level of Service (LOS) at Study Intersections (Table)

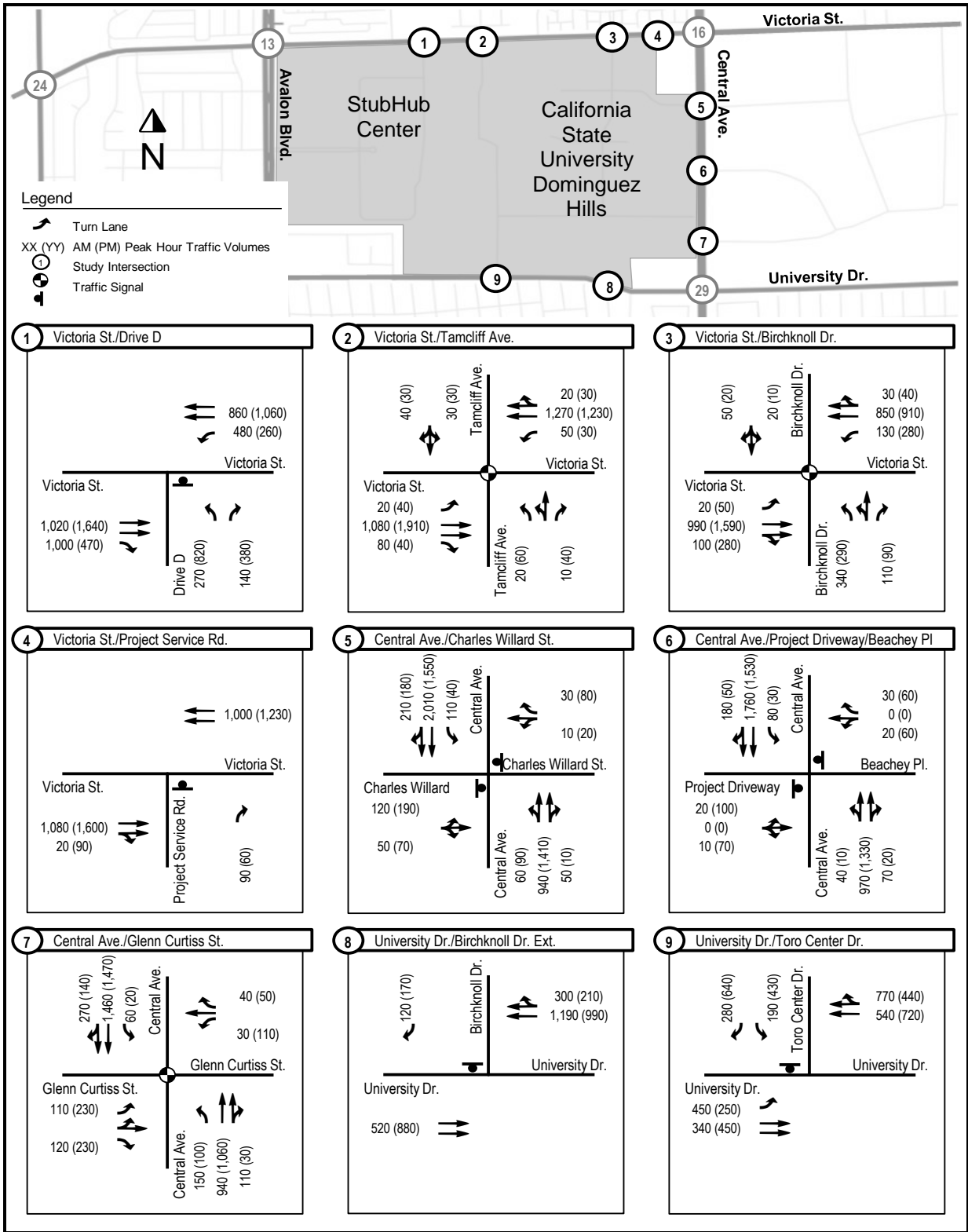


Exhibit 123: 2035 Weekday Plus Project Alternative 2 Traffic Volumes and Lane Configurations

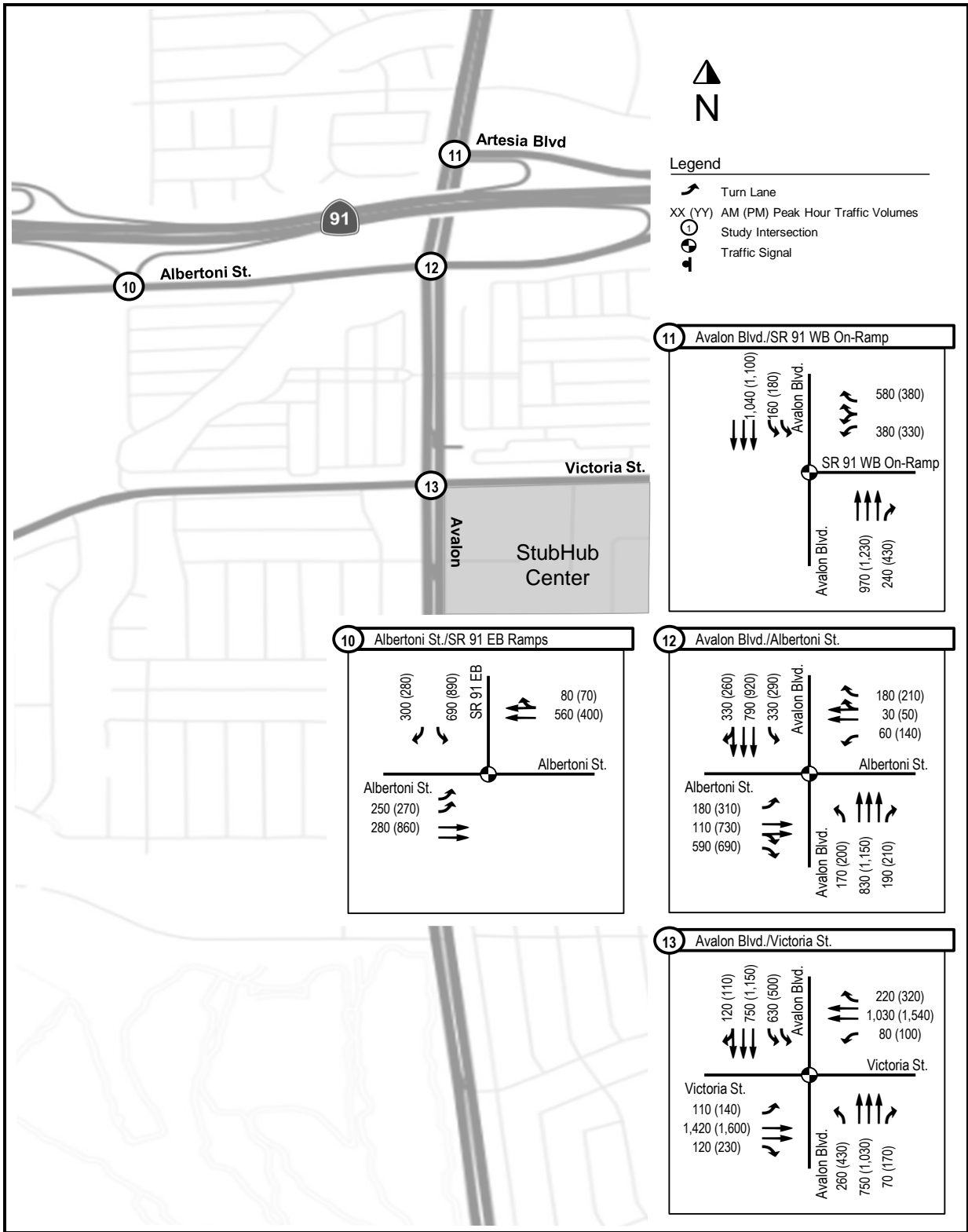


Exhibit 123: 2035 Weekday Plus Project Alternative 2 Traffic Volumes and Lane Configurations (Map B)

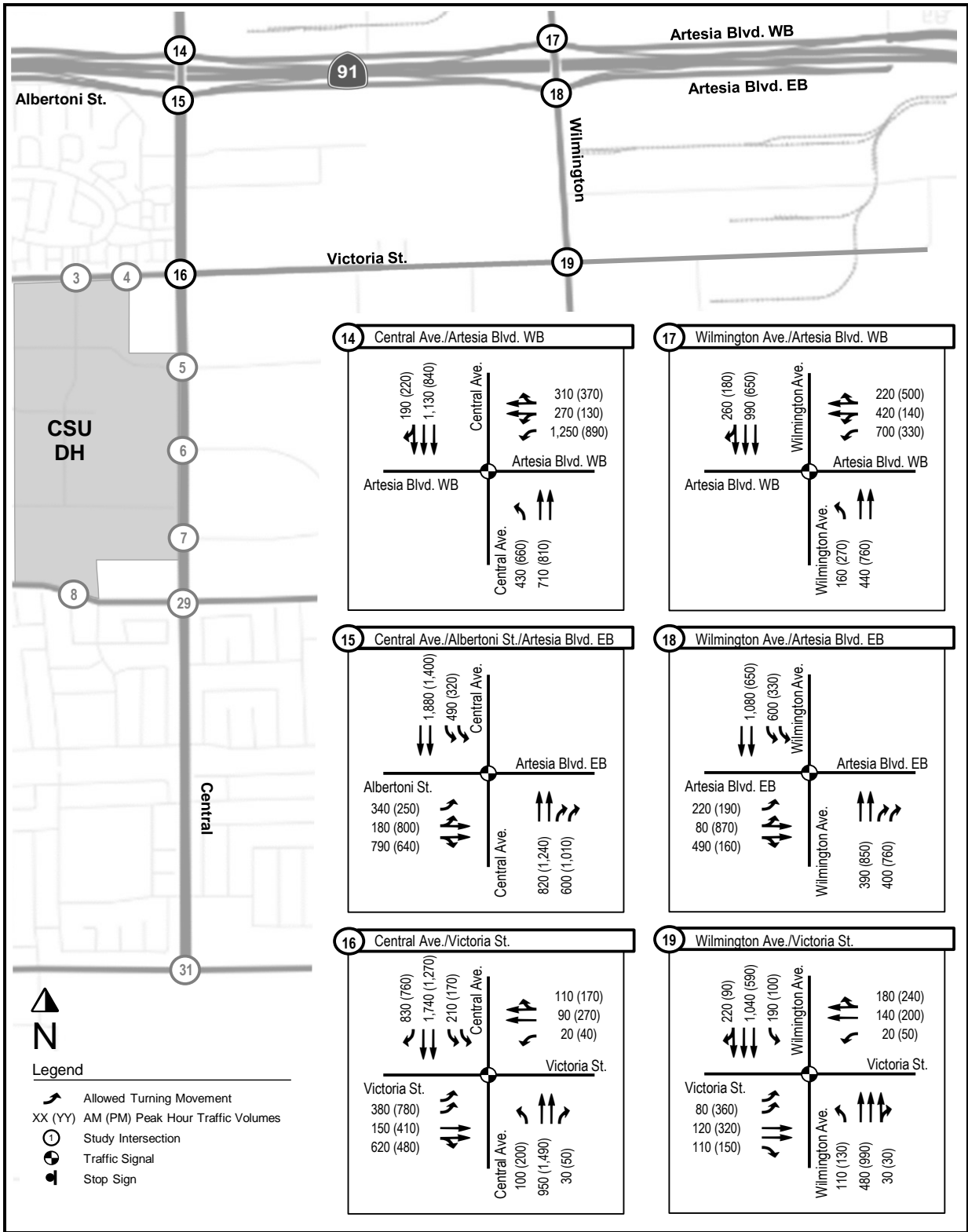


Exhibit 123: 2035 Weekday Plus Project Alternative 2 Traffic Volumes and Lane Configurations (Map C)

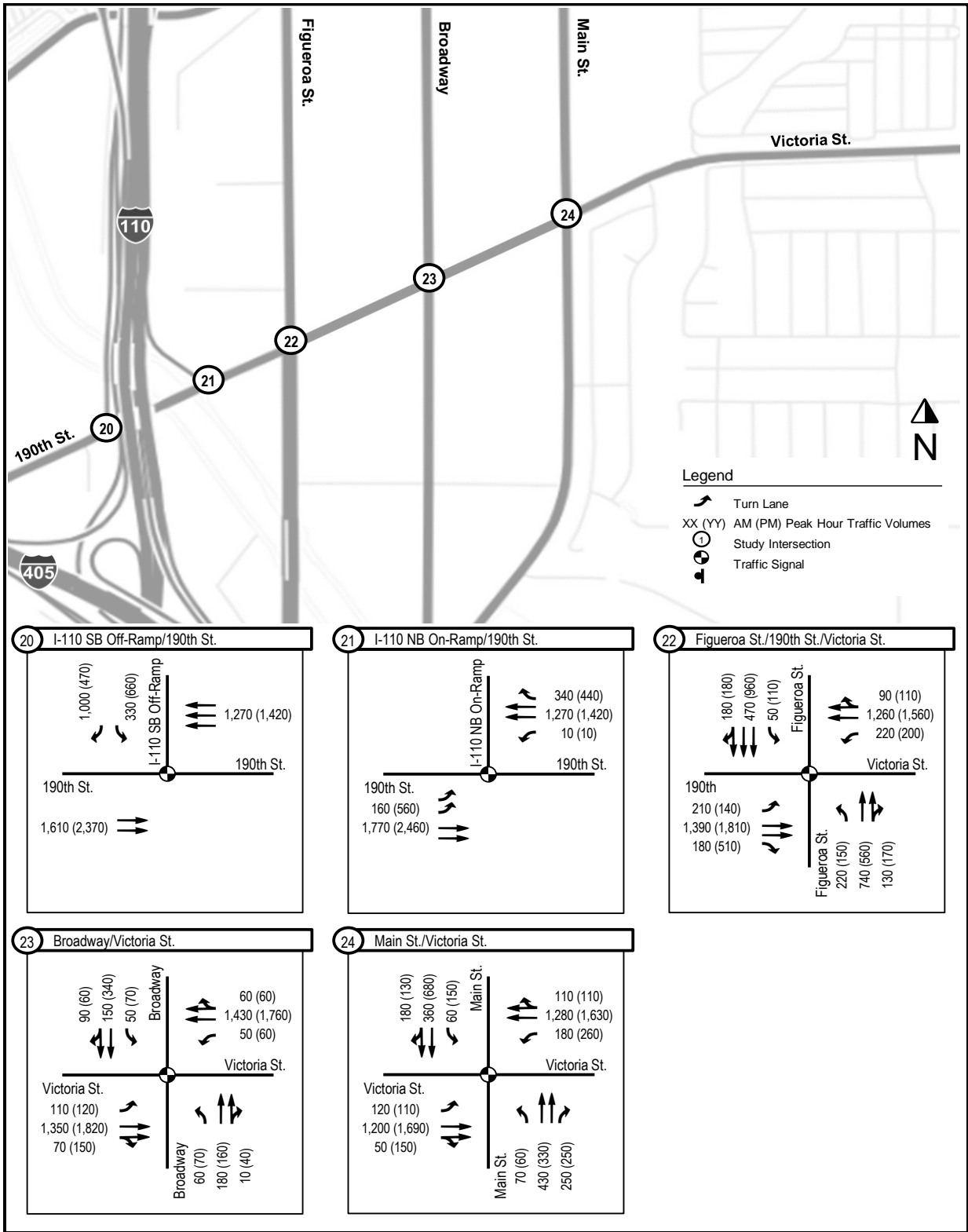


Exhibit 123: 2035 Weekday Plus Project Alternative 2 Traffic Volumes and Lane Configurations (Map D)

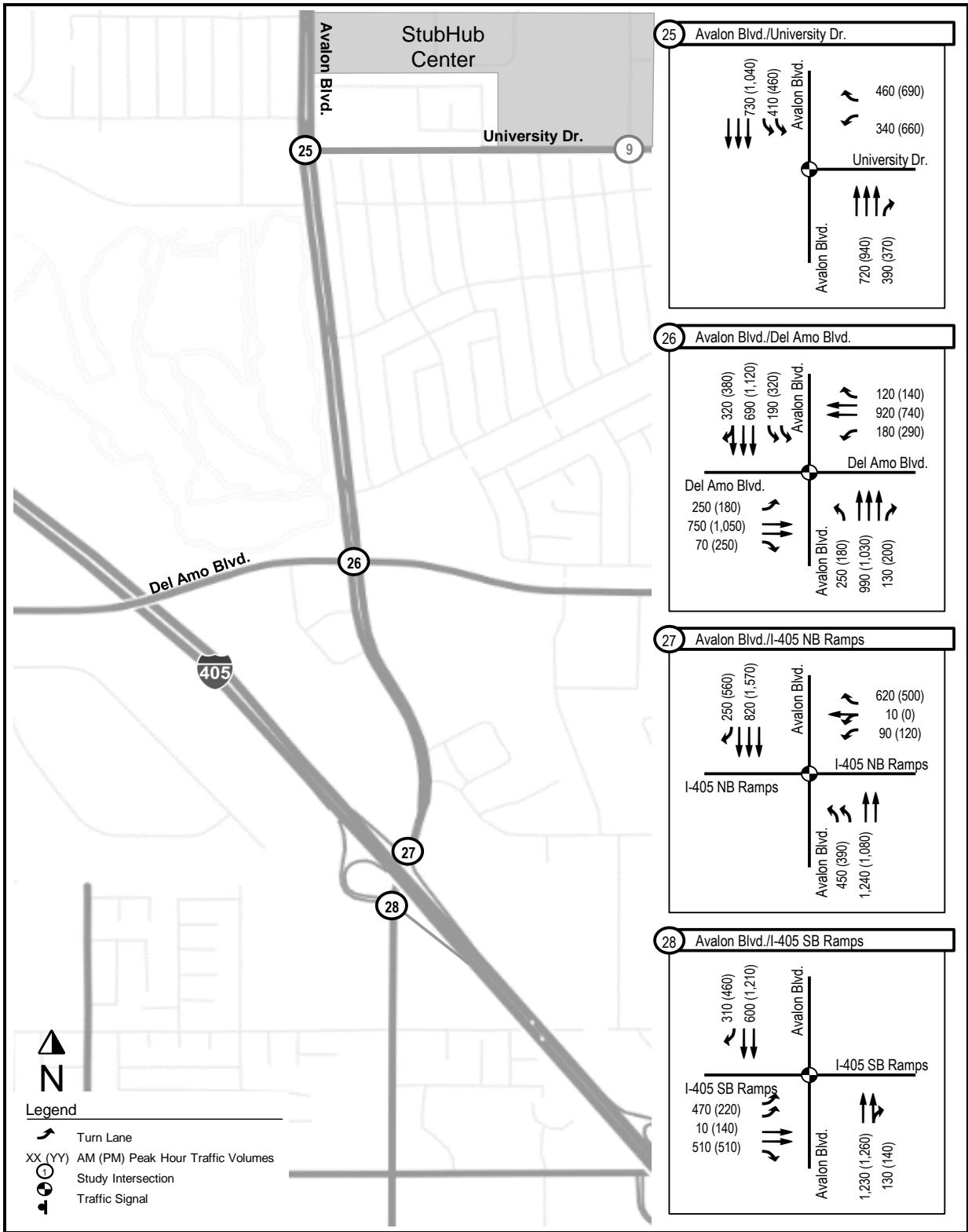


Exhibit 123: 2035 Weekday Plus Project Alternative 2 Traffic Volumes and Lane Configurations (Map E)

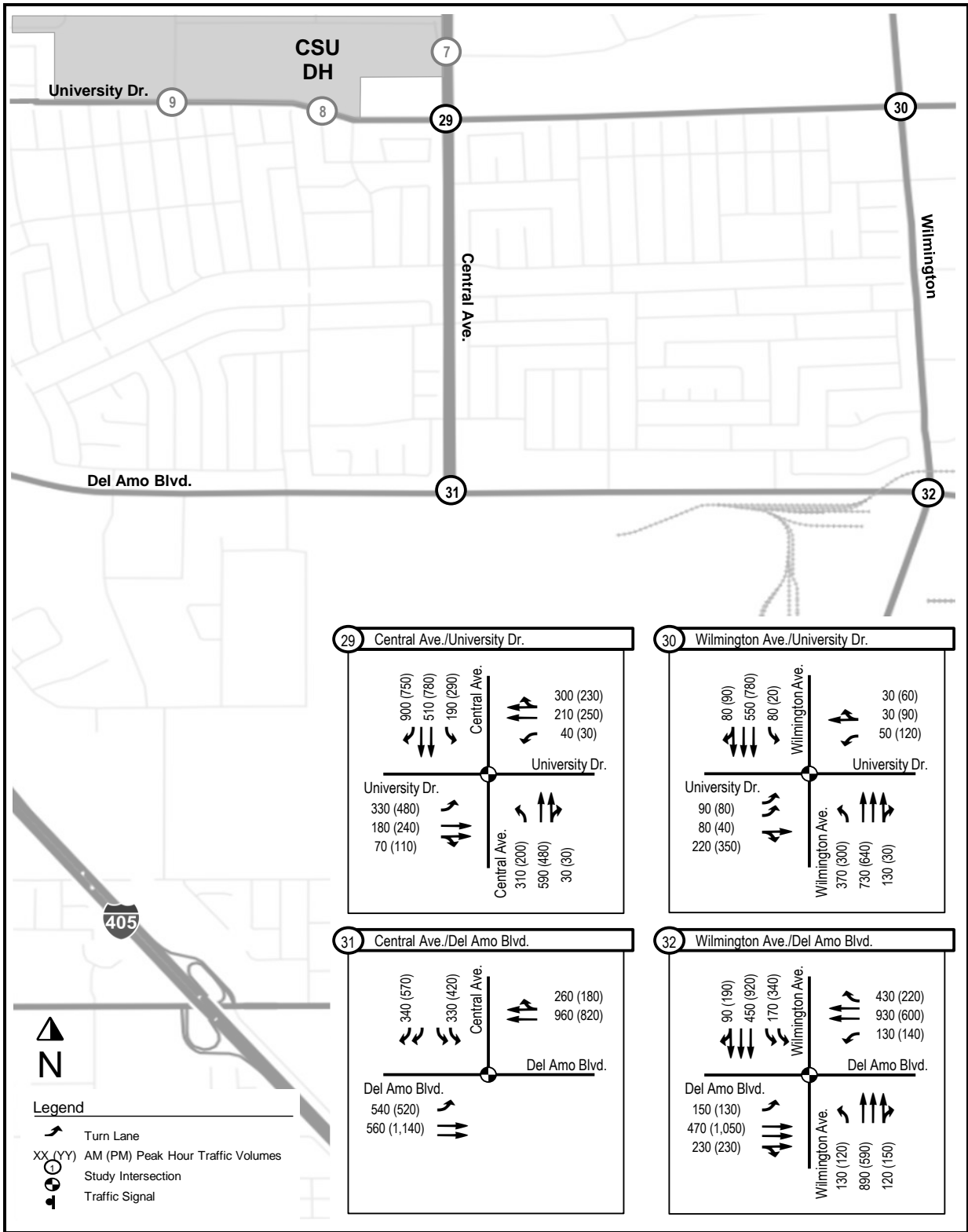


Exhibit 123: 2035 Weekday Plus Project Alternative 2 Traffic Volumes and Lane Configurations (Map F)

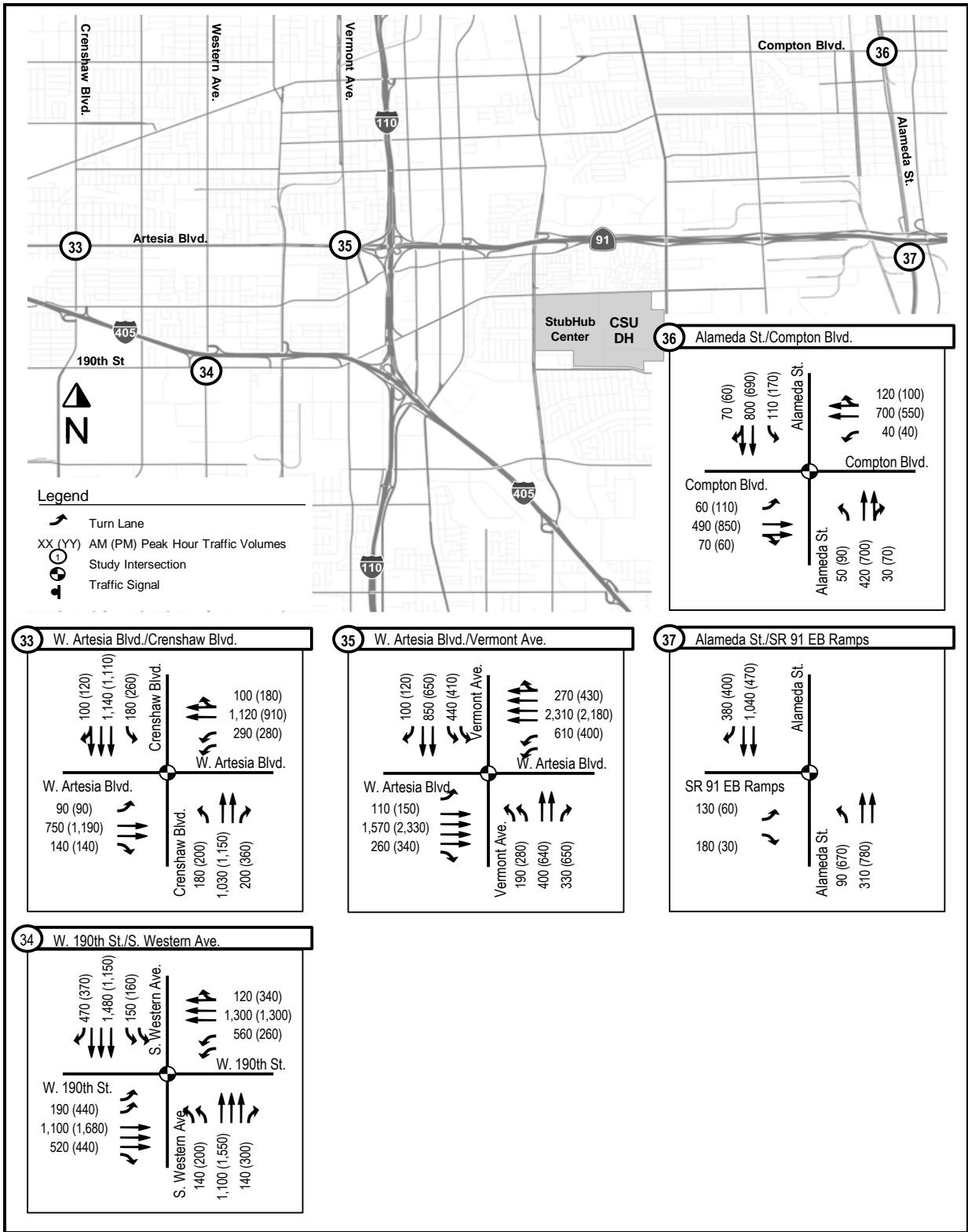


Exhibit 123: 2035 Weekday Plus Project Alternative 2 Traffic Volumes and Lane Configurations (Map G)

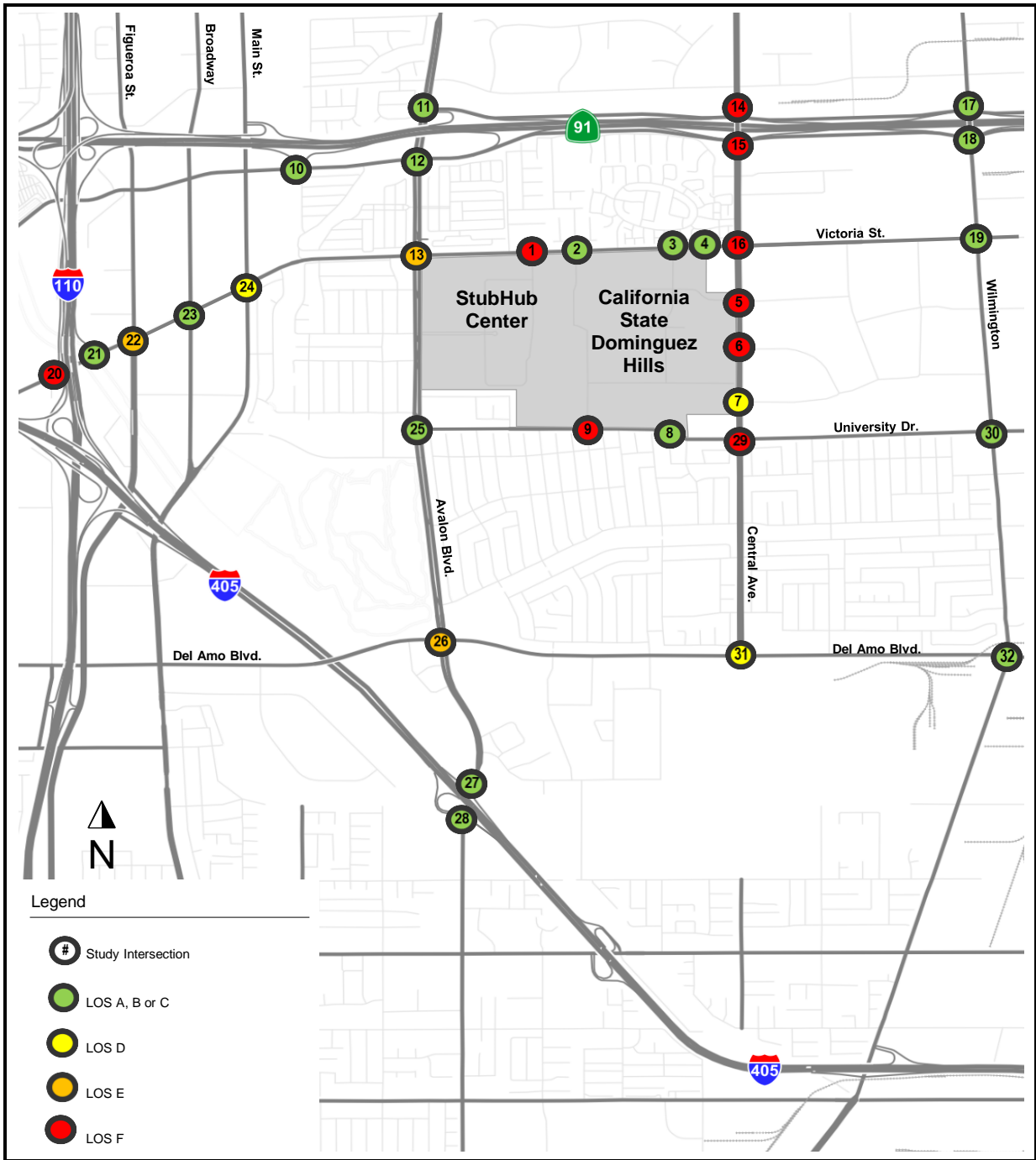


Exhibit 124: 2035 Weekday Plus Project Alternative 2 AM Peak Hour LOS (Map)

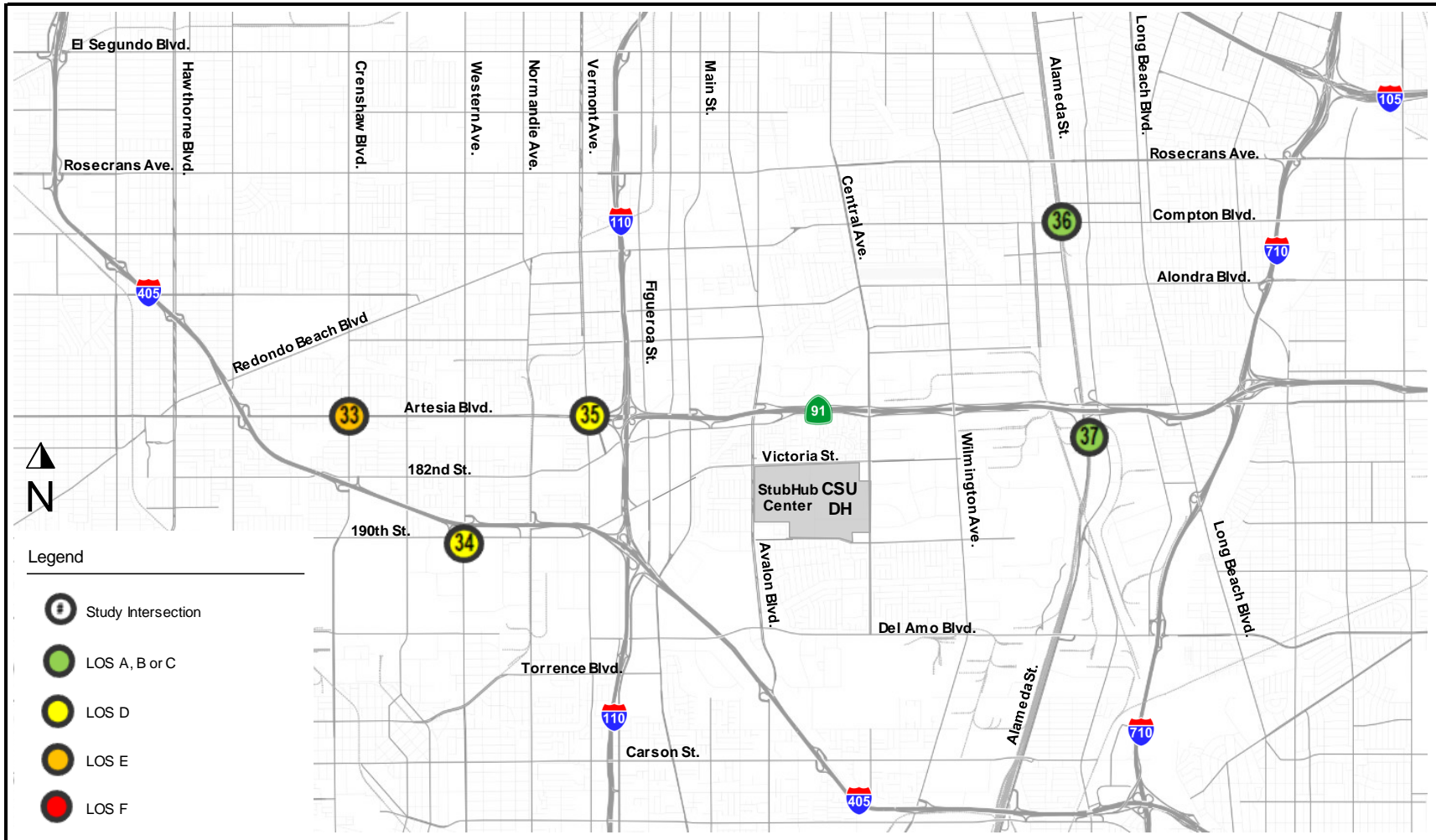


Exhibit 124: 2035 Weekday Plus Project Alternative 2 AM Peak Hour LOS (Map)

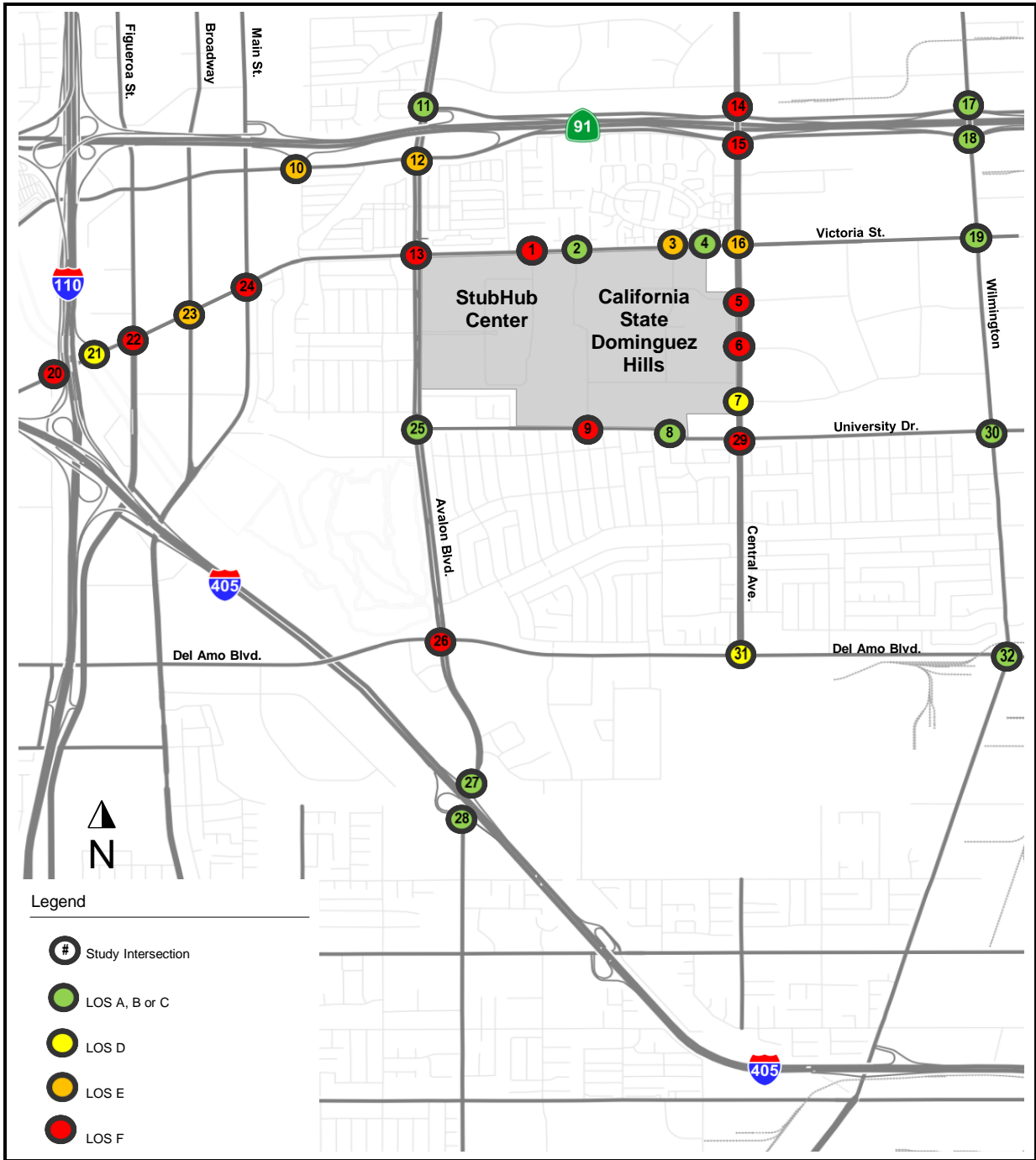


Exhibit 125: 2035 Weekday Plus Project Alternative 2 PM Peak Hour LOS (Map)

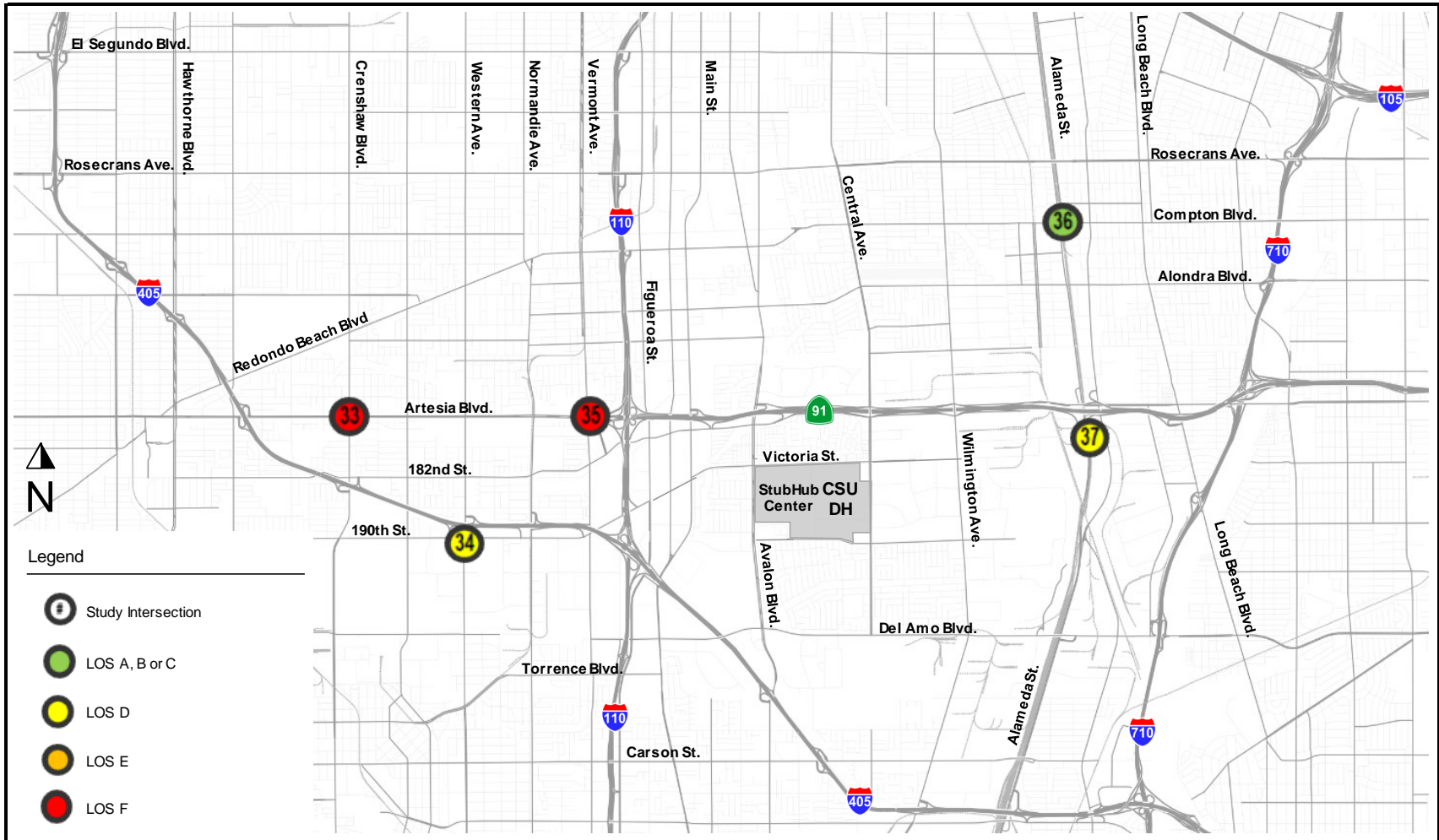


Exhibit 125: 2035 Weekday Plus Project Alternative 2 PM Peak Hour LOS (Map)

Study ID	Intersection Name	Control Type	2035 Scenarios					
			AM Peak Hour			PM Peak Hour		
			No Project LOS	Plus Project LOS	Project Has Significant Impact?	No Project LOS	Plus Project LOS	Project Has Significant Impact?
1	Victoria St./Drive D	TWSC	D	F	Yes	F	F	Yes
2	Victoria St./Tamcliff Ave.	Signalized	A	A	No	B	C	No
3	Victoria St./Birchknoll Dr.	Signalized	A	B	No	B	E	Yes
4	Victoria St./Project Service Rd.	TWSC	N/A	B	No	N/A	C	No
5	Central Ave./Charles Willard St.	TWSC	E	F	Yes	D	F	Yes
6	Central Ave./Beachey Pl.	TWSC	C	F	Yes	C	F	Yes
7	Central Ave./Glenn Curtiss St.	Signalized	A	D	No	A	D	No
8	University Dr./Birchknoll Dr. Ext.	TWSC	N/A	C	No	N/A	C	No
9	University Dr./Toro Center Dr.	TWSC	B	F	Yes	B	F	Yes
10	Albertoni St./SR 91 EB Ramps	Signalized	B	C	No	D	E	Yes
11	Avalon Blvd./SR 91 WB On-Ramp	Signalized	A	A	No	A	A	No
12	Avalon Blvd./Albertoni St.	Signalized	B	C	No	D	E	Yes
13	Avalon Blvd./Victoria St.	Signalized	B	E	Yes	D	F	Yes
14	Central Ave./Artesia Blvd. WB	Signalized	D	F	Yes	C	F	Yes
15	Central Ave./Albertoni St./Artesia Blvd. EB	Signalized	D	F	Yes	C	F	Yes
16	Central Ave./Victoria St.	Signalized	A	F	Yes	B	E	Yes
17	Wilmington Ave./Artesia Blvd. WB	Signalized	C	C	No	C	C	No
18	Wilmington Ave./Artesia Blvd. EB	Signalized	C	C	No	C	C	No
19	Wilmington Ave./Victoria St.	Signalized	A	A	No	A	A	No
20	I-110 SB Off-Ramp/190th St.	Signalized	F	F	Yes	F	F	Yes
21	I-110 NB On-Ramp/190th St.	Signalized	A	B	No	C	D	No
22	Figueroa St./190th St./Victoria St.	Signalized	D	E	Yes	D	F	Yes
23	Broadway/Victoria St.	Signalized	A	C	No	C	E	Yes
24	Main St./Victoria St.	Signalized	B	D	No	E	F	Yes
25	Avalon Blvd./University Dr.	Signalized	A	A	No	B	C	No
26	Avalon Blvd./Del Amo Blvd.	Signalized	D	E	Yes	E	F	Yes
27	Avalon Blvd./I-405 NB Ramps	Signalized	A	A	No	A	A	No
28	Avalon Blvd./I-405 SB Ramps	Signalized	B	B	No	A	A	No
29	Central Ave./University Dr.	Signalized	A	F	Yes	A	F	Yes
30	Wilmington Ave./University Dr.	Signalized	A	B	No	A	C	No
31	Central Ave./Del Amo Blvd.	Signalized	C	D	No	C	D	No
32	Wilmington Ave./Del Amo Blvd.	Signalized	B	C	No	C	C	No
33	W. Artesia Blvd./Crenshaw Blvd.	Signalized	E	E	No	F	F	No
34	W. 190th St./S. Western Ave.	Signalized	D	D	No	D	D	No
35	W. Artesia Blvd./Vermont Ave.	Signalized	D	D	No	F	F	No
36	Alameda St./Compton Blvd.	Signalized	B	B	No	C	C	No
37	Alameda St./SR 91 EB Ramps	Signalized	A	A	No	C	D	No

Exhibit 126: Determination of Intersection Impacts for the 2035 Weekday Plus Project Alternative 2

12.2.3 2035 Weekday Plus Project Alternative 2 Freeway Level of Service

The forecast LOS for the study freeway segments for the 2035 Plus Project condition are shown in Exhibit 127. Exhibit 128 shows the freeway impacts of the Project. The Project would have significant impacts on 13 CMP freeway monitoring stations, namely:

- CMP Station #1033, SR-91 East of Alameda St./Santa Fe Ave., Eastbound, during the PM peak hour
- CMP Station #1033, SR-91 East of Alameda St./Santa Fe Ave., Westbound, during the AM peak hour
- CMP Station #1034, SR-91 East of Cherry Ave., Eastbound, during the PM peak hour
- CMP Station #1034, SR-91 East of Cherry Ave., Southbound, during the AM peak hour
- CMP Station #1046, I-110 at Manchester Blvd., Northbound, during the PM peak hour
- CMP Station #1046, I-110 at Manchester Blvd., Southbound, during the AM peak hour
- CMP Station #1047, I-110 at Slauson Ave., Northbound, during the PM peak hour
- CMP Station #1047, I-110 at Slauson Ave., Southbound, during both peak hours
- CMP Station #1066, I-405 at Santa Fe Ave., Northbound, during the both peak hours
- CMP Station #1066, I-405 at Santa Fe Ave., Southbound, during the PM peak hour
- CMP Station #1067, I-405 South of I-110 at the Carson Scales, Northbound, during both peak hours
- CMP Station #1067, I-405 South of I-110 at the Carson Scales, Southbound, during the PM peak hour
- CMT Station #1068, I-405 North of Inglewood Ave., Northbound during the PM peak hour

Altogether 81 freeway segments would have significant impacts, including those that are not CMP monitoring stations. These additional locations are:

- SR-91 eastbound, Jct. Rte. 110 to Avalon Blvd., during the PM peak hour
- SR-91 eastbound, Avalon Blvd. to Central Ave., during the PM peak hour
- SR-91 eastbound, Central Ave. to Wilmington Ave., during the PM peak hour
- SR-91 eastbound, Wilmington Ave. to Alameda St., during the PM peak hour
- SR-91 eastbound, Alameda St. to Alameda St./Santa Fe Ave., during the both peak hours
- SR-91 eastbound, Long Beach Blvd. to Jct. Rte. 710, during the PM peak hour
- SR-91 eastbound, Jct. Rte. 710 to Cherry Ave., during the PM peak hour
- SR-91 eastbound, Paramount Blvd. to Downey Ave., during the PM peak hour
- SR-91 eastbound, Downey Ave. to Jct. Rte. 19, during the PM peak hour
- SR-91 eastbound, Jct. Rte. 19 to Clark Ave., during the PM peak hour
- I-110 northbound, Sepulveda Blvd. to Carson St., during the AM peak hour
- I-110 northbound, Carson St. to Torrance/Del Amo Blvd., during the both peak hours
- I-110 northbound, Torrance/Del Amo Blvd. to Jct. Rte. 405, during the both peak hours
- I-110 northbound, Jct. Rte. 405 to Jct. Rte. 91, during the AM peak hour

- I-110 northbound, Rosecrans Ave. to El Segundo Blvd., during the PM peak hour
- I-110 northbound, El Segundo Blvd. to Jct. Rte. 105, during the PM peak hour
- I-110 northbound, Century Blvd. to Manchester Ave., during the PM peak hour
- I-110 northbound, Slauson Ave. to 51st St., during the PM peak hour
- I-110 northbound, 51st St. to Vernon Ave., during the PM peak hour
- I-110 northbound, Vernon Ave. to Martin Luther King Jr. Blvd., during the PM peak hour
- I-405 northbound, Orange Ave. to Atlantic Ave., during the both peak hours
- I-405 northbound, Atlantic Ave. to Long Beach Blvd, during the AM peak hour
- I-405 northbound, Alameda St. to Wilmington Ave., during the both peak hours
- I-405 northbound, Wilmington Ave. to Carson St., during the both peak hours
- I-405 northbound, Carson St. to Avalon Blvd., during the both peak hours
- I-405 northbound, Jct. Rte. 110 to Vermont Ave., during the both peak hours
- I-405 northbound, Vermont Ave. to Normandie Ave., during the AM peak hour
- I-405 northbound, Normandie Ave. to Western Ave., during the PM peak hour
- I-405 northbound, Western Ave. to Crenshaw Blvd., during the both peak hours
- I-405 northbound, Crenshaw Blvd. to Artesia Blvd., during the both peak hours
- I-405 northbound, Hawthorne Blvd. to Inglewood Ave., during the PM peak hour
- SR-91 westbound, Jct. Rte. 110 to Avalon Blvd., during the both peak hours
- SR-91 westbound, Avalon Blvd. to Central Ave., during the AM peak hour
- SR-91 westbound, Central Ave. to Wilmington Ave., during the AM peak hour
- SR-91 westbound, Wilmington Ave. to Alameda St., during the AM peak hour
- SR-91 westbound, Alameda St. to Alameda St./Santa Fe Ave., during the AM peak hour
- SR-91 westbound, Long Beach Blvd. to Jct. Rte. 710, during the AM peak hour
- SR-91 westbound, Jct. Rte. 710 to Cherry Ave., during the both peak hours
- SR-91 westbound, Paramount Blvd. to Downey Ave., during the both peak hours
- SR-91 westbound, Downey Ave. to Jct. Rte. 19, during the AM peak hour
- SR-91 westbound, Jct. Rte. 19 to Clark Ave., during the AM peak hour
- SR-91 westbound, Clark Ave. to Bellflower Blvd., during the AM peak hour
- SR-91 westbound, Bellflower Blvd. to Jct. Rte. 605, during the AM peak hour
- I-110 southbound, Sepulveda Blvd. to Carson St., during the both peak hours
- I-110 southbound, Carson St. to Torrance/Del Amo Blvd., during the both peak hours
- I-110 southbound, Torrance/Del Amo Blvd. to Jct. Rte. 405, during the both peak hours
- I-110 southbound, Jct. Rte. 405 to Jct. Rte. 91, during the both peak hours
- I-110 southbound, Redondo Beach Blvd. to Rosecrans Ave., during the AM peak hour
- I-110 southbound, Rosecrans Ave. to El Segundo Blvd., during the both peak hours

- I-110 southbound, Century Blvd. to Manchester Ave., during the both peak hours
- I-110 southbound, Florence Ave. to Gage Ave., during the both peak hours
- I-110 southbound, Slauson Ave. to 51st St., during the both peak hours
- I-110 southbound, 51st St. to Vernon Ave., during the AM peak hour
- I-110 southbound, Vernon Ave. to Martin Luther King Jr. Blvd., during the AM peak hour
- I-110 southbound, Martin Luther King Jr. Blvd. to Exposition Blvd., during the both peak hours
- I-405 southbound, Orange Ave. to Atlantic Ave., during the PM peak hour
- I-405 southbound, Long Beach Blvd to Jct. Rte. 710, during the PM peak hour
- I-405 southbound, Alameda St. to Wilmington Ave., during the PM peak hour
- I-405 southbound, Wilmington Ave. to Carson St., during the PM peak hour
- I-405 southbound, Carson St. to Avalon Blvd., during the both peak hours
- I-405 southbound, Jct. Rte. 110 to Vermont Ave., during the both peak hours
- I-405 southbound, Vermont Ave. to Normandie Ave., during the PM peak hour
- I-405 southbound, Normandie Ave. to Western Ave., during the both peak hours
- I-405 southbound, Western Ave. to Crenshaw Blvd., during the both peak hours
- I-405 southbound, Crenshaw Blvd. to Artesia Blvd., during the both peak hours
- I-405 southbound, Artesia Blvd. to Hawthorne Blvd., during the AM peak hour
- I-405 southbound, Hawthorne Blvd. to Inglewood Ave., during the AM peak hour
- I-710 southbound, Alondra Blvd. to Jct. Rte. 105, during the AM peak hour

ID	CMP Station	Fwy Rte	Post Mile	Location	Northbound/Eastbound								Southbound/Westbound							
					AM Peak Hour				PM Peak Hour				AM Peak Hour				PM Peak Hour			
					Demand	Capacity	D/C	LOS	Demand	Capacity	D/C	LOS	Demand	Capacity	D/C	LOS	Demand	Capacity	D/C	LOS
91-1		91	6.344	Jct. Rte. 110 to Avalon Blvd.	7,130	12,000	0.59	C	14,670	12,000	1.22	F(0)	9,430	4,000	2.36	F(3)	6,390	4,000	1.60	F(3)
91-2		91	7.426	Avalon Blvd. to Central Ave.	7,370	10,000	0.74	C	15,060	10,000	1.51	F(3)	9,830	10,000	0.98	E	6,720	10,000	0.67	C
91-3		91	8.435	Central Ave. to Wilmington Ave.	7,520	10,000	0.75	C	15,350	10,000	1.54	F(3)	10,220	10,000	1.02	F(0)	6,940	10,000	0.69	C
91-4		91	9.162	Wilmington Ave. to Alameda St.	7,820	10,000	0.78	D	15,970	10,000	1.60	F(3)	10,520	10,000	1.05	F(0)	7,140	10,000	0.71	C
91-5		91	10.271	Alameda St. to Alameda St./Santa Fe Ave.	8,100	8,000	1.01	F(0)	16,620	8,000	2.08	F(3)	11,010	8,000	1.38	F(2)	7,440	8,000	0.93	D
91-6	1033	91	10.41	Alameda St./Santa Fe Ave. to Long Beach Blvd.	8,400	12,000	0.70	C	17,220	12,000	1.44	F(2)	11,430	12,000	0.95	E	7,750	12,000	0.65	C
91-7		91	11.096	Long Beach Blvd. to Jct. Rte. 710	8,390	12,000	0.70	C	17,210	12,000	1.43	F(2)	11,400	10,000	1.14	F(0)	7,730	10,000	0.77	C
91-8		91	11.681	Jct. Rte. 710 to Cherry Ave.	8,510	10,000	0.85	D	12,230	10,000	1.22	F(0)	13,770	10,000	1.38	F(2)	9,680	10,000	0.97	E
91-9	1034	91	13.094	Cherry Ave. to Paramount Blvd.	8,600	10,000	0.86	D	12,420	10,000	1.24	F(0)	13,960	12,000	1.16	F(0)	9,770	12,000	0.81	D
91-10		91	13.594	Paramount Blvd. to Downey Ave.	8,400	10,000	0.84	D	12,000	10,000	1.20	F(0)	13,550	10,000	1.36	F(2)	9,570	10,000	0.96	E
91-11		91	14.103	Downey Ave. to Jct. Rte. 19	8,390	10,000	0.70	C	12,000	12,000	1.00	E	13,430	10,000	1.34	F(1)	9,460	10,000	0.95	E
91-12		91	14.618	Jct. Rte. 19 to Clark Ave.	7,690	10,000	0.77	C	11,080	10,000	1.11	F(0)	12,500	8,000	1.56	F(3)	8,740	8,000	1.09	F(0)
91-13		91	15.105	Clark Ave. to Bellflower Blvd.	8,190	12,000	0.68	C	11,680	12,000	0.97	E	13,100	10,000	1.31	F(1)	9,240	10,000	0.92	D
91-14		91	15.614	Bellflower Blvd. to Jct. Rte. 605	8,080	12,000	0.67	C	11,560	12,000	0.96	E	12,990	10,000	1.30	F(1)	9,130	10,000	0.91	D
110-1	1045	110	1.23	Channel St. to C St.	4,660	8,000	0.58	C	3,370	8,000	0.42	B	3,730	8,000	0.47	B	4,480	8,000	0.56	C
110-2		110	2.771	C St. to Anaheim St.	4,860	10,000	0.49	B	3,570	10,000	0.36	B	3,940	8,000	0.49	B	4,690	8,000	0.59	C
110-3		110	3.264	Anaheim St. to Jct. Rte. 1	5,270	10,000	0.53	B	3,790	10,000	0.38	B	4,250	10,000	0.43	B	5,100	10,000	0.51	B
110-4		110	4.061	Jct. Rte. 1 to Sepulveda Blvd.	7,360	8,000	0.92	D	5,380	8,000	0.67	C	5,890	8,000	0.74	C	7,160	8,000	0.90	D
110-5		110	5.451	Sepulveda Blvd. to Carson St.	9,490	8,000	1.19	F(0)	6,920	8,000	0.87	D	7,640	8,000	0.96	E	9,330	8,000	1.17	F(0)
110-6		110	7.016	Carson St. to Torrance/Del Amo Blvd.	10,890	8,000	1.36	F(0)	8,020	8,000	1.00	E	8,840	8,000	1.11	F(0)	10,740	8,000	1.34	F(1)
110-7		110	8.028	Torrance/Del Amo Blvd. to Jct. Rte. 405	11,490	8,000	1.44	F(2)	8,420	8,000	1.05	F(0)	9,340	8,000	1.17	F(0)	11,340	8,000	1.42	F(2)
110-8		110	8.775	Jct. Rte. 405 to Jct. Rte. 91	14,090	12,000	1.17	F(0)	10,220	12,000	0.85	D	11,340	8,000	1.42	F(2)	13,840	8,000	1.73	F(3)
110-9		110	9.87	Jct. Rte. 91 to Redondo Beach Blvd.	9,300	12,000	0.78	D	9,550	12,000	0.80	D	10,270	12,000	0.86	D	9,880	12,000	0.82	D
110-10		110	11.239	Redondo Beach Blvd. to Rosecrans Ave.	9,600	11,000	0.87	D	9,950	11,000	0.90	D	10,670	11,000	0.97	E	10,180	11,000	0.93	D
110-11		110	11.891	Rosecrans Ave. to El Segundo Blvd.	9,990	11,000	0.91	D	10,340	11,000	0.94	E	11,170	11,000	1.02	F(0)	10,680	11,000	0.97	E
110-12		110	12.898	El Segundo Blvd. to Jct. Rte. 105	10,170	11,000	0.92	D	10,510	11,000	0.96	E	11,360	13,000	0.87	D	10,870	13,000	0.84	D
110-13		110	13.82	Jct. Rte. 105 to Century Blvd.	11,350	14,000	0.81	D	11,680	14,000	0.83	D	12,550	14,000	0.90	D	12,060	14,000	0.86	D
110-14		110	14.967	Century Blvd. to Manchester Ave.	12,150	12,000	1.01	F(0)	12,480	12,000	1.04	F(0)	13,450	12,000	1.12	F(0)	12,960	12,000	1.08	F(0)
110-15	1046	110	15.976	Manchester Ave. to Florence Ave.	11,850	12,000	0.99	E	12,170	12,000	1.01	F(0)	13,100	12,000	1.09	F(0)	12,530	12,000	1.04	F(0)
110-16		110	16.981	Florence Ave. to Gage Ave.	12,230	12,000	1.02	F(0)	12,530	12,000	1.04	F(0)	13,190	12,000	1.10	F(0)	12,720	12,000	1.06	F(0)
110-17	1047	110	17.514	Gage Ave. to Slauson Ave.	12,120	12,000	1.01	F(0)	12,420	12,000	1.04	F(0)	13,180	12,000	1.10	F(0)	12,610	12,000	1.05	F(0)
110-18		110	17.98	Slauson Ave. to 51st St.	11,720	10,000	1.17	F(0)	11,910	10,000	1.19	F(0)	12,670	10,000	1.27	F(1)	12,100	10,000	1.21	F(0)
110-19		110	18.495	51st St. to Vernon Ave.	11,920	10,000	1.19	F(0)	12,210	10,000	1.22	F(0)	12,870	12,000	1.07	F(0)	12,400	12,000	1.03	F(0)
110-20		110	18.998	Vernon Ave. to Martin Luther King Jr. Blvd.	11,910	12,000	0.99	E	12,190	12,000	1.02	F(0)	12,850	12,000	1.07	F(0)	12,390	12,000	1.03	F(0)
110-21		110	19.502	Martin Luther King Jr. Blvd. to Exposition Blvd.	10,800	12,000	0.90	D	10,980	12,000	0.92	D	11,630	10,000	1.16	F(0)	11,180	10,000	1.12	F(0)
110-22		110	19.996	Exposition Blvd. to Jct. Rte. 10	10,380	12,000	0.87	D	10,650	12,000	0.89	D	11,340	12,000	0.95	E	10,890	12,000	0.91	D
405-1		405	3.324	Lakewood Blvd. to Cherry Ave.	12,620	10,000	1.26	F(1)	10,790	10,000	1.08	F(0)	9,460	10,000	0.95	E	11,810	10,000	1.18	F(0)
405-2		405	4.879	Cherry Ave. to Orange Ave.	13,340	10,000	1.33	F(1)	11,300	10,000	1.13	F(0)	9,870	8,000	1.23	F(0)	12,420	8,000	1.55	F(3)
405-3		405	5.388	Orange Ave. to Atlantic Ave.	13,840	8,000	1.73	F(3)	11,800	8,000	1.48	F(3)	10,270	8,000	1.28	F(1)	12,930	8,000	1.62	F(3)
405-4		405	6.076	Atlantic Ave. to Long Beach Blvd	13,640	8,000	1.71	F(3)	11,610	8,000	1.45	F(2)	10,180	12,000	0.85	D	12,750	12,000	1.06	F(0)
405-5		405	6.34	Long Beach Blvd to Jct. Rte. 710	13,560	12,000	1.13	F(0)	11,520	12,000	0.96	E	10,080	10,000	1.01	F(0)	12,650	10,000	1.27	F(1)
405-6	1066	405	7.596	Jct. Rte. 710 to Alameda St.	12,410	10,000	1.24	F(0)	10,560	10,000	1.06	F(0)	9,210	10,000	0.92	D	11,600	10,000	1.16	F(0)
405-7		405	8.784	Alameda St. to Wilmington Ave.	12,040	10,000	1.20	F(0)	10,180	10,000	1.02	F(0)	8,930	10,000	0.89	D	11,230	10,000	1.12	F(0)
405-8		405	9.556	Wilmington Ave. to Carson St.	11,240	8,000	1.41	F(2)	9,680	8,000	1.21	F(0)	9,530	8,000	1.19	F(0)	11,630	8,000	1.45	F(2)
405-9		405	10.541	Carson St. to Avalon Blvd.	11,040	8,000	1.38	F(2)	9,480	8,000	1.19	F(0)	9,430	8,000	1.18	F(0)	11,430	8,000	1.43	F(2)
405-10	1067	405	11.224	Avalon Blvd. to Jct. Rte. 110	11,840	10,000	1.18	F(0)	10,180	10,000	1.02	F(0)	10,030	10,000	1.00	E	12,230	10,000	1.22	F(0)
405-11		405	12.97	Jct. Rte. 110 to Vermont Ave.	11,580	10,000	1.16	F(0)	10,190	10,000	1.02	F(0)	8,780	8,000	1.10	F(0)	10,750	8,000	1.34	F(1)
405-12		405	13.28	Vermont Ave. to Normandie Ave.	12,080	12,000	1.01	F(0)	10,690	12,000	0.89	D	9,150	10,000	0.92	D	11,220	10,000	1.12	F(0)
405-13		405	13.826	Normandie Ave. to Western Ave.	11,380	10,000	1.14	F(0)	9,990	10,000	1.00	E	8,500	8,000	1.06	F(0)	10,480	8,000	1.31	F(1)
405-14		405	14.398	Western Ave. to Crenshaw Blvd.	10,880	8,000	1.36	F(2)	9,590	8,000	1.20	F(0)	8,200	8,000	1.03	F(0)	10,080	8,000	1.26	F(1)
405-15		405	15.447	Crenshaw Blvd. to Artesia Blvd.	10,680	8,000	1.33	F(1)	9,350	8,000	1.17	F(0)	7,990	8,000	1.00	E	9,870	8,000	1.23	F(0)
405-16		405	16.573	Artesia Blvd. to Hawthorne Blvd.	10,730	10,000	1.07	F(0)	9,410	10,000	0.94	E	8,060	8,000	1.01	F(0)	9,940	8,000	1.24	F(0)
405-17		405	17.589	Hawthorne Blvd. to Inglewood Ave.	11,220	10,000	1.12	F(0)	9,880	10,000	0.99	E	8,450	8,000	1.06	F(0)	10,340	8,000	1.29	F(1)
405-18	1068	405	18.233	Inglewood Ave. to Rosecrans Ave.	11,700	10,000	1.17	F(0)	10,250	10,000	1.03	F(0)	8,830	10,000	0.88	D	10,820	10,000	1.08	F(0)
710-1		710	12.97	Jct. Rte. 91 to Alondra Blvd.	11,480	12,000	0.96	E	17,860	12,000	1.49	F(3)	11,330	12,000	0.94	E	9,060	12,000	0.76	C
710-2		710	13.945	Alondra Blvd. to Jct. Rte. 105	11,870	12,000	0.99	E	18,440	12,000	1.54	F(3)	11,710	12,000	0.98	E	9,340	12,000	0.78	D

Note: D/C is demand-to-capacity ratio.

Exhibit 127: 2035 Weekday Plus Project Alternative 2 Level of Service (LOS) for Study Freeway Locations

Northbound/Eastbound

ID	CMP Station	Fwy Rte	Post Mile	Location	2035 No Project				2035 Plus Project				2035 Increase in D/C Ratio with Project		2035 Project Has Significant Cumulative Impact?	
					AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM	PM	AM	PM
					D/C	LOS	D/C	LOS	D/C	LOS	D/C	LOS				
91-1		91	6.344	Jct. Rte. 110 to Avalon Blvd.	0.58	C	1.20	F(0)	0.59	C	1.22	F(0)	0.01	0.02	No	Yes
91-2		91	7.426	Avalon Blvd. to Central Ave.	0.72	C	1.47	F(3)	0.74	C	1.51	F(3)	0.02	0.04	No	Yes
91-3		91	8.435	Central Ave. to Wilmington Ave.	0.73	C	1.49	F(3)	0.75	C	1.54	F(3)	0.02	0.05	No	Yes
91-4		91	9.162	Wilmington Ave. to Alameda St.	0.76	C	1.55	F(3)	0.78	D	1.60	F(3)	0.02	0.05	No	Yes
91-5		91	10.271	Alameda St. to Alameda St./Santa F	0.99	E	2.03	F(3)	1.01	F(0)	2.08	F(3)	0.02	0.05	Yes	Yes
91-6	1033	91	10.41	Alameda St./Santa Fe Ave. to Long	0.68	C	1.40	F(2)	0.70	C	1.44	F(2)	0.02	0.04	No	Yes
91-7		91	11.096	Long Beach Blvd. to Jct. Rte. 710	0.68	C	1.40	F(2)	0.70	C	1.43	F(2)	0.02	0.03	No	Yes
91-8		91	11.681	Jct. Rte. 710 to Cherry Ave.	0.84	D	1.20	F(0)	0.85	D	1.22	F(0)	0.01	0.02	No	Yes
91-9	1034	91	13.094	Cherry Ave. to Paramount Blvd.	0.85	D	1.22	F(0)	0.86	D	1.24	F(0)	0.01	0.02	No	Yes
91-10		91	13.594	Paramount Blvd. to Downey Ave.	0.83	D	1.18	F(0)	0.84	D	1.20	F(0)	0.01	0.02	No	Yes
91-11		91	14.103	Downey Ave. to Jct. Rte. 19	0.69	C	0.98	E	0.70	C	1.00	E	0.01	0.02	No	Yes
91-12		91	14.618	Jct. Rte. 19 to Clark Ave.	0.76	C	1.09	F(0)	0.77	C	1.11	F(0)	0.01	0.02	No	Yes
91-13		91	15.105	Clark Ave. to Bellflower Blvd.	0.68	C	0.96	E	0.68	C	0.97	E	0.00	0.01	No	No
91-14		91	15.614	Bellflower Blvd. to Jct. Rte. 605	0.67	C	0.95	E	0.67	C	0.96	E	0.00	0.01	No	No
110-1	1045	110	1.23	Channel St. to C St.	0.56	C	0.40	B	0.58	C	0.42	B	0.02	0.02	No	No
110-2		110	2.771	C St. to Anaheim St.	0.47	B	0.34	A	0.49	B	0.36	B	0.02	0.02	No	No
110-3		110	3.264	Anaheim St. to Jct. Rte. 1	0.51	B	0.36	B	0.53	B	0.38	B	0.02	0.02	No	No
110-4		110	4.061	Jct. Rte. 1 to Sepulveda Blvd.	0.89	D	0.64	C	0.92	D	0.67	C	0.03	0.03	No	No
110-5		110	5.451	Sepulveda Blvd. to Carson St.	1.15	F(0)	0.83	D	1.19	F(0)	0.87	D	0.04	0.04	Yes	No
110-6		110	7.016	Carson St. to Torrance/Del Amo Blvd	1.33	F(1)	0.96	E	1.36	F(2)	1.00	E	0.03	0.04	Yes	Yes
110-7		110	8.028	Torrance/Del Amo Blvd. to Jct. Rte.	1.40	F(2)	1.01	F(0)	1.44	F(2)	1.05	F(0)	0.04	0.04	Yes	Yes
110-8		110	8.775	Jct. Rte. 405 to Jct. Rte. 91	1.15	F(0)	0.83	D	1.17	F(0)	0.85	D	0.02	0.02	Yes	No
110-9		110	9.87	Jct. Rte. 91 to Redondo Beach Blvd.	0.76	C	0.77	C	0.78	D	0.80	D	0.02	0.03	No	No
110-10		110	11.239	Redondo Beach Blvd. to Rosecrans	0.85	D	0.87	D	0.87	D	0.90	D	0.02	0.03	No	No
110-11		110	11.891	Rosecrans Ave. to El Segundo Blvd.	0.89	D	0.91	D	0.91	D	0.94	E	0.02	0.03	No	Yes
110-12		110	12.898	El Segundo Blvd. to Jct. Rte. 105	0.91	D	0.93	D	0.92	D	0.96	E	0.01	0.03	No	Yes
110-13		110	13.82	Jct. Rte. 105 to Century Blvd.	0.80	D	0.81	D	0.81	D	0.83	D	0.01	0.02	No	No
110-14		110	14.967	Century Blvd. to Manchester Ave.	1.00	E	1.02	F(0)	1.01	F(0)	1.04	F(0)	0.01	0.02	No	Yes
110-15	1046	110	15.976	Manchester Ave. to Florence Ave.	0.98	E	0.99	E	0.99	E	1.01	F(0)	0.01	0.02	No	Yes
110-16		110	16.981	Florence Ave. to Gage Ave.	1.01	F(0)	1.03	F(0)	1.02	F(0)	1.04	F(0)	0.01	0.01	No	No
110-17	1047	110	17.514	Gage Ave. to Slauson Ave.	1.00	E	1.02	F(0)	1.01	F(0)	1.04	F(0)	0.01	0.02	No	Yes
110-18		110	17.98	Slauson Ave. to 51st St.	1.16	F(0)	1.17	F(0)	1.17	F(0)	1.19	F(0)	0.01	0.02	No	Yes
110-19		110	18.495	51st St. to Vernon Ave.	1.18	F(0)	1.20	F(0)	1.19	F(0)	1.22	F(0)	0.01	0.02	No	Yes
110-20		110	18.998	Vernon Ave. to Martin Luther King Jr	0.98	E	1.00	E	0.99	E	1.02	F(0)	0.01	0.02	No	Yes
110-21		110	19.502	Martin Luther King Jr. Blvd. to Expos	0.89	D	0.90	D	0.90	D	0.92	D	0.01	0.02	No	No
110-22		110	19.996	Exposition Blvd. to Jct. Rte. 10	0.86	D	0.88	D	0.87	D	0.89	D	0.01	0.01	No	No
405-1		405	3.324	Lakewood Blvd. to Cherry Ave.	1.25	F(0)	1.07	F(0)	1.26	F(1)	1.08	F(0)	0.01	0.01	No	No
405-2		405	4.879	Cherry Ave. to Orange Ave.	1.32	F(1)	1.12	F(0)	1.33	F(1)	1.13	F(0)	0.01	0.01	No	No
405-3		405	5.388	Orange Ave. to Atlantic Ave.	1.71	F(3)	1.46	F(3)	1.73	F(3)	1.48	F(3)	0.02	0.02	Yes	Yes
405-4		405	6.076	Atlantic Ave. to Long Beach Blvd	1.69	F(3)	1.44	F(2)	1.71	F(3)	1.45	F(2)	0.02	0.01	Yes	No
405-5		405	6.34	Long Beach Blvd to Jct. Rte. 710	1.12	F(0)	0.95	E	1.13	F(0)	0.96	E	0.01	0.01	No	No
405-6	1066	405	7.596	Jct. Rte. 710 to Alameda St.	1.22	F(0)	1.04	F(0)	1.24	F(0)	1.06	F(0)	0.02	0.02	Yes	Yes
405-7		405	8.784	Alameda St. to Wilmington Ave.	1.18	F(0)	1.00	E	1.20	F(0)	1.02	F(0)	0.02	0.02	Yes	Yes
405-8		405	9.556	Wilmington Ave. to Carson St.	1.38	F(2)	1.19	F(0)	1.41	F(2)	1.21	F(0)	0.03	0.02	Yes	Yes
405-9		405	10.541	Carson St. to Avalon Blvd.	1.35	F(1)	1.16	F(0)	1.38	F(2)	1.19	F(0)	0.03	0.03	Yes	Yes
405-10	1067	405	11.224	Avalon Blvd. to Jct. Rte. 110	1.16	F(0)	1.00	E	1.18	F(0)	1.02	F(0)	0.02	0.02	Yes	Yes
405-11		405	12.97	Jct. Rte. 110 to Vermont Ave.	1.14	F(0)	0.99	E	1.16	F(0)	1.02	F(0)	0.02	0.03	Yes	Yes
405-12		405	13.28	Vermont Ave. to Normandie Ave.	0.99	E	0.87	D	1.01	F(0)	0.89	D	0.02	0.02	Yes	No
405-13		405	13.826	Normandie Ave. to Western Ave.	1.12	F(0)	0.97	E	1.14	F(0)	1.00	E	0.02	0.03	No	Yes
405-14		405	14.398	Western Ave. to Crenshaw Blvd.	1.34	F(1)	1.16	F(0)	1.36	F(2)	1.20	F(0)	0.02	0.04	Yes	Yes
405-15		405	15.447	Crenshaw Blvd. to Artesia Blvd.	1.31	F(1)	1.14	F(0)	1.33	F(1)	1.17	F(0)	0.02	0.03	Yes	Yes
405-16		405	16.573	Artesia Blvd. to Hawthorne Blvd.	1.06	F(0)	0.92	D	1.07	F(0)	0.94	E	0.01	0.02	No	No
405-17		405	17.589	Hawthorne Blvd. to Inglewood Ave.	1.11	F(0)	0.97	E	1.12	F(0)	0.99	E	0.01	0.02	No	Yes
405-18	1068	405	18.233	Inglewood Ave. to Rosecrans Ave.	1.16	F(0)	1.01	F(0)	1.17	F(0)	1.03	F(0)	0.01	0.02	No	Yes
710-1		710	12.97	Jct. Rte. 91 to Alondra Blvd.	0.95	E	1.48	F(3)	0.96	E	1.49	F(3)	0.01	0.01	No	No
710-2		710	13.945	Alondra Blvd. to Jct. Rte. 105	0.98	E	1.53	F(3)	0.99	E	1.54	F(3)	0.01	0.01	No	No

Note: D/C is demand-to-capacity ratio.

Exhibit 128: Determination of Intersection Impact for 2035 Weekday Plus Project Alternative 2

Southbound/Wesbound

ID	CMP Station	Fwy Rte	Post Mile	Location	2035 No Project				2035 Plus Project				2035 Increase in D/C Ratio with Project		2035 Project Has Significant Cumulative Impact?	
					AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM	PM	AM	PM
					D/C	LOS	D/C	LOS	D/C	LOS	D/C	LOS				
91-1		91	6.344	Jct. Rte. 110 to Avalon Blvd.	2.33	F(3)	1.58	F(3)	2.36	F(3)	1.60	F(3)	0.03	0.02	Yes	Yes
91-2		91	7.426	Avalon Blvd. to Central Ave.	0.95	E	0.65	C	0.98	E	0.67	C	0.03	0.02	Yes	No
91-3		91	8.435	Central Ave. to Wilmington Ave.	0.97	E	0.66	C	1.02	F(0)	0.69	C	0.05	0.03	Yes	No
91-4		91	9.162	Wilmington Ave. to Alameda St.	1.00	E	0.68	C	1.05	F(0)	0.71	C	0.05	0.03	Yes	No
91-5		91	10.271	Alameda St. to Alameda St./Santa F	1.31	F(1)	0.89	D	1.38	F(2)	0.93	D	0.07	0.04	Yes	No
91-6	1033	91	10.41	Alameda St./Santa Fe Ave. to Long	0.91	D	0.62	C	0.95	E	0.65	C	0.04	0.03	Yes	No
91-7		91	11.096	Long Beach Blvd. to Jct. Rte. 710	1.09	F(0)	0.74	C	1.14	F(0)	0.77	C	0.05	0.03	Yes	No
91-8		91	11.681	Jct. Rte. 710 to Cherry Ave.	1.35	F(1)	0.95	E	1.38	F(2)	0.97	E	0.03	0.02	Yes	Yes
91-9	1034	91	13.094	Cherry Ave. to Paramount Blvd.	1.14	F(0)	0.80	D	1.16	F(0)	0.81	D	0.02	0.01	Yes	No
91-10		91	13.594	Paramount Blvd. to Downey Ave.	1.33	F(1)	0.94	E	1.36	F(2)	0.96	E	0.03	0.02	Yes	Yes
91-11		91	14.103	Downey Ave. to Jct. Rte. 19	1.32	F(1)	0.93	D	1.34	F(1)	0.95	E	0.02	0.02	Yes	No
91-12		91	14.618	Jct. Rte. 19 to Clark Ave.	1.54	F(3)	1.08	F(0)	1.56	F(3)	1.09	F(0)	0.02	0.01	Yes	No
91-13		91	15.105	Clark Ave. to Bellflower Blvd.	1.29	F(1)	0.91	D	1.31	F(1)	0.92	D	0.02	0.01	Yes	No
91-14		91	15.614	Bellflower Blvd. to Jct. Rte. 605	1.28	F(1)	0.90	D	1.30	F(1)	0.91	D	0.02	0.01	Yes	No
110-1	1045	110	1.23	Channel St. to C St.	0.45	B	0.54	B	0.47	B	0.56	C	0.02	0.02	No	No
110-2		110	2.771	C St. to Anaheim St.	0.48	B	0.56	C	0.49	B	0.59	C	0.01	0.03	No	No
110-3		110	3.264	Anaheim St. to Jct. Rte. 1	0.41	B	0.49	B	0.43	B	0.51	B	0.02	0.02	No	No
110-4		110	4.061	Jct. Rte. 1 to Sepulveda Blvd.	0.71	C	0.86	D	0.74	C	0.90	D	0.03	0.04	No	No
110-5		110	5.451	Sepulveda Blvd. to Carson St.	0.93	D	1.13	F(0)	0.96	E	1.17	F(0)	0.03	0.04	Yes	Yes
110-6		110	7.016	Carson St. to Torrance/Del Amo Blvd	1.08	F(0)	1.30	F(1)	1.11	F(0)	1.34	F(1)	0.03	0.04	Yes	Yes
110-7		110	8.028	Torrance/Del Amo Blvd. to Jct. Rte. 4	1.14	F(0)	1.38	F(2)	1.17	F(0)	1.42	F(2)	0.03	0.04	Yes	Yes
110-8		110	8.775	Jct. Rte. 405 to Jct. Rte. 91	1.39	F(2)	1.69	F(3)	1.42	F(2)	1.73	F(3)	0.03	0.04	Yes	Yes
110-9		110	9.87	Jct. Rte. 91 to Redondo Beach Blvd.	0.83	D	0.80	D	0.86	D	0.82	D	0.03	0.02	No	No
110-10		110	11.239	Redondo Beach Blvd. to Rosecrans	0.94	E	0.90	D	0.97	E	0.93	D	0.03	0.03	Yes	No
110-11		110	11.891	Rosecrans Ave. to El Segundo Blvd.	0.98	E	0.95	E	1.02	F(0)	0.97	E	0.04	0.02	Yes	Yes
110-12		110	12.898	El Segundo Blvd. to Jct. Rte. 105	0.85	D	0.82	D	0.87	D	0.84	D	0.02	0.02	No	No
110-13		110	13.82	Jct. Rte. 105 to Century Blvd.	0.87	D	0.84	D	0.90	D	0.86	D	0.03	0.02	No	No
110-14		110	14.967	Century Blvd. to Manchester Ave.	1.09	F(0)	1.06	F(0)	1.12	F(0)	1.08	F(0)	0.03	0.02	Yes	Yes
110-15	1046	110	15.976	Manchester Ave. to Florence Ave.	1.07	F(0)	1.03	F(0)	1.09	F(0)	1.04	F(0)	0.02	0.01	Yes	No
110-16		110	16.981	Florence Ave. to Gage Ave.	1.08	F(0)	1.04	F(0)	1.10	F(0)	1.06	F(0)	0.02	0.02	Yes	Yes
110-17	1047	110	17.514	Gage Ave. to Slauson Ave.	1.08	F(0)	1.03	F(0)	1.10	F(0)	1.05	F(0)	0.02	0.02	Yes	Yes
110-18		110	17.98	Slauson Ave. to 51st St.	1.24	F(0)	1.19	F(0)	1.27	F(1)	1.21	F(0)	0.03	0.02	Yes	Yes
110-19		110	18.495	51st St. to Vernon Ave.	1.05	F(0)	1.02	F(0)	1.07	F(0)	1.03	F(0)	0.02	0.01	Yes	No
110-20		110	18.998	Vernon Ave. to Martin Luther King Jr	1.05	F(0)	1.02	F(0)	1.07	F(0)	1.03	F(0)	0.02	0.01	Yes	No
110-21		110	19.502	Martin Luther King Jr. Blvd. to Expos	1.14	F(0)	1.10	F(0)	1.16	F(0)	1.12	F(0)	0.02	0.02	Yes	Yes
110-22		110	19.996	Exposition Blvd. to Jct. Rte. 10	0.93	D	0.89	D	0.95	E	0.91	D	0.02	0.02	No	No
405-1		405	3.324	Lakewood Blvd. to Cherry Ave.	0.94	E	1.17	F(0)	0.95	E	1.18	F(0)	0.01	0.01	No	No
405-2		405	4.879	Cherry Ave. to Orange Ave.	1.23	F(0)	1.54	F(3)	1.23	F(0)	1.55	F(3)	0.00	0.01	No	No
405-3		405	5.388	Orange Ave. to Atlantic Ave.	1.28	F(1)	1.60	F(3)	1.28	F(1)	1.62	F(3)	0.00	0.02	No	Yes
405-4		405	6.076	Atlantic Ave. to Long Beach Blvd	0.84	D	1.05	F(0)	0.85	D	1.06	F(0)	0.01	0.01	No	No
405-5		405	6.34	Long Beach Blvd to Jct. Rte. 710	1.00	E	1.25	F(0)	1.01	F(0)	1.27	F(1)	0.01	0.02	No	Yes
405-6	1066	405	7.596	Jct. Rte. 710 to Alameda St.	0.91	D	1.14	F(0)	0.92	D	1.16	F(0)	0.01	0.02	No	Yes
405-7		405	8.784	Alameda St. to Wilmington Ave.	0.88	D	1.10	F(0)	0.89	D	1.12	F(0)	0.01	0.02	No	Yes
405-8		405	9.556	Wilmington Ave. to Carson St.	1.18	F(0)	1.43	F(2)	1.19	F(0)	1.45	F(2)	0.01	0.02	No	Yes
405-9		405	10.541	Carson St. to Avalon Blvd.	1.16	F(0)	1.40	F(2)	1.18	F(0)	1.43	F(2)	0.02	0.03	Yes	Yes
405-10	1067	405	11.224	Avalon Blvd. to Jct. Rte. 110	0.99	E	1.20	F(0)	1.00	E	1.22	F(0)	0.01	0.02	No	Yes
405-11		405	12.97	Jct. Rte. 110 to Vermont Ave.	1.06	F(0)	1.31	F(1)	1.10	F(0)	1.34	F(1)	0.04	0.03	Yes	Yes
405-12		405	13.28	Vermont Ave. to Normandie Ave.	0.89	D	1.10	F(0)	0.92	D	1.12	F(0)	0.03	0.02	No	Yes
405-13		405	13.826	Normandie Ave. to Western Ave.	1.04	F(0)	1.29	F(1)	1.06	F(0)	1.31	F(1)	0.02	0.02	Yes	Yes
405-14		405	14.398	Western Ave. to Crenshaw Blvd.	1.00	E	1.24	F(0)	1.03	F(0)	1.26	F(1)	0.03	0.02	Yes	Yes
405-15		405	15.447	Crenshaw Blvd. to Artesia Blvd.	0.98	E	1.21	F(0)	1.00	E	1.23	F(0)	0.02	0.02	Yes	Yes
405-16		405	16.573	Artesia Blvd. to Hawthorne Blvd.	0.99	E	1.23	F(0)	1.01	F(0)	1.24	F(0)	0.02	0.01	Yes	No
405-17		405	17.589	Hawthorne Blvd. to Inglewood Ave.	1.04	F(0)	1.28	F(1)	1.06	F(0)	1.29	F(1)	0.02	0.01	Yes	No
405-18	1068	405	18.233	Inglewood Ave. to Rosecrans Ave.	0.87	D	1.07	F(0)	0.88	D	1.08	F(0)	0.01	0.01	No	No
710-1		710	12.97	Jct. Rte. 91 to Alondra Blvd.	0.93	D	0.74	C	0.94	E	0.76	C	0.01	0.02	No	No
710-2		710	13.945	Alondra Blvd. to Jct. Rte. 105	0.96	E	0.77	C	0.98	E	0.78	D	0.02	0.01	Yes	No

Note: D/C is demand-to-capacity ratio.

Exhibit 128: Determination of Intersection Impact for 2035 Weekday Plus Project Alternative 2 (Continued)

12.2.4 Determination of Pedestrian Impacts

The CSU system has defined a significant pedestrian impact as a situation where,

- *“A project fails to provide safe pedestrian connections between campus buildings and adjacent streets and transit facilities. Or*
- *A project significantly disrupts existing or planned pedestrian facilities or significantly conflicts with applicable non-automotive transportation plans, guidelines, policies, or standards.”*

Based on this standard, the Project would not impose such disruptions and so would not have any significant pedestrian impacts in 2035.

12.2.5 Determination of Bicycle Impacts

The CSU system has defined a significant bicycle impact as a situation where, *“A project significantly disrupts existing or planned bicycle facilities or significantly conflicts with applicable non-automotive transportation plans, guidelines, policies, or standards.”* Based on this standard, the Project would not impose such disruptions and so would not have any significant bicycle impacts in 2035.

12.2.6 Determination of Transit Impacts

CSU guideline state that a significant transit impact would occur if, *“A project significantly disrupts existing or planned transit facilities and services or significantly conflicts with applicable transit plans, guidelines, policies, or standards.”* Based on this standard, the Project would not impose such disruptions and so would not have any significant transit impacts in 2035. The Project would also not have any transit capacity impacts, as was shown earlier in Section 6.1.6.

12.3 2035 Sunday Plus Project with 30,000-Seats Conditions

12.3.1 Forecasting 2035 Sunday Plus Project with 30,000-Seats Traffic

Traffic volumes for the 2035 Plus Project condition were developed by factoring up the existing Sunday traffic counts using the growth factor from the LA-CMP and then adding in the traffic for a 30,000-seat event and the traffic generated by the master plan on Sunday. The resulting 2035 Plus Project traffic volumes are shown in Exhibit 130 for the pre-game peak hour and Exhibit 131 for the post-game peak hour.

12.3.2 2035 Sunday Plus Project with 30,000-Seats Level of Service

Exhibit 129 shows in tabular format the 2019 Plus Project Sunday level of service (LOS) based on the traffic volumes shown in Exhibit 130 and Exhibit 131 (also see Appendix S). The LOS is also shown on maps in Exhibit 132, for the pre-game peak hour condition, and Exhibit 133 for the post-game peak hour condition. Exhibit 134 shows the intersection impacts of the Project. The Project would have significant impacts at 5 study intersections, namely:

- Intersection #3, Victoria St./Tamcliff Ave., during post-game peak hour
- Intersection #9, University Dr./Toro Center Dr., during both peak hours
- Intersection #25, Avalon Blvd./University Dr., during both peak hours
- Intersection #26, Avalon Blvd./Del Amo Blvd., during post-game peak hour
- Intersection #41, Victoria St./Rainsbury Ave., during pre-game peak hour

12.3.3 Determination of Pedestrian Impacts

The CSU system has defined a significant pedestrian impact as a situation where,

- *“A project fails to provide safe pedestrian connections between campus buildings and adjacent streets and transit facilities. Or*
- *A project significantly disrupts existing or planned pedestrian facilities or significantly conflicts with applicable non-automotive transportation plans, guidelines, policies, or standards.”*

Based on this standard the 30,000-seat game does not impose any significant pedestrian impacts since the 30,000-seat game will include temporary control of intersections by traffic control officers who will be able to stop traffic to allow pedestrians to safely cross the street when going to and from the stadium.

The 30,000-seat game does not involve any construction activities that would disrupt any existing or planned pedestrian facilities.

12.3.4 Determination of Bicycle Impacts

The CSU system has defined a significant bicycle impact as a situation where, *“A project significantly disrupts existing or planned bicycle facilities or significantly conflicts with applicable non-automotive transportation plans, guidelines, policies, or standards.”* Based on this standard the 30,000-seat game does not impose any significant bicycle impacts since the 30,000-seat game does not involve any construction activities that would it disrupt any existing or planned bicycle facilities. The 30,000-seat game will include temporary control of intersections by traffic control officers whose presence will make the streets around StubHub Center safer for bicyclists than streets that are unsupervised.

Study ID	Intersection Name	Control Type	Pre-Game Peak Hour		Post-Game Peak Hour	
			V/C Ratio	ICU LOS	V/C Ratio	ICU LOS
1	Victoria St./Drive D	TWSC	0.803	D	0.841	D
2	Victoria St./Tamcliff Ave.	Signalized	0.350	A	0.878	D
3	Victoria St./Birchknoll Dr.	Signalized	0.531	A	1.087	F
9	University Dr./Toro Center Dr.	TWSC	0.903	E	0.778	C
10	Albertoni St./SR 91 EB Ramps	Signalized	0.639	B	0.367	A
11	Avalon Blvd./SR 91 WB On-Ramp	Signalized	0.711	C	0.834	D
12	Avalon Blvd./Albertoni St.	Signalized	0.873	D	0.650	B
13	Avalon Blvd./Victoria St.	Signalized	0.895	D	0.739	C
14	Central Ave./Artesia Blvd. WB	Signalized	0.598	A	0.621	B
15	Central Ave./Albertoni St./Artesia Blvd. EB	Signalized	0.684	B	0.683	B
16	Central Ave./Victoria St.	Signalized	0.703	C	0.759	C
17	Wilmington Ave./Artesia Blvd. WB	Signalized	0.530	A	0.546	A
18	Wilmington Ave./Artesia Blvd. EB	Signalized	0.403	A	0.692	B
19	Wilmington Ave./Victoria St.	Signalized	0.324	A	0.535	A
22	Figuroa St./190th St./Victoria St.	Signalized	0.653	B	0.466	A
24	Main St./Victoria St.	Signalized	0.631	B	0.481	A
25	Avalon Blvd./University Dr.	Signalized	0.921	E	0.742	C
26	Avalon Blvd./Del Amo Blvd.	Signalized	0.825	D	0.794	C
27	Avalon Blvd./I-405 NB Ramps	Signalized	0.703	C	0.522	A
28	Avalon Blvd./I-405 SB Ramps	Signalized	0.658	B	0.523	A
29	Central Ave./University Dr.	Signalized	0.809	D	0.813	D
30	Wilmington Ave./University Dr.	Signalized	0.806	D	0.401	A
31	Central Ave./Del Amo Blvd.	Signalized	0.529	A	0.492	A
32	Wilmington Ave./Del Amo Blvd.	Signalized	0.519	A	0.607	B
38	Avalon Blvd./184th St.	Signalized	0.479	A	0.452	A
39	Avalon Blvd./182nd St.	TWSC	0.379	A	0.719	C
40	Victoria St./Drive C	TWSC	0.888	D	0.484	A
41	Victoria St./Rainsbury Ave.	TWSC	1.019	F	0.516	A
42	Avalon Blvd./Harbor Village/Colony Cove	Signalized	0.735	C	0.644	B

Exhibit 129: 2035 Sunday Plus Project with 30,000-Seats Level of Service (LOS) at Study Intersections (Table)

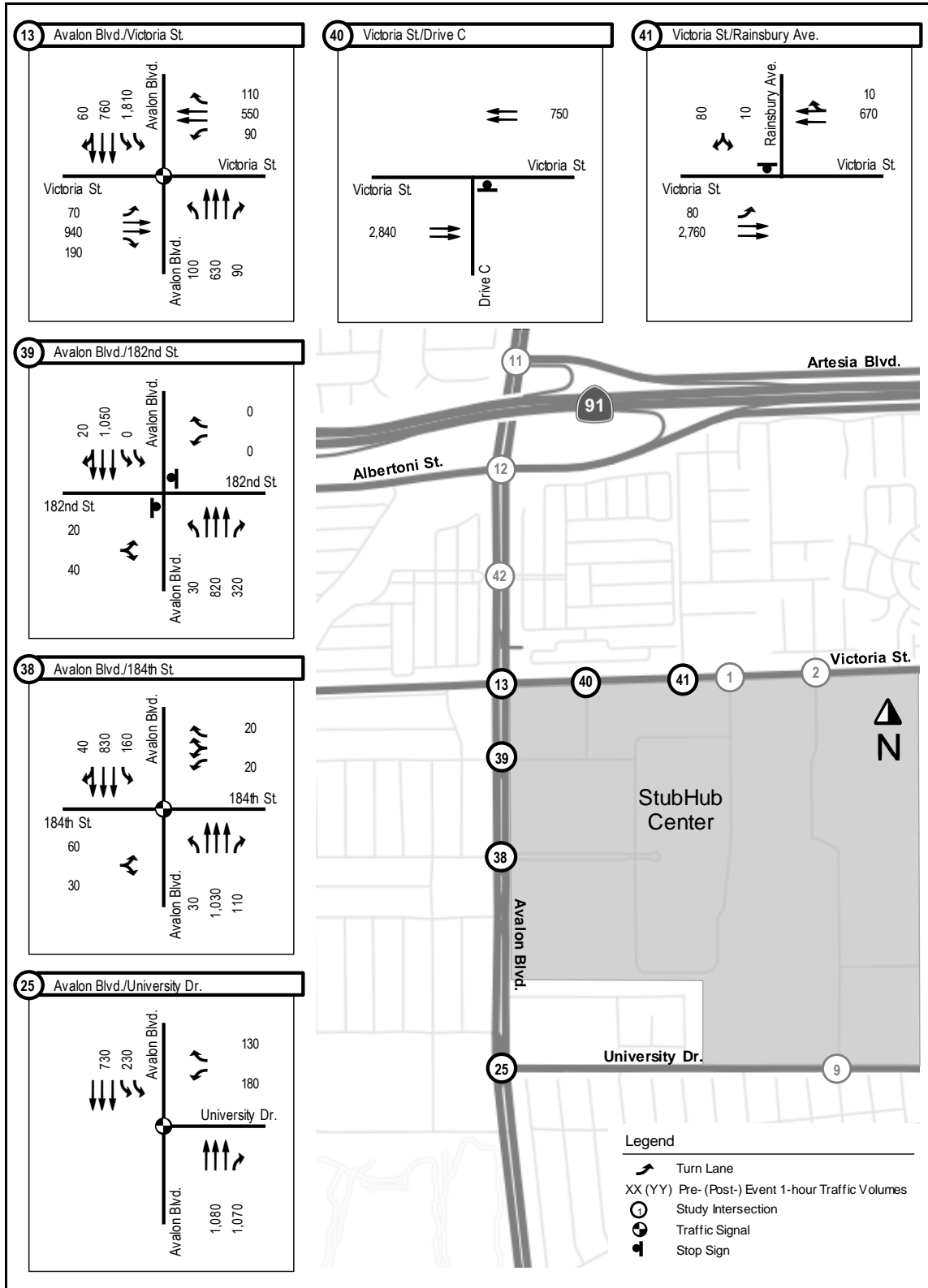


Exhibit 130: 2035 Sunday Plus Project with 30,000-Seats Pre-Game Traffic Volumes and Lane Configurations

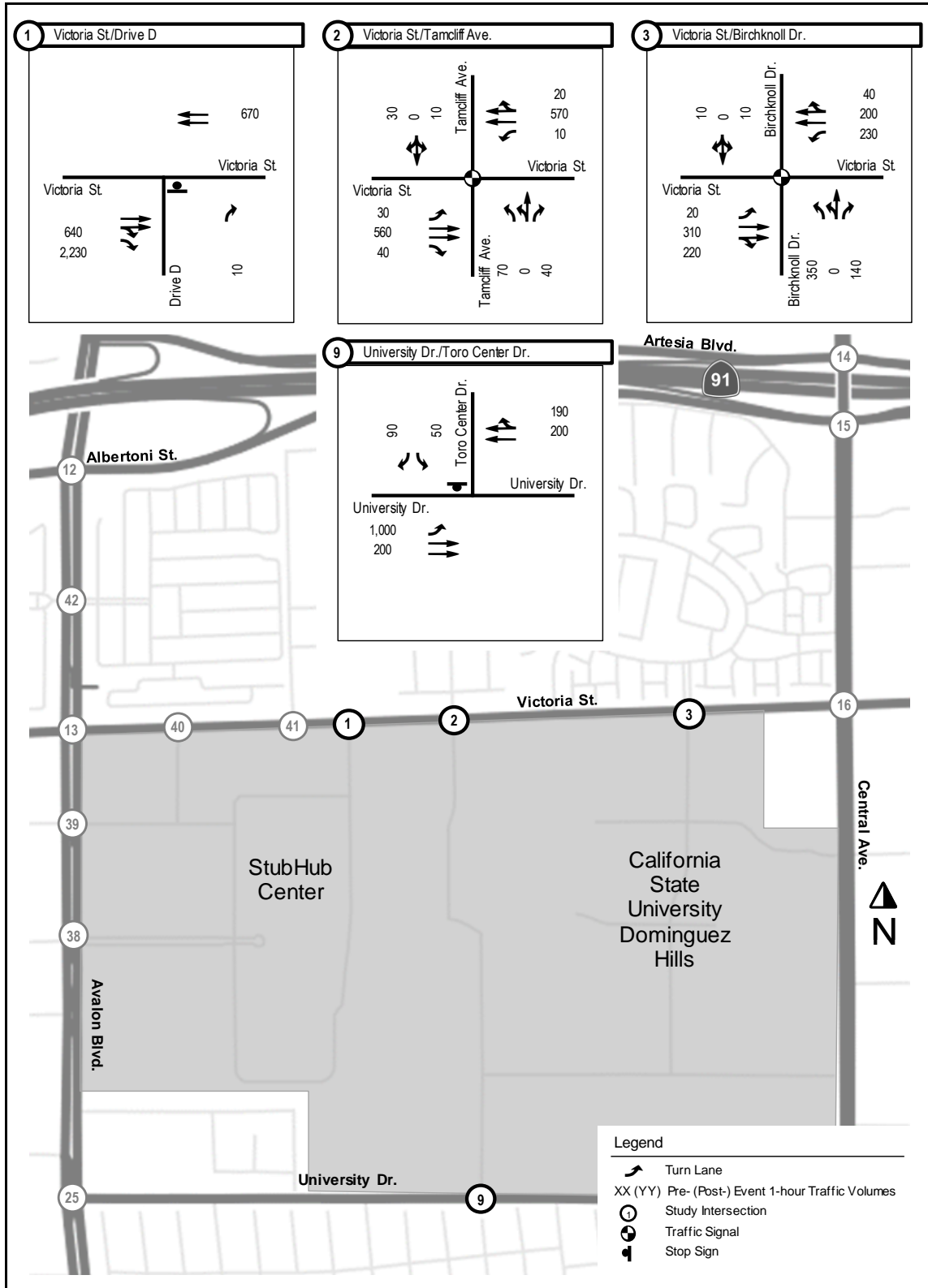


Exhibit 130: 2035 Sunday Plus Project with 30,000-Seats Pre-Game Traffic Volumes and Lane Configurations (Map B)

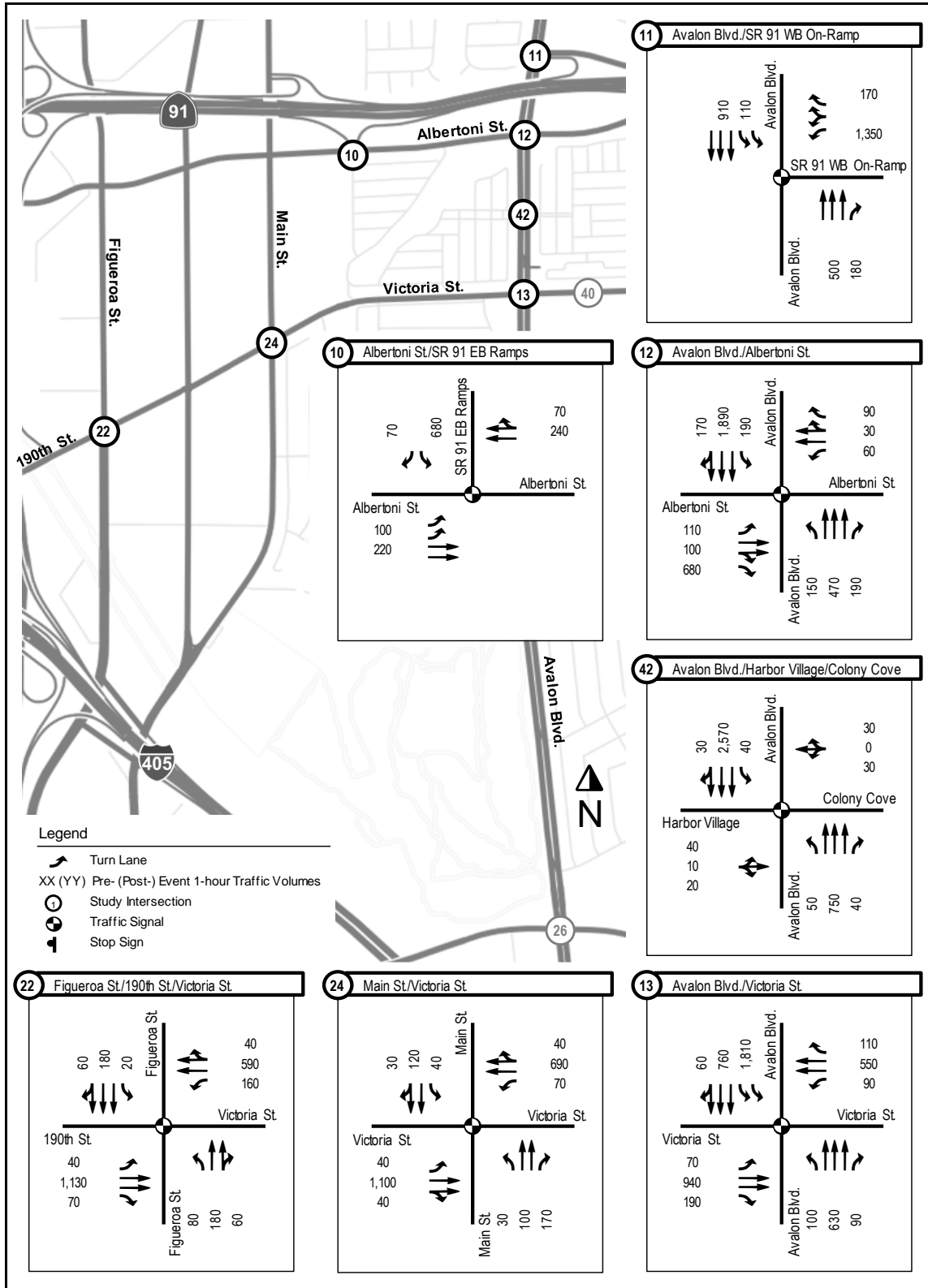


Exhibit 130: 2035 Sunday Plus Project with 30,000-Seats Pre-Game Traffic Volumes and Lane Configurations (Map C)

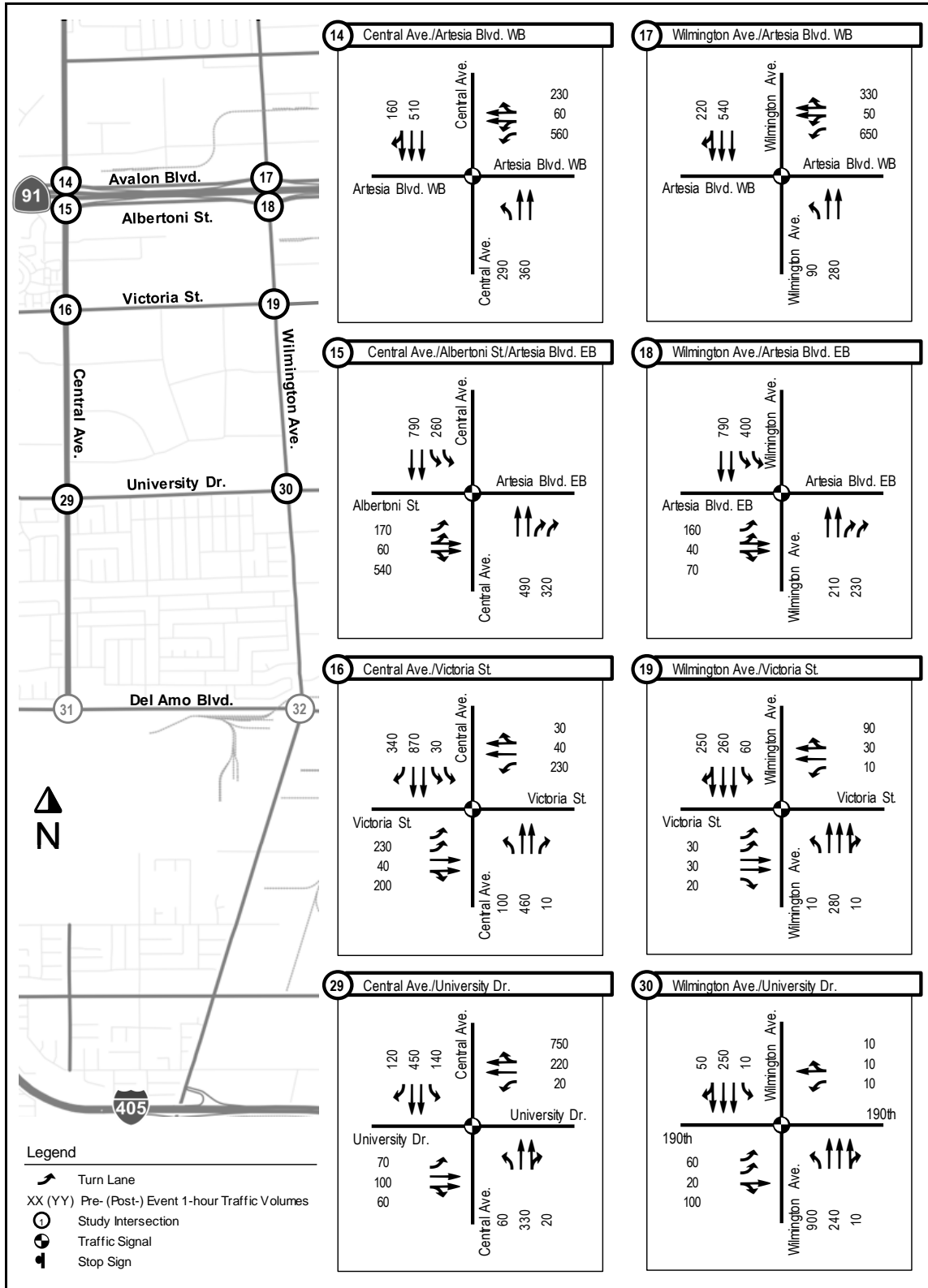


Exhibit 130: 2035 Sunday Plus Project with 30,000-Seats Pre-Game Traffic Volumes and Lane Configurations (Map D)

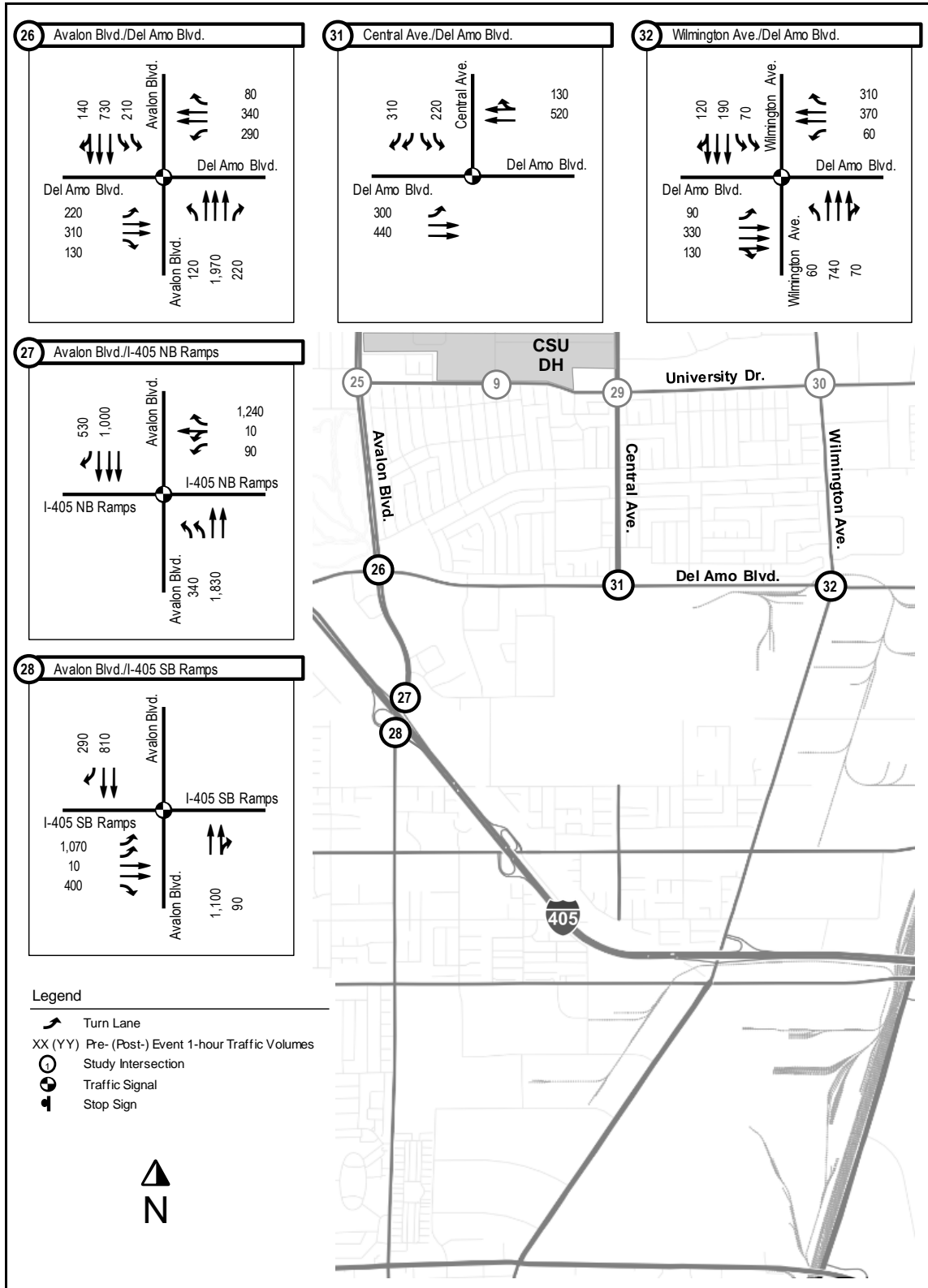


Exhibit 130: 2035 Sunday Plus Project with 30,000-Seats Pre-Game Traffic Volumes and Lane Configurations (Map E)

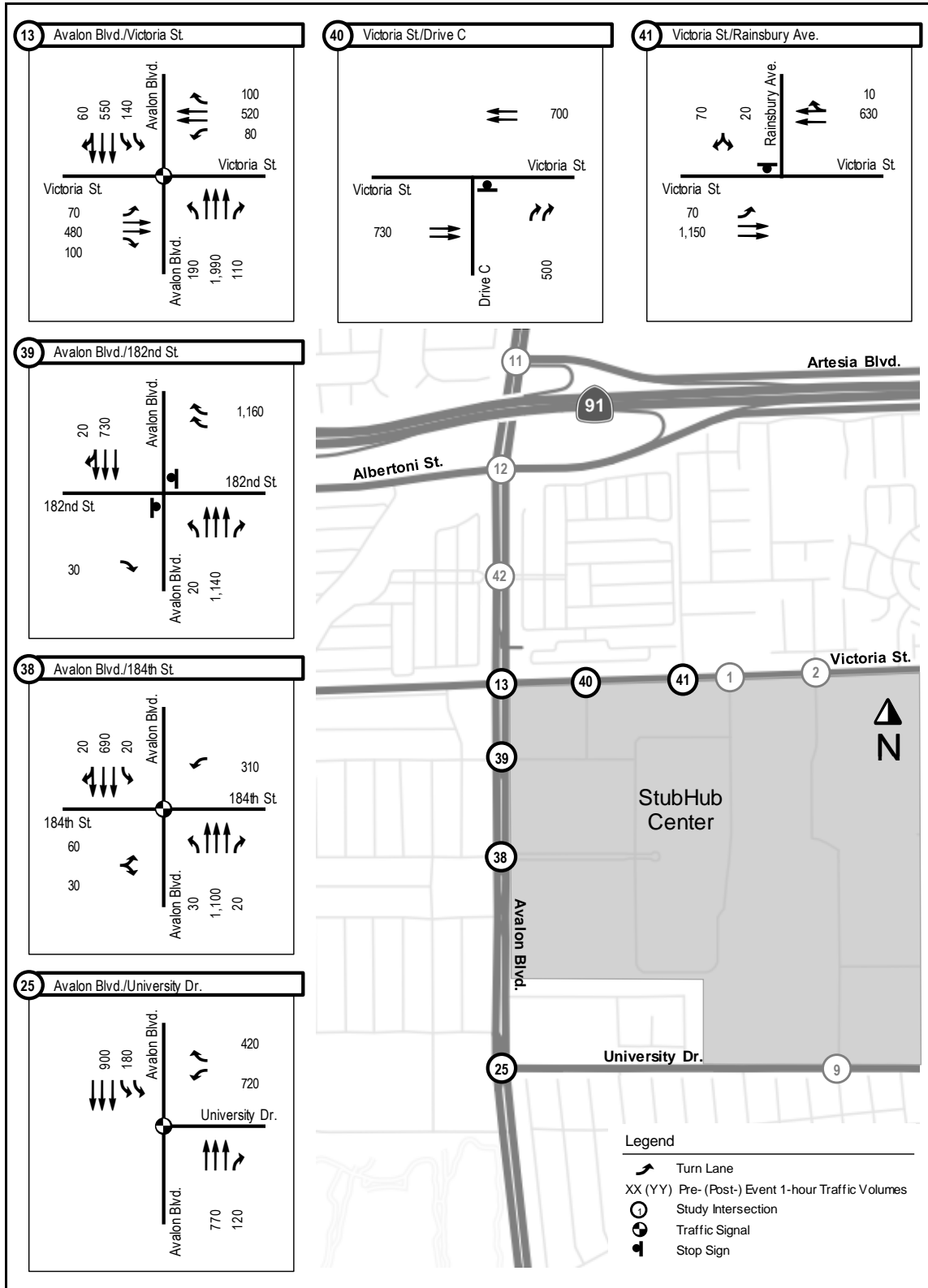


Exhibit 131: 2035 Sunday Plus Project with 30,000-Seats Post-Game Traffic Volumes and Lane Configurations

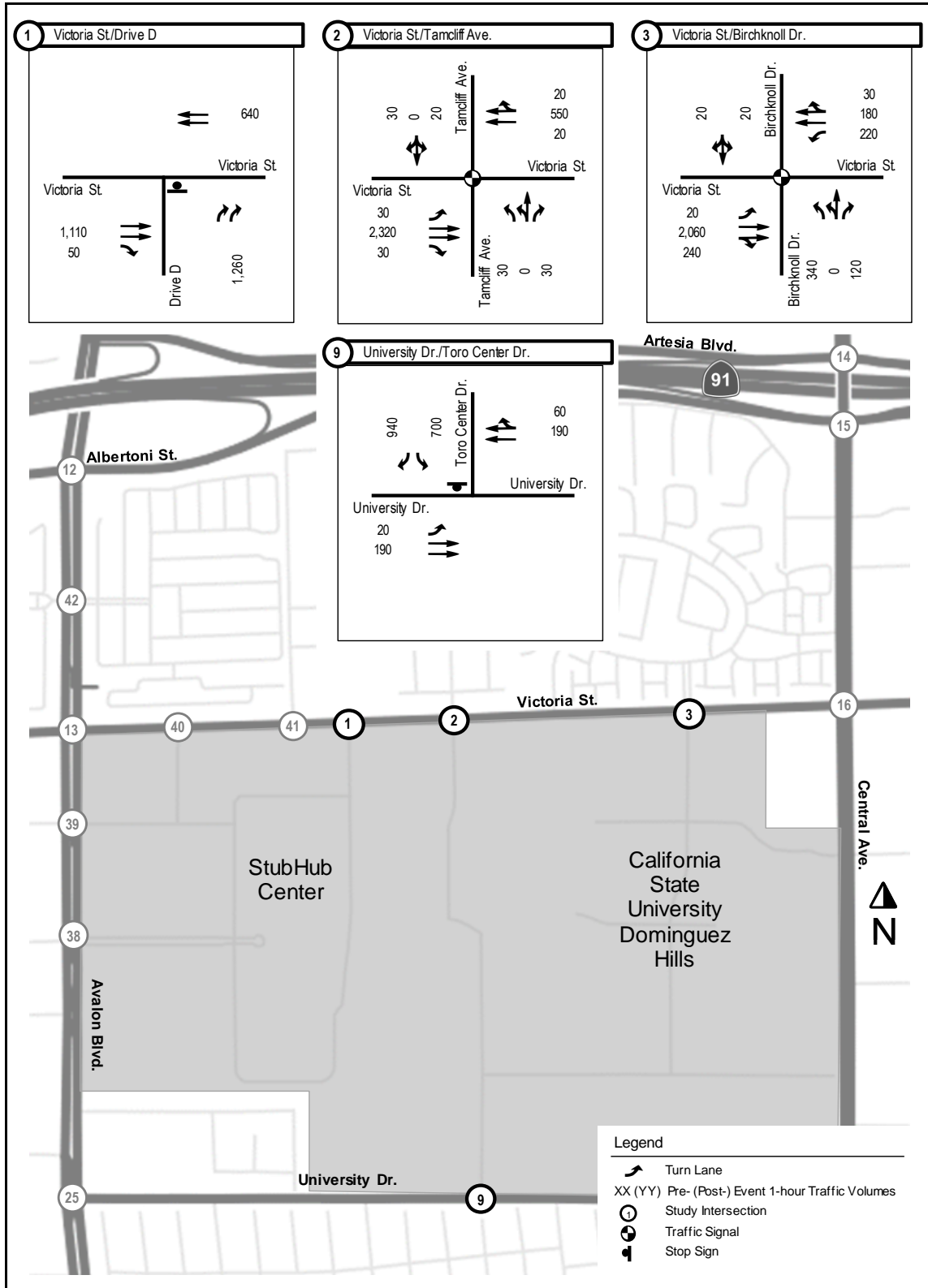


Exhibit 131: 2035 Sunday Plus Project with 30,000-Seats Post-Game Traffic Volumes and Lane Configurations (Map B)

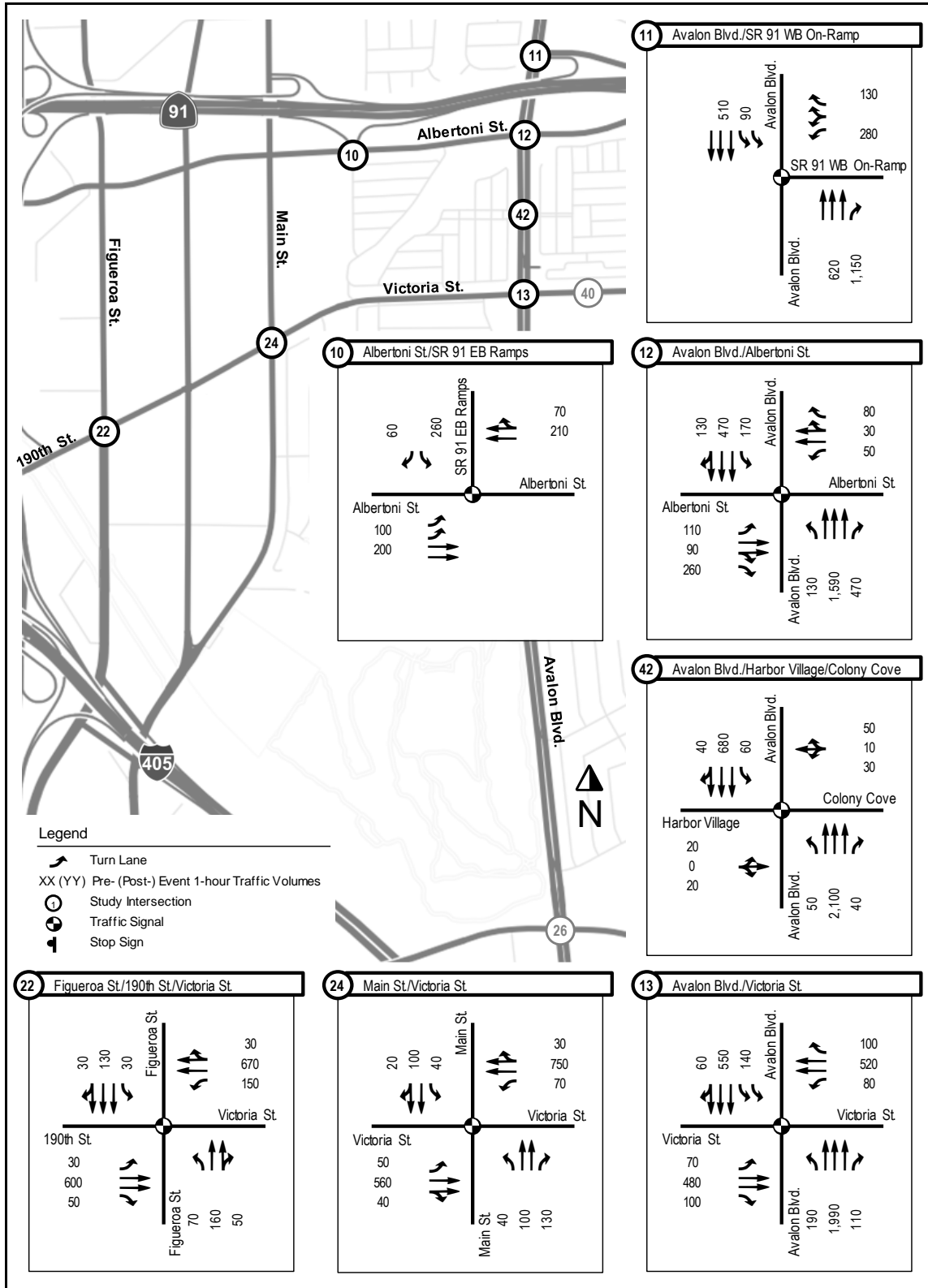


Exhibit 131: 2035 Sunday Plus Project with 30,000-Seats Post-Game Traffic Volumes and Lane Configurations (Map C)

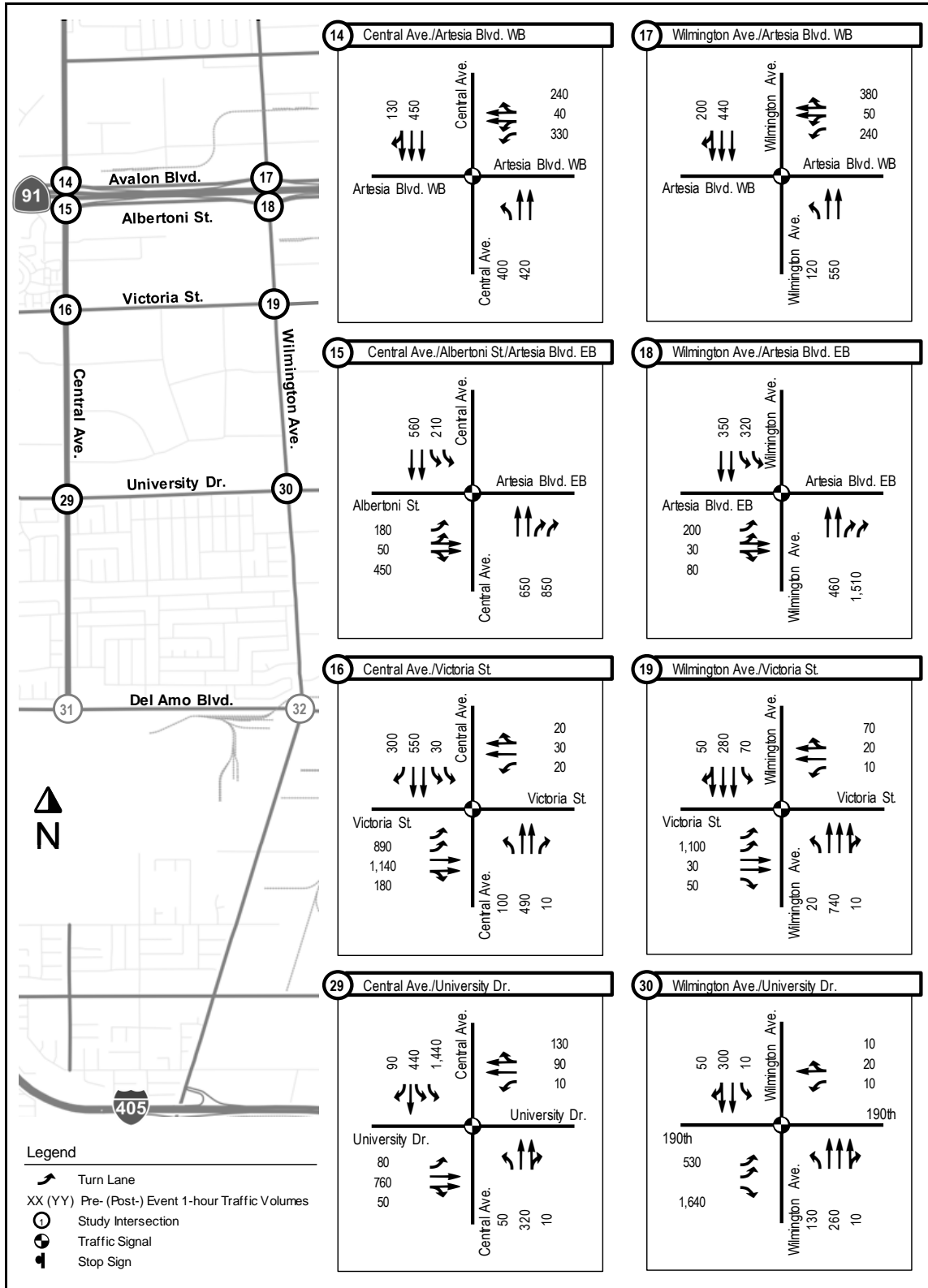


Exhibit 131: 2035 Sunday Plus Project with 30,000-Seats Post-Game Traffic Volumes and Lane Configurations (Map D)

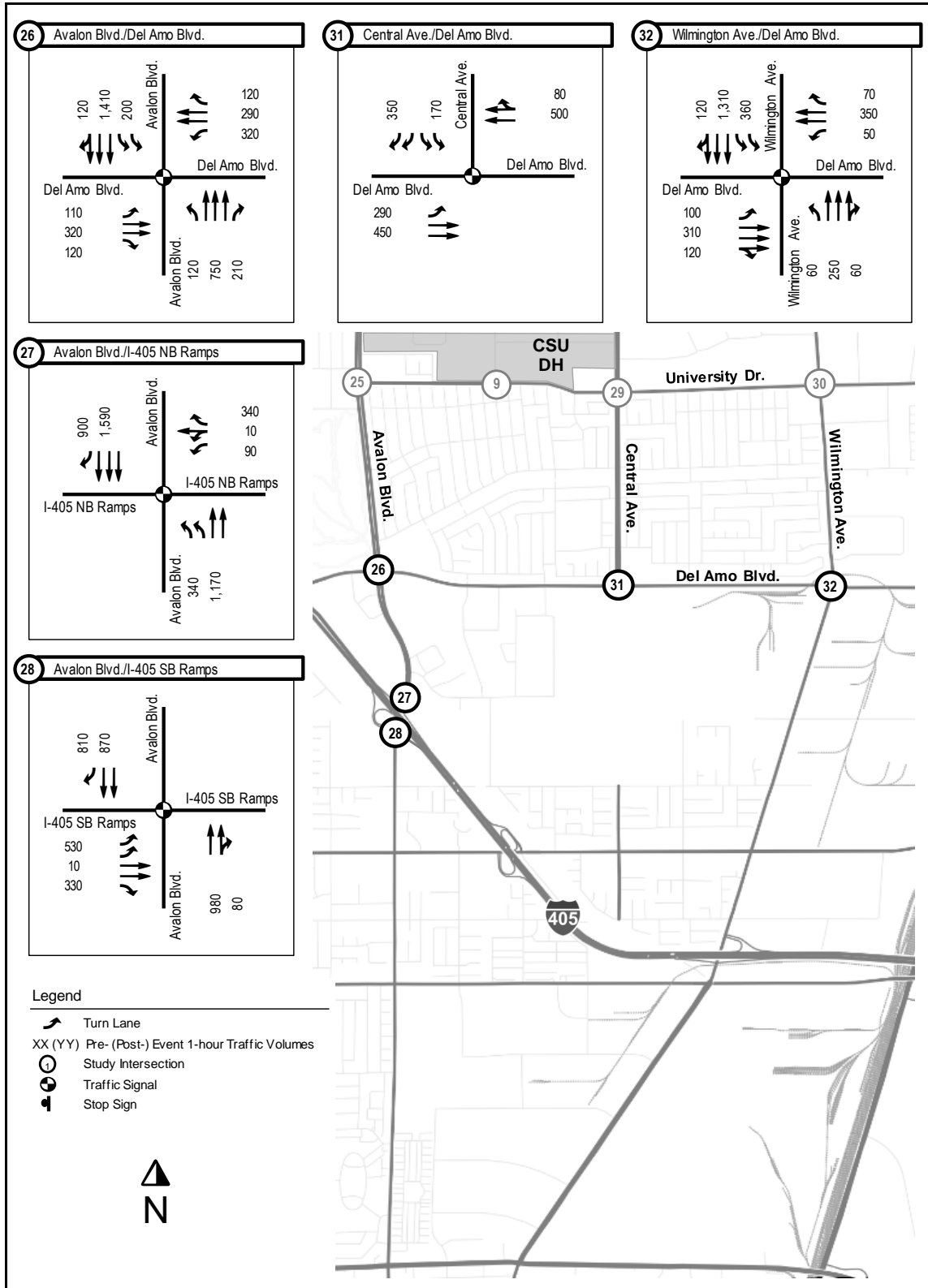


Exhibit 131: 2035 Sunday Plus Project with 30,000-Seats Post-Game Traffic Volumes and Lane Configurations (Map E)

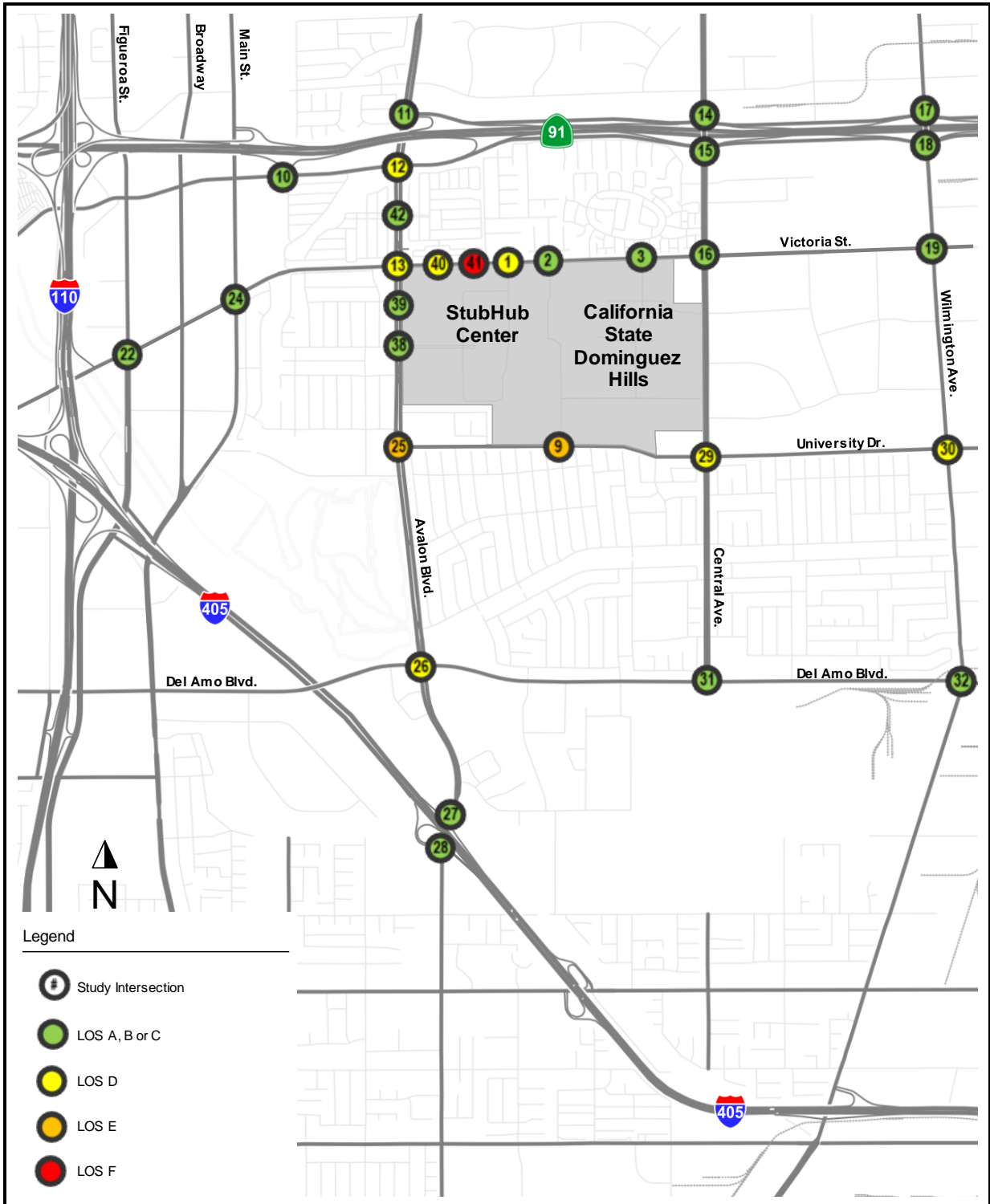


Exhibit 132: 2035 Sunday Plus Project with 30,000-Seats Pre-Game Peak Hour LOS (Map)

Study ID	Intersection Name	Control Type	2035 Scenarios					
			Pre-Game Peak Hour			Post-Game Peak Hour		
			Plus 27,000 LOS	Plus 30,000 LOS	Project Has Significant Impact?	Plus 27,000 LOS	Plus 30,000 LOS	Project Has Significant Impact?
1	Victoria St./Drive D	TWSC	A	D	No	A	D	No
2	Victoria St./Tamcliff Ave.	Signalized	A	A	No	B	D	No
3	Victoria St./Birchknoll Dr.	Signalized	A	A	No	B	F	Yes
9	University Dr./Toro Center Dr.	TWSC	A	E	Yes	B	C	No
10	Albertoni St./SR 91 EB Ramps	Signalized	A	B	No	A	A	No
11	Avalon Blvd./SR 91 WB On-Ramp	Signalized	B	C	No	C	D	No
12	Avalon Blvd./Albertoni St.	Signalized	D	D	No	B	B	No
13	Avalon Blvd./Victoria St.	Signalized	C	D	No	A	C	No
14	Central Ave./Artesia Blvd. WB	Signalized	A	A	No	A	B	No
15	Central Ave./Albertoni St./Artesia Blvd. EB	Signalized	A	B	No	A	B	No
16	Central Ave./Victoria St.	Signalized	C	C	No	A	C	No
17	Wilmington Ave./Artesia Blvd. WB	Signalized	A	A	No	A	A	No
18	Wilmington Ave./Artesia Blvd. EB	Signalized	A	A	No	C	B	No
19	Wilmington Ave./Victoria St.	Signalized	A	A	No	A	A	No
22	Figueroa St./190th St./Victoria St.	Signalized	A	B	No	A	A	No
24	Main St./Victoria St.	Signalized	A	B	No	A	A	No
25	Avalon Blvd./University Dr.	Signalized	B	E	Yes	D	C	No
26	Avalon Blvd./Del Amo Blvd.	Signalized	C	D	No	D	C	No
27	Avalon Blvd./I-405 NB Ramps	Signalized	B	C	No	A	A	No
28	Avalon Blvd./I-405 SB Ramps	Signalized	B	B	No	A	A	No
29	Central Ave./University Dr.	Signalized	D	D	No	B	D	No
30	Wilmington Ave./University Dr.	Signalized	C	D	No	A	A	No
31	Central Ave./Del Amo Blvd.	Signalized	A	A	No	A	A	No
32	Wilmington Ave./Del Amo Blvd.	Signalized	A	A	No	A	B	No
38	Avalon Blvd./184th St.	Signalized	A	A	No	A	A	No
39	Avalon Blvd./182nd St.	TWSC	A	A	No	B	C	No
40	Victoria St./Drive C	TWSC	B	D	No	A	A	No
41	Victoria St./Rainsbury Ave.	TWSC	D	F	Yes	A	A	No
42	Avalon Blvd./Harbor Village/Colony Cove	Signalized	B	C	No	A	B	No

Exhibit 134: Determination of Intersection Impact for the 2035 Sunday with 30,000 Seats

12.3.5 Determination of Transit Impacts

CSU guideline state that a significant transit impact would occur if, “A project significantly disrupts existing or planned transit facilities and services or significantly conflicts with applicable transit plans, guidelines, policies, or standards.” Based on this standard the 30,000-seat game does not impose any significant transit impacts since it would not disrupt any existing or planned transit facilities. The 30,000-seat game will complement the transit system by providing shuttle buses from transit centers to the stadium.

13 Recommended Mitigation Measures

This chapter begins with a discussion of how a Project's fair share contribution towards needed mitigations is calculated. This is followed by sections describing specific mitigations needed at sites where significant impacts are expected to occur.

13.1 Identification of Direct and Cumulative Impacts

CEQA distinguishes between direct impacts, which are attributable to the proposed project alone, and cumulative impacts, which are attributable to the proposed project in combination with other projects. Impacts that occur in the Existing Plus Project scenario are considered direct impacts, while impacts that do not occur in the Existing Plus Project scenario but do occur in future-year scenarios when other projects are assumed to have occurred are considered cumulative impacts. A project's responsibility (fair share) towards the cost of mitigations depends on the relationship between the existing, Project, and other project traffic volumes and the capacity of the facility. This is illustrated in Exhibit 135 for a facility with a notional capacity of 1,000 vehicles per hour:

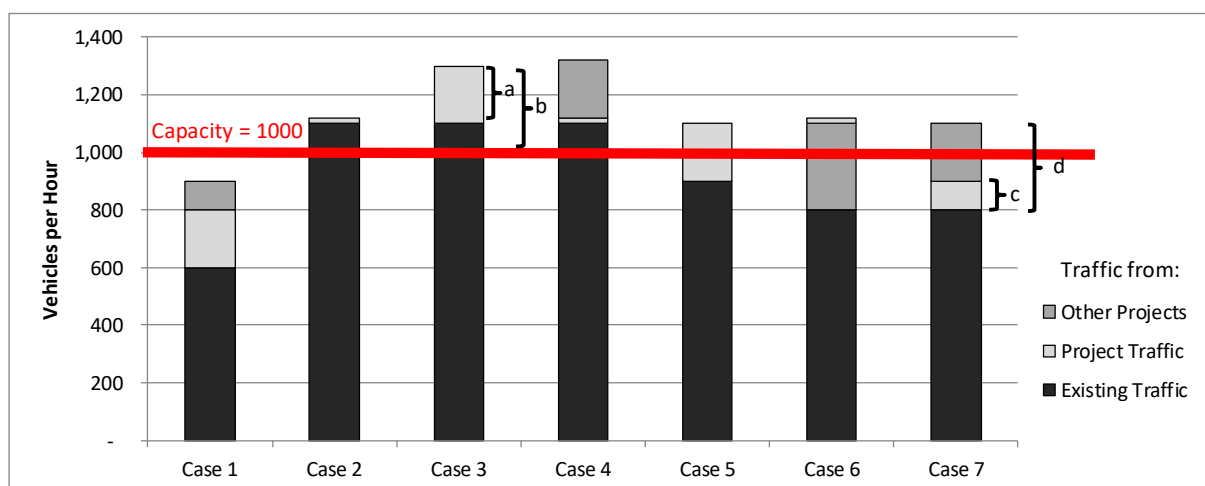


Exhibit 135: Computing a Project's Fair Share of Mitigation Costs

- **Case 1:** The existing traffic volumes, combined with the traffic volumes from the proposed project and other proposed projects, is less than the capacity of the facility. In such cases the proposed project would have no impact and would bear no responsibility towards improving the facility.
- **Case 2:** The existing traffic volumes already exceed the capacity of the facility, but the proposed project would add so little traffic that its impact would be less than significant. In such cases the proposed project would bear no responsibility towards improving the facility.
- **Case 3:** The existing traffic volumes already exceed the capacity of the facility, and traffic from the proposed project would exacerbate the deficiency. This would be a *direct impact* since it would occur even in the absence of other proposed projects. Under state law a future project cannot be held responsible for correcting existing deficiencies but it is responsible for its share of the post-project problem. The proposed project's fair share is calculated as its share of the deficiency, or "a" divided by "b".
- **Case 4:** Case 4 is similar to Case 2 in that there is an existing deficiency and the proposed project would add so little traffic that its impact by itself would be less than significant. The difference is that in Case 5 traffic from other reasonably foreseeable projects is added whose combined impact would be significant. Since the proposed project adds very little traffic to the

facility its impact would not be cumulatively significant project and so the project would bear no responsibility towards improving the facility.

- Case 5: The existing volumes are less than the capacity of the facility, but the proposed project adds a considerable amount of traffic and the addition of the proposed project's traffic would create a deficiency where none currently exists. This would be a *direct impact* since it would occur even in the absence of other proposed projects. In such cases the proposed project would be responsible for the entire cost of the mitigation measures needed to correct the deficiency.
- Case 6: The combination of the existing traffic volume plus traffic from other projects would exceed the capacity of the facility, and the proposed project would add only a very small amount of traffic to the total. In such a case the proposed project's impact would be less than significant and the proposed project would bear no responsibility towards improving the facility.
- Case 7: The combination of the existing traffic volume plus the proposed project's traffic volume would be below the capacity of the facility, the proposed project adds considerable traffic, and the further addition of traffic from other foreseeable projects would exceed the capacity. This would be a *cumulative impact* since it would only occur when the effect of the proposed project is analyzed in combination with the effects of other proposed projects. In such cases the proposed project's fair share is calculated as its share of the foreseeable growth in traffic, or "c" divided by "d".

A proposed project's impacts on a given facility may be different for different analysis periods. For example, it may be a Case 1 situation in the AM peak hour and Case 3 in the PM peak hour. In this study we assume that the University will take responsibility based on its highest computed fair share in either peak hour. Using this approach, Exhibit 136 and Exhibit 137 show the impact type and the Project's fair share towards the cost of improvements at study intersections for Alternative 1 and Alternative 2, respectively. Exhibit 138 and Exhibit 139 show the percentage of the deficiency that is attributable to the Project for study freeway segments.

Study ID	Intersection Name	Control Type	Is There an Existing Deficiency?		Project Has an Impact?				Is Impact (if any) Direct or Cumulative?		Impact Type for Project's Maximum Impact	Project's Fair Share
			AM Peak Hour	PM Peak Hour	Existing Plus Alt 1		2035 Plus Alt 1		AM	PM		
					AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour				
1	Victoria St./Drive D	TWSC	No	Yes	Yes	Yes	Yes	Yes	Direct	Direct	Case 3 in AM peak hour	100%
2	Victoria St./Tamcliff Ave.	Signalized	No	No	No	No	No	No	Cumulative	Cumulative	Case 7 in AM peak hour	66%
3	Victoria St./Birchknoll Dr.	Signalized	No	No	No	Yes	No	Yes		Direct	Case 5 in PM peak hour	100%
4	Victoria St./Project Service Rd.	N/A	No	No	No	No	No	No			No impact	
5	Central Ave./Charles Willard St.	TWSC	No	No	Yes	Yes	Yes	Yes	Direct	Direct	Case 5 in both peak hours	100%
6	Central Ave./Beachey Pl.	TWSC	No	No	Yes	Yes	Yes	Yes	Direct	Direct	Case 5 in both peak hours	100%
7	Central Ave./Glenn Curtiss St.	Signalized	No	No	No	No	No	No			No impact	
8	University Dr./Birchknoll Dr. Ext.	N/A	No	No	No	No	No	No			No impact	
9	University Dr./Toro Center Dr.	TWSC	No	No	Yes	Yes	Yes	Yes	Direct	Direct	Case 5 in both peak hours	65%
10	Albertoni St./SR 91 EB Ramps	Signalized	No	No	No	No	No	Yes		Cumulative	Case 7 in PM peak hour	50%
11	Avalon Blvd./SR 91 WB On-Ramp	Signalized	No	No	No	No	No	No			No impact	
12	Avalon Blvd./Albertoni St.	Signalized	No	No	No	No	No	Yes		Cumulative	Case 7 in PM peak hour	46%
13	Avalon Blvd./Victoria St.	Signalized	No	No	No	Yes	Yes	Yes		Direct	Case 5 in PM peak hour	100%
									Cumulative	Cumulative	Case 7 in AM peak hour	70%
14	Central Ave./Artesia Blvd. WB	Signalized	No	No	Yes	Yes	Yes	Yes	Direct	Direct	Case 5 in both peak hours	100%
15	Central Ave./Albertoni St./Artesia Blvd. EB	Signalized	No	No	Yes	Yes	Yes	Yes	Direct	Direct	Case 5 in both peak hours	100%
									Cumulative	Cumulative	Case 7 in AM peak hour	84%
16	Central Ave./Victoria St.	Signalized	No	No	Yes	Yes	Yes	Yes	Direct	Direct	Case 5 in both peak hours	75%
									Cumulative	Cumulative	Case 7 in AM peak hour	75%
17	Wilmington Ave./Artesia Blvd. WB	Signalized	No	No	No	No	No	No			No impact	
18	Wilmington Ave./Artesia Blvd. EB	Signalized	No	No	No	No	No	No			No impact	
19	Wilmington Ave./Victoria St.	Signalized	No	No	No	No	No	No			No impact	
20	I-110 SB Off-Ramp/190th St.	Signalized	Yes	Yes	Yes	Yes	Yes	Yes	Direct	Direct	Case 3 in AM peak hour	100%
21	I-110 NB On-Ramp/190th St.	Signalized	No	No	No	No	No	No			No impact	
22	Figuroa St./190th St./Victoria St.	Signalized	No	No	Yes	Yes	Yes	Yes	Direct	Direct	Case 5 in both peak hours	100%
									Cumulative	Cumulative	Case 7 in AM peak hour	72%
23	Broadway/Victoria St.	Signalized	No	No	No	No	No	Yes		Cumulative	Case 7 in PM peak hour	73%
24	Main St./Victoria St.	Signalized	No	No	No	Yes	No	Yes		Direct	Case 5 in PM peak hour	100%
										Cumulative	Case 7 in PM peak hour	71%
25	Avalon Blvd./University Dr.	Signalized	No	No	No	No	No	No			No impact	
26	Avalon Blvd./Del Amo Blvd.	Signalized	No	No	No	Yes	Yes	Yes	Cumulative	Direct	Case 5 in PM peak hour	55%
27	Avalon Blvd./I-405 NB Ramps	Signalized	No	No	No	No	No	No			No impact	
28	Avalon Blvd./I-405 SB Ramps	Signalized	No	No	No	No	No	No			No impact	
29	Central Ave./University Dr.	Signalized	No	No	Yes	Yes	Yes	Yes	Direct	Direct	Case 5 in both peak hours	61%
30	Wilmington Ave./University Dr.	Signalized	No	No	No	No	No	No			No impact	
31	Central Ave./Del Amo Blvd.	Signalized	No	No	No	No	No	No			No impact	
32	Wilmington Ave./Del Amo Blvd.	Signalized	No	No	No	No	No	No			No impact	
33	W. Artesia Blvd./Crenshaw Blvd.	Signalized	Yes	Yes	No	No	No	No			No impact	
34	W. 190th St./S. Western Ave.	Signalized	No	No	No	No	No	No			No impact	
35	W. Artesia Blvd./Vermont Ave.	Signalized	No	Yes	No	No	No	No			No impact	
36	Alameda St./Compton Blvd.	Signalized	No	No	No	No	No	No			No impact	
37	Alameda St./SR 91 EB Ramps	Signalized	No	No	No	No	No	No			No impact	

Exhibit 136: Impact Type and Fair Share, Intersections Alternative 1

Study ID	Intersection Name	Control Type	Is There an Existing Deficiency?		Project Has an Impact?				Is Impact (if any) Direct or Cumulative?		Impact Type for Project's Maximum Impact	Project's Fair Share
			AM Peak Hour	PM Peak Hour	Existing Plus Alt 2		2035 Plus Alt 2		AM	PM		
					AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour				
1	Victoria St./Drive D	TWSC	No	Yes	Yes	Yes	Yes	Yes	Direct	Direct	Case 3 in AM peak hour	100%
									Cumulative	Cumulative	Case 7 in AM peak hour	65%
2	Victoria St./Tamcliff Ave.	Signalized	No	No	No	No	No	No			No impact	
3	Victoria St./Birchknoll Dr.	Signalized	No	No	No	Yes	No	Yes		Direct	Case 5 in PM peak hour	100%
4	Victoria St./Project Service Rd.	N/A	No	No	No	No	No	No			No impact	
5	Central Ave./Charles Willard St.	TWSC	No	No	Yes	Yes	Yes	Yes	Direct	Direct	Case 5 in both peak hours	100%
6	Central Ave./Beachey Pl.	TWSC	No	No	Yes	Yes	Yes	Yes	Direct	Direct	Case 5 in both peak hours	100%
7	Central Ave./Glenn Curtiss St.	Signalized	No	No	No	No	No	No			No impact	
8	University Dr./Birchknoll Dr. Ext.	N/A	No	No	No	No	No	No			No impact	
9	University Dr./Toro Center Dr.	TWSC	No	No	Yes	Yes	Yes	Yes	Direct	Direct	Case 5 in both peak hours	61%
10	Albertoni St./SR 91 EB Ramps	Signalized	No	No	No	No	No	Yes		Cumulative	Case 7 in PM peak hour	48%
11	Avalon Blvd./SR 91 WB On-Ramp	Signalized	No	No	No	No	No	No			No impact	
12	Avalon Blvd./Albertoni St.	Signalized	No	No	No	No	No	Yes		Cumulative	Case 7 in PM peak hour	44%
13	Avalon Blvd./Victoria St.	Signalized	No	No	No	Yes	Yes	Yes		Direct	Case 5 in PM peak hour	100%
									Cumulative	Cumulative	Case 7 in both peak hours	68%
14	Central Ave./Artesia Blvd. WB	Signalized	No	No	Yes	Yes	Yes	Yes	Direct	Direct	Case 5 in both peak hours	100%
15	Central Ave./Albertoni St./Artesia Blvd. EB	Signalized	No	No	Yes	Yes	Yes	Yes	Direct	Direct	Case 5 in both peak hours	100%
									Cumulative	Cumulative	Case 7 in AM peak hour	83%
16	Central Ave./Victoria St.	Signalized	No	No	Yes	No	Yes	Yes	Direct	Cumulative	Case 5 in AM peak hour	74%
									Cumulative	Cumulative	Case 7 in AM peak hour	74%
17	Wilmington Ave./Artesia Blvd. WB	Signalized	No	No	No	No	No	No			No impact	
18	Wilmington Ave./Artesia Blvd. EB	Signalized	No	No	No	No	No	No			No impact	
19	Wilmington Ave./Victoria St.	Signalized	No	No	No	No	No	No			No impact	
20	I-110 SB Off-Ramp/190th St.	Signalized	Yes	Yes	Yes	Yes	Yes	Yes	Direct	Direct	Case 3 in AM peak hour	100%
21	I-110 NB On-Ramp/190th St.	Signalized	No	No	No	No	No	No			No impact	
22	Figueroa St./190th St./Victoria St.	Signalized	No	No	Yes	Yes	Yes	Yes	Direct	Direct	Case 5 in both peak hours	100%
									Cumulative	Cumulative	Case 7 in AM peak hour	71%
23	Broadway/Victoria St.	Signalized	No	No	No	No	No	Yes		Cumulative	Case 7 in PM peak hour	72%
24	Main St./Victoria St.	Signalized	No	No	No	Yes	No	Yes		Direct	Case 5 in PM peak hour	100%
										Cumulative	Case 7 in PM peak hour	70%
25	Avalon Blvd./University Dr.	Signalized	No	No	No	No	No	No			No impact	
26	Avalon Blvd./Del Amo Blvd.	Signalized	No	No	No	Yes	Yes	Yes	Cumulative	Direct	Case 5 in PM peak hour	100%
27	Avalon Blvd./I-405 NB Ramps	Signalized	No	No	No	No	No	No			No impact	
28	Avalon Blvd./I-405 SB Ramps	Signalized	No	No	No	No	No	No			No impact	
29	Central Ave./University Dr.	Signalized	No	No	Yes	Yes	Yes	Yes	Direct	Direct	Case 5 in both peak hours	61%
30	Wilmington Ave./University Dr.	Signalized	No	No	No	No	No	No			No impact	
31	Central Ave./Del Amo Blvd.	Signalized	No	No	No	No	No	No			No impact	
32	Wilmington Ave./Del Amo Blvd.	Signalized	No	No	No	No	No	No			No impact	
33	W. Artesia Blvd./Crenshaw Blvd.	Signalized	Yes	Yes	No	No	No	No			No impact	
34	W. 190th St./S. Western Ave.	Signalized	No	No	No	No	No	No			No impact	
35	W. Artesia Blvd./Vermont Ave.	Signalized	No	Yes	No	No	No	No			No impact	
36	Alameda St./Compton Blvd.	Signalized	No	No	No	No	No	No			No impact	
37	Alameda St./SR 91 EB Ramps	Signalized	No	No	No	No	No	No			No impact	

Exhibit 137: Impact Type and Fair Share, Intersections Alternative 2

Northbound/Eastbound

ID	CMP Station	Fwy Rte	Post Mile	Location	Is There a Deficiency?						Project Has a Significant Impact?				Percentage Attributable to Project
					Existing		2025 No Project		2035 No Project		2025 Plus Project		2035 Plus Project		
					AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	
91-1		91	6.344	Jct. Rte. 110 to Avalon Blvd.	No	Yes	No	Yes	No	Yes	No	No	No	Yes	7%
91-2		91	7.426	Avalon Blvd. to Central Ave.	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	4%
91-3		91	8.435	Central Ave. to Wilmington Ave.	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	3%
91-4		91	9.162	Wilmington Ave. to Alameda St.	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	3%
91-5		91	10.271	Alameda St. to Alameda St./Santa Fe	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	2%
91-6	1033	91	10.41	Alameda St./Santa Fe Ave. to Long B	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	4%
91-7		91	11.096	Long Beach Blvd. to Jct. Rte. 710	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	4%
91-8		91	11.681	Jct. Rte. 710 to Cherry Ave.	No	Yes	No	Yes	No	Yes	No	No	No	Yes	7%
91-9	1034	91	13.094	Cherry Ave. to Paramount Blvd.	No	Yes	No	Yes	No	Yes	No	No	No	Yes	6%
91-10		91	13.594	Paramount Blvd. to Downey Ave.	No	Yes	No	Yes	No	Yes	No	No	No	Yes	7%
91-11		91	14.103	Downey Ave. to Jct. Rte. 19	No	No	No	Yes	No	Yes	No	No	No	Yes	29%
91-12		91	14.618	Jct. Rte. 19 to Clark Ave.	No	Yes	No	Yes	No	Yes	No	No	No	Yes	11%
91-13		91	15.105	Clark Ave. to Bellflower Blvd.	No	No	No	Yes	No	Yes	No	No	No	Yes	25%
91-14		91	15.614	Bellflower Blvd. to Jct. Rte. 605	No	No	No	Yes	No	Yes	No	No	No	No	
110-1	1045	110	1.23	Channel St. to C St.	No	No	No	No	No	No	No	No	No	No	
110-2		110	2.771	C St. to Anaheim St.	No	No	No	No	No	No	No	No	No	No	
110-3		110	3.264	Anaheim St. to Jct. Rte. 1	No	No	No	No	No	No	No	No	No	No	
110-4		110	4.061	Jct. Rte. 1 to Sepulveda Blvd.	No	No	No	No	No	No	No	No	No	No	
110-5		110	5.451	Sepulveda Blvd. to Carson St.	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	12%
110-6		110	7.016	Carson St. to Torrance/Del Amo Blvd	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	5%
110-7		110	8.028	Torrance/Del Amo Blvd. to Jct. Rte. 4	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	6%
110-8		110	8.775	Jct. Rte. 405 to Jct. Rte. 91	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	8%
110-9		110	9.87	Jct. Rte. 91 to Redondo Beach Blvd.	No	No	No	No	No	No	No	No	No	No	
110-10		110	11.239	Redondo Beach Blvd. to Rosecrans A	No	No	No	No	No	No	No	No	No	No	
110-11		110	11.891	Rosecrans Ave. to El Segundo Blvd.	No	No	No	No	No	No	No	No	No	Yes	60%
110-12		110	12.898	El Segundo Blvd. to Jct. Rte. 105	No	No	No	No	No	No	No	No	No	Yes	60%
110-13		110	13.82	Jct. Rte. 105 to Century Blvd.	No	No	No	No	No	No	No	No	No	No	
110-14		110	14.967	Century Blvd. to Manchester Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	18%
110-15	1046	110	15.976	Manchester Ave. to Florence Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	33%
110-16		110	16.981	Florence Ave. to Gage Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	17%
110-17	1047	110	17.514	Gage Ave. to Slauson Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	18%
110-18		110	17.98	Slauson Ave. to 51st St.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	8%
110-19		110	18.495	51st St. to Vernon Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	7%
110-20		110	18.998	Vernon Ave. to Martin Luther King Jr.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	22%
110-21		110	19.502	Martin Luther King Jr. Blvd. to Exposit	No	No	No	No	No	No	No	No	No	No	
110-22		110	19.996	Exposition Blvd. to Jct. Rte. 10	No	No	No	No	No	No	No	No	No	No	
405-1		405	3.324	Lakewood Blvd. to Cherry Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	
405-2		405	4.879	Cherry Ave. to Orange Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	5%
405-3		405	5.388	Orange Ave. to Atlantic Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	3%
405-4		405	6.076	Atlantic Ave. to Long Beach Blvd	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	3%
405-5		405	6.34	Long Beach Blvd to Jct. Rte. 710	Yes	No	Yes	Yes	Yes	Yes	No	No	No	No	
405-6	1066	405	7.596	Jct. Rte. 710 to Alameda St.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	6%
405-7		405	8.784	Alameda St. to Wilmington Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	11%
405-8		405	9.556	Wilmington Ave. to Carson St.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	6%
405-9		405	10.541	Carson St. to Avalon Blvd.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	5%
405-10	1067	405	11.224	Avalon Blvd. to Jct. Rte. 110	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	22%
405-11		405	12.97	Jct. Rte. 110 to Vermont Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	25%
405-12		405	13.28	Vermont Ave. to Normandie Ave.	Yes	No	Yes	No	Yes	No	No	No	Yes	No	25%
405-13		405	13.826	Normandie Ave. to Western Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	33%
405-14		405	14.398	Western Ave. to Crenshaw Blvd.	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	8%
405-15		405	15.447	Crenshaw Blvd. to Artesia Blvd.	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	9%
405-16		405	16.573	Artesia Blvd. to Hawthorne Blvd.	Yes	No	Yes	No	Yes	No	No	No	No	No	
405-17		405	17.589	Hawthorne Blvd. to Inglewood Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	33%
405-18	1068	405	18.233	Inglewood Ave. to Rosecrans Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	20%
710-1		710	12.97	Jct. Rte. 91 to Alondra Blvd.	No	Yes	Yes	Yes	Yes	Yes	No	No	No	No	
710-2		710	13.945	Alondra Blvd. to Jct. Rte. 105	No	Yes	Yes	Yes	Yes	Yes	No	No	No	No	

Exhibit 138: Percentage of the Deficiency that is Attributable to the Project, Freeways for Alternative 1

Southbound/Westbound

ID	CMP Station	Fwy Rte	Post Mile	Location	Is There a Deficiency?						Project Has a Significant Impact?				Percentage Attributable to Project
					Existing		2025 No Project		2035 No Project		2025 Plus Project		2035 Plus Project		
					AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	
91-1		91	6.344	Jct. Rte. 110 to Avalon Blvd.	No	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	2%
91-2		91	7.426	Avalon Blvd. to Central Ave.	No	Yes	Yes	No	Yes	No	Yes	No	Yes	No	40%
91-3		91	8.435	Central Ave. to Wilmington Ave.	No	Yes	Yes	No	Yes	No	Yes	No	Yes	No	33%
91-4		91	9.162	Wilmington Ave. to Alameda St.	No	Yes	Yes	No	Yes	No	Yes	No	Yes	No	22%
91-5		91	10.271	Alameda St. to Alameda St./Santa Fe	No	Yes	Yes	No	Yes	No	Yes	No	Yes	No	7%
91-6	1033	91	10.41	Alameda St./Santa Fe Ave. to Long B	No	Yes	No	No	No	No	No	No	Yes	No	42%
91-7		91	11.096	Long Beach Blvd. to Jct. Rte. 710	No	Yes	Yes	No	Yes	No	Yes	No	Yes	No	11%
91-8		91	11.681	Jct. Rte. 710 to Cherry Ave.	No	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	7%
91-9	1034	91	13.094	Cherry Ave. to Paramount Blvd.	No	Yes	Yes	No	Yes	No	No	No	Yes	No	13%
91-10		91	13.594	Paramount Blvd. to Downey Ave.	No	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	7%
91-11		91	14.103	Downey Ave. to Jct. Rte. 19	No	No	Yes	No	Yes	No	No	No	Yes	No	7%
91-12		91	14.618	Jct. Rte. 19 to Clark Ave.	No	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	5%
91-13		91	15.105	Clark Ave. to Bellflower Blvd.	No	No	Yes	No	Yes	No	No	No	Yes	No	5%
91-14		91	15.614	Bellflower Blvd. to Jct. Rte. 605	No	No	Yes	No	Yes	No	No	No	Yes	No	5%
110-1	1045	110	1.23	Channel St. to C St.	No	No	No	No	No	No	No	No	No	No	
110-2		110	2.771	C St. to Anaheim St.	No	No	No	No	No	No	No	No	No	No	
110-3		110	3.264	Anaheim St. to Jct. Rte. 1	No	No	No	No	No	No	No	No	No	No	
110-4		110	4.061	Jct. Rte. 1 to Sepulveda Blvd.	No	No	No	No	No	No	No	No	No	No	
110-5		110	5.451	Sepulveda Blvd. to Carson St.	Yes	No	No	Yes	No	Yes	No	Yes	Yes	Yes	9%
110-6		110	7.016	Carson St. to Torrance/Del Amo Blvd	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	8%
110-7		110	8.028	Torrance/Del Amo Blvd. to Jct. Rte. 4	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	4%
110-8		110	8.775	Jct. Rte. 405 to Jct. Rte. 91	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	4%
110-9		110	9.87	Jct. Rte. 91 to Redondo Beach Blvd.	No	No	No	No	No	No	No	No	No	No	
110-10		110	11.239	Redondo Beach Blvd. to Rosecrans A	No	No	Yes	No	Yes	No	Yes	No	Yes	No	50%
110-11		110	11.891	Rosecrans Ave. to El Segundo Blvd.	No	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	29%
110-12		110	12.898	El Segundo Blvd. to Jct. Rte. 105	No	No	No	No	No	No	No	No	No	No	
110-13		110	13.82	Jct. Rte. 105 to Century Blvd.	No	No	No	No	No	No	No	No	No	No	
110-14		110	14.967	Century Blvd. to Manchester Ave.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	11%
110-15	1046	110	15.976	Manchester Ave. to Florence Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	13%
110-16		110	16.981	Florence Ave. to Gage Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	12%
110-17	1047	110	17.514	Gage Ave. to Slauson Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	12%
110-18		110	17.98	Slauson Ave. to 51st St.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	6%
110-19		110	18.495	51st St. to Vernon Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	14%
110-20		110	18.998	Vernon Ave. to Martin Luther King Jr.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	14%
110-21		110	19.502	Martin Luther King Jr. Blvd. to Exposi	No	No	Yes	Yes	Yes	Yes	No	No	Yes	Yes	13%
110-22		110	19.996	Exposition Blvd. to Jct. Rte. 10	No	No	No	No	No	No	No	No	No	No	
405-1		405	3.324	Lakewood Blvd. to Cherry Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	
405-2		405	4.879	Cherry Ave. to Orange Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	
405-3		405	5.388	Orange Ave. to Atlantic Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	3%
405-4		405	6.076	Atlantic Ave. to Long Beach Blvd	Yes	Yes	No	Yes	No	Yes	No	No	No	No	
405-5		405	6.34	Long Beach Blvd to Jct. Rte. 710	Yes	No	Yes	Yes	Yes	Yes	No	No	No	Yes	6%
405-6	1066	405	7.596	Jct. Rte. 710 to Alameda St.	Yes	Yes	No	Yes	No	Yes	No	No	No	Yes	9%
405-7		405	8.784	Alameda St. to Wilmington Ave.	Yes	Yes	No	Yes	No	Yes	No	No	No	Yes	11%
405-8		405	9.556	Wilmington Ave. to Carson St.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	6%
405-9		405	10.541	Carson St. to Avalon Blvd.	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	4%
405-10	1067	405	11.224	Avalon Blvd. to Jct. Rte. 110	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	25%
405-11		405	12.97	Jct. Rte. 110 to Vermont Ave.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	5%
405-12		405	13.28	Vermont Ave. to Normandie Ave.	Yes	No	No	Yes	No	Yes	No	No	No	Yes	11%
405-13		405	13.826	Normandie Ave. to Western Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	5%
405-14		405	14.398	Western Ave. to Crenshaw Blvd.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	22%
405-15		405	15.447	Crenshaw Blvd. to Artesia Blvd.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	7%
405-16		405	16.573	Artesia Blvd. to Hawthorne Blvd.	Yes	No	Yes	Yes	Yes	Yes	No	No	Yes	No	25%
405-17		405	17.589	Hawthorne Blvd. to Inglewood Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	15%
405-18	1068	405	18.233	Inglewood Ave. to Rosecrans Ave.	Yes	Yes	No	Yes	No	Yes	No	No	No	No	
710-1		710	12.97	Jct. Rte. 91 to Alondra Blvd.	No	Yes	No	No	No	No	No	No	No	No	
710-2		710	13.945	Alondra Blvd. to Jct. Rte. 105	No	Yes	Yes	No	Yes	No	No	No	Yes	No	22%

Exhibit 138: Percentage of the Deficiency that is Attributable to the Project, Freeways for Alternative 1 (continued)

Northbound/Eastbound

ID	CMP Station	Fwy Rte	Post Mile	Location	Is There a Deficiency?						Project Has a Significant Impact?				Percentage Attributable to Project
					Existing		2025 No Project		2035 No Project		2025 Plus Project		2035 Plus Project		
					AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	
91-1		91	6.344	Jct. Rte. 110 to Avalon Blvd.	No	Yes	No	Yes	No	Yes	No	No	No	Yes	7%
91-2		91	7.426	Avalon Blvd. to Central Ave.	No	Yes	No	Yes	No	Yes	No	No	Yes	Yes	4%
91-3		91	8.435	Central Ave. to Wilmington Ave.	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	3%
91-4		91	9.162	Wilmington Ave. to Alameda St.	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	3%
91-5		91	10.271	Alameda St. to Alameda St./Santa Fe	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	2%
91-6	1033	91	10.41	Alameda St./Santa Fe Ave. to Long B	No	Yes	No	Yes	No	Yes	No	No	No	Yes	8%
91-7		91	11.096	Long Beach Blvd. to Jct. Rte. 710	No	Yes	No	Yes	No	Yes	No	No	No	Yes	6%
91-8		91	11.681	Jct. Rte. 710 to Cherry Ave.	No	Yes	No	Yes	No	Yes	No	No	No	Yes	7%
91-9	1034	91	13.094	Cherry Ave. to Paramount Blvd.	No	Yes	No	Yes	No	Yes	No	No	No	Yes	6%
91-10		91	13.594	Paramount Blvd. to Downey Ave.	No	Yes	No	Yes	No	Yes	No	No	No	Yes	7%
91-11		91	14.103	Downey Ave. to Jct. Rte. 19	No	No	No	Yes	No	Yes	No	No	No	Yes	29%
91-12		91	14.618	Jct. Rte. 19 to Clark Ave.	No	Yes	No	Yes	No	Yes	No	No	No	Yes	11%
91-13		91	15.105	Clark Ave. to Bellflower Blvd.	No	No	No	Yes	No	Yes	No	No	No	No	
91-14		91	15.614	Bellflower Blvd. to Jct. Rte. 605	No	No	No	Yes	No	Yes	No	No	No	No	
110-1	1045	110	1.23	Channel St. to C St.	No	No	No	No	No	No	No	No	No	No	
110-2		110	2.771	C St. to Anaheim St.	No	No	No	No	No	No	No	No	No	No	
110-3		110	3.264	Anaheim St. to Jct. Rte. 1	No	No	No	No	No	No	No	No	No	No	
110-4		110	4.061	Jct. Rte. 1 to Sepulveda Blvd.	No	No	No	No	No	No	No	No	No	No	
110-5		110	5.451	Sepulveda Blvd. to Carson St.	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	12%
110-6		110	7.016	Carson St. to Torrance/Del Amo Blvd	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	5%
110-7		110	8.028	Torrance/Del Amo Blvd. to Jct. Rte. 4	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	6%
110-8		110	8.775	Jct. Rte. 405 to Jct. Rte. 91	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	8%
110-9		110	9.87	Jct. Rte. 91 to Redondo Beach Blvd.	No	No	No	No	No	No	No	No	No	No	
110-10		110	11.239	Redondo Beach Blvd. to Rosecrans A	No	No	No	No	No	No	No	No	No	No	
110-11		110	11.891	Rosecrans Ave. to El Segundo Blvd.	No	No	No	No	No	No	No	No	No	Yes	60%
110-12		110	12.898	El Segundo Blvd. to Jct. Rte. 105	No	No	No	No	No	No	No	No	No	Yes	60%
110-13		110	13.82	Jct. Rte. 105 to Century Blvd.	No	No	No	No	No	No	No	No	No	No	
110-14		110	14.967	Century Blvd. to Manchester Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	18%
110-15	1046	110	15.976	Manchester Ave. to Florence Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	25%
110-16		110	16.981	Florence Ave. to Gage Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	
110-17	1047	110	17.514	Gage Ave. to Slauson Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	18%
110-18		110	17.98	Slauson Ave. to 51st St.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	8%
110-19		110	18.495	51st St. to Vernon Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	7%
110-20		110	18.998	Vernon Ave. to Martin Luther King Jr.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	22%
110-21		110	19.502	Martin Luther King Jr. Blvd. to Exposi	No	No	No	No	No	No	No	No	No	No	
110-22		110	19.996	Exposition Blvd. to Jct. Rte. 10	No	No	No	No	No	No	No	No	No	No	
405-1		405	3.324	Lakewood Blvd. to Cherry Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	
405-2		405	4.879	Cherry Ave. to Orange Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	
405-3		405	5.388	Orange Ave. to Atlantic Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	3%
405-4		405	6.076	Atlantic Ave. to Long Beach Blvd	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	3%
405-5		405	6.34	Long Beach Blvd to Jct. Rte. 710	Yes	No	Yes	Yes	Yes	Yes	No	No	No	No	
405-6	1066	405	7.596	Jct. Rte. 710 to Alameda St.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	6%
405-7		405	8.784	Alameda St. to Wilmington Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	7%
405-8		405	9.556	Wilmington Ave. to Carson St.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	6%
405-9		405	10.541	Carson St. to Avalon Blvd.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	5%
405-10	1067	405	11.224	Avalon Blvd. to Jct. Rte. 110	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	22%
405-11		405	12.97	Jct. Rte. 110 to Vermont Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	25%
405-12		405	13.28	Vermont Ave. to Normandie Ave.	Yes	No	Yes	No	Yes	No	No	No	Yes	No	25%
405-13		405	13.826	Normandie Ave. to Western Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	33%
405-14		405	14.398	Western Ave. to Crenshaw Blvd.	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	8%
405-15		405	15.447	Crenshaw Blvd. to Artesia Blvd.	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	9%
405-16		405	16.573	Artesia Blvd. to Hawthorne Blvd.	Yes	No	Yes	No	Yes	No	No	No	No	No	
405-17		405	17.589	Hawthorne Blvd. to Inglewood Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	33%
405-18	1068	405	18.233	Inglewood Ave. to Rosecrans Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	20%
710-1		710	12.97	Jct. Rte. 91 to Alondra Blvd.	No	Yes	Yes	Yes	Yes	Yes	No	No	No	No	
710-2		710	13.945	Alondra Blvd. to Jct. Rte. 105	No	Yes	Yes	Yes	Yes	Yes	No	No	No	No	

Exhibit 139: Percentage of the Deficiency that is Attributable to the Project, Freeways for Alternative 2

Southbound/Westbound

ID	CMP Station	Fwy Rte	Post Mile	Location	Is There a Deficiency?						Project Has a Significant Impact?				Percentage Attributable to Project
					Existing		2025 No Project		2035 No Project		2025 Plus Project		2035 Plus Project		
					AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	
91-1		91	6.344	Jct. Rte. 110 to Avalon Blvd.	No	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	2%
91-2		91	7.426	Avalon Blvd. to Central Ave.	No	Yes	Yes	No	Yes	No	No	No	Yes	No	50%
91-3		91	8.435	Central Ave. to Wilmington Ave.	No	Yes	Yes	No	Yes	No	Yes	No	Yes	No	33%
91-4		91	9.162	Wilmington Ave. to Alameda St.	No	Yes	Yes	No	Yes	No	Yes	No	Yes	No	22%
91-5		91	10.271	Alameda St. to Alameda St./Santa Fe	No	Yes	Yes	No	Yes	No	Yes	No	Yes	No	7%
91-6	1033	91	10.41	Alameda St./Santa Fe Ave. to Long B	No	Yes	No	No	No	No	No	No	Yes	No	36%
91-7		91	11.096	Long Beach Blvd. to Jct. Rte. 710	No	Yes	Yes	No	Yes	No	Yes	No	Yes	No	11%
91-8		91	11.681	Jct. Rte. 710 to Cherry Ave.	No	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	7%
91-9	1034	91	13.094	Cherry Ave. to Paramount Blvd.	No	Yes	Yes	No	Yes	No	No	No	Yes	No	9%
91-10		91	13.594	Paramount Blvd. to Downey Ave.	No	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	7%
91-11		91	14.103	Downey Ave. to Jct. Rte. 19	No	No	Yes	No	Yes	No	No	No	Yes	No	5%
91-12		91	14.618	Jct. Rte. 19 to Clark Ave.	No	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	3%
91-13		91	15.105	Clark Ave. to Bellflower Blvd.	No	No	Yes	No	Yes	No	No	No	Yes	No	5%
91-14		91	15.614	Bellflower Blvd. to Jct. Rte. 605	No	No	Yes	No	Yes	No	No	No	Yes	No	5%
110-1	1045	110	1.23	Channel St. to C St.	No	No	No	No	No	No	No	No	No	No	
110-2		110	2.771	C St. to Anaheim St.	No	No	No	No	No	No	No	No	No	No	
110-3		110	3.264	Anaheim St. to Jct. Rte. 1	No	No	No	No	No	No	No	No	No	No	
110-4		110	4.061	Jct. Rte. 1 to Sepulveda Blvd.	No	No	No	No	No	No	No	No	No	No	
110-5		110	5.451	Sepulveda Blvd. to Carson St.	Yes	No	No	Yes	No	Yes	No	Yes	Yes	Yes	9%
110-6		110	7.016	Carson St. to Torrance/Del Amo Blvd	Yes	No	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	8%
110-7		110	8.028	Torrance/Del Amo Blvd. to Jct. Rte. 4	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	4%
110-8		110	8.775	Jct. Rte. 405 to Jct. Rte. 91	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	4%
110-9		110	9.87	Jct. Rte. 91 to Redondo Beach Blvd.	No	No	No	No	No	No	No	No	No	No	
110-10		110	11.239	Redondo Beach Blvd. to Rosecrans A	No	No	Yes	No	Yes	No	No	No	Yes	No	60%
110-11		110	11.891	Rosecrans Ave. to El Segundo Blvd.	No	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	29%
110-12		110	12.898	El Segundo Blvd. to Jct. Rte. 105	No	No	No	No	No	No	No	No	No	No	
110-13		110	13.82	Jct. Rte. 105 to Century Blvd.	No	No	No	No	No	No	No	No	No	No	
110-14		110	14.967	Century Blvd. to Manchester Ave.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	11%
110-15	1046	110	15.976	Manchester Ave. to Florence Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	13%
110-16		110	16.981	Florence Ave. to Gage Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	12%
110-17	1047	110	17.514	Gage Ave. to Slauson Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	12%
110-18		110	17.98	Slauson Ave. to 51st St.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	9%
110-19		110	18.495	51st St. to Vernon Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	14%
110-20		110	18.998	Vernon Ave. to Martin Luther King Jr.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	14%
110-21		110	19.502	Martin Luther King Jr. Blvd. to Exposit	No	No	Yes	Yes	Yes	Yes	No	No	Yes	Yes	9%
110-22		110	19.996	Exposition Blvd. to Jct. Rte. 10	No	No	No	No	No	No	No	No	No	No	
405-1		405	3.324	Lakewood Blvd. to Cherry Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	
405-2		405	4.879	Cherry Ave. to Orange Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	
405-3		405	5.388	Orange Ave. to Atlantic Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	3%
405-4		405	6.076	Atlantic Ave. to Long Beach Blvd	Yes	Yes	No	Yes	No	Yes	No	No	No	No	
405-5		405	6.34	Long Beach Blvd to Jct. Rte. 710	Yes	No	Yes	Yes	Yes	Yes	No	No	No	Yes	6%
405-6	1066	405	7.596	Jct. Rte. 710 to Alameda St.	Yes	Yes	No	Yes	No	Yes	No	No	No	Yes	9%
405-7		405	8.784	Alameda St. to Wilmington Ave.	Yes	Yes	No	Yes	No	Yes	No	No	No	Yes	11%
405-8		405	9.556	Wilmington Ave. to Carson St.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	4%
405-9		405	10.541	Carson St. to Avalon Blvd.	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	4%
405-10	1067	405	11.224	Avalon Blvd. to Jct. Rte. 110	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	25%
405-11		405	12.97	Jct. Rte. 110 to Vermont Ave.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	5%
405-12		405	13.28	Vermont Ave. to Normandie Ave.	Yes	No	No	Yes	No	Yes	No	No	No	Yes	11%
405-13		405	13.826	Normandie Ave. to Western Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	5%
405-14		405	14.398	Western Ave. to Crenshaw Blvd.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	6%
405-15		405	15.447	Crenshaw Blvd. to Artesia Blvd.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	7%
405-16		405	16.573	Artesia Blvd. to Hawthorne Blvd.	Yes	No	Yes	Yes	Yes	Yes	No	No	Yes	No	25%
405-17		405	17.589	Hawthorne Blvd. to Inglewood Ave.	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	15%
405-18	1068	405	18.233	Inglewood Ave. to Rosecrans Ave.	Yes	Yes	No	Yes	No	Yes	No	No	No	No	
710-1		710	12.97	Jct. Rte. 91 to Alondra Blvd.	No	Yes	No	No	No	No	No	No	No	No	
710-2		710	13.945	Alondra Blvd. to Jct. Rte. 105	No	Yes	Yes	No	Yes	No	No	No	Yes	No	22%

Exhibit 139: Percentage of the Deficiency that is Attributable to the Project, Freeways for Alternative 2 (continued)

13.2 Mitigations Needed with Alternative 1 by 2025

Analysis shown in Section 10.1 found that in 2025 the Project Alternative 1 would have impacts at 10 intersections and at 1 freeway segment. These are described in the sub-sections below.

13.2.1 Intersection Mitigations Needed with Alternative 1 by 2025

Exhibit 140 shows the measures that could be used to mitigate these impacts, which are also described below. Appendix T shows outlines of these measures on aerial photographs.

Intersection #1, Victoria St./Drive D

Because the Project would create a deficiency in the AM peak hour that would not exist in the absence of the Project, the University would be responsible for the full cost of this improvement. With implementation of the following improvement, operations at the intersection would improve to LOS A in the AM peak hour and LOS D in the PM peak hour, thus fully mitigating the project impact:

- Install traffic signal at intersection

However, this intersection is under the jurisdiction and control of the City of Carson and, accordingly, the University cannot guarantee implementation of this improvement. For this reason, the recommended improvement is infeasible and the identified impact at this intersection is considered significant and unavoidable.

Intersection #3, Victoria St./Birchknoll Dr.

Because the Project would create a deficiency in the AM peak hour that would not exist in the absence of the Project, the University would be responsible for the full cost of this improvement. With implementation of the following improvement, operations at the intersection would improve to LOS B in the AM peak hour and LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add second westbound left-turn lane

However, this intersection is under the jurisdiction and control of the City of Carson and, accordingly, the University cannot guarantee implementation of this improvement. For this reason, the recommended improvement is infeasible and the identified impact at this intersection is considered significant and unavoidable.

Intersection #5, Central Ave./Charles Willard St.

Because the Project would create a deficiency in the AM peak hour that would not exist in the absence of the Project, the University would be responsible for the full cost of this improvement. With implementation of the following improvement, operations at the intersection would improve to LOS B in the AM peak hour and LOS C in the PM peak hour, thus fully mitigating the project impact:

- Install traffic signal at intersection

However, this intersection is under the jurisdiction and control of the City of Carson and, accordingly, the University cannot guarantee implementation of this improvement. For this reason, the recommended improvement is infeasible and the identified impact at this intersection is considered significant and unavoidable.

Intersection #6, Central Ave./Beachey Pl.

Because the Project would create a deficiency in the AM peak hour that would not exist in the absence of the Project, the University would be responsible for the full cost of this improvement. With implementation of the following improvement, operations at the intersection would improve to LOS A in the AM peak hour and LOS A in the PM peak hour, thus fully mitigating the project impact:

- Install traffic signal at intersection

However, this intersection is under the jurisdiction and control of the City of Carson and, accordingly, the University cannot guarantee implementation of this improvement. For this reason, the recommended improvement is infeasible and the identified impact at this intersection is considered significant and unavoidable.

Intersection #13, Avalon Blvd./Victoria St.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the intersection. With implementation of the following improvements, operations at the intersection would improve to LOS B in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Convert eastbound exclusive right-turn lane into an eastbound through/right-turn shared lane
- Convert westbound exclusive right-turn lane into an eastbound through/right-turn shared lane
- Add second northbound left-turn lane

However, these improvements may be physically infeasible due to difficulties with the right of way for the additional northbound left-turn lane because high voltage power lines are located in the median of Avalon Blvd. In addition, this intersection is under the jurisdiction and control of the City of Carson, and, as such, the University cannot guarantee implementation of the improvements. Moreover, the City does not currently have an adopted fee program in place to provide the non-CSU portion of the cost of improvements. For these reasons, the recommended improvements are infeasible and the identified impact at this intersection is considered significant and unavoidable.

Intersection #14, Central Ave/Artesia Blvd. WB

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the intersection. With implementation of the following improvements, operations at the intersection would improve to LOS C in the AM peak hour and to LOS B in the PM peak hours, thus fully mitigating the project impact:

- Add second northbound left-turn lane

However, since this improvement may be physically infeasible due to right-of-way constraints. In addition, the overcrossing is under the jurisdiction and control of Caltrans, a different State agency from CSU. Nonetheless, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. However, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

Intersection #15, Central Ave./Albertoni St./Artesia Blvd. EB

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the intersection. With implementation of the following improvements, operations at the intersection would improve to LOS D in the AM and to LOS D in the PM peak hours, thus fully mitigating the project impact:

- Add second eastbound right-turn lane

However, since this improvement may be physically infeasible due to right-of-way constraints. In addition, the overcrossing is under the jurisdiction and control of Caltrans, a different State agency from CSU. Nonetheless, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. However, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

Intersection #20, I-110 SB Off-Ramp/190th St.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the intersection. With implementation of the following improvements, operations at the intersection would improve to LOS D in the AM peak hour and to LOS D in the PM peak hours, thus fully mitigating the project impact:

- Add a southbound left/right-shared lane

However, this ramp is under the jurisdiction and control of Caltrans, a different State agency from CSU. Nonetheless, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. However, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

Intersection #22, Figueroa St./190th St./Victoria St.

Because the Project would create a deficiency in the AM peak hour that would not exist in the absence of the Project, the University would be responsible for the full cost of this improvement. With implementation of the following improvements, operations at the intersection would improve to LOS C in the AM peak hour and to LOS D in the PM peak hours, thus fully mitigating the impact:

- Add third westbound through lane
- Add third eastbound through lane
- Re-phase the signal for protected left-turns for the eastbound and westbound phases.

However, this intersection is under the jurisdiction and control of the City of Carson and, accordingly, the University cannot guarantee implementation of this improvement. For this reason, the recommended improvement is infeasible and the identified impact at this intersection is considered significant and unavoidable.

Intersection #24, Main St./Victoria St.

Because the Project would create a deficiency in the AM peak hour that would not exist in the absence of the Project, the University would be responsible for the full cost of this improvement. With implementation of the following improvements, operations at the intersection would improve to LOS C in the AM peak hour and to LOS D in the PM peak hours:

- Add westbound exclusive right-turn lane
- Add third eastbound through lane

However, this intersection is under the jurisdiction and control of the City of Carson and, accordingly, the University cannot guarantee implementation of this improvement. For this reason, the recommended improvement is infeasible and the identified impact at this intersection is considered significant and unavoidable.

Study ID	Intersection Name	Control Type	With Project		Recommended Mitigation	With Mitigation	
			LOS (ICU or HCM)			LOS (ICU or HCM)	
			AM Peak Hour	PM Peak Hour		AM Peak Hour	PM Peak Hour
1	Victoria St./Drive D	TWSC	F	F	Signalize	A	D
3	Victoria St./Birchknoll Dr.	Signalized	D	F	Add 2nd WB Left-Turn Lane	B	D
5	Central Ave./Charles Willard St.	TWSC	F	F	Signalize	B	C
6	Central Ave./Beachey Pl.	TWSC	F	F	Signalize	A	A
13	Avalon Blvd./Victoria St.	Signalized	C	F	Add 2nd NB Left-Turn Lane, Convert EB Exclusive Right-Turn Lane to a Through/Right-Shared Lane, Convert WB Exclusive Right-Turn Lane to a Through/Right-Shared Lane	B	D
14	Central Ave./Artesia Blvd. WB	Signalized	D	E	Add 2nd NB Left-Turn Lane	C	B
15	Central Ave./Albertoni St./Artesia Blvd. EB	Signalized	F	E	Add 2nd EB Right-Turn Lane	D	D
20	I-110 SB Off-Ramp/190th St.	Signalized	F	F	Add a SB Left/Right-Shared Lane	D	F
22	Figueroa St./190th St./Victoria St.	Signalized	E	F	Add 3rd WB Through Lane, Add 3rd EB Through Lane	C	D
24	Main St./Victoria St.	Signalized	C	F	Add 3rd EB Through Lane, Add WB Exclusive Right-Turn Lane	C	D

Exhibit 140: Intersection Weekday Mitigations Needed by 2025 with Alternative 1

13.2.2 Weekday Freeway Mitigation 2025 - Alternative 1

Exhibit 141 shows the potential improvements that could be made to mitigate the significant impacts to freeway mainline segments that would result when project traffic is combined with other cumulative background traffic forecast to occur by year 2025. The percentage of the deficiency attributable to the project is illustrated in Table 138. The potential improvements for each significantly impacted segment are described in the following mitigation measures:

SR-91 eastbound, Avalon Blvd. to Central Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 eastbound, Avalon Boulevard to Central Avenue. Implementation of the following improvement would improve operations at the freeway to LOS C in the AM peak hour and to LOS F(0) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 eastbound, Central Ave. to Wilmington Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 eastbound, Central Avenue to Wilmington Avenue. Implementation of the following improvement would improve operations at the freeway to LOS C in the AM peak hour and to LOS F(1) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 eastbound, Wilmington Ave. to Alameda St.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 eastbound, Wilmington Avenue to Alameda Street. Implementation of the following improvement would improve operations at the freeway to LOS C in the AM peak hour and to LOS F(1) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 eastbound, Alameda St. to Alameda St./Santa Fe Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 eastbound, Alameda Street to Alameda Street/Santa Fe Avenue. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS F(3) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 eastbound, Alameda St./Santa Fe Ave. to Long Beach Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 eastbound, Alameda Street/Santa Fe Avenue to Long Beach Boulevard. Implementation of the following improvement would improve operations at the freeway to LOS C in the AM peak hour and to LOS F(0) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 eastbound, Long Beach Blvd. to Jct. Rte. 710

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 eastbound, Long Beach Boulevard to the Junction with Route 710. Implementation of the following improvement would improve operations at the freeway to LOS C in the AM peak hour and to LOS F(0) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 northbound, Sepulveda Blvd. to Carson St.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 northbound, Sepulveda Boulevard to Carson Street. Implementation of the following improvement would improve operations at the freeway to LOS E in the AM peak hour and to LOS C in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 northbound, Carson St. to Torrance/Del Amo Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 northbound, Carson Street to Torrance/Del Amo Boulevard. Implementation of the following improvement would improve operations at the freeway to LOS F(0) in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 northbound, Torrance/Del Amo Blvd. to Jct. Rte. 405

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 northbound, Torrance/Del Amo Boulevard to the Junction with Route 405. Implementation of the following improvement would improve operations at the freeway to LOS F(0) in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 northbound, Jct. Rte. 405 to Jct. Rte. 91

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 northbound, Junction with Route 405 to Junction with Route 91. Implementation of the following improvement would improve operations at the freeway to LOS E in the AM peak hour and to LOS C in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 northbound, Carson St. to Avalon Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 northbound, Carson Street to Avalon Boulevard. Implementation of the following improvement would improve operations at the freeway to LOS F(0) in the AM peak hour and to LOS E in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 northbound, Avalon Blvd. to Jct. Rte. 110

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 northbound, Avalon Boulevard to Junction with Route 110. Implementation of the following improvement would improve operations at the freeway to LOS E in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 northbound, Jct. Rte. 110 to Vermont Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 northbound, Junction with Route 110 to Vermont Avenue. Implementation of the following improvement would improve operations at the freeway to LOS E in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 northbound, Normandie Ave. to Western Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 northbound, Normandie Avenue to Western Avenue. Implementation of the following improvement would improve operations at the freeway to LOS E in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 northbound, Western Ave. to Crenshaw Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 northbound, Western Avenue to Crenshaw Boulevard. Implementation of the following improvement would improve operations at the freeway to LOS F(0) in the AM peak hour and to LOS E in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 northbound, Crenshaw Blvd. to Artesia Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 northbound, Crenshaw Boulevard to Artesia Boulevard. Implementation of the following improvement would improve operations at the freeway to LOS F(0) in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 westbound, Avalon Blvd. to Central Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 westbound, Avalon Boulevard to Central Avenue. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS C in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 westbound, Central Ave. to Wilmington Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 westbound, Central Avenue to Wilmington Avenue. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS C in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 westbound, Wilmington Ave. to Alameda St.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 westbound, Wilmington Avenue to Alameda Street. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS C in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 westbound, Alameda St. to Alameda St./Santa Fe Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 westbound, Alameda Street to Alameda Street/Santa Fe Avenue. Implementation of the following improvement would improve operations at the freeway to LOS F(0) in the AM peak hour and to LOS C in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 westbound, Long Beach Blvd. to Jct. Rte. 710

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 westbound, Long Beach Boulevard to the Junction with Route 710. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS C in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 southbound, Sepulveda Blvd. to Carson St.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 southbound, Sepulveda Boulevard to Carson Street. Implementation of the following improvement would improve operations at the freeway to LOS C in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 southbound, Carson St. to Torrance/Del Amo Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 southbound, Carson Street to Torrance/Del Amo Boulevard. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS F(0) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 southbound, Torrance/Del Amo Blvd. to Jct. Rte. 405

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 southbound, Torrance/Del Amo Boulevard to the Junction with Route 405. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS F(0) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 southbound, Jct. Rte. 405 to Jct. Rte. 91

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 southbound, Junction with Route 405 to the Junction with Route 91. Implementation of the following improvement would improve operations at the freeway to LOS F(0) in the AM peak hour and to LOS F(2) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 southbound, Redondo Beach Blvd. to Rosecrans Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 southbound, Redondo Beach Boulevard to Rosecrans Avenue. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS C in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 southbound, Rosecrans Ave. to El Segundo Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 southbound, Rosecrans Avenue to El Segundo Boulevard. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 southbound, Century Blvd. to Manchester Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 southbound, Century Boulevard to Manchester Avenue. Implementation of the following improvement would improve operations at the freeway to LOS E in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 southbound, Slauson Ave. to 51st St.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 southbound, Slauson Avenue to 51st Street. Implementation of the following improvement would improve operations at the freeway to LOS F(0) in the AM peak hour and to LOS E in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 southbound, Carson St. to Avalon Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 southbound, Carson Street to Avalon Boulevard. Implementation of the following improvement would improve operations at the freeway to LOS E in the AM peak hour and to LOS F(0) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 southbound, Avalon Blvd. to Jct. Rte. 110

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 southbound, Avalon Boulevard to the Junction with Route 110. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS F(0) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 southbound, Jct. Rte. 110 to Vermont Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 southbound, Junction with Route 110 to Vermont Avenue. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS F(0) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 southbound, Western Ave. to Crenshaw Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 southbound, Western Avenue to Crenshaw Boulevard. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS E in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

Northbound/Eastbound

ID	CMP Station	Fwy Rte	Post Mile	Location	2025 Plus Project				Recommended Mitigation Measure	2025 Plus Project with Mitigation			
					AM Peak Hour		PM Peak Hour			AM Peak Hour		PM Peak Hour	
					D/C	LOS	D/C	LOS		D/C	LOS	D/C	LOS
91-2		91	7.426	Avalon Blvd. to Central Ave.	0.73	C	1.49	F(3)	Add one mainline lane	0.61	C	1.24	F(0)
91-3		91	8.435	Central Ave. to Wilmington Ave.	0.74	C	1.51	F(3)	Add one mainline lane	0.62	C	1.26	F(1)
91-4		91	9.162	Wilmington Ave. to Alameda St.	0.77	C	1.57	F(3)	Add one mainline lane	0.64	C	1.31	F(1)
91-5		91	10.271	Alameda St. to Alameda St./Santa Fe	1.00	E	2.05	F(3)	Add one mainline lane	0.80	D	1.64	F(3)
91-6	1033	91	10.41	Alameda St./Santa Fe Ave. to Long B	0.69	C	1.42	F(2)	Add one mainline lane	0.59	C	1.21	F(0)
91-7		91	11.096	Long Beach Blvd. to Jct. Rte. 710	0.69	C	1.42	F(2)	Add one mainline lane	0.59	C	1.21	F(0)
110-5		110	5.451	Sepulveda Blvd. to Carson St.	1.18	F(0)	0.85	D	Add one mainline lane	0.94	E	0.68	C
110-6		110	7.016	Carson St. to Torrance/Del Amo Blvd	1.35	F(1)	0.99	E	Add one mainline lane	1.08	F(0)	0.79	D
110-7		110	8.028	Torrance/Del Amo Blvd. to Jct. Rte. 4	1.43	F(2)	1.04	F(0)	Add one mainline lane	1.14	F(0)	0.83	D
110-8		110	8.775	Jct. Rte. 405 to Jct. Rte. 91	1.17	F(0)	0.84	D	Add one mainline lane	1.00	E	0.72	C
405-9		405	10.541	Carson St. to Avalon Blvd.	1.37	F(2)	1.18	F(0)	Add one mainline lane	1.09	F(0)	0.94	E
405-10	1067	405	11.224	Avalon Blvd. to Jct. Rte. 110	1.17	F(0)	1.02	F(0)	Add one mainline lane	0.98	E	0.85	D
405-11		405	12.97	Jct. Rte. 110 to Vermont Ave.	1.15	F(0)	1.01	F(0)	Add one mainline lane	0.96	E	0.84	D
405-13		405	13.826	Normandie Ave. to Western Ave.	1.13	F(0)	0.99	E	Add one mainline lane	0.94	E	0.82	D
405-14		405	14.398	Western Ave. to Crenshaw Blvd.	1.35	F(1)	1.18	F(0)	Add one mainline lane	1.08	F(0)	0.95	E
405-15		405	15.447	Crenshaw Blvd. to Artesia Blvd.	1.32	F(1)	1.16	F(0)	Add one mainline lane	1.06	F(0)	0.92	D

Note: D/C is demand-to-capacity ratio.

Southbound/Westbound

ID	CMP Station	Fwy Rte	Post Mile	Location	2025 Plus Project				Recommended Mitigation Measure	2025 Plus Project with Mitigation			
					AM Peak Hour		PM Peak Hour			AM Peak Hour		PM Peak Hour	
					D/C	LOS	D/C	LOS		D/C	LOS	D/C	LOS
91-2		91	7.426	Avalon Blvd. to Central Ave.	0.97	E	0.66	C	Add one mainline lane	0.80	D	0.55	C
91-3		91	8.435	Central Ave. to Wilmington Ave.	0.99	E	0.68	C	Add one mainline lane	0.83	D	0.56	C
91-4		91	9.162	Wilmington Ave. to Alameda St.	1.02	F(0)	0.70	C	Add one mainline lane	0.85	D	0.58	C
91-5		91	10.271	Alameda St. to Alameda St./Santa Fe	1.34	F(1)	0.91	D	Add one mainline lane	1.07	F(0)	0.73	C
91-7		91	11.096	Long Beach Blvd. to Jct. Rte. 710	1.11	F(0)	0.76	C	Add one mainline lane	0.93	D	0.63	C
110-5		110	5.451	Sepulveda Blvd. to Carson St.	0.94	E	1.15	F(0)	Add one mainline lane	0.75	C	0.92	D
110-6		110	7.016	Carson St. to Torrance/Del Amo Blvd	1.09	F(0)	1.33	F(1)	Add one mainline lane	0.87	D	1.06	F(0)
110-7		110	8.028	Torrance/Del Amo Blvd. to Jct. Rte. 4	1.16	F(0)	1.40	F(2)	Add one mainline lane	0.92	D	1.12	F(0)
110-8		110	8.775	Jct. Rte. 405 to Jct. Rte. 91	1.41	F(2)	1.72	F(3)	Add one mainline lane	1.12	F(0)	1.37	F(2)
110-10		110	11.239	Redondo Beach Blvd. to Rosecrans A	0.96	E	0.91	D	Add one mainline lane	0.81	D	0.77	C
110-11		110	11.891	Rosecrans Ave. to El Segundo Blvd.	1.00	E	0.96	E	Add one mainline lane	0.85	D	0.81	D
110-14		110	14.967	Century Blvd. to Manchester Ave.	1.11	F(0)	1.07	F(0)	Add one mainline lane	0.95	E	0.92	D
110-18		110	17.98	Slauson Ave. to 51st St.	1.26	F(1)	1.20	F(0)	Add one mainline lane	1.05	F(0)	1.00	E
405-9		405	10.541	Carson St. to Avalon Blvd.	1.17	F(0)	1.42	F(2)	Add one mainline lane	0.94	E	1.13	F(0)
405-10	1067	405	11.224	Avalon Blvd. to Jct. Rte. 110	1.01	F(0)	1.21	F(0)	Add one mainline lane	0.84	D	1.01	F(0)
405-11		405	12.97	Jct. Rte. 110 to Vermont Ave.	1.08	F(0)	1.33	F(1)	Add one mainline lane	0.87	D	1.06	F(0)
405-14		405	14.398	Western Ave. to Crenshaw Blvd.	1.02	F(0)	1.25	F(0)	Add one mainline lane	0.81	D	1.00	E

Note: D/C is demand-to-capacity ratio.

Exhibit 141: Freeway Weekday Mitigation 2025 - Alternative 1

13.3 Weekday Mitigations Needed with Alternative 1 by 2035

Analysis shown in Section 12.1 found that in 2035 the Project would have impacts at 17 intersections and at 11 of the freeway segments. These are described in the sub-sections below.

13.3.1 Weekday Intersection Mitigations Needed with Alternative 1 by 2035

Exhibit 142 shows the measures that could be used to mitigate the impacts to intersections. Appendix T shows outlines of these measures on aerial photographs. In many cases measures used to mitigate impacts in 2025 would be part or all of the improvements needed to mitigate the Project's impacts in 2035.

Intersection #1, Victoria St./Drive D

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the intersection. With implementation of the following improvements, operations at the intersection would improve to LOS D in the AM peak hour and to LOS E in the PM peak hour, thus fully mitigating the project impact:

- Add second westbound left-turn lane
- Add second northbound left-turn lane and convert two-way left turn lane into median east of intersection
- Use overlap phasing for the eastbound right-turn movement

Note that this is in addition to the mitigation measure identified for this location as needed for 2025. The University's fair share contribution towards the improvements was calculated to be 66% provided that such funds shall be used only for the above improvements that ultimately benefit CSU and the local community. However, this intersection is under the jurisdiction and control of the City of Carson and as such, the University cannot guarantee implementation of the improvements. In the event that, prior to Board of Trustees approval of the CSUDH 2018 Master Plan, the City of Carson adopts a transportation impact fee program, supported by all appropriate technical studies, that would provide for the funding and construction of the following improvements at the subject intersection, CSU shall pay its fair share. Additionally, the City does not currently have an adopted fee program in place to provide the non-CSU portion of the cost of improvements. For these reasons, the identified impact at this intersection is considered significant and unavoidable

Intersection #9, University Dr./Toro Center Dr.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the intersection. With implementation of the following improvements, operations at the intersection would improve to LOS D in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Install traffic signal at intersection with overlap phasing for the westbound and southbound right-turn movements

The University's fair share contribution towards the improvements was calculated to be 65% provided that such funds shall be used only for the above improvements that ultimately benefit CSU and the local community. In the event that, prior to Board of Trustees approval of the CSUDH 2018 Master Plan, the City of Carson adopts a transportation impact fee program, supported by all appropriate

technical studies, that would provide for the funding and construction of the following improvements at the subject intersection, CSU shall pay its fair share. However, this intersection is under the jurisdiction and control of the City of Carson and as such, the University cannot guarantee implementation of the improvements. Additionally, the City does not currently have an adopted fee program in place to provide the non-CSU portion of the cost of improvements. For these reasons, the identified impact at this intersection is considered significant and unavoidable.

Intersection #10, Albertoni St./SR-91 EB Ramps

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the intersection. Implementation of the following improvement would improve operations at the intersection to LOS B in the AM peak hour and to LOS C in the PM peak hour, thus fully mitigating the project impact:

- Convert the southbound exclusive right-turn lane into a shared left/right-turn shared lane

The percentage of the deficiency that is attributable to the Project for this improvement was calculated to be 50%. However, this ramp is under the jurisdiction and control of Caltrans, a different State agency from CSU. Nonetheless, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. However, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

Intersection #12, Avalon Blvd./Albertoni St.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the intersection. With implementation of the following improvement, operations at the intersection would improve to LOS C in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add second exclusive eastbound right-turn lane

The University's fair share contribution towards this improvement was calculated to be 46% provided that such funds shall be used only for the above improvements that ultimately benefit CSU and the local community. However, this intersection is under the jurisdiction and control of the City of Carson and, as such, the University cannot guarantee implementation of the improvement. In the event that, prior to Board of Trustees approval of the CSUDH 2018 Master Plan, the City of Carson adopts a transportation impact fee program, supported by all appropriate technical studies, that would provide for the funding and construction of the following improvements at the subject intersection, CSU shall pay its fair share. Additionally, the City does not currently have an adopted fee program in place to provide the non-CSU portion of the cost of improvements. For these reasons, the recommended improvement is infeasible and the identified impact at this intersection is considered significant and unavoidable.

Intersection #13, Avalon Blvd./Victoria St.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the intersection. With implementation of the following improvements, operations at the intersection would improve to LOS D in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add third westbound through lane instead of converting the west bound right-turn into a shared through/right-turn lane and move median south

Note that this is in addition to the mitigation measure identified for this location as needed for 2025. The University's fair share contribution towards the improvements was calculated to be 70% provided that such funds shall be used only for the above improvements that ultimately benefit CSU and the local community. However, this intersection is under the jurisdiction and control of the City of Carson

and as such, the University cannot guarantee implementation of the improvements. In the event that, prior to Board of Trustees approval of the CSUDH 2018 Master Plan, the City of Carson adopts a transportation impact fee program, supported by all appropriate technical studies, that would provide for the funding and construction of the following improvements at the subject intersection, CSU shall pay its fair share. Additionally, the City does not currently have an adopted fee program in place to provide the non-CSU portion of the cost of improvements. For these reasons, the identified impact at this intersection is considered significant and unavoidable.

Intersection #14, Central Ave./Artesia Blvd. WB

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the intersection. With implementation of the following improvements, operations at the intersection would improve to LOS D in the AM peak hour and to LOS C in the PM peak hour, thus fully mitigating the project impact:

- Add second northbound left-turn lane

However, this improvement may be infeasible due to right-of-way constraints. In addition, this overcrossing is under the jurisdiction and control of Caltrans, a different State agency from CSU. Nonetheless, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. However, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

Intersection #15, Central Ave./Albertoni St./Artesia Blvd. EB

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the intersection. With implementation of the following improvements, operations at the intersection would improve to LOS D in the AM peak hour and to LOS C in the PM peak hour, thus fully mitigating the project impact:

- Add third southbound through lane

However, these improvements may be infeasible due to right-of-way constraints. In addition, this overcrossing is under the jurisdiction and control of Caltrans, a different State agency from CSU. Nonetheless, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. However, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

Intersection #16, Central Ave./Victoria St.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the intersection. With implementation of the following improvement, operations at the intersection would improve to LOS D in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add third southbound through lane
- Add eastbound exclusive left-turn lane

However, these improvements may be physically infeasible due to right-of-way constraints. In addition, this intersection is under the jurisdiction and control of the City of Carson, and, as such, the University cannot guarantee implementation of the improvements. Moreover, the City does not currently have an adopted fee program in place to provide the non-CSU portion of the cost of improvements. In the event that, prior to Board of Trustees approval of the CSUDH 2018 Master Plan, the City of Carson adopts a transportation impact fee program, supported by all appropriate technical studies, that would provide for the funding and construction of the following improvements at the subject intersection, CSU shall pay its fair share. For these reasons, the recommended

improvements are infeasible and the identified impact at this intersection is considered significant and unavoidable.

Intersection #20, I-110 SB Off-Ramp/190th St.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the intersection. Implementation of the following improvement would improve operations at the intersection to LOS E in the AM peak hour and to LOS F in the PM peak hour (i.e. better than for No Project conditions), thus fully mitigating the impact:

- Add a southbound left/right-shared lane

However, this ramp is under the jurisdiction and control of Caltrans, a different State agency from CSU. Nonetheless, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. However, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

Intersection #22, Figueroa St./190th St./Victoria St.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the intersection. With implementation of the following improvements, operations at the intersection would improve to LOS D in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add second westbound left-turn lane
- Re-phase signal to provide protected left-turns for the eastbound and westbound phases

However, the addition second westbound left-turn lane improvement may be infeasible due to right-of-way constraints. In addition, this intersection is under the jurisdiction and control of the City of Carson, and, as such, the University cannot guarantee implementation of the improvements. Moreover, the City does not currently have an adopted fee program in place to provide the non-CSU portion of the cost of improvements. In the event that, prior to Board of Trustees approval of the CSUDH 2018 Master Plan, the City of Carson adopts a transportation impact fee program, supported by all appropriate technical studies, that would provide for the funding and construction of the following improvements at the subject intersection, CSU shall pay its fair share. For these reasons, the recommended improvements are infeasible and the identified impact at this intersection is considered significant and unavoidable.

Intersection #23, Broadway/Victoria St.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the intersection. With implementation of the following improvements, operations at the intersection would improve to LOS B in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add third westbound through lane
- Add eastbound right-turn lane

Note that this is in addition to the mitigation measure identified for this location as needed for 2025. The University's fair share contribution towards the improvements was calculated to be 73% provided that such funds shall be used only for the above improvements that ultimately benefit CSU and the local community. However, this intersection is under the jurisdiction and control of the City of Carson and as such, the University cannot guarantee implementation of the improvements. Additionally, the City does not currently have an adopted fee program in place to provide the non-CSU portion of the cost of improvements. In the event that, prior to Board of Trustees approval of the CSUDH 2018 Master Plan, the City of Carson adopts a transportation impact fee program, supported by all

appropriate technical studies, that would provide for the funding and construction of the following improvements at the subject intersection, CSU shall pay its fair share. For these reasons, the identified impact at this intersection is considered significant and unavoidable

Intersection #24, Main St./Victoria St.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the intersection. With implementation of the following improvements, operations at the intersection would improve to LOS B in the AM peak hour and to LOS E in the PM peak hour, (i.e. better than for No Project conditions), thus fully mitigating the impact:

- Convert westbound exclusive right-turn lane from the 2025 mitigations into westbound through/right-turn shared lane
- Add eastbound exclusive right-turn

The University's fair share contribution towards this improvement was calculated to be 71% provided that such funds shall be used only for the above improvements that ultimately benefit CSU and the local community. However, the additional eastbound right-turn lane improvement may be infeasible due to right-of-way constraints. In addition, this intersection is under the jurisdiction and control of the City of Carson, and, as such, the University cannot guarantee implementation of the improvements. Moreover, the City does not currently have an adopted fee program in place to provide the non-CSU portion of the cost of improvements. In the event that, prior to Board of Trustees approval of the CSUDH 2018 Master Plan, the City of Carson adopts a transportation impact fee program, supported by all appropriate technical studies, that would provide for the funding and construction of the following improvements at the subject intersection, CSU shall pay its fair share. For these reasons, the recommended improvements are infeasible and the identified impact at this intersection is considered significant and unavoidable.

Intersection #26, Avalon Blvd./Del Amo Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the intersection. With implementation of the following improvement, operations at the intersection would improve to LOS D in the AM peak hour and to LOS E in the PM peak hour, (i.e. better than for No Project conditions), thus fully mitigating the impact:

- Add southbound exclusive right-turn lane
- Convert the westbound exclusive right-turn lane into a westbound through/right-turn shared lane

The University's fair share contribution towards this improvement was calculated to be 55% provided that such funds shall be used only for the above improvements that ultimately benefit CSU and the local community. However, this intersection is under the jurisdiction and control of the City of Carson and, as such, the University cannot guarantee implementation of the improvement. Additionally, the City does not currently have an adopted fee program in place to provide the non-CSU portion of the cost of improvements. . In the event that, prior to Board of Trustees approval of the CSUDH 2018 Master Plan, the City of Carson adopts a transportation impact fee program, supported by all appropriate technical studies, that would provide for the funding and construction of the following improvements at the subject intersection, CSU shall pay its fair share. For these reasons, the recommended improvement is infeasible and the identified impact at this intersection is considered significant and unavoidable.

Intersection #29, Central Ave./University Dr.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the intersection. With implementation of the following improvements, operations

at the intersection would improve to LOS D in the AM peak hour and to LOS C in the PM peak hour, thus fully mitigating the project impact:

- Add second eastbound left-turn lane
- Add second southbound right-turn lane

However, these improvements may be physically infeasible due to right-of-way constraints. In addition, this intersection is under the jurisdiction and control of the City of Carson, and, as such, the University cannot guarantee implementation of the improvements. Moreover, the City does not currently have an adopted fee program in place to provide the non-CSU portion of the cost of improvements. . In the event that, prior to Board of Trustees approval of the CSUDH 2018 Master Plan, the City of Carson adopts a transportation impact fee program, supported by all appropriate technical studies, that would provide for the funding and construction of the following improvements at the subject intersection, CSU shall pay its fair share. For these reasons, the recommended improvements are infeasible and the identified impact at this intersection is considered significant and unavoidable.

Study ID	Intersection Name	Control Type	With Project		Mitigation Measures already Recommended for 2025 Plus Project	Additional Mitigation Measures For 2035 Plus Project	With Mitigation	
			LOS (ICU or HCM)				LOS (ICU or HCM)	
			AM Peak Hour	PM Peak Hour			AM Peak Hour	PM Peak Hour
1	Victoria St./Drive D	TWSC	F	F	Signalize	Add 2nd WB Left-Turn Lane, Add 2nd NB Left-Turn Lanes, EB Right-Turn Overlap Phasing	D	E
3	Victoria St./Birchknoll Dr.	Signalized	B	E	Add 2nd WB Left-Turn Lane		B	D
5	Central Ave./Charles Willard St.	TWSC	F	F	Signalize		E	D
6	Central Ave./Beachey Pl.	TWSC	F	F	Signalize		C	C
9	University Dr./Toro Center Dr.	TWSC	F	F		Signalize, WB Right-Turn Overlap Phasing, SB Right-Turn Overlap Phasing	D	D
10	Albertoni St./SR 91 EB Ramps	Signalized	C	E		Convert SB Exclusive Right-Turn Lane to Shared Left/Right-Turn Lane	B	C
12	Avalon Blvd./Albertoni St.	Signalized	C	E		Add 2nd Exclusive EB Right-Turn Lane	C	D
13	Avalon Blvd./Victoria St.	Signalized	E	F	Add 2nd NB Left-Turn Lane, Convert EB Exclusive Right-Turn Lane to a Through/Right-Shared Lane, Convert WB Exclusive Right-Turn Lane to a Through/Right-Shared Lane	Add 3rd WB Through Lane (instead of converting RT into a shared TH/RT)	C	D
14	Central Ave./Artesia Blvd. WB	Signalized	F	F	Add 2nd NB Left-Turn Lane		D	C
15	Central Ave./Albertoni St./Artesia Blvd. EB	Signalized	F	F	Add 2nd EB Right-Turn Lane	Add 3rd SB Through Lane	C	D
16	Central Ave./Victoria St.	Signalized	F	E		Add 3rd SB Through Lane, Add EB Exclusive Right-Turn Lane	D	D
20	I-110 SB Off-Ramp/190th St.	Signalized	F	F	Add a SB Left/Right-Shared Lane		E	F
22	Figueroa St./190th St./Victoria St.	Signalized	E	F	Add 3rd WB Through Lane, Add 3rd EB Through Lane	Add 2nd WB Left-Turn Lane	D	D
23	Broadway/Victoria St.	Signalized	C	E		Add 3rd WB Through Lane, Add EB Right-Turn Lane	B	D
24	Main St./Victoria St.	Signalized	D	F	Add 3rd EB Through Lane, Add WB Exclusive Right-Turn Lane	Add 3rd WB Through Lane (instead of the WB Exclusive Right-Turn Lane) Add EB Exclusive Right-Turn Lane	B	E
26	Avalon Blvd./Del Amo Blvd.	Signalized	E	F		Add SB Exclusive Right-Turn Lane Convert WB Exclusive Right-Turn Lane into an WB Through/Right-Shared Lane	D	E
29	Central Ave./University Dr.	Signalized	F	F		Add 2nd EB Left-Turn Lane, Add 2nd SB Right-Turn Lane	D	C

Exhibit 142: Intersection Weekday Mitigations Needed by 2035 with Alternative 1

13.3.2 Weekday Freeway Mitigations Needed with Alternative 1 by 2035

Exhibit 143 shows the potential improvements that could be made to mitigate the significant impacts to freeway mainline segments that would result when Project traffic is combined with other cumulative background traffic forecast to occur by year 2035. The percentage of the deficiency attributable to the project is illustrated in Table 138. The potential improvements for each significantly impacted segment not already addressed by the improvements referenced under the 2025 scenario are described in the following mitigation measures:

SR-91 eastbound, Jct. Rte. 110 to Avalon Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 eastbound, Junction with Route 110 to Avalon Boulevard. Implementation of the following improvement would improve operations at the freeway to LOS B in the AM peak hour and to LOS F(0) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 eastbound, Jct. Rte. 710 to Cherry Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 eastbound, Junction Route 710 to Cherry Avenue. Implementation of the following improvement would improve operations at the freeway to LOS C in the AM peak hour and to LOS F(0) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 eastbound, Cherry Ave. to Paramount Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 eastbound, Cherry Avenue to Paramount Boulevard. Implementation of the following improvement would improve operations at the freeway to LOS C in the AM peak hour and to LOS F(0) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 eastbound, Paramount Blvd. to Downey Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 eastbound, Paramount Boulevard to Downey Avenue.

Implementation of the following improvement would improve operations at the freeway to LOS C in the AM peak hour and to LOS E in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 eastbound, Downey Ave. to Jct. Rte. 19

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 eastbound, Downey Avenue to Junction with Route 19. Implementation of the following improvement would improve operations at the freeway to LOS C in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 eastbound, Jct. Rte. 19 to Clark Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 eastbound, Junction Route 19 to Clark Avenue. Implementation of the following improvement would improve operations at the freeway to LOS C in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 eastbound, Clark Ave. to Bellflower Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 eastbound, Clark Avenue to Bellflower Boulevard. Implementation of the following improvement would improve operations at the freeway to LOS C in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 northbound, Rosecrans Ave. to El Segundo Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 northbound, Rosecrans Avenue to El Segundo Boulevard.

Implementation of the following improvement would improve operations at the freeway to LOS C in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 northbound, El Segundo Blvd. to Jct. Rte. 105

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 northbound, El Segundo Boulevard to Junction with Route 105. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 northbound, Century Blvd. to Manchester Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 northbound, Century Boulevard to Manchester Avenue. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 northbound, Manchester Ave. to Florence Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 northbound, Manchester Avenue to Florence Avenue. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 northbound, Florence Ave. to Gage Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 northbound, Florence Avenue to Gage Avenue. Implementation of the

following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 northbound, Gage Ave. to Slauson Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 northbound, Gage Avenue to Slauson Avenue. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 northbound, Slauson Ave. to 51st St.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 northbound, Slauson Avenue to 51st Street. Implementation of the following improvement would improve operations at the freeway to LOS E in the AM peak hour and to LOS E in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 northbound, 51st St. to Vernon Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 northbound, 51st Street to Vernon Avenue. Implementation of the following improvement would improve operations at the freeway to LOS E in the AM peak hour and to LOS F(0) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 northbound, Vernon Ave. to Martin Luther King Jr. Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 northbound, Vernon Avenue to Martin Luther King Jr. Boulevard.

Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 northbound, Cherry Ave. to Orange Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 northbound, Cherry Avenue to Orange Avenue. Implementation of the following improvement would improve operations at the freeway to LOS F(0) in the AM peak hour and to LOS E in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 northbound, Orange Ave. to Atlantic Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 northbound, Orange Avenue to Atlantic Avenue. Implementation of the following improvement would improve operations at the freeway to LOS F(2) in the AM peak hour and to LOS F(0) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 northbound, Atlantic Ave. to Long Beach Blvd

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 northbound, Atlantic Avenue to Long Beach Boulevard. Implementation of the following improvement would improve operations at the freeway to LOS F(2) in the AM peak hour and to LOS F(0) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 northbound, Jct. Rte. 710 to Alameda St.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 northbound, Junction Route 710 to Alameda Street. Implementation of

the following improvement would improve operations at the freeway to LOS F(0) in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 northbound, Alameda St. to Wilmington Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 northbound, Alameda Street to Wilmington Avenue. Implementation of the following improvement would improve operations at the freeway to LOS F(0) in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 northbound, Wilmington Ave. to Carson St.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 northbound, Wilmington Avenue to Carson Street. Implementation of the following improvement would improve operations at the freeway to LOS F(0) in the AM peak hour and to LOS E in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 northbound, Vermont Ave. to Normandie Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 northbound, Vermont Avenue to Normandie Avenue. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS C in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 northbound, Hawthorne Blvd. to Inglewood Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 northbound, Hawthorne Boulevard to Inglewood Avenue.

Implementation of the following improvement would improve operations at the freeway to LOS E in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 northbound, Inglewood Ave. to Rosecrans Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 northbound, Inglewood Avenue to Rosecrans Avenue. Implementation of the following improvement would improve operations at the freeway to LOS E in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 westbound, Jct. Rte. 110 to Avalon Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 westbound, Junction Route 110 to Avalon Boulevard. Implementation of the following improvement would improve operations at the freeway to LOS F(3) in the AM peak hour and to LOS F(0) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 westbound, Alameda St./Santa Fe Ave. to Long Beach Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 westbound, Alameda Street/Santa Fe Avenue to Long Beach Boulevard. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS C in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 westbound, Jct. Rte. 710 to Cherry Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 westbound, Junction Route 710 to Cherry Avenue. Implementation of

the following improvement would improve operations at the freeway to LOS F(0) in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 westbound, Cherry Ave. to Paramount Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 westbound, Cherry Avenue to Paramount Boulevard. Implementation of the following improvement would improve operations at the freeway to LOS E in the AM peak hour and to LOS C in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 westbound, Paramount Blvd. to Downey Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 westbound, Paramount Boulevard to Downey Avenue. Implementation of the following improvement would improve operations at the freeway to LOS F(0) in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 westbound, Downey Ave. to Jct. Rte. 19

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 westbound, Downey Avenue to the Junction with Route 19. Implementation of the following improvement would improve operations at the freeway to LOS F(0) in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 westbound, Jct. Rte. 19 to Clark Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 westbound, Junction Route 19 to Clark Avenue. Implementation of

the following improvement would improve operations at the freeway to LOS F(0) in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 westbound, Clark Ave. to Bellflower Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 westbound, Clark Avenue to Bellflower Boulevard. Implementation of the following improvement would improve operations at the freeway to LOS F(0) in the AM peak hour and to LOS C in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 westbound, Bellflower Blvd. to Jct. Rte. 605

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 westbound, Bellflower Boulevard to Junction with Route 605. Implementation of the following improvement would improve operations at the freeway to LOS F(0) in the AM peak hour and to LOS C in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 southbound, Manchester Ave. to Florence Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 southbound, Manchester Avenue to Florence Avenue. Implementation of the following improvement would improve operations at the freeway to LOS E in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 southbound, Florence Ave. to Gage Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 southbound, Florence Avenue to Gage Avenue. Implementation of the

following improvement would improve operations at the freeway to LOS E in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 southbound, Gage Ave. to Slauson Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 southbound, Gage Avenue to Slauson Avenue. Implementation of the following improvement would improve operations at the freeway to LOS E in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 southbound, 51st St. to Vernon Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 southbound, 51st Street to Vernon Avenue. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 southbound, Vernon Ave. to Martin Luther King Jr. Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 southbound, Vernon Avenue to Martin Luther King Jr. Boulevard. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 southbound, Martin Luther King Jr. Blvd. to Exposition Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 southbound, Martin Luther King Jr. Boulevard to Exposition Boulevard.

Implementation of the following improvement would improve operations at the freeway to LOS E in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 southbound, Orange Ave. to Atlantic Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 southbound, Orange Avenue to Atlantic Avenue. Implementation of the following improvement would improve operations at the freeway to LOS F(0) in the AM peak hour and to LOS F(1) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 southbound, Long Beach Blvd to Jct. Rte. 710

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 southbound, Long Beach Boulevard to the Junction with Route 710. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS F(0) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 southbound, Jct. Rte. 710 to Alameda St.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 southbound, Junction Route 710 to Alameda Street. Implementation of the following improvement would improve operations at the freeway to LOS C in the AM peak hour and to LOS E in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 southbound, Alameda St. to Wilmington Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 southbound, Alameda Street to Wilmington Avenue. Implementation of

the following improvement would improve operations at the freeway to LOS C in the AM peak hour and to LOS E in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 southbound, Wilmington Ave. to Carson St.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 southbound, Wilmington Avenue to Carson Street. Implementation of the following improvement would improve operations at the freeway to LOS E in the AM peak hour and to LOS F(0) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 southbound, Vermont Ave. to Normandie Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 southbound, Vermont Avenue to Normandie Avenue. Implementation of the following improvement would improve operations at the freeway to LOS C in the AM peak hour and to LOS E in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 southbound, Normandie Ave. to Western Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 southbound, Normandie Avenue to Western Avenue. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS F(0) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 southbound, Crenshaw Blvd. to Artesia Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 southbound, Crenshaw Boulevard to Artesia Boulevard. Implementation

of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS E in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 southbound, Artesia Blvd. to Hawthorne Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 southbound, Artesia Boulevard to Hawthorne Boulevard. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS E in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 southbound, Hawthorne Blvd. to Inglewood Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 southbound, Hawthorne Boulevard to Inglewood Avenue. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS F(0) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-710 southbound, Alondra Blvd. to Jct. Rte. 105

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-710 southbound, Alondra Boulevard to Junction Route 105. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS C in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

Northbound/Eastbound

ID	CMP Station	Fwy Rte	Post Mile	Location	2035 Plus Project				Recommended Mitigation Measure	2035 Plus Project with Mitigation			
					AM Peak Hour		PM Peak Hour			AM Peak Hour		PM Peak Hour	
					D/C	LOS	D/C	LOS		D/C	LOS	D/C	LOS
91-1		91	6.344	Jct. Rte. 110 to Avalon Blvd.	0.60	C	1.22	F(0)	Add one mainline lane	0.51	B	1.05	F(0)
91-2		91	7.426	Avalon Blvd. to Central Ave.	0.74	C	1.51	F(3)	Add one mainline lane	0.62	C	1.26	F(1)
91-3		91	8.435	Central Ave. to Wilmington Ave.	0.75	C	1.54	F(3)	Add one mainline lane	0.63	C	1.28	F(1)
91-4		91	9.162	Wilmington Ave. to Alameda St.	0.79	D	1.60	F(3)	Add one mainline lane	0.65	C	1.33	F(1)
91-5		91	10.271	Alameda St. to Alameda St./Santa Fe	1.02	F(0)	2.08	F(3)	Add one mainline lane	0.81	D	1.67	F(3)
91-6	1033	91	10.41	Alameda St./Santa Fe Ave. to Long B	0.70	C	1.44	F(2)	Add one mainline lane	0.60	C	1.23	F(0)
91-7		91	11.096	Long Beach Blvd. to Jct. Rte. 710	0.70	C	1.40	F(2)	Add one mainline lane	0.60	C	1.23	F(0)
91-8		91	11.681	Jct. Rte. 710 to Cherry Ave.	0.85	D	1.22	F(0)	Add one mainline lane	0.71	C	1.02	F(0)
91-9	1034	91	13.094	Cherry Ave. to Paramount Blvd.	0.86	D	1.24	F(0)	Add one mainline lane	0.72	C	1.04	F(0)
91-10		91	13.594	Paramount Blvd. to Downey Ave.	0.84	D	1.20	F(0)	Add one mainline lane	0.70	C	1.00	E
91-11		91	14.103	Downey Ave. to Jct. Rte. 19	0.70	C	1.00	E	Add one mainline lane	0.60	C	0.86	D
91-12		91	14.618	Jct. Rte. 19 to Clark Ave.	0.77	C	1.11	F(0)	Add one mainline lane	0.64	C	0.92	D
91-13		91	15.105	Clark Ave. to Bellflower Blvd.	0.68	C	0.98	E	Add one mainline lane	0.59	C	0.84	D
110-5		110	5.451	Sepulveda Blvd. to Carson St.	1.19	F(0)	0.87	D	Add one mainline lane	0.95	E	0.69	C
110-6		110	7.016	Carson St. to Torrance/Del Amo Blvd	1.36	F(2)	1.00	E	Add one mainline lane	1.09	F(0)	0.80	D
110-7		110	8.028	Torrance/Del Amo Blvd. to Jct. Rte. 4	1.44	F(2)	1.05	F(0)	Add one mainline lane	1.15	F(0)	0.84	D
110-8		110	8.775	Jct. Rte. 405 to Jct. Rte. 91	1.18	F(0)	0.85	D	Add one mainline lane	1.01	F(0)	0.73	C
110-11		110	11.891	Rosecrans Ave. to El Segundo Blvd.	0.91	D	0.94	E	Add one mainline lane	0.77	C	0.80	D
110-12		110	12.898	El Segundo Blvd. to Jct. Rte. 105	0.93	D	0.96	E	Add one mainline lane	0.78	D	0.81	D
110-14		110	14.967	Century Blvd. to Manchester Ave.	1.01	F(0)	1.04	F(0)	Add one mainline lane	0.87	D	0.89	D
110-15	1046	110	15.976	Manchester Ave. to Florence Ave.	0.99	E	1.02	F(0)	Add one mainline lane	0.85	D	0.87	D
110-16		110	16.981	Florence Ave. to Gage Ave.	1.02	F(0)	1.05	F(0)	Add one mainline lane	0.87	D	0.90	D
110-17	1047	110	17.514	Gage Ave. to Slauson Ave.	1.01	F(0)	1.04	F(0)	Add one mainline lane	0.87	D	0.89	D
110-18		110	17.98	Slauson Ave. to 51st St.	1.17	F(0)	1.19	F(0)	Add one mainline lane	0.98	E	0.99	E
110-19		110	18.495	51st St. to Vernon Ave.	1.19	F(0)	1.22	F(0)	Add one mainline lane	0.99	E	1.02	F(0)
110-20		110	18.998	Vernon Ave. to Martin Luther King Jr.	0.99	E	1.02	F(0)	Add one mainline lane	0.85	D	0.87	D
405-2		405	4.879	Cherry Ave. to Orange Ave.	1.34	F(1)	1.13	F(0)	Add one mainline lane	1.11	F(0)	0.94	E
405-3		405	5.388	Orange Ave. to Atlantic Ave.	1.73	F(3)	1.48	F(3)	Add one mainline lane	1.39	F(2)	1.18	F(0)
405-4		405	6.076	Atlantic Ave. to Long Beach Blvd	1.71	F(3)	1.45	F(2)	Add one mainline lane	1.37	F(2)	1.16	F(0)
405-6	1066	405	7.596	Jct. Rte. 710 to Alameda St.	1.24	F(0)	1.06	F(0)	Add one mainline lane	1.04	F(0)	0.88	D
405-7		405	8.784	Alameda St. to Wilmington Ave.	1.21	F(0)	1.02	F(0)	Add one mainline lane	1.01	F(0)	0.85	D
405-8		405	9.556	Wilmington Ave. to Carson St.	1.41	F(2)	1.21	F(0)	Add one mainline lane	1.13	F(0)	0.97	E
405-9		405	10.541	Carson St. to Avalon Blvd.	1.38	F(2)	1.19	F(0)	Add one mainline lane	1.11	F(0)	0.95	E
405-10	1067	405	11.224	Avalon Blvd. to Jct. Rte. 110	1.19	F(0)	1.02	F(0)	Add one mainline lane	0.99	E	0.85	D
405-11		405	12.97	Jct. Rte. 110 to Vermont Ave.	1.16	F(0)	1.02	F(0)	Add one mainline lane	0.97	E	0.85	D
405-12		405	13.28	Vermont Ave. to Normandie Ave.	1.01	F(0)	0.89	D	Add one mainline lane	0.86	D	0.76	C
405-13		405	13.826	Normandie Ave. to Western Ave.	1.14	F(0)	1.00	E	Add one mainline lane	0.95	E	0.83	D
405-14		405	14.398	Western Ave. to Crenshaw Blvd.	1.36	F(2)	1.20	F(0)	Add one mainline lane	1.09	F(0)	0.96	E
405-15		405	15.447	Crenshaw Blvd. to Artesia Blvd.	1.33	F(1)	1.17	F(0)	Add one mainline lane	1.07	F(0)	0.94	E
405-17		405	17.589	Hawthorne Blvd. to Inglewood Ave.	1.12	F(0)	0.99	E	Add one mainline lane	0.94	E	0.82	D
405-18	1068	405	18.233	Inglewood Ave. to Rosecrans Ave.	1.17	F(0)	1.03	F(0)	Add one mainline lane	0.98	E	0.86	D

Note: D/C is demand-to-capacity ratio.

Exhibit 143: Freeway Weekday Mitigation 2035 - Alternative 1

Southbound/Westbound

ID	CMP Station	Fwy Rte	Post Mile	Location	2035 No Project				Recommended Mitigation Measure	2035 Plus Project			
					AM Peak Hour		PM Peak Hour			AM Peak Hour		PM Peak Hour	
					D/C	LOS	D/C	LOS		D/C	LOS	D/C	LOS
91-1		91	6.344	Jct. Rte. 110 to Avalon Blvd.	2.36	F(3)	1.60	F(3)	Add one mainline lane	1.58	F(3)	1.07	F(0)
91-2		91	7.426	Avalon Blvd. to Central Ave.	0.99	E	0.67	C	Add one mainline lane	0.82	D	0.56	C
91-3		91	8.435	Central Ave. to Wilmington Ave.	1.03	F(0)	0.70	C	Add one mainline lane	0.86	D	0.58	C
91-4		91	9.162	Wilmington Ave. to Alameda St.	1.06	F(0)	0.72	C	Add one mainline lane	0.88	D	0.60	C
91-5		91	10.271	Alameda St. to Alameda St./Santa Fe	1.38	F(2)	0.93	D	Add one mainline lane	1.11	F(0)	0.75	C
91-6	1033	91	10.41	Alameda St./Santa Fe Ave. to Long B	0.96	E	0.65	C	Add one mainline lane	0.82	D	0.56	C
91-7		91	11.096	Long Beach Blvd. to Jct. Rte. 710	1.14	F(0)	0.78	D	Add one mainline lane	0.95	E	0.65	C
91-8		91	11.681	Jct. Rte. 710 to Cherry Ave.	1.38	F(2)	0.97	E	Add one mainline lane	1.15	F(0)	0.81	D
91-9	1034	91	13.094	Cherry Ave. to Paramount Blvd.	1.17	F(0)	0.82	D	Add one mainline lane	1.00	E	0.70	C
91-10		91	13.594	Paramount Blvd. to Downey Ave.	1.36	F(2)	0.96	E	Add one mainline lane	1.13	F(0)	0.80	D
91-11		91	14.103	Downey Ave. to Jct. Rte. 19	1.35	F(1)	0.95	E	Add one mainline lane	1.12	F(0)	0.79	D
91-12		91	14.618	Jct. Rte. 19 to Clark Ave.	1.57	F(3)	1.09	F(0)	Add one mainline lane	1.25	F(0)	0.88	D
91-13		91	15.105	Clark Ave. to Bellflower Blvd.	1.31	F(1)	0.93	D	Add one mainline lane	1.09	F(0)	0.77	C
91-14		91	15.614	Bellflower Blvd. to Jct. Rte. 605	1.30	F(1)	0.91	D	Add one mainline lane	1.08	F(0)	0.76	C
110-5		110	5.451	Sepulveda Blvd. to Carson St.	0.96	E	1.17	F(0)	Add one mainline lane	0.77	C	0.93	D
110-6		110	7.016	Carson St. to Torrance/Del Amo Blvd	1.11	F(0)	1.34	F(1)	Add one mainline lane	0.89	D	1.07	F(0)
110-7		110	8.028	Torrance/Del Amo Blvd. to Jct. Rte. 4	1.17	F(0)	1.42	F(2)	Add one mainline lane	0.94	E	1.13	F(0)
110-8		110	8.775	Jct. Rte. 405 to Jct. Rte. 91	1.42	F(2)	1.73	F(3)	Add one mainline lane	1.14	F(0)	1.38	F(2)
110-10		110	11.239	Redondo Beach Blvd. to Rosecrans A	0.97	E	0.93	D	Add one mainline lane	0.82	D	0.78	D
110-11		110	11.891	Rosecrans Ave. to El Segundo Blvd.	1.02	F(0)	0.97	E	Add one mainline lane	0.86	D	0.82	D
110-14		110	14.967	Century Blvd. to Manchester Ave.	1.12	F(0)	1.08	F(0)	Add one mainline lane	0.96	E	0.93	D
110-15	1046	110	15.976	Manchester Ave. to Florence Ave.	1.09	F(0)	1.05	F(0)	Add one mainline lane	0.94	E	0.90	D
110-16		110	16.981	Florence Ave. to Gage Ave.	1.10	F(0)	1.06	F(0)	Add one mainline lane	0.94	E	0.91	D
110-17	1047	110	17.514	Gage Ave. to Slauson Ave.	1.10	F(0)	1.05	F(0)	Add one mainline lane	0.94	E	0.90	D
110-18		110	17.98	Slauson Ave. to 51st St.	1.27	F(1)	1.21	F(0)	Add one mainline lane	1.06	F(0)	1.01	F(0)
110-19		110	18.495	51st St. to Vernon Ave.	1.07	F(0)	1.03	F(0)	Add one mainline lane	0.92	D	0.89	D
110-20		110	18.998	Vernon Ave. to Martin Luther King Jr.	1.07	F(0)	1.03	F(0)	Add one mainline lane	0.92	D	0.89	D
110-21		110	19.502	Martin Luther King Jr. Blvd. to Exposi	1.17	F(0)	1.12	F(0)	Add one mainline lane	0.97	E	0.93	D
405-3		405	5.388	Orange Ave. to Atlantic Ave.	1.29	F(1)	1.62	F(3)	Add one mainline lane	1.03	F(0)	1.29	F(1)
405-5		405	6.34	Long Beach Blvd to Jct. Rte. 710	1.01	F(0)	1.27	F(1)	Add one mainline lane	0.84	D	1.06	F(0)
405-6	1066	405	7.596	Jct. Rte. 710 to Alameda St.	0.92	D	1.16	F(0)	Add one mainline lane	0.77	C	0.97	E
405-7		405	8.784	Alameda St. to Wilmington Ave.	0.89	D	1.12	F(0)	Add one mainline lane	0.74	C	0.94	E
405-8		405	9.556	Wilmington Ave. to Carson St.	1.19	F(0)	1.46	F(3)	Add one mainline lane	0.95	E	1.16	F(0)
405-9		405	10.541	Carson St. to Avalon Blvd.	1.18	F(0)	1.43	F(2)	Add one mainline lane	0.94	E	1.14	F(0)
405-10	1067	405	11.224	Avalon Blvd. to Jct. Rte. 110	1.00	E	1.22	F(0)	Add one mainline lane	0.84	D	1.02	F(0)
405-11		405	12.97	Jct. Rte. 110 to Vermont Ave.	1.10	F(0)	1.35	F(1)	Add one mainline lane	0.88	D	1.08	F(0)
405-12		405	13.28	Vermont Ave. to Normandie Ave.	0.92	D	1.12	F(0)	Add one mainline lane	0.76	C	0.94	E
405-13		405	13.826	Normandie Ave. to Western Ave.	1.06	F(0)	1.31	F(1)	Add one mainline lane	0.85	D	1.05	F(0)
405-14		405	14.398	Western Ave. to Crenshaw Blvd.	1.03	F(0)	1.26	F(1)	Add one mainline lane	0.82	D	1.01	F(0)
405-15		405	15.447	Crenshaw Blvd. to Artesia Blvd.	1.00	E	1.23	F(0)	Add one mainline lane	0.80	D	0.99	E
405-16		405	16.573	Artesia Blvd. to Hawthorne Blvd.	1.01	F(0)	1.24	F(0)	Add one mainline lane	0.81	D	1.00	E
405-17		405	17.589	Hawthorne Blvd. to Inglewood Ave.	1.06	F(0)	1.29	F(1)	Add one mainline lane	0.85	D	1.04	F(0)
710-2		710	13.945	Alondra Blvd. to Jct. Rte. 105	0.98	E	0.78	D	Add one mainline lane	0.84	D	0.67	C

Note: D/C is demand-to-capacity ratio.

Exhibit 143: Freeway Weekday Mitigation 2035 - Alternative 1 (continued)

13.4 Mitigations Needed with Alternative 2 by 2025

Analysis shown in Section 10.2 found that in 2025 the Project Alternative 2 would have impacts at 11 intersections and at 1 freeway segment. These are described in the sub-sections below.

13.4.1 Intersection Mitigations Needed with Alternative 2 by 2025

Exhibit 140 shows the measures that could be used to mitigate these impacts, which are also described below. Appendix T shows outlines of these measures on aerial photographs.

Intersection #1, Victoria St./Drive D

Because the Project would create a deficiency in the AM peak hour that would not exist in the absence of the Project, the University would be responsible for the full cost of this improvement. With implementation of the following improvement, operations at the intersection would improve to LOS A in the AM peak hour and LOS D in the PM peak hour, thus fully mitigating the project impact:

- Install traffic signal at intersection

However, this intersection is under the jurisdiction and control of the City of Carson and, accordingly, the University cannot guarantee implementation of this improvement. In the event that, prior to Board of Trustees approval of the CSUDH 2018 Master Plan, the City of Carson adopts a transportation impact fee program, supported by all appropriate technical studies, that would provide for the funding and construction of the following improvements at the subject intersection, CSU shall pay its fair share. For this reason, the recommended improvement is infeasible and the identified impact at this intersection is considered significant and unavoidable.

Intersection #3, Victoria St./Birchknoll Dr.

Because the Project would create a deficiency in the AM peak hour that would not exist in the absence of the Project, the University would be responsible for the full cost of this improvement. With implementation of the following improvement, operations at the intersection would improve to LOS B in the AM peak hour and LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add second westbound left-turn lane

However, this intersection is under the jurisdiction and control of the City of Carson and, accordingly, the University cannot guarantee implementation of this improvement. In the event that, prior to Board of Trustees approval of the CSUDH 2018 Master Plan, the City of Carson adopts a transportation impact fee program, supported by all appropriate technical studies, that would provide for the funding and construction of the following improvements at the subject intersection, CSU shall pay its fair share. For this reason, the recommended improvement is infeasible and the identified impact at this intersection is considered significant and unavoidable.

Intersection #5, Central Ave./Charles Willard St.

Because the Project would create a deficiency in the AM peak hour that would not exist in the absence of the Project, the University would be responsible for the full cost of this improvement. With implementation of the following improvement, operations at the intersection would improve to LOS B in the AM peak hour and LOS C in the PM peak hour, thus fully mitigating the project impact:

- Install traffic signal at intersection

However, this intersection is under the jurisdiction and control of the City of Carson and, accordingly, the University cannot guarantee implementation of this improvement. In the event that,

prior to Board of Trustees approval of the CSUDH 2018 Master Plan, the City of Carson adopts a transportation impact fee program, supported by all appropriate technical studies, that would provide for the funding and construction of the following improvements at the subject intersection, CSU shall pay its fair share. For this reason, the recommended improvement is infeasible and the identified impact at this intersection is considered significant and unavoidable.

Intersection #6, Central Ave./Beachey Pl.

Because the Project would create a deficiency in the AM peak hour that would not exist in the absence of the Project, the University would be responsible for the full cost of this improvement. With implementation of the following improvement, operations at the intersection would improve to LOS A in the AM peak hour and LOS A in the PM peak hour, thus fully mitigating the project impact:

- Install traffic signal at intersection

However, this intersection is under the jurisdiction and control of the City of Carson and, accordingly, the University cannot guarantee implementation of this improvement. In the event that, prior to Board of Trustees approval of the CSUDH 2018 Master Plan, the City of Carson adopts a transportation impact fee program, supported by all appropriate technical studies, that would provide for the funding and construction of the following improvements at the subject intersection, CSU shall pay its fair share. For this reason, the recommended improvement is infeasible and the identified impact at this intersection is considered significant and unavoidable.

Intersection #13, Avalon Blvd./Victoria St.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the intersection. With implementation of the following improvements, operations at the intersection would improve to LOS B in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Convert eastbound exclusive right-turn lane into an eastbound through/right-turn shared lane
- Convert westbound exclusive right-turn lane into an eastbound through/right-turn shared lane
- Add second northbound left-turn lane

However, these improvements may be physically infeasible due to difficulties with the right of way for the additional northbound left-turn lane because high voltage power lines are located in the median of Avalon Blvd. In addition, this intersection is under the jurisdiction and control of the City of Carson, and, as such, the University cannot guarantee implementation of the improvements. Moreover, the City does not currently have an adopted fee program in place to provide the non-CSU portion of the cost of improvements. In the event that, prior to Board of Trustees approval of the CSUDH 2018 Master Plan, the City of Carson adopts a transportation impact fee program, supported by all appropriate technical studies, that would provide for the funding and construction of the following improvements at the subject intersection, CSU shall pay its fair share. For these reasons, the recommended improvements are infeasible and the identified impact at this intersection is considered significant and unavoidable.

Intersection #14, Central Ave./Artesia Blvd. WB

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the intersection. With implementation of the following improvements, operations at the intersection would improve to LOS C in the AM peak hour and to LOS B in the PM peak hours, thus fully mitigating the project impact:

- Add second northbound left-turn lane

However, since this improvement may be physically infeasible due to right-of-way constraints. In addition, the overcrossing is under the jurisdiction and control of Caltrans, a different State agency from CSU. Nonetheless, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. However, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

Intersection #15, Central Ave./Albertoni St./Artesia Blvd. EB

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the intersection. With implementation of the following improvements, operations at the intersection would improve to LOS D in the AM and to LOS D in the PM peak hours, thus fully mitigating the project impact:

- Add second eastbound right-turn lane

However, since this improvement may be physically infeasible due to right-of-way constraints. In addition, the overcrossing is under the jurisdiction and control of Caltrans, a different State agency from CSU. Nonetheless, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. However, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

Intersection #20, I-110 SB Off-Ramp/190th St.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the intersection. With implementation of the following improvements, operations at the intersection would improve to LOS D in the AM peak hour. It would also improve the V/C in the PM peak hour to better than the No Project condition, thus fully mitigating the impact:

- Add a southbound left/right-shared lane

However, this ramp is under the jurisdiction and control of Caltrans, a different State agency from CSU. Nonetheless, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. However, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

Intersection #22, Figueroa St./190th St./Victoria St.

Because the Project would create a deficiency in the AM peak hour that would not exist in the absence of the Project, the University would be responsible for the full cost of this improvement. With implementation of the following improvements, operations at the intersection would improve to LOS C in the AM peak hour and to LOS D in the PM peak hours, thus fully mitigating the impact :

- Add third westbound through lane
- Add third eastbound through lane
- Re-phase the signal for protected left-turns for the eastbound and westbound phases.

However, this intersection is under the jurisdiction and control of the City of Carson and, accordingly, the University cannot guarantee implementation of this improvement. In the event that, prior to Board of Trustees approval of the CSUDH 2018 Master Plan, the City of Carson adopts a transportation impact fee program, supported by all appropriate technical studies, that would provide for the funding and construction of the following improvements at the subject intersection, CSU shall pay its fair share. For this reason, the recommended improvement is infeasible and the identified impact at this intersection is considered significant and unavoidable.

Intersection #24, Main St./Victoria St.

Because the Project would create a deficiency in the AM peak hour that would not exist in the absence of the Project, the University would be responsible for the full cost of this improvement. With implementation of the following improvements, operations at the intersection would improve to LOS C in the AM peak hour and to LOS D in the PM peak hours:

- Add westbound exclusive right-turn lane
- Add third eastbound through lane

However, this intersection is under the jurisdiction and control of the City of Carson and, accordingly, the University cannot guarantee implementation of this improvement. In the event that, prior to Board of Trustees approval of the CSUDH 2018 Master Plan, the City of Carson adopts a transportation impact fee program, supported by all appropriate technical studies, that would provide for the funding and construction of the following improvements at the subject intersection, CSU shall pay its fair share. For this reason, the recommended improvement is infeasible and the identified impact at this intersection is considered significant and unavoidable.

Intersection #26, Avalon Blvd./Del Amo Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the intersection. Implementation of the following improvement would improve operations at the intersection to LOS D in the AM peak hour and to E in the PM peak hour, (i.e. better than for No Project conditions), thus fully mitigating the impact:

- Add southbound exclusive right-turn lane

The University's fair share contribution towards this improvement was calculated to be 37% provided that such funds shall be used only for the above improvements that ultimately benefit CSU and the local community. However, this intersection is under the jurisdiction and control of the City of Carson and, as such, the University cannot guarantee implementation of the improvement. Additionally, the City does not currently have an adopted fee program in place to provide the non-CSU portion of the cost of improvements. In the event that, prior to Board of Trustees approval of the CSUDH 2018 Master Plan, the City of Carson adopts a transportation impact fee program, supported by all appropriate technical studies, that would provide for the funding and construction of the following improvements at the subject intersection, CSU shall pay its fair share. For these reasons, the recommended improvement is infeasible and the identified impact at this intersection is considered significant and unavoidable.

Study ID	Intersection Name	Control Type	With Project		Recommended Mitigation	With Mitigation	
			LOS (ICU or HCM)			LOS (ICU or HCM)	
			AM Peak Hour	PM Peak Hour		AM Peak Hour	PM Peak Hour
1	Victoria St./Drive D	TWSC	F	F	Signalize	A	D
3	Victoria St./Birchknoll Dr.	Signalized	C	F	Add 2nd WB Left-Turn Lane	B	D
5	Central Ave./Charles Willard St.	TWSC	F	F	Signalize	B	C
6	Central Ave./Beachey Pl.	TWSC	F	F	Signalize	A	A
13	Avalon Blvd./Victoria St.	Signalized	C	F	Add 2nd NB Left-Turn Lane, Convert EB Exclusive Right-Turn Lane to a Through/Right-Shared Lane, Convert WB Exclusive Right-Turn Lane to a Through/Right-Shared Lane	B	D
14	Central Ave./Artesia Blvd. WB	Signalized	D	E	Add 2nd NB Left-Turn Lane	C	B
15	Central Ave./Albertoni St./Artesia Blvd. EB	Signalized	F	F	Add 2nd EB Right-Turn Lane	D	D
20	I-110 SB Off-Ramp/190th St.	Signalized	F	F	Add a SB Left/Right-Shared Lane	D	F
22	Figueroa St./190th St./Victoria St.	Signalized	D	F	Add 3rd WB Through Lane, Add 3rd EB Through Lane	C	D
24	Main St./Victoria St.	Signalized	C	F	Add 3rd EB Through Lane, Add WB Exclusive Right-Turn Lane	C	D
26	Avalon Blvd./Del Amo Blvd.	Signalized	D	E	Add SB Exclusive Right-Turn Lane	D	E

Exhibit 144: Intersection Weekday Mitigations Needed by 2025 with Alternative 2

13.4.2 Weekday Freeway Mitigations Needed with Alternative 2 by 2025

Exhibit 145 shows the potential improvements that could be made to mitigate the significant impacts to freeway mainline segments that would result when project traffic is combined with other cumulative background traffic forecast to occur by year 2025. The percentage of the deficiency attributable to the project is illustrated in Table 139. The potential improvements for each significantly impacted segment are described in the following mitigation measures:

SR-91 eastbound, Avalon Blvd. to Central Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 eastbound, Avalon Boulevard to Central Avenue. Implementation of the following improvement would improve operations at the freeway to LOS C in the AM peak hour and to LOS F(0) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 eastbound, Central Ave. to Wilmington Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 eastbound, Central Avenue to Wilmington Avenue. Implementation of the following improvement would improve operations at the freeway to LOS C in the AM peak hour and to LOS F(1) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 eastbound, Wilmington Ave. to Alameda St.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 eastbound, Wilmington Avenue to Alameda Street. Implementation of the following improvement would improve operations at the freeway to LOS C in the AM peak hour and to LOS F(1) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 eastbound, Alameda St. to Alameda St./Santa Fe Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 eastbound, Alameda Street to Alameda Street/Santa Fe Avenue. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS F(3) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 northbound, Sepulveda Blvd. to Carson St.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 northbound, Sepulveda Boulevard to Carson Street. Implementation of the following improvement would improve operations at the freeway to LOS E in the AM peak hour and to LOS C in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 northbound, Carson St. to Torrance/Del Amo Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 northbound, Carson Street to Torrance/Del Amo Boulevard. Implementation of the following improvement would improve operations at the freeway to LOS F(0) in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 northbound, Torrance/Del Amo Blvd. to Jct. Rte. 405

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 northbound, Torrance/Del Amo Boulevard to Junction with Route 405. Implementation of the following improvement would improve operations at the freeway to LOS F(0) in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 northbound, Jct. Rte. 405 to Jct. Rte. 91

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 northbound, Junction Route 405 to Junction Route 91. Implementation of the following improvement would improve operations at the freeway to LOS E in the AM peak hour and to LOS C in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 northbound, Carson St. to Avalon Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 northbound, Carson Street to Avalon Boulevard. Implementation of the following improvement would improve operations at the freeway to LOS F(0) in the AM peak hour and to LOS E in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 northbound, Avalon Blvd. to Jct. Rte. 110

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 northbound, Avalon Boulevard to Junction Route 110. Implementation of the following improvement would improve operations at the freeway to LOS E in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 northbound, Jct. Rte. 110 to Vermont Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 northbound, Junction Route 110 to Vermont Avenue. Implementation of the following improvement would improve operations at the freeway to LOS E in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 northbound, Normandie Ave. to Western Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 northbound, Normandie Avenue to Western Avenue. Implementation of the following improvement would improve operations at the freeway to LOS E in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 northbound, Western Ave. to Crenshaw Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 northbound, Western Avenue to Crenshaw Boulevard. Implementation of the following improvement would improve operations at the freeway to LOS F(0) in the AM peak hour and to LOS E in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 northbound, Crenshaw Blvd. to Artesia Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 northbound, Crenshaw Boulevard to Artesia Boulevard. Implementation of the following improvement would improve operations at the freeway to LOS F(0) in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 westbound, Central Ave. to Wilmington Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 westbound, Central Avenue to Wilmington Avenue. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS C in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 westbound, Wilmington Ave. to Alameda St.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 westbound, Wilmington Avenue to Alameda Street. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS C in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 westbound, Alameda St. to Alameda St./Santa Fe Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 westbound, Alameda Street to Alameda Street/Santa Fe Avenue. Implementation of the following improvement would improve operations at the freeway to LOS F(0) in the AM peak hour and to LOS C in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 westbound, Long Beach Blvd. to Jct. Rte. 710

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 westbound, Long Beach Boulevard to Junction Route 710. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS C in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 southbound, Sepulveda Blvd. to Carson St.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 southbound, Sepulveda Boulevard to Carson Street. Implementation of the following improvement would improve operations at the freeway to LOS C in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 southbound, Carson St. to Torrance/Del Amo Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 southbound, Carson Street to Torrance/Del Amo Boulevard. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS F(0) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 southbound, Torrance/Del Amo Blvd. to Jct. Rte. 405

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 southbound, Torrance/Del Amo Boulevard to Junction Route 405. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS F(0) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 southbound, Jct. Rte. 405 to Jct. Rte. 91

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 southbound, Junction Route 405 to Junction Route 91. Implementation of the following improvement would improve operations at the freeway to LOS F(0) in the AM peak hour and to LOS F(2) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 southbound, Rosecrans Ave. to El Segundo Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 southbound, Rosecrans Avenue to El Segundo Boulevard. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 southbound, Century Blvd. to Manchester Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 southbound, Century Boulevard to Manchester Avenue. Implementation of the following improvement would improve operations at the freeway to LOS E in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 southbound, Carson St. to Avalon Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 southbound, Carson Street to Avalon Boulevard. Implementation of the following improvement would improve operations at the freeway to LOS E in the AM peak hour and to LOS F(0) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 southbound, Avalon Blvd. to Jct. Rte. 110

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 southbound, Avalon Boulevard to Junction Route 110. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS F(0) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 southbound, Jct. Rte. 110 to Vermont Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 southbound, Junction Route 110 to Vermont Avenue. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS F(0) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

Northbound/Eastbound

ID	CMP Station	Fwy Rte	Post Mile	Location	2025 Plus Project				Recommended Mitigation Measure	2025 Plus Project with Mitigation			
					AM Peak Hour		PM Peak Hour			AM Peak Hour		PM Peak Hour	
					D/C	LOS	D/C	LOS		D/C	LOS	D/C	LOS
91-2		91	7.426	Avalon Blvd. to Central Ave.	0.73	C	1.49	F(3)	Add one mainline lane	0.61	C	1.24	F(0)
91-3		91	8.435	Central Ave. to Wilmington Ave.	0.74	C	1.51	F(3)	Add one mainline lane	0.62	C	1.26	F(1)
91-4		91	9.162	Wilmington Ave. to Alameda St.	0.77	C	1.57	F(3)	Add one mainline lane	0.64	C	1.31	F(1)
91-5		91	10.271	Alameda St. to Alameda St./Santa Fe	1.00	E	2.05	F(3)	Add one mainline lane	0.80	D	1.64	F(3)
91-6	1033	91	10.41	Alameda St./Santa Fe Ave. to Long B	0.69	C	1.41	F(2)		0.69	C	1.41	F(2)
91-7		91	11.096	Long Beach Blvd. to Jct. Rte. 710	0.69	C	1.41	F(2)		0.69	C	1.41	F(2)
110-5		110	5.451	Sepulveda Blvd. to Carson St.	1.18	F(0)	0.85	D	Add one mainline lane	0.94	E	0.68	C
110-6		110	7.016	Carson St. to Torrance/Del Amo Blvd	1.35	F(1)	0.99	E	Add one mainline lane	1.08	F(0)	0.79	D
110-7		110	8.028	Torrance/Del Amo Blvd. to Jct. Rte. 4	1.43	F(2)	1.04	F(0)	Add one mainline lane	1.14	F(0)	0.83	D
110-8		110	8.775	Jct. Rte. 405 to Jct. Rte. 91	1.17	F(0)	0.84	D	Add one mainline lane	1.00	E	0.72	C
405-9		405	10.541	Carson St. to Avalon Blvd.	1.37	F(2)	1.17	F(0)	Add one mainline lane	1.09	F(0)	0.94	E
405-10	1067	405	11.224	Avalon Blvd. to Jct. Rte. 110	1.17	F(0)	1.02	F(0)	Add one mainline lane	0.97	E	0.85	D
405-11		405	12.97	Jct. Rte. 110 to Vermont Ave.	1.15	F(0)	1.01	F(0)	Add one mainline lane	0.96	E	0.84	D
405-13		405	13.826	Normandie Ave. to Western Ave.	1.13	F(0)	0.99	E	Add one mainline lane	0.94	E	0.82	D
405-14		405	14.398	Western Ave. to Crenshaw Blvd.	1.35	F(1)	1.18	F(0)	Add one mainline lane	1.08	F(0)	0.95	E
405-15		405	15.447	Crenshaw Blvd. to Artesia Blvd.	1.32	F(1)	1.16	F(0)	Add one mainline lane	1.06	F(0)	0.92	D

Note: D/C is demand-to-capacity ratio.

Southbound/Westbound

ID	CMP Station	Fwy Rte	Post Mile	Location	2025 Plus Project				Recommended Mitigation Measure	2025 Plus Project with Mitigation			
					AM Peak Hour		PM Peak Hour			AM Peak Hour		PM Peak Hour	
					D/C	LOS	D/C	LOS		D/C	LOS	D/C	LOS
91-2		91	7.426	Avalon Blvd. to Central Ave.	0.96	E	0.66	C		0.96	E	0.66	C
91-3		91	8.435	Central Ave. to Wilmington Ave.	0.99	E	0.67	C	Add one mainline lane	0.83	D	0.56	C
91-4		91	9.162	Wilmington Ave. to Alameda St.	1.02	F(0)	0.69	C	Add one mainline lane	0.85	D	0.58	C
91-5		91	10.271	Alameda St. to Alameda St./Santa Fe	1.34	F(1)	0.90	D	Add one mainline lane	1.07	F(0)	0.72	C
91-7		91	11.096	Long Beach Blvd. to Jct. Rte. 710	1.11	F(0)	0.75	C	Add one mainline lane	0.92	D	0.63	C
110-5		110	5.451	Sepulveda Blvd. to Carson St.	0.94	E	1.15	F(0)	Add one mainline lane	0.75	C	0.92	D
110-6		110	7.016	Carson St. to Torrance/Del Amo Blvd	1.09	F(0)	1.33	F(1)	Add one mainline lane	0.87	D	1.06	F(0)
110-7		110	8.028	Torrance/Del Amo Blvd. to Jct. Rte. 4	1.16	F(0)	1.40	F(2)	Add one mainline lane	0.92	D	1.12	F(0)
110-8		110	8.775	Jct. Rte. 405 to Jct. Rte. 91	1.41	F(2)	1.72	F(3)	Add one mainline lane	1.12	F(0)	1.37	F(2)
110-10		110	11.239	Redondo Beach Blvd. to Rosecrans A	0.95	E	0.91	D		0.95	E	0.91	D
110-11		110	11.891	Rosecrans Ave. to El Segundo Blvd.	1.00	E	0.96	E	Add one mainline lane	0.85	D	0.81	D
110-14		110	14.967	Century Blvd. to Manchester Ave.	1.11	F(0)	1.07	F(0)	Add one mainline lane	0.95	E	0.92	D
110-18		110	17.98	Slauson Ave. to 51st St.	1.25	F(0)	1.20	F(0)		1.25	F(0)	1.20	F(0)
405-9		405	10.541	Carson St. to Avalon Blvd.	1.17	F(0)	1.42	F(2)	Add one mainline lane	0.94	E	1.13	F(0)
405-10	1067	405	11.224	Avalon Blvd. to Jct. Rte. 110	1.01	F(0)	1.21	F(0)	Add one mainline lane	0.84	D	1.01	F(0)
405-11		405	12.97	Jct. Rte. 110 to Vermont Ave.	1.08	F(0)	1.33	F(1)	Add one mainline lane	0.87	D	1.06	F(0)
405-14		405	14.398	Western Ave. to Crenshaw Blvd.	1.01	F(0)	1.25	F(0)		1.01	F(0)	1.25	F(0)

Note: D/C is demand-to-capacity ratio.

Exhibit 145: Freeway Weekday Mitigations Needed by 2025 with Alternative 2

13.5 Weekday Mitigations Needed with Alternative 2 by 2035

Analysis shown in Section 12.2 found that in 2035 the Project would have impacts at 17 intersections and at 11 of the freeway segments. These are described in the sub-sections below.

13.5.1 Weekday Intersection Mitigations Needed with Alternative 2 by 2035

Exhibit 142 shows the measures that could be used to mitigate the impacts to intersections. Appendix T shows outlines of these measures on aerial photographs.

Intersection #1, Victoria St./Drive D

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the intersection. With implementation of the following improvements, operations at the intersection would improve to LOS D in the AM peak hour and to LOS E in the PM peak hour, thus fully mitigating the project impact:

- Add second westbound left-turn lane
- Add second northbound left-turn lane and convert two-way left turn lane into median east of intersection
- Use overlap phasing for the eastbound right-turn movement

Note that this is in addition to the mitigation measure identified for this location as needed for 2025. The University's fair share contribution towards the improvements was calculated to be 65% provided that such funds shall be used only for the above improvements that ultimately benefit CSU and the local community. However, this intersection is under the jurisdiction and control of the City of Carson and as such, the University cannot guarantee implementation of the improvements. Additionally, the City does not currently have an adopted fee program in place to provide the non-CSU portion of the cost of improvements. In the event that, prior to Board of Trustees approval of the CSUDH 2018 Master Plan, the City of Carson adopts a transportation impact fee program, supported by all appropriate technical studies, that would provide for the funding and construction of the following improvements at the subject intersection, CSU shall pay its fair share. For these reasons, the identified impact at this intersection is considered significant and unavoidable.

Intersection #9, University Dr./Toro Center Dr.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the intersection. With implementation of the following improvements, operations at the intersection would improve to LOS D in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Install traffic signal at intersection with overlap phasing for the westbound and southbound right-turn movements

The University's fair share contribution towards the improvements was calculated to be 61% provided that such funds shall be used only for the above improvements that ultimately benefit CSU and the local community. However, this intersection is under the jurisdiction and control of the City of Carson and as such, the University cannot guarantee implementation of the improvements. Additionally, the City does not currently have an adopted fee program in place to provide the non-CSU portion of the cost of improvements. In the event that, prior to Board of Trustees approval of the CSUDH 2018 Master Plan, the City of Carson adopts a transportation impact fee program, supported by all appropriate technical studies, that would provide for the funding and construction of the following improvements at the subject intersection, CSU shall pay its fair share. For these reasons, the identified impact at this intersection is considered significant and unavoidable.

Intersection #10, Albertoni St./SR-91 EB Ramps

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the intersection. Implementation of the following improvement would improve operations at the intersection to LOS B in the AM peak hour and to LOS C in the PM peak hour, thus fully mitigating the project impact:

- Convert the southbound exclusive right-turn lane into a shared left/right-turn shared lane

The percentage of the deficiency that is attributable to the Project for this improvement was calculated to be 50%. However, this ramp is under the jurisdiction and control of Caltrans, a different State agency from CSU. Nonetheless, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. However, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

Intersection #12, Avalon Blvd./Albertoni St.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the intersection. With implementation of the following improvement, operations at the intersection would improve to LOS C in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add second exclusive eastbound right-turn lane

The University's fair share contribution towards this improvement was calculated to be 44% provided that such funds shall be used only for the above improvements that ultimately benefit CSU and the local community. However, this intersection is under the jurisdiction and control of the City of Carson and, as such, the University cannot guarantee implementation of the improvement. Additionally, the City does not currently have an adopted fee program in place to provide the non-CSU portion of the cost of improvements. In the event that, prior to Board of Trustees approval of the CSUDH 2018 Master Plan, the City of Carson adopts a transportation impact fee program, supported by all appropriate technical studies, that would provide for the funding and construction of the following improvements at the subject intersection, CSU shall pay its fair share. For these reasons, the recommended improvement is infeasible and the identified impact at this intersection is considered significant and unavoidable.

Intersection #13, Avalon Blvd./Victoria St.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the intersection. With implementation of the following improvements, operations at the intersection would improve to LOS C in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add third westbound through lane instead of converting the west bound right-turn into a shared through/right-turn lane and move median south

Note that this is in addition to the mitigation measure identified for this location as needed for 2025. The University's fair share contribution towards the improvements was calculated to be 68% provided that such funds shall be used only for the above improvements that ultimately benefit CSU and the local community. However, this intersection is under the jurisdiction and control of the City of Carson and as such, the University cannot guarantee implementation of the improvements. Additionally, the City does not currently have an adopted fee program in place to provide the non-CSU portion of the cost of improvements. In the event that, prior to Board of Trustees approval of the CSUDH 2018 Master Plan, the City of Carson adopts a transportation impact fee program, supported by all appropriate technical studies, that would provide for the funding and construction of the following improvements at the subject intersection, CSU shall pay its fair share. For these reasons, the identified impact at this intersection is considered significant and unavoidable.

Intersection #14, Central Ave/Artesia Blvd. WB

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the intersection. With implementation of the following improvements, operations at the intersection would improve to LOS D in the AM peak hour and to LOS C in the PM peak hour, thus fully mitigating the project impact:

- Add second northbound left-turn lane

However, this improvement may be infeasible due to right-of-way constraints. In addition, this overcrossing is under the jurisdiction and control of Caltrans, a different State agency from CSU. Nonetheless, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. However, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

Intersection #15, Central Ave./Albertoni St./Artesia Blvd. EB

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the intersection. With implementation of the following improvements, operations at the intersection would improve to LOS D in the AM peak hour and to LOS C in the PM peak hour, thus fully mitigating the project impact:

- Add third southbound through lane

However, these improvements may be infeasible due to right-of-way constraints. In addition, this overcrossing is under the jurisdiction and control of Caltrans, a different State agency from CSU. Nonetheless, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. However, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

Intersection #16, Central Ave./Victoria St.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the intersection. With implementation of the following improvements, operations at the intersection would improve to LOS D in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add third southbound through lane
- Add eastbound exclusive left-turn lane

However, these improvements may be physically infeasible due to right-of-way constraints. In addition, this intersection is under the jurisdiction and control of the City of Carson, and, as such, the University cannot guarantee implementation of the improvements. Moreover, the City does not currently have an adopted fee program in place to provide the non-CSU portion of the cost of improvements. In the event that, prior to Board of Trustees approval of the CSUDH 2018 Master Plan, the City of Carson adopts a transportation impact fee program, supported by all appropriate technical studies, that would provide for the funding and construction of the following improvements at the subject intersection, CSU shall pay its fair share. For these reasons, the recommended improvements are infeasible and the identified impact at this intersection is considered significant and unavoidable.

Intersection #20, I-110 SB Off-Ramp/190th St.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the intersection. Implementation of the following improvement would improve

operations at the intersection to LOS E in the AM peak hour and to LOS F in the PM peak hour (i.e. better than for No Project conditions), thus fully mitigating the impact:

- Add a southbound left/right-shared lane

However, this ramp is under the jurisdiction and control of Caltrans, a different State agency from CSU. Nonetheless, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. However, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

Intersection #22, Figueroa St./190th St./Victoria St.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the intersection. With implementation of the following improvements, operations at the intersection would improve to LOS D in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add second westbound left-turn lane
- Re-phase signal to provide protected left-turns for the eastbound and westbound phases

However, the addition second westbound left-turn lane improvement may be infeasible due to right-of-way constraints. In addition, this intersection is under the jurisdiction and control of the City of Carson, and, as such, the University cannot guarantee implementation of the improvements. Moreover, the City does not currently have an adopted fee program in place to provide the non-CSU portion of the cost of improvements. In the event that, prior to Board of Trustees approval of the CSUDH 2018 Master Plan, the City of Carson adopts a transportation impact fee program, supported by all appropriate technical studies, that would provide for the funding and construction of the following improvements at the subject intersection, CSU shall pay its fair share. For these reasons, the recommended improvements are infeasible and the identified impact at this intersection is considered significant and unavoidable.

Intersection #23, Broadway/Victoria St.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the intersection. With implementation of the following improvements, operations at the intersection would improve to LOS B in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add third westbound through lane
- Add eastbound right-turn lane

Note that this is in addition to the mitigation measure identified for this location as needed for 2025. The University's fair share contribution towards the improvements was calculated to be 72% provided that such funds shall be used only for the above improvements that ultimately benefit CSU and the local community. However, this intersection is under the jurisdiction and control of the City of Carson and as such, the University cannot guarantee implementation of the improvements. Additionally, the City does not currently have an adopted fee program in place to provide the non-CSU portion of the cost of improvements. In the event that, prior to Board of Trustees approval of the CSUDH 2018 Master Plan, the City of Carson adopts a transportation impact fee program, supported by all appropriate technical studies, that would provide for the funding and construction of the following improvements at the subject intersection, CSU shall pay its fair share. For these reasons, the identified impact at this intersection is considered significant and unavoidable.

Intersection #24, Main St./Victoria St.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the intersection. With implementation of the following improvements, operations at the intersection would improve to LOS B in the AM peak hour and to LOS E in the PM peak hour, (i.e. better than for No Project conditions), thus fully mitigating the impact:

- Convert westbound exclusive right-turn lane from the 2025 mitigations into westbound through/right-turn shared lane
- Add eastbound exclusive right-turn

The University's fair share contribution towards this improvement was calculated to be 70% provided that such funds shall be used only for the above improvements that ultimately benefit CSU and the local community. However, the additional eastbound right-turn lane improvement may be infeasible due to right-of-way constraints. In addition, this intersection is under the jurisdiction and control of the City of Carson, and, as such, the University cannot guarantee implementation of the improvements. Moreover, the City does not currently have an adopted fee program in place to provide the non-CSU portion of the cost of improvements. In the event that, prior to Board of Trustees approval of the CSUDH 2018 Master Plan, the City of Carson adopts a transportation impact fee program, supported by all appropriate technical studies, that would provide for the funding and construction of the following improvements at the subject intersection, CSU shall pay its fair share. For these reasons, the recommended improvements are infeasible and the identified impact at this intersection is considered significant and unavoidable.

Intersection #26, Avalon Blvd./Del Amo Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the intersection. With implementation of the following improvement, operations at the intersection would improve to LOS D in the AM peak hour and to LOS E in the PM peak hour, (i.e. better than for No Project conditions), thus fully mitigating the impact:

- Convert the westbound exclusive right-turn lane into a westbound through/right-turn shared lane

Note that this is in addition to the mitigation measure identified for this location as needed for 2025. The University's fair share contribution towards this improvement was calculated to be 54% provided that such funds shall be used only for the above improvements that ultimately benefit CSU and the local community. However, this intersection is under the jurisdiction and control of the City of Carson and, as such, the University cannot guarantee implementation of the improvement. Additionally, the City does not currently have an adopted fee program in place to provide the non-CSU portion of the cost of improvements. In the event that, prior to Board of Trustees approval of the CSUDH 2018 Master Plan, the City of Carson adopts a transportation impact fee program, supported by all appropriate technical studies, that would provide for the funding and construction of the following improvements at the subject intersection, CSU shall pay its fair share. For these reasons, the recommended improvement is infeasible and the identified impact at this intersection is considered significant and unavoidable.

Intersection #29, Central Ave./University Dr.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the intersection. With implementation of the following improvements, operations at the intersection would improve to LOS D in the AM peak hour and to LOS C in the PM peak hour, thus fully mitigating the project impact:

- Add second eastbound left-turn lane
- Add second southbound right-turn lane

However, these improvements may be physically infeasible due to right-of-way constraints. In addition, this intersection is under the jurisdiction and control of the City of Carson, and, as such, the University cannot guarantee implementation of the improvements. Moreover, the City does not currently have an adopted fee program in place to provide the non-CSU portion of the cost of improvements. In the event that, prior to Board of Trustees approval of the CSUDH 2018 Master Plan, the City of Carson adopts a transportation impact fee program, supported by all appropriate technical studies, that would provide for the funding and construction of the following improvements at the subject intersection, CSU shall pay its fair share. For these reasons, the recommended improvements are infeasible and the identified impact at this intersection is considered significant and unavoidable.

Study ID	Intersection Name	Control Type	With Project		Mitigation Measures already Recommended for 2025 Plus Project	Additional Mitigation Measures For 2035 Plus Project	With Mitigation	
			LOS (ICU or HCM)				AM Peak Hour	PM Peak Hour
			AM Peak Hour	PM Peak Hour				
1	Victoria St./Drive D	TWSC	F	F	Signalize	Add 2nd WB Left-Turn Lane, Add 2nd NB Left-Turn Lanes, EB Right-Turn Overlap Phasing	D	E
3	Victoria St./Birchknoll Dr.	Signalized	B	E	Add 2nd WB Left-Turn Lane		B	D
5	Central Ave./Charles Willard St.	TWSC	F	F	Signalize		E	D
6	Central Ave./Beachey Pl.	TWSC	F	F	Signalize		C	C
9	University Dr./Toro Center Dr.	TWSC	F	F		Signalize, WB Right-Turn Overlap Phasing, SB Right-Turn Overlap Phasing	D	D
10	Albertoni St./SR 91 EB Ramps	Signalized	C	E		Convert SB Exclusive Right-Turn Lane to Shared Left/Right-Turn Lane	B	C
12	Avalon Blvd./Albertoni St.	Signalized	C	E		Add 2nd Exclusive EB Right-Turn Lane	C	D
13	Avalon Blvd./Victoria St.	Signalized	E	F	Add 2nd NB Left-Turn Lane, Convert EB Exclusive Right-Turn Lane to a Through/Right-Shared Lane, Convert WB Exclusive Right-Turn Lane to a Through/Right-Shared Lane	Add 3rd WB Through Lane (instead of converting RT into a shared TH/RT)	C	D
14	Central Ave./Artesia Blvd. WB	Signalized	F	F	Add 2nd NB Left-Turn Lane		D	C
15	Central Ave./Albertoni St./Artesia Blvd. EB	Signalized	F	F	Add 2nd EB Right-Turn Lane	Add 3rd SB Through Lane	C	D
16	Central Ave./Victoria St.	Signalized	F	E		Add 3rd SB Through Lane, Add EB Exclusive Right-Turn Lane	D	D
20	I-110 SB Off-Ramp/190th St.	Signalized	F	F	Add a SB Left/Right-Shared Lane		E	F
22	Figueroa St./190th St./Victoria St.	Signalized	E	F	Add 3rd WB Through Lane, Add 3rd EB Through Lane	Add 2nd WB Left-Turn Lane	D	D
23	Broadway/Victoria St.	Signalized	C	E		Add 3rd WB Through Lane, Add EB Right-Turn Lane	B	D
24	Main St./Victoria St.	Signalized	D	F	Add 3rd EB Through Lane, Add WB Exclusive Right-Turn Lane	Add 3rd WB Through Lane (instead of the WB Exclusive Right-Turn Lane) Add EB Exclusive Right-Turn Lane	B	E
26	Avalon Blvd./Del Amo Blvd.	Signalized	E	F	Add SB Exclusive Right-Turn Lane	Convert WB Exclusive Right-Turn Lane into an WB Through/Right-Shared Lane	D	E
29	Central Ave./University Dr.	Signalized	F	F		Add 2nd EB Left-Turn Lane, Add 2nd SB Right-Turn Lane	D	C

Exhibit 146: Intersection Weekday Mitigations Needed by 2035 with Alternative 2

13.5.2 Weekday Freeway Mitigations Needed with Alternative 2 by 2035

Exhibit 147 shows the potential improvements that could be made to mitigate the significant impacts to freeway mainline segments that would result when project traffic is combined with other cumulative background traffic forecast to occur by year 2035. The percentage of the deficiency attributable to the project is illustrated in Table 139. The potential improvements for each significantly impacted segment not already mitigated by the improvements referenced under the 2025 scenario are described in the following mitigation measures:

SR-91 eastbound, Jct. Rte. 110 to Avalon Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 eastbound, Jct. Rte. 110 to Avalon Blvd. Implementation of the following improvement would improve operations at the freeway to LOS B in the AM peak hour and to LOS F(0) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 eastbound, Alameda St./Santa Fe Ave. to Long Beach Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 eastbound, Alameda St./Santa Fe Ave. to Long Beach Blvd. Implementation of the following improvement would improve operations at the freeway to LOS C in the AM peak hour and to LOS F(0) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 eastbound, Long Beach Blvd. to Jct. Rte. 710

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 eastbound, Long Beach Blvd. to Jct. Rte. 710. Implementation of the following improvement would improve operations at the freeway to LOS C in the AM peak hour and to LOS F(0) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 eastbound, Jct. Rte. 710 to Cherry Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 eastbound, Jct. Rte. 710 to Cherry Ave. Implementation of the

following improvement would improve operations at the freeway to LOS C in the AM peak hour and to LOS F(0) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 eastbound, Cherry Ave. to Paramount Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 eastbound, Cherry Ave. to Paramount Blvd. Implementation of the following improvement would improve operations at the freeway to LOS C in the AM peak hour and to LOS F(0) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 eastbound, Paramount Blvd. to Downey Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 eastbound, Paramount Blvd. to Downey Ave. Implementation of the following improvement would improve operations at the freeway to LOS C in the AM peak hour and to LOS E in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 eastbound, Downey Ave. to Jct. Rte. 19

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 eastbound, Downey Ave. to Jct. Rte. 19. Implementation of the following improvement would improve operations at the freeway to LOS C in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 eastbound, Jct. Rte. 19 to Clark Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 eastbound, Jct. Rte. 19 to Clark Ave. Implementation of the following

improvement would improve operations at the freeway to LOS C in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 northbound, Rosecrans Ave. to El Segundo Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 northbound, Rosecrans Ave. to El Segundo Blvd. Implementation of the following improvement would improve operations at the freeway to LOS C in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 northbound, El Segundo Blvd. to Jct. Rte. 105

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 northbound, El Segundo Blvd. to Jct. Rte. 105. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 northbound, Century Blvd. to Manchester Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 northbound, Century Blvd. to Manchester Ave. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 northbound, Manchester Ave. to Florence Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 northbound, Manchester Ave. to Florence Ave. Implementation of the

following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 northbound, Gage Ave. to Slauson Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 northbound, Gage Ave. to Slauson Ave. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 northbound, Slauson Ave. to 51st St.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 northbound, Slauson Ave. to 51st St. Implementation of the following improvement would improve operations at the freeway to LOS E in the AM peak hour and to LOS E in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 northbound, 51st St. to Vernon Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 northbound, 51st St. to Vernon Ave. Implementation of the following improvement would improve operations at the freeway to LOS E in the AM peak hour and to LOS F(0) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 northbound, Vernon Ave. to Martin Luther King Jr. Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 northbound, Vernon Ave. to Martin Luther King Jr. Blvd.

Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 northbound, Orange Ave. to Atlantic Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 northbound, Orange Ave. to Atlantic Ave. Implementation of the following improvement would improve operations at the freeway to LOS F(2) in the AM peak hour and to LOS F(0) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 northbound, Atlantic Ave. to Long Beach Blvd

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 northbound, Atlantic Ave. to Long Beach Blvd. Implementation of the following improvement would improve operations at the freeway to LOS F(2) in the AM peak hour and to LOS F(0) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 northbound, Jct. Rte. 710 to Alameda St.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 northbound, Jct. Rte. 710 to Alameda St. Implementation of the following improvement would improve operations at the freeway to LOS F(0) in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 northbound, Alameda St. to Wilmington Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 northbound, Alameda St. to Wilmington Ave. Implementation of the

following improvement would improve operations at the freeway to LOS E in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 northbound, Wilmington Ave. to Carson St.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 northbound, Wilmington Ave. to Carson St. Implementation of the following improvement would improve operations at the freeway to LOS F(0) in the AM peak hour and to LOS E in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 northbound, Vermont Ave. to Normandie Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 northbound, Vermont Ave. to Normandie Ave. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS C in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 northbound, Hawthorne Blvd. to Inglewood Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 northbound, Hawthorne Blvd. to Inglewood Ave. Implementation of the following improvement would improve operations at the freeway to LOS E in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 northbound, Inglewood Ave. to Rosecrans Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 northbound, Inglewood Ave. to Rosecrans Ave. Implementation of the

following improvement would improve operations at the freeway to LOS E in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 westbound, Jct. Rte. 110 to Avalon Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 westbound, Jct. Rte. 110 to Avalon Blvd. Implementation of the following improvement would improve operations at the freeway to LOS F(3) in the AM peak hour and to LOS F(0) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 westbound, Avalon Blvd. to Central Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 westbound, Avalon Blvd. to Central Ave. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS C in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 westbound, Alameda St./Santa Fe Ave. to Long Beach Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 westbound, Alameda St./Santa Fe Ave. to Long Beach Blvd. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS C in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 westbound, Jct. Rte. 710 to Cherry Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 westbound, Jct. Rte. 710 to Cherry Ave. Implementation of the

following improvement would improve operations at the freeway to LOS F(0) in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 westbound, Cherry Ave. to Paramount Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 westbound, Cherry Ave. to Paramount Blvd. Implementation of the following improvement would improve operations at the freeway to LOS E in the AM peak hour and to LOS C in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 westbound, Paramount Blvd. to Downey Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 westbound, Paramount Blvd. to Downey Ave. Implementation of the following improvement would improve operations at the freeway to LOS F(0) in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 westbound, Downey Ave. to Jct. Rte. 19

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 westbound, Downey Ave. to Jct. Rte. 19. Implementation of the following improvement would improve operations at the freeway to LOS F(0) in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 westbound, Jct. Rte. 19 to Clark Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 westbound, Jct. Rte. 19 to Clark Ave. Implementation of the following

improvement would improve operations at the freeway to LOS F(0) in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 westbound, Clark Ave. to Bellflower Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 westbound, Clark Ave. to Bellflower Blvd. Implementation of the following improvement would improve operations at the freeway to LOS F(0) in the AM peak hour and to LOS C in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

SR-91 westbound, Bellflower Blvd. to Jct. Rte. 605

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the SR-91 westbound, Bellflower Blvd. to Jct. Rte. 605. Implementation of the following improvement would improve operations at the freeway to LOS F(0) in the AM peak hour and to LOS C in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 southbound, Redondo Beach Blvd. to Rosecrans Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 southbound, Redondo Beach Blvd. to Rosecrans Ave. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 southbound, Manchester Ave. to Florence Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 southbound, Manchester Ave. to Florence Ave. Implementation of the

following improvement would improve operations at the freeway to LOS E in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 southbound, Florence Ave. to Gage Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 southbound, Florence Ave. to Gage Ave. Implementation of the following improvement would improve operations at the freeway to LOS E in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 southbound, Gage Ave. to Slauson Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 southbound, Gage Ave. to Slauson Ave. Implementation of the following improvement would improve operations at the freeway to LOS E in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 southbound, Slauson Ave. to 51st St.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 southbound, Slauson Ave. to 51st St. Implementation of the following improvement would improve operations at the freeway to LOS F(0) in the AM peak hour and to LOS F(0) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 southbound, 51st St. to Vernon Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 southbound, 51st St. to Vernon Ave. Implementation of the following

improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 southbound, Vernon Ave. to Martin Luther King Jr. Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 southbound, Vernon Ave. to Martin Luther King Jr. Blvd. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-110 southbound, Martin Luther King Jr. Blvd. to Exposition Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-110 southbound, Martin Luther King Jr. Blvd. to Exposition Blvd. Implementation of the following improvement would improve operations at the freeway to LOS E in the AM peak hour and to LOS D in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 southbound, Orange Ave. to Atlantic Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 southbound, Orange Ave. to Atlantic Ave. Implementation of the following improvement would improve operations at the freeway to LOS F(0) in the AM peak hour and to LOS F(1) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 southbound, Long Beach Blvd to Jct. Rte. 710

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 southbound, Long Beach Blvd to Jct. Rte. 710. Implementation of the

following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS F(0) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 southbound, Jct. Rte. 710 to Alameda St.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 southbound, Jct. Rte. 710 to Alameda St. Implementation of the following improvement would improve operations at the freeway to LOS C in the AM peak hour and to LOS E in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 southbound, Alameda St. to Wilmington Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 southbound, Alameda St. to Wilmington Ave. Implementation of the following improvement would improve operations at the freeway to LOS C in the AM peak hour and to LOS E in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 southbound, Wilmington Ave. to Carson St.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 southbound, Wilmington Ave. to Carson St. Implementation of the following improvement would improve operations at the freeway to LOS E in the AM peak hour and to LOS F(0) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 southbound, Vermont Ave. to Normandie Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 southbound, Vermont Ave. to Normandie Ave. Implementation of the

following improvement would improve operations at the freeway to LOS C in the AM peak hour and to LOS E in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 southbound, Normandie Ave. to Western Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 southbound, Normandie Ave. to Western Ave. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS F(0) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 southbound, Western Ave. to Crenshaw Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 southbound, Western Ave. to Crenshaw Blvd. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS F(0) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 southbound, Crenshaw Blvd. to Artesia Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 southbound, Crenshaw Blvd. to Artesia Blvd. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS E in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 southbound, Artesia Blvd. to Hawthorne Blvd.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 southbound, Artesia Blvd. to Hawthorne Blvd. Implementation of the

following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS E in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-405 southbound, Hawthorne Blvd. to Inglewood Ave.

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-405 southbound, Hawthorne Blvd. to Inglewood Ave. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS F(0) in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

I-710 southbound, Alondra Blvd. to Jct. Rte. 105

The Project, in combination with other reasonably foreseeable projects, would have a significant cumulative impact at the I-710 southbound, Alondra Blvd. to Jct. Rte. 105. Implementation of the following improvement would improve operations at the freeway to LOS D in the AM peak hour and to LOS C in the PM peak hour, thus fully mitigating the project impact:

- Add a general purpose lane

However, this freeway is under the jurisdiction and control of Caltrans, a different State agency from CSU. Accordingly, CSU shall support Caltrans in its efforts to obtain funding from the Legislature for the costs to implement the improvement. As such, since the University cannot guarantee implementation of this improvement, this impact is considered significant and unavoidable.

Northbound/Eastbound

ID	CMP Station	Fwy Rte	Post Mile	Location	2035 Plus Project				Recommended Mitigation Measure	2035 Plus Project with Mitigation			
					AM Peak Hour		PM Peak Hour			AM Peak Hour		PM Peak Hour	
					D/C	LOS	D/C	LOS		D/C	LOS	D/C	LOS
91-1		91	6.344	Jct. Rte. 110 to Avalon Blvd.	0.59	C	1.22	F(0)	Add one mainline lane	0.51	B	1.05	F(0)
91-2		91	7.426	Avalon Blvd. to Central Ave.	0.74	C	1.51	F(3)	Add one mainline lane	0.61	C	1.26	F(1)
91-3		91	8.435	Central Ave. to Wilmington Ave.	0.75	C	1.54	F(3)	Add one mainline lane	0.63	C	1.28	F(1)
91-4		91	9.162	Wilmington Ave. to Alameda St.	0.78	D	1.60	F(3)	Add one mainline lane	0.65	C	1.33	F(1)
91-5		91	10.271	Alameda St. to Alameda St./Santa Fe	1.01	F(0)	2.08	F(3)	Add one mainline lane	0.81	D	1.66	F(3)
91-6	1033	91	10.41	Alameda St./Santa Fe Ave. to Long B	0.70	C	1.44	F(2)	Add one mainline lane	0.60	C	1.23	F(0)
91-7		91	11.096	Long Beach Blvd. to Jct. Rte. 710	0.70	C	1.43	F(2)	Add one mainline lane	0.60	C	1.23	F(0)
91-8		91	11.681	Jct. Rte. 710 to Cherry Ave.	0.85	D	1.22	F(0)	Add one mainline lane	0.71	C	1.02	F(0)
91-9	1034	91	13.094	Cherry Ave. to Paramount Blvd.	0.86	D	1.24	F(0)	Add one mainline lane	0.72	C	1.04	F(0)
91-10		91	13.594	Paramount Blvd. to Downey Ave.	0.84	D	1.20	F(0)	Add one mainline lane	0.70	C	1.00	E
91-11		91	14.103	Downey Ave. to Jct. Rte. 19	0.70	C	1.00	E	Add one mainline lane	0.60	C	0.86	D
91-12		91	14.618	Jct. Rte. 19 to Clark Ave.	0.77	C	1.11	F(0)	Add one mainline lane	0.64	C	0.92	D
110-5		110	5.451	Sepulveda Blvd. to Carson St.	1.19	F(0)	0.87	D	Add one mainline lane	0.95	E	0.69	C
110-6		110	7.016	Carson St. to Torrance/Del Amo Blvd	1.36	F(2)	1.00	E	Add one mainline lane	1.09	F(0)	0.80	D
110-7		110	8.028	Torrance/Del Amo Blvd. to Jct. Rte. 4	1.44	F(2)	1.05	F(0)	Add one mainline lane	1.15	F(0)	0.84	D
110-8		110	8.775	Jct. Rte. 405 to Jct. Rte. 91	1.17	F(0)	0.85	D	Add one mainline lane	1.01	F(0)	0.73	C
110-11		110	11.891	Rosecrans Ave. to El Segundo Blvd.	0.91	D	0.94	E	Add one mainline lane	0.77	C	0.80	D
110-12		110	12.898	El Segundo Blvd. to Jct. Rte. 105	0.92	D	0.96	E	Add one mainline lane	0.78	D	0.81	D
110-14		110	14.967	Century Blvd. to Manchester Ave.	1.01	F(0)	1.04	F(0)	Add one mainline lane	0.87	D	0.89	D
110-15	1046	110	15.976	Manchester Ave. to Florence Ave.	0.99	E	1.01	F(0)	Add one mainline lane	0.85	D	0.87	D
110-17	1047	110	17.514	Gage Ave. to Slauson Ave.	1.01	F(0)	1.04	F(0)	Add one mainline lane	0.87	D	0.89	D
110-18		110	17.98	Slauson Ave. to 51st St.	1.17	F(0)	1.19	F(0)	Add one mainline lane	0.98	E	0.99	E
110-19		110	18.495	51st St. to Vernon Ave.	1.19	F(0)	1.22	F(0)	Add one mainline lane	0.99	E	1.02	F(0)
110-20		110	18.998	Vernon Ave. to Martin Luther King Jr.	0.99	E	1.02	F(0)	Add one mainline lane	0.85	D	0.87	D
405-3		405	5.388	Orange Ave. to Atlantic Ave.	1.73	F(3)	1.48	F(3)	Add one mainline lane	1.38	F(2)	1.18	F(0)
405-4		405	6.076	Atlantic Ave. to Long Beach Blvd	1.71	F(3)	1.45	F(2)	Add one mainline lane	1.36	F(2)	1.16	F(0)
405-6	1066	405	7.596	Jct. Rte. 710 to Alameda St.	1.24	F(0)	1.06	F(0)	Add one mainline lane	1.03	F(0)	0.88	D
405-7		405	8.784	Alameda St. to Wilmington Ave.	1.20	F(0)	1.02	F(0)	Add one mainline lane	1.00	E	0.85	D
405-8		405	9.556	Wilmington Ave. to Carson St.	1.41	F(2)	1.21	F(0)	Add one mainline lane	1.12	F(0)	0.97	E
405-9		405	10.541	Carson St. to Avalon Blvd.	1.38	F(2)	1.19	F(0)	Add one mainline lane	1.10	F(0)	0.95	E
405-10	1067	405	11.224	Avalon Blvd. to Jct. Rte. 110	1.18	F(0)	1.02	F(0)	Add one mainline lane	0.99	E	0.85	D
405-11		405	12.97	Jct. Rte. 110 to Vermont Ave.	1.16	F(0)	1.02	F(0)	Add one mainline lane	0.97	E	0.85	D
405-12		405	13.28	Vermont Ave. to Normandie Ave.	1.01	F(0)	0.89	D	Add one mainline lane	0.86	D	0.76	C
405-13		405	13.826	Normandie Ave. to Western Ave.	1.14	F(0)	1.00	E	Add one mainline lane	0.95	E	0.83	D
405-14		405	14.398	Western Ave. to Crenshaw Blvd.	1.36	F(2)	1.20	F(0)	Add one mainline lane	1.09	F(0)	0.96	E
405-15		405	15.447	Crenshaw Blvd. to Artesia Blvd.	1.33	F(1)	1.17	F(0)	Add one mainline lane	1.07	F(0)	0.94	E
405-17		405	17.589	Hawthorne Blvd. to Inglewood Ave.	1.12	F(0)	0.99	E	Add one mainline lane	0.94	E	0.82	D
405-18	1068	405	18.233	Inglewood Ave. to Rosecrans Ave.	1.17	F(0)	1.03	F(0)	Add one mainline lane	0.98	E	0.85	D

Note: D/C is demand-to-capacity ratio.

Exhibit 147: Freeway Weekday Mitigations Needed by 2035 with Alternative 2

Southbound/Westbound

ID	CMP Station	Fwy Rte	Post Mile	Location	2035 No Project				Recommended Mitigation Measure	2035 Plus Project			
					AM Peak Hour		PM Peak Hour			AM Peak Hour		PM Peak Hour	
					D/C	LOS	D/C	LOS		D/C	LOS	D/C	LOS
91-1		91	6.344	Jct. Rte. 110 to Avalon Blvd.	2.36	F(3)	1.60	F(3)	Add one mainline lane	1.57	F(3)	1.07	F(0)
91-2		91	7.426	Avalon Blvd. to Central Ave.	0.98	E	0.67	C	Add one mainline lane	0.82	D	0.56	C
91-3		91	8.435	Central Ave. to Wilmington Ave.	1.02	F(0)	0.69	C	Add one mainline lane	0.85	D	0.58	C
91-4		91	9.162	Wilmington Ave. to Alameda St.	1.05	F(0)	0.71	C	Add one mainline lane	0.88	D	0.60	C
91-5		91	10.271	Alameda St. to Alameda St./Santa Fe	1.38	F(2)	0.93	D	Add one mainline lane	1.10	F(0)	0.74	C
91-6	1033	91	10.41	Alameda St./Santa Fe Ave. to Long B	0.95	E	0.65	C	Add one mainline lane	0.82	D	0.55	C
91-7		91	11.096	Long Beach Blvd. to Jct. Rte. 710	1.14	F(0)	0.77	C	Add one mainline lane	0.95	E	0.64	C
91-8		91	11.681	Jct. Rte. 710 to Cherry Ave.	1.38	F(2)	0.97	E	Add one mainline lane	1.15	F(0)	0.81	D
91-9	1034	91	13.094	Cherry Ave. to Paramount Blvd.	1.16	F(0)	0.81	D	Add one mainline lane	1.00	E	0.70	C
91-10		91	13.594	Paramount Blvd. to Downey Ave.	1.36	F(2)	0.96	E	Add one mainline lane	1.13	F(0)	0.80	D
91-11		91	14.103	Downey Ave. to Jct. Rte. 19	1.34	F(1)	0.95	E	Add one mainline lane	1.12	F(0)	0.79	D
91-12		91	14.618	Jct. Rte. 19 to Clark Ave.	1.56	F(3)	1.09	F(0)	Add one mainline lane	1.25	F(0)	0.87	D
91-13		91	15.105	Clark Ave. to Bellflower Blvd.	1.31	F(1)	0.92	D	Add one mainline lane	1.09	F(0)	0.77	C
91-14		91	15.614	Bellflower Blvd. to Jct. Rte. 605	1.30	F(1)	0.91	D	Add one mainline lane	1.08	F(0)	0.76	C
110-5		110	5.451	Sepulveda Blvd. to Carson St.	0.96	E	1.17	F(0)	Add one mainline lane	0.76	C	0.93	D
110-6		110	7.016	Carson St. to Torrance/Del Amo Blvd	1.11	F(0)	1.34	F(1)	Add one mainline lane	0.88	D	1.07	F(0)
110-7		110	8.028	Torrance/Del Amo Blvd. to Jct. Rte. 4	1.17	F(0)	1.42	F(2)	Add one mainline lane	0.93	D	1.13	F(0)
110-8		110	8.775	Jct. Rte. 405 to Jct. Rte. 91	1.42	F(2)	1.73	F(3)	Add one mainline lane	1.13	F(0)	1.38	F(2)
110-10		110	11.239	Redondo Beach Blvd. to Rosecrans A	0.97	E	0.93	D	Add one mainline lane	0.82	D	0.78	D
110-11		110	11.891	Rosecrans Ave. to El Segundo Blvd.	1.02	F(0)	0.97	E	Add one mainline lane	0.86	D	0.82	D
110-14		110	14.967	Century Blvd. to Manchester Ave.	1.12	F(0)	1.08	F(0)	Add one mainline lane	0.96	E	0.93	D
110-15	1046	110	15.976	Manchester Ave. to Florence Ave.	1.09	F(0)	1.04	F(0)	Add one mainline lane	0.94	E	0.90	D
110-16		110	16.981	Florence Ave. to Gage Ave.	1.10	F(0)	1.06	F(0)	Add one mainline lane	0.94	E	0.91	D
110-17	1047	110	17.514	Gage Ave. to Slauson Ave.	1.10	F(0)	1.05	F(0)	Add one mainline lane	0.94	E	0.90	D
110-18		110	17.98	Slauson Ave. to 51st St.	1.27	F(1)	1.21	F(0)	Add one mainline lane	1.06	F(0)	1.01	F(0)
110-19		110	18.495	51st St. to Vernon Ave.	1.07	F(0)	1.03	F(0)	Add one mainline lane	0.92	D	0.89	D
110-20		110	18.998	Vernon Ave. to Martin Luther King Jr.	1.07	F(0)	1.03	F(0)	Add one mainline lane	0.92	D	0.89	D
110-21		110	19.502	Martin Luther King Jr. Blvd. to Exposi	1.16	F(0)	1.12	F(0)	Add one mainline lane	0.97	E	0.93	D
405-3		405	5.388	Orange Ave. to Atlantic Ave.	1.28	F(1)	1.62	F(3)	Add one mainline lane	1.03	F(0)	1.29	F(1)
405-5		405	6.34	Long Beach Blvd to Jct. Rte. 710	1.01	F(0)	1.27	F(1)	Add one mainline lane	0.84	D	1.05	F(0)
405-6	1066	405	7.596	Jct. Rte. 710 to Alameda St.	0.92	D	1.16	F(0)	Add one mainline lane	0.77	C	0.97	E
405-7		405	8.784	Alameda St. to Wilmington Ave.	0.89	D	1.12	F(0)	Add one mainline lane	0.74	C	0.94	E
405-8		405	9.556	Wilmington Ave. to Carson St.	1.19	F(0)	1.45	F(2)	Add one mainline lane	0.95	E	1.16	F(0)
405-9		405	10.541	Carson St. to Avalon Blvd.	1.18	F(0)	1.43	F(2)	Add one mainline lane	0.94	E	1.14	F(0)
405-10	1067	405	11.224	Avalon Blvd. to Jct. Rte. 110	1.00	E	1.22	F(0)	Add one mainline lane	0.84	D	1.02	F(0)
405-11		405	12.97	Jct. Rte. 110 to Vermont Ave.	1.10	F(0)	1.34	F(1)	Add one mainline lane	0.88	D	1.08	F(0)
405-12		405	13.28	Vermont Ave. to Normandie Ave.	0.92	D	1.12	F(0)	Add one mainline lane	0.76	C	0.94	E
405-13		405	13.826	Normandie Ave. to Western Ave.	1.06	F(0)	1.31	F(1)	Add one mainline lane	0.85	D	1.05	F(0)
405-14		405	14.398	Western Ave. to Crenshaw Blvd.	1.03	F(0)	1.26	F(1)	Add one mainline lane	0.82	D	1.01	F(0)
405-15		405	15.447	Crenshaw Blvd. to Artesia Blvd.	1.00	E	1.23	F(0)	Add one mainline lane	0.80	D	0.99	E
405-16		405	16.573	Artesia Blvd. to Hawthorne Blvd.	1.01	F(0)	1.24	F(0)	Add one mainline lane	0.81	D	0.99	E
405-17		405	17.589	Hawthorne Blvd. to Inglewood Ave.	1.06	F(0)	1.29	F(1)	Add one mainline lane	0.85	D	1.03	F(0)
710-2		710	13.945	Alondra Blvd. to Jct. Rte. 105	0.98	E	0.78	D	Add one mainline lane	0.84	D	0.67	C

Note: D/C is demand-to-capacity ratio.

Exhibit 147: Freeway Weekday Mitigations Needed by 2035 with Alternative 2 (continued)

13.6 Sunday Mitigations Needed by 2035

13.6.1 Sunday Pre-Game Mitigations Needed by 2035

As seen in Section 12.3, in the pre-game peak hour, the full CMP build out with 30,000-seat game will have impacts at three intersections. Exhibit 148 shows mitigations that could be added to pre-game the traffic management plan and Exhibit 149 shows mitigations that could be added to post-game the traffic management plan.

Intersection #9, University Dr./Toro Center Dr.

The traffic management plan for the game will include the following mitigation measure:

- Officer Control
- Temporarily convert one of the two eastbound through lanes into to a second eastbound left-turn lane

With these measures, operations of the intersection will improve to LOS A for the pre-game peak hour and the impact will be reduced to a less than significant level.

Intersection #25, Avalon Blvd./University Dr.

The traffic management plan for the game will include the following mitigation measure:

- Officer Control
- Temporarily provide overlap phasing for the northbound right-turn movement

With these measures, operations of the intersection will improve to LOS D for the pre-game peak hour and the impact will be reduced to a less than significant level.

Intersection #41, Victoria St./Rainsbury Ave.

The traffic management plan for the game will include following mitigation measure:

- Temporarily extend with cones eastbound right-turn lane for Intersection #1, Victoria St./Gate D, back to before Intersection #41 providing three eastbound through lanes at Intersection #41.

With this measure, operations of the intersection will improve to LOS C for the pre-game peak hour and the impact will be reduced to a less than significant level.

13.6.2 Sunday Post-Game Mitigations Needed by 2035

As seen in Section 12.3, in the post-game peak hour, the full CMP build out with 30,000-seat game will have impacts at one intersections. Exhibit 149 shows mitigations that could be added to the traffic management plan.

Intersection #3, Victoria St./Birchknoll Dr.

The traffic management plan for the game will include the following mitigation measure:

- temporarily cone an additional east bound through lane

With this measure, operations of the intersection will improve to LOS D for the pre-game peak hour and the impact will be reduced to a less than significant level. This addition is feasible due to the 30 plus feet of right of way for the eastbound lanes on Victoria Street. The left-most lane can then be coned to become the left turn lane at Intersection #16.

Study ID	Intersection Name	Control Type	ICU LOS	Recommended Mitigation	ICU LOS
9	University Dr./Toro Center Dr.	TWSC	E	1 of the 2 EB Through lanes to a 2 nd EB Left Turn Lane	A
25	Avalon Blvd./University Dr.	Signalized	E	Overlap Phasing for NB Right Turn Lane	D
41	Victoria St./Rainsbury Ave.	TWSC	F	Provide 3 EB Through lanes	C

Exhibit 148: Intersection Sunday Mitigations for 2035 and 30,000-Seats during Pre-Game Peak Hour

Study ID	Intersection Name	Control Type	ICU LOS	Recommended Mitigation	ICU LOS
3	Victoria St./Birchknoll Dr.	Signalized	F	Add EB Through Lane Lane	D

Exhibit 149: Intersection Sunday Mitigations for 2035 and 30,000-Seats during Post-Game Peak Hour

13.7 Triggers for Mitigations

It is the intention of the University to implement the intersection mitigations described in the preceding chapters prior to the onset of the impacts that would cause them to be needed. Exhibit 150 identifies specific triggers for each of the mitigation measures identified in earlier chapters as being physically feasible. The triggers link the mitigations to the specific component of the Project that causes the impact. For example, Intersection 1 serves the main parking lots for off-campus students, so improvements to this intersection would be triggered by increases in off-campus student enrolment. Similarly, Intersection 5 and 6 will serve the business park and market-rate apartment components of the Project and so improvements to those intersections would be triggered by construction of those buildings.

Readers should note that it may not always be possible for the University to control the timing of improvements since the off-campus facilities that need to be improved are all under the jurisdiction of other entities. Nevertheless the University will make reasonable efforts to seek their cooperation in implementing the mitigation measures in a timely manner.

Intersection		Recommended Mitigation	Trigger for Implementation
1	Victoria St./Drive D	Signalize	Prior to occupancy of building(s) that would allow off-campus student enrollment to increase more than 400 FTES, and the City has a fee program in place, and the City grants approval for construction of the proposed roadway improvement.
		Add 2nd WB left turn lane	Prior to occupancy of building(s) that would allow off-campus student enrollment to increase more than 2,400 FTES, and the City has a fee program in place, and the City grants approval for construction of the proposed roadway improvement.
3	Victoria St./Birchknoll Dr.	Add 2d WB Left-Turn Lane	Prior to start of construction of mixed-use component, and the City has a fee program in place, and the City grants approval for construction of the proposed roadway improvement.
5	Central Ave./Charles Willard St.	Signalize	Prior to construction of any of the 3 northern business park buildings, or the construction of either of the 2 northern market-rate apartment buildings, whichever comes first, and the City has a fee program in place, and the City grants approval for construction of the proposed roadway improvement.
6	Central Ave./Beachey Pl.	Signalize	Prior to construction of any of the 4 southern business park buildings, or the construction of either the southern-most market-rate apartment building or the construction of student apartments, whichever comes first, and the City has a fee program in place, and the City grants approval for construction of the proposed roadway improvement.
9	University Dr./Toro Center Dr.	Signalize	Prior to occupancy of building(s) that would allow off-campus student enrollment to increase more than 5,600 FTES, and the City has a fee program in place, and the City grants approval for construction of the proposed roadway improvement.
12	Avalon Blvd./Albertoni St.	Add 2nd Exclusive EB Right-Turn Lane	Prior to occupancy of building(s) that would allow off-campus student enrollment to increase more than 2,400 FTES, and the City has a fee program in place, and the City grants approval for construction of the proposed roadway improvement.
13	Avalon Blvd./Victoria St.	Add 2nd NB Left-Turn Lane, Convert EB Exclusive Right-Turn Lane to a Through/Right-Shared Lane	Prior to occupancy of the mixed-use area, and the City has a fee program in place, and the City grants approval for construction of the proposed roadway improvement.
		Add 3rd WB Through Lane	Prior to occupancy of building(s) that would allow off-campus student enrollment to increase more than 2,400 FTES, and the City has a fee program in place, and the City grants approval for construction of the proposed roadway improvement.
22	Figueroa St./190th St./Victoria St.	Add 3rd WB Through Lane, Add 3rd EB Through Lane	Prior to occupancy of the mixed-use area, and the City has a fee program in place, and the City grants approval for construction of the proposed roadway improvement.
		Add 2nd WB Left-Turn Lane	Prior to occupancy of building(s) that would allow off-campus student enrollment to increase more than 2,400 FTES, and the City has a fee program in place, and the City grants approval for construction of the proposed roadway improvement.
23	Broadway/Victoria St.	Add 3rd WB Through Lane, Add EB Right-Turn Lane	Prior to occupancy of building(s) that would allow off-campus student enrollment to increase more than 2,400 FTES, and the City has a fee program in place, and the City grants approval for construction of the proposed roadway improvement.
24	Main St./Victoria St.	Add 3rd EB Through Lane, Add WB Exclusive Right-Turn Lane	Prior to occupancy of the mixed-use area, and the City has a fee program in place, and the City grants approval for construction of the proposed roadway improvement.
		Add EB Exclusive Right-Turn Lane	Prior to occupancy of building(s) that would allow off-campus student enrollment to increase more than 2,400 FTES, and the City has a fee program in place, and the City grants approval for construction of the proposed roadway improvement.
26	Avalon Blvd./Del Amo Blvd.	Add SB Exclusive Right-Turn Lane Convert WB Exclusive Right-Turn Lane into an WB Through/Right-Shared Lane	Prior to occupancy of building(s) that would allow off-campus student enrollment to increase more than 800 FTES, and the City has a fee program in place, and the City grants approval for construction of the proposed roadway improvement.

Exhibit 150: Triggers for Mitigations

Appendix A

Shuttle Bus Routes for Off-Site Parking Lots

Figure A.1 Bus Routes From Harbor Gateway Transit Center To Parking Lot #7

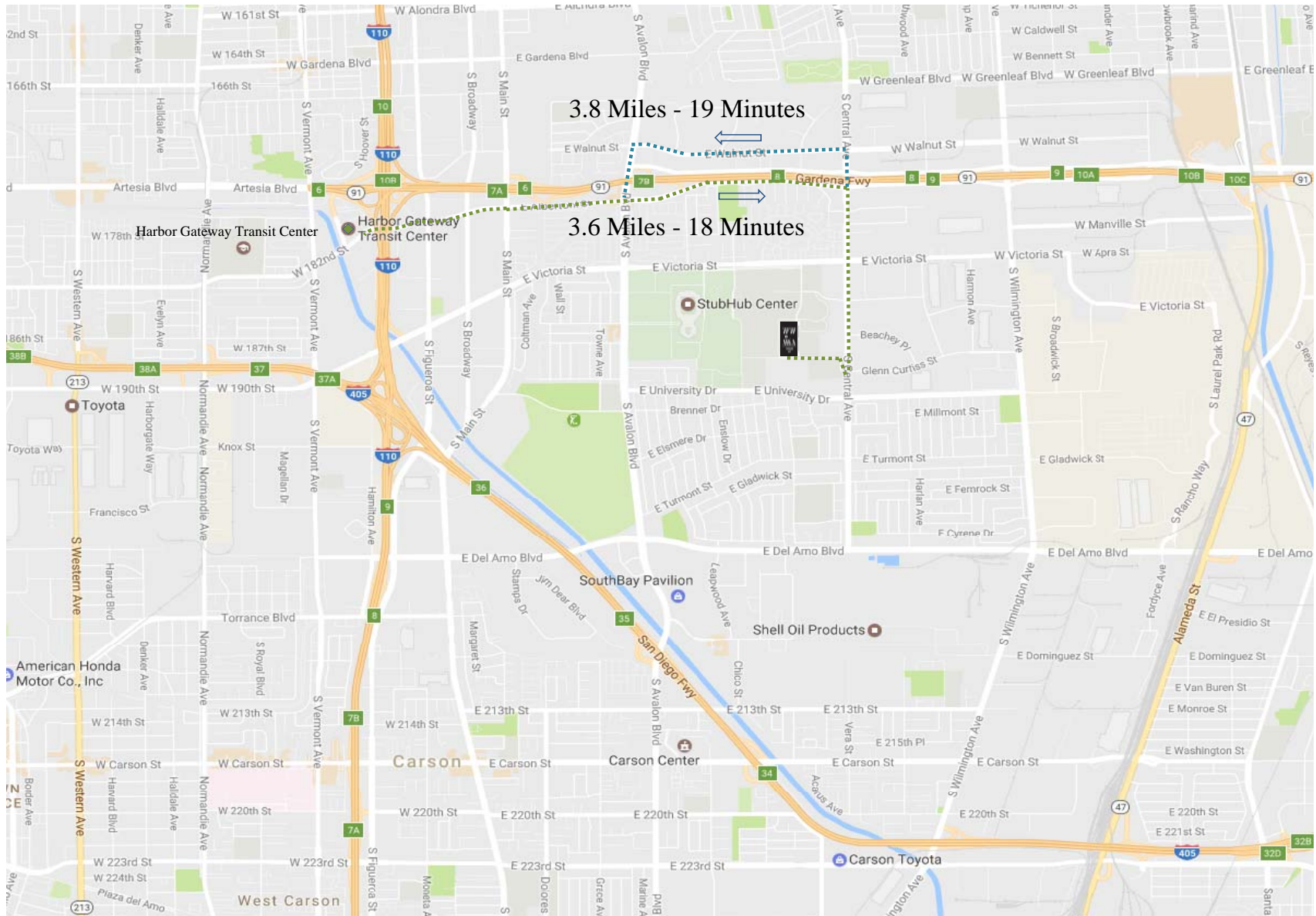


Figure A.2 Bus Routes From Herbalife Center To Parking Lot #7

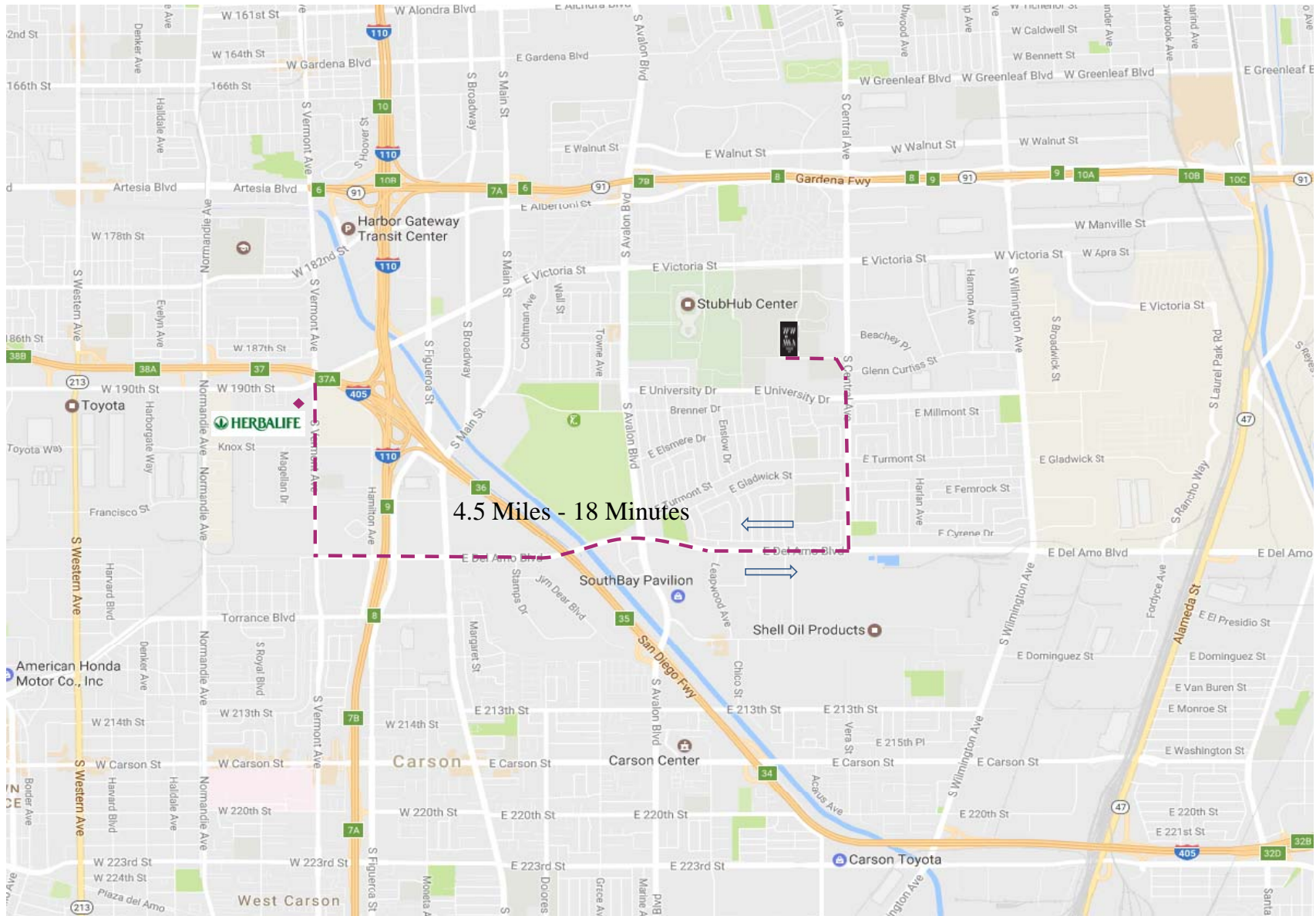
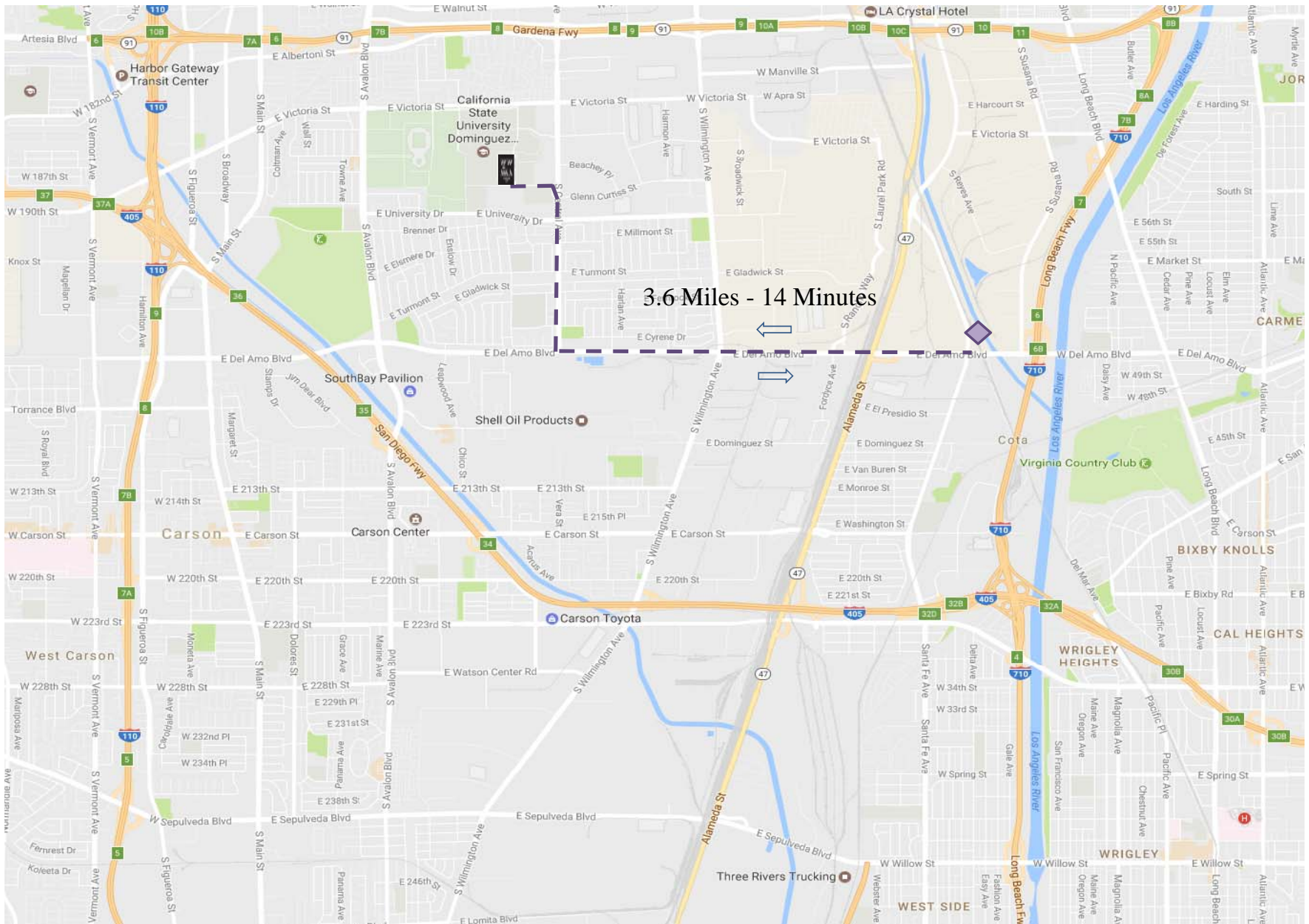
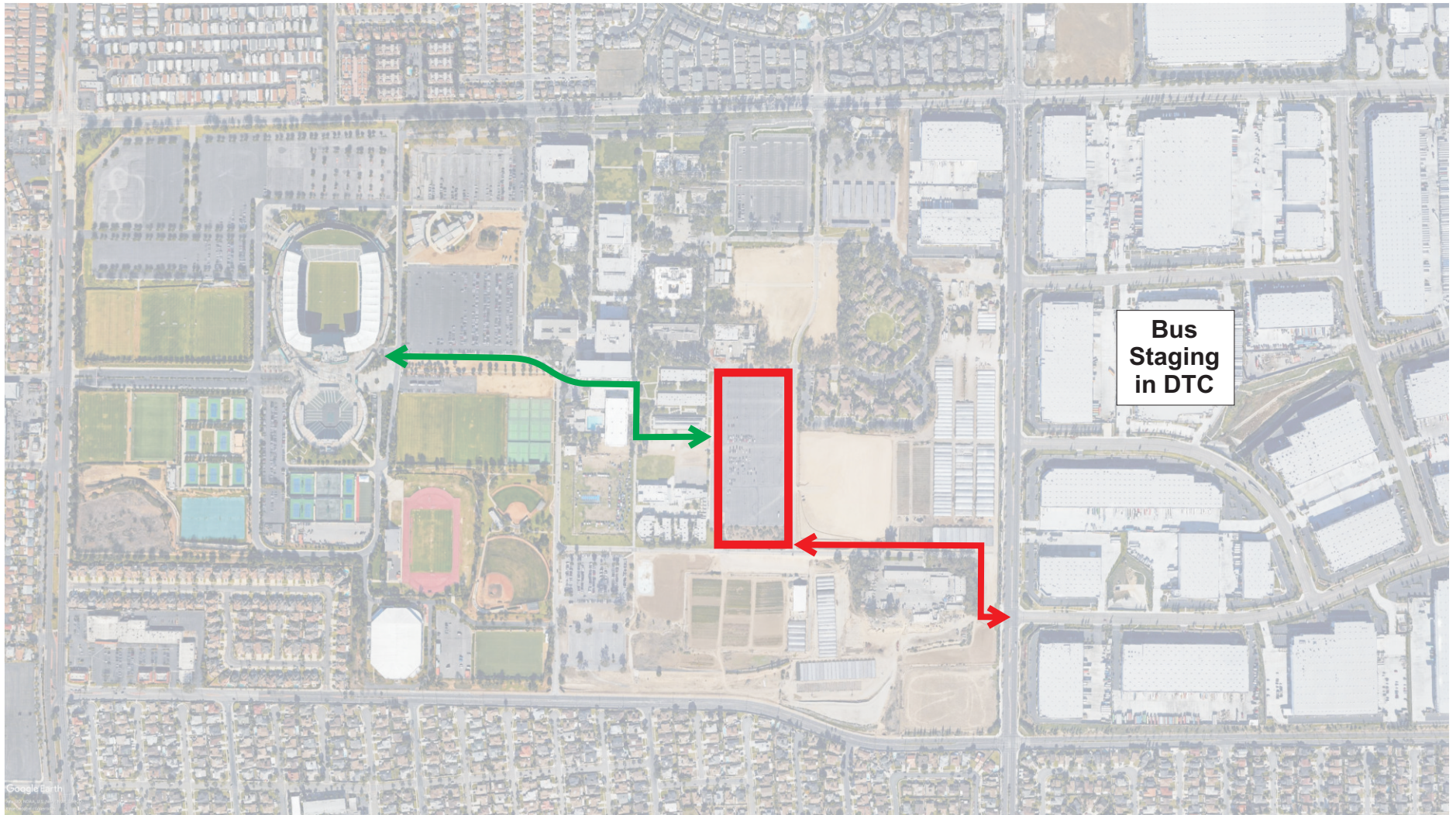


Figure A.3 Bus Routes From Del Amo Station To Parking Lot #7





3/24/17

Figure 1
StubHub Center Campus - Existing Street Network

StubHub Center

The Mobility Group
Transportation Strategies & Solutions

Appendix B

Weekday Intersection Count Data Sheets

INTERSECTION TURNING MOVEMENT COUNTS

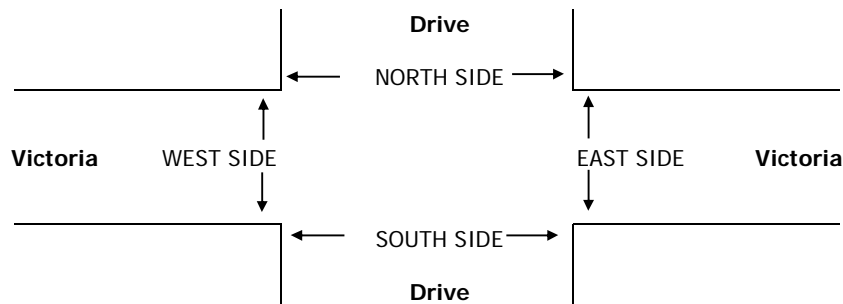
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Apr 4, 17	LOCATION: NORTH & SOUTH: CSU Dominguez Hills EAST & WEST: Drive Victoria	PROJECT #: SC1281 LOCATION #: 1 CONTROL: STOP N
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NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W E ▶ S ▼
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Drive			Drive			Victoria			Victoria			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	X	1	X	X	X	X	2	1	0	2	X	

AM	7:00 AM	1	0	0	0	0	0	0	82	10	0	124	0	217
	7:15 AM	3	0	0	0	0	0	0	82	10	0	177	0	272
	7:30 AM	0	0	1	0	0	0	0	109	39	1	164	0	314
	7:45 AM	2	0	0	0	0	0	0	151	61	2	126	0	342
	8:00 AM	2	0	0	0	0	0	0	175	85	2	119	0	383
	8:15 AM	0	0	1	0	0	0	0	199	84	5	134	0	423
	8:30 AM	0	0	1	0	0	0	1	120	50	3	153	0	328
	8:45 AM	4	0	0	0	0	0	0	97	46	1	115	0	263
	VOLUMES	12	0	3	0	0	0	1	1,015	385	14	1,112	0	2,542
	APPROACH %	80%	0%	20%	0%	0%	0%	0%	72%	27%	1%	99%	0%	
APP/DEPART	15	/	1	0	/	397	1,401	/	1,020	1,126	/	1,124	0	
BEGIN PEAK HR	7:45 AM													
VOLUMES	4	0	2	0	0	0	1	645	280	12	532	0	1,476	
APPROACH %	67%	0%	33%	0%	0%	0%	0%	70%	30%	2%	98%	0%		
PEAK HR FACTOR	0.750			0.000			0.818			0.872			0.872	
APP/DEPART	6	/	1	0	/	290	926	/	649	544	/	536	0	
PM	4:00 PM	19	0	4	0	0	0	0	263	20	1	178	0	485
	4:15 PM	14	0	1	0	0	0	0	249	16	2	176	0	458
	4:30 PM	7	0	2	0	0	0	0	289	17	1	195	0	511
	4:45 PM	10	0	2	0	0	0	2	224	28	1	160	0	427
	5:00 PM	24	0	2	0	0	0	0	254	34	1	285	0	600
	5:15 PM	35	0	9	0	0	0	0	299	31	2	268	0	644
	5:30 PM	22	0	5	0	0	0	0	297	24	2	223	0	573
	5:45 PM	18	0	4	0	0	0	0	254	25	1	181	0	483
	VOLUMES	149	0	29	0	0	0	2	2,129	195	11	1,666	0	4,181
	APPROACH %	84%	0%	16%	0%	0%	0%	0%	92%	8%	1%	99%	0%	
APP/DEPART	178	/	2	0	/	205	2,326	/	2,159	1,677	/	1,815	0	
BEGIN PEAK HR	5:00 PM													
VOLUMES	99	0	20	0	0	0	0	1,104	114	6	957	0	2,300	
APPROACH %	83%	0%	17%	0%	0%	0%	0%	91%	9%	1%	99%	0%		
PEAK HR FACTOR	0.676			0.000			0.923			0.842			0.893	
APP/DEPART	119	/	0	0	/	120	1,218	/	1,124	963	/	1,056	0	



INTERSECTION TURNING MOVEMENT COUNTS

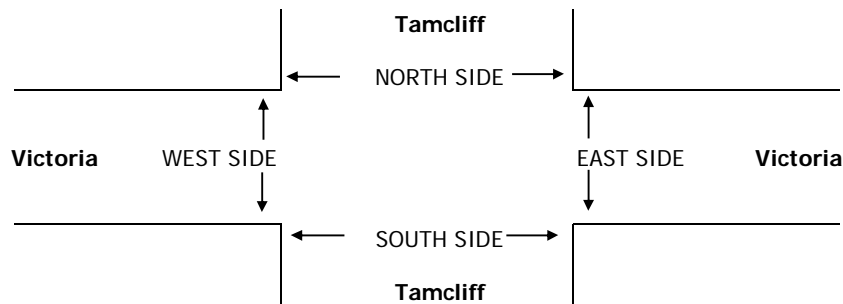
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Apr 4, 17	LOCATION: NORTH & SOUTH: CSU Dominguez Hills EAST & WEST: Tamcliff Victoria	PROJECT #: SC1281 LOCATION #: 2 CONTROL: SIGNAL
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NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W E ▶ S ▼
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	Tamcliff			Tamcliff			Victoria			Victoria			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1.5	0.5	1	0	1	0	1	2	1	1	2	0	

AM	7:00 AM	5	0	5	4	0	8	5	62	12	10	109	2	222
	7:15 AM	9	0	3	5	0	10	4	66	13	18	159	3	290
	7:30 AM	1	0	0	8	0	13	3	97	16	27	147	1	313
	7:45 AM	7	0	2	12	3	7	1	123	33	32	109	3	332
	8:00 AM	13	0	6	6	0	11	9	125	43	61	98	5	377
	8:15 AM	16	0	5	1	0	3	4	139	51	44	115	9	387
	8:30 AM	18	0	4	4	0	7	3	90	21	37	135	3	322
	8:45 AM	3	0	4	3	0	5	4	76	26	37	101	5	264
	VOLUMES	72	0	29	43	3	64	33	778	215	266	973	31	2,507
	APPROACH %	71%	0%	29%	39%	3%	58%	3%	76%	21%	21%	77%	2%	
APP/DEPART	101	/	61	110	/	479	1,026	/	855	1,270	/	1,112	0	
BEGIN PEAK HR	7:45 AM													
VOLUMES	54	0	17	23	3	28	17	477	148	174	457	20	1,418	
APPROACH %	76%	0%	24%	43%	6%	52%	3%	74%	23%	27%	70%	3%		
PEAK HR FACTOR	0.807			0.614			0.827			0.930			0.916	
APP/DEPART	71	/	35	54	/	322	642	/	520	651	/	541	0	
PM	4:00 PM	37	0	23	2	0	3	3	238	42	16	141	9	514
	4:15 PM	26	0	16	0	0	4	9	215	23	13	146	13	465
	4:30 PM	26	0	16	3	1	7	7	243	26	9	151	6	495
	4:45 PM	22	0	18	5	0	8	6	197	25	23	129	6	439
	5:00 PM	65	0	48	2	0	2	11	213	31	17	204	3	596
	5:15 PM	74	1	45	8	1	6	14	234	38	26	203	5	655
	5:30 PM	34	0	25	7	0	7	7	265	34	20	184	4	587
	5:45 PM	30	0	18	9	0	7	6	225	23	13	147	8	486
	VOLUMES	314	1	209	36	2	44	63	1,830	242	137	1,305	54	4,237
	APPROACH %	60%	0%	40%	44%	2%	54%	3%	86%	11%	9%	87%	4%	
APP/DEPART	524	/	117	82	/	372	2,135	/	2,084	1,496	/	1,664	0	
BEGIN PEAK HR	5:00 PM													
VOLUMES	203	1	136	26	1	22	38	937	126	76	738	20	2,324	
APPROACH %	60%	0%	40%	53%	2%	45%	3%	85%	11%	9%	88%	2%		
PEAK HR FACTOR	0.708			0.766			0.900			0.891			0.887	
APP/DEPART	340	/	58	49	/	196	1,101	/	1,106	834	/	964	0	



INTERSECTION TURNING MOVEMENT COUNTS

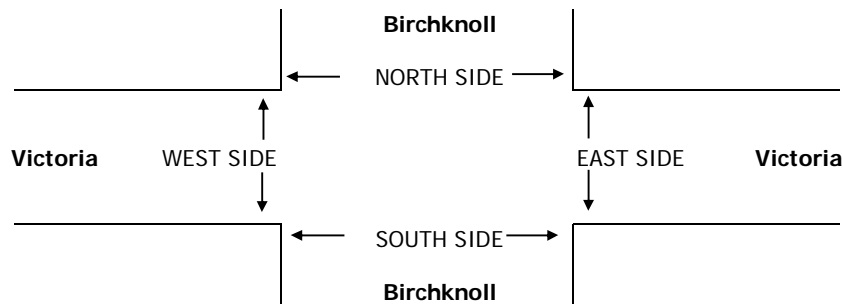
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Apr 4, 17	LOCATION: NORTH & SOUTH: CSU Dominguez Hills EAST & WEST: Birchknoll Victoria	PROJECT #: SC1281 LOCATION #: 3 CONTROL: SIGNAL
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NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W E ▶ S ▼
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	Birchknoll			Birchknoll			Victoria			Victoria			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
LANES:	1.5	0.5	1	0	1	0	1	2	0	1	2	0	

AM	7:00 AM	10	0	6	5	0	11	4	52	8	22	76	5	199
	7:15 AM	7	0	12	6	0	17	4	58	13	27	110	7	261
	7:30 AM	20	0	16	2	1	18	3	76	19	40	103	4	302
	7:45 AM	14	0	21	4	1	11	3	101	28	65	107	4	359
	8:00 AM	16	1	20	1	1	8	5	79	58	87	108	8	392
	8:15 AM	40	0	37	4	1	8	8	49	82	93	106	9	437
	8:30 AM	26	0	25	2	0	11	4	56	33	57	111	4	329
	8:45 AM	10	0	11	0	0	6	8	58	14	36	116	4	263
	VOLUMES	143	1	148	24	4	90	39	529	255	427	837	45	2,542
	APPROACH %	49%	0%	51%	20%	3%	76%	5%	64%	31%	33%	64%	3%	
APP/DEPART	292	/	70	118	/	655	823	/	732	1,309	/	1,085	0	
BEGIN PEAK HR	7:45 AM													
VOLUMES	96	1	103	11	3	38	20	285	201	302	432	25	1,517	
APPROACH %	48%	1%	52%	21%	6%	73%	4%	56%	40%	40%	57%	3%		
PEAK HR FACTOR	0.649			0.813			0.891			0.912			0.868	
APP/DEPART	200	/	37	52	/	489	506	/	416	759	/	575	0	
PM	4:00 PM	46	0	45	3	0	5	11	202	36	36	101	2	487
	4:15 PM	30	0	36	5	0	4	10	192	15	26	122	9	449
	4:30 PM	36	1	41	3	0	2	12	194	19	26	116	8	458
	4:45 PM	25	1	28	1	0	4	3	196	18	33	129	5	443
	5:00 PM	45	0	57	1	0	7	8	216	38	42	160	8	582
	5:15 PM	73	0	84	2	0	4	15	219	28	50	139	7	621
	5:30 PM	45	1	54	0	0	0	11	249	18	17	145	7	547
	5:45 PM	22	1	34	3	0	5	13	212	18	18	130	13	469
	VOLUMES	322	4	379	18	0	31	83	1,680	190	248	1,042	59	4,056
	APPROACH %	46%	1%	54%	37%	0%	63%	4%	86%	10%	18%	77%	4%	
APP/DEPART	705	/	131	49	/	425	1,953	/	2,090	1,349	/	1,410	0	
BEGIN PEAK HR	5:00 PM													
VOLUMES	185	2	229	6	0	16	47	896	102	127	574	35	2,219	
APPROACH %	44%	0%	55%	27%	0%	73%	4%	86%	10%	17%	78%	5%		
PEAK HR FACTOR	0.662			0.688			0.940			0.876			0.893	
APP/DEPART	416	/	73	22	/	220	1,045	/	1,140	736	/	786	0	



INTERSECTION TURNING MOVEMENT COUNTS

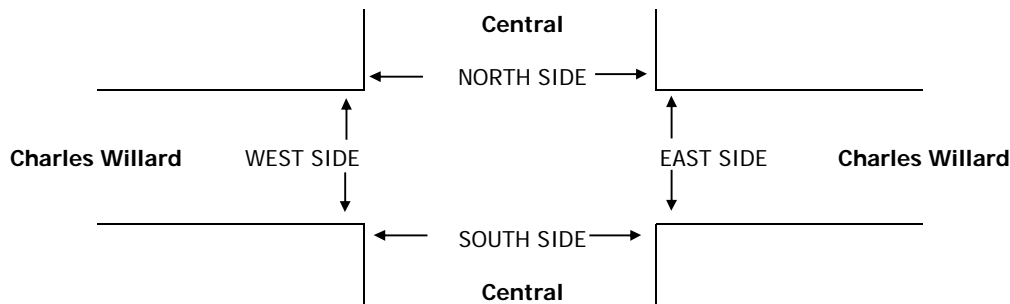
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wed, Apr 5, 17	LOCATION: NORTH & SOUTH: CSU Dominguez Hills EAST & WEST: Central Charles Willard	PROJECT #: SC1281 LOCATION #: 5 CONTROL: STOP E/W
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NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W E ▶ S ▼
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	Central			Central			Charles Willard			Charles Willard			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	2	0	1	2	0	0	1	0	1	1	0	

AM	7:00 AM	0	105	6	19	112	5	0	0	0	0	0	11	258
	7:15 AM	1	119	4	12	121	4	0	0	0	0	0	6	267
	7:30 AM	2	178	12	26	165	5	0	0	1	1	2	6	398
	7:45 AM	2	184	8	28	218	9	0	0	2	3	0	6	460
	8:00 AM	5	162	8	18	196	13	0	0	0	1	0	4	407
	8:15 AM	5	134	11	30	154	17	1	0	0	0	1	7	360
	8:30 AM	4	100	10	19	114	10	0	0	2	3	0	5	267
	8:45 AM	6	84	9	37	112	6	0	0	0	1	1	8	264
	VOLUMES	25	1,066	68	189	1,192	69	1	0	5	9	4	53	2,681
	APPROACH %	2%	92%	6%	13%	82%	5%	17%	0%	83%	14%	6%	80%	
APP/DEPART	1,159	/	1,130	1,450	/	1,206	6	/	247	66	/	98	0	
BEGIN PEAK HR	7:30 AM													
VOLUMES	14	658	39	102	733	44	1	0	3	5	3	23	1,625	
APPROACH %	2%	93%	5%	12%	83%	5%	25%	0%	75%	16%	10%	74%		
PEAK HR FACTOR	0.916			0.862			0.500			0.861			0.883	
APP/DEPART	711	/	688	879	/	741	4	/	135	31	/	61	0	
PM	4:00 PM	4	166	4	15	167	3	4	0	5	3	0	16	387
	4:15 PM	2	152	4	15	175	1	3	1	3	1	1	10	368
	4:30 PM	2	172	2	17	183	6	1	0	5	4	0	16	408
	4:45 PM	5	150	2	12	179	5	2	0	4	2	1	7	369
	5:00 PM	3	176	6	11	175	5	2	0	13	5	0	19	415
	5:15 PM	6	138	0	8	201	3	6	0	7	3	0	11	383
	5:30 PM	2	166	0	9	188	3	1	0	9	4	0	26	408
	5:45 PM	4	132	3	7	179	3	1	3	3	6	1	12	354
	VOLUMES	28	1,252	21	94	1,447	29	20	4	49	28	3	117	3,092
	APPROACH %	2%	96%	2%	6%	92%	2%	27%	5%	67%	19%	2%	79%	
APP/DEPART	1,301	/	1,416	1,570	/	1,526	73	/	92	148	/	58	0	
BEGIN PEAK HR	4:45 PM													
VOLUMES	16	630	8	40	743	16	11	0	33	14	1	63	1,575	
APPROACH %	2%	96%	1%	5%	93%	2%	25%	0%	75%	18%	1%	81%		
PEAK HR FACTOR	0.884			0.942			0.733			0.650			0.949	
APP/DEPART	654	/	716	799	/	791	44	/	36	78	/	32	0	



INTERSECTION TURNING MOVEMENT COUNTS

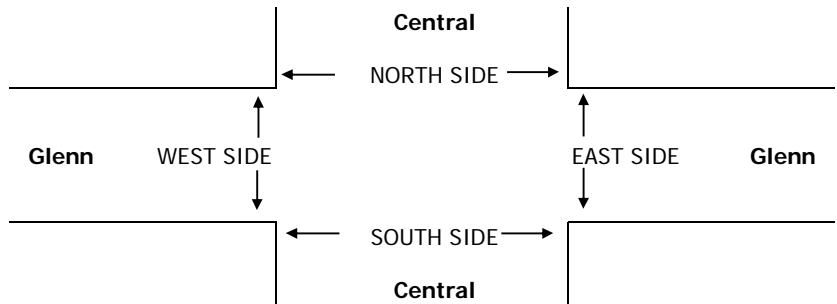
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wed, Apr 5, 17	LOCATION: NORTH & SOUTH: CSU Dominguez Hills EAST & WEST: Central Glenn	PROJECT #: SC1281 LOCATION #: 7 CONTROL: SIGNAL
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NOTES:	AM PM MD OTHER OTHER	◀ W E ▶	▲ N S ▼
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	Central			Central			Glenn			Glenn			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	0	1	2	0	1.5	0.5	1	1	1	1	

AM	7:00 AM	5	121	22	13	88	9	1	0	1	4	2	2	268
	7:15 AM	12	121	16	12	91	10	2	0	3	0	8	3	278
	7:30 AM	15	177	15	18	137	6	2	2	4	2	7	6	391
	7:45 AM	27	184	30	13	138	17	9	5	4	4	12	10	453
	8:00 AM	28	182	27	14	139	18	10	5	5	4	10	9	451
	8:15 AM	42	121	21	7	91	30	12	6	17	8	22	5	382
	8:30 AM	25	107	23	14	93	6	7	2	9	8	5	9	308
	8:45 AM	10	83	16	10	81	3	2	1	1	7	2	5	221
	VOLUMES	164	1,096	170	101	858	99	45	21	44	37	68	49	2,752
	APPROACH %	11%	77%	12%	10%	81%	9%	41%	19%	40%	24%	44%	32%	
APP/DEPART	1,430	/	1,191	1,058	/	940	110	/	291	154	/	330	0	
BEGIN PEAK HR	7:30 AM													
VOLUMES	112	664	93	52	505	71	33	18	30	18	51	30	1,677	
APPROACH %	13%	76%	11%	8%	80%	11%	41%	22%	37%	18%	52%	30%		
PEAK HR FACTOR	0.901			0.918			0.579			0.707			0.925	
APP/DEPART	869	/	728	628	/	553	81	/	162	99	/	234	0	
PM	4:00 PM	10	129	12	8	157	6	14	5	26	30	2	18	417
	4:15 PM	4	121	2	7	166	4	3	2	16	19	1	8	353
	4:30 PM	10	134	6	4	190	3	11	0	9	27	2	17	413
	4:45 PM	3	124	2	3	173	7	6	1	9	19	2	16	365
	5:00 PM	12	130	8	3	186	5	7	3	14	24	2	23	417
	5:15 PM	15	114	4	4	172	8	2	7	17	32	4	7	386
	5:30 PM	7	117	6	4	198	3	5	3	11	20	0	12	386
	5:45 PM	3	131	4	2	169	6	3	1	10	14	1	4	348
	VOLUMES	64	1,000	44	35	1,411	42	51	22	112	185	14	105	3,085
	APPROACH %	6%	90%	4%	2%	95%	3%	28%	12%	61%	61%	5%	35%	
APP/DEPART	1,108	/	1,157	1,488	/	1,709	185	/	100	304	/	119	0	
BEGIN PEAK HR	4:30 PM													
VOLUMES	40	502	20	14	721	23	26	11	49	102	10	63	1,581	
APPROACH %	7%	89%	4%	2%	95%	3%	30%	13%	57%	58%	6%	36%		
PEAK HR FACTOR	0.937			0.962			0.827			0.893			0.948	
APP/DEPART	562	/	591	758	/	873	86	/	45	175	/	72	0	



INTERSECTION TURNING MOVEMENT COUNTS

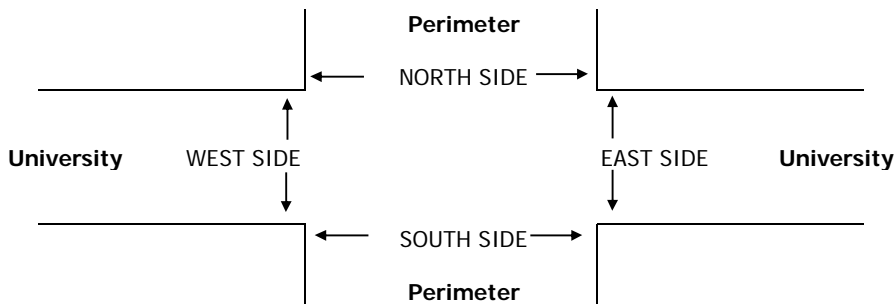
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wed, Apr 5, 17	LOCATION: NORTH & SOUTH: CSU Dominguez Hills EAST & WEST: Perimeter University	PROJECT #: SC1281 LOCATION #: 9 CONTROL: STOP S
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NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W E ▶ S ▼
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	Perimeter			Perimeter			University			University			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	X	X	X	1	X	1	1	2	X	X	2	0	

AM	7:00 AM	0	0	0	3	0	9	24	47	0	0	66	10	159
	7:15 AM	0	0	0	2	0	19	28	70	0	0	82	8	209
	7:30 AM	0	0	0	0	0	24	35	84	0	0	82	6	231
	7:45 AM	0	0	0	5	0	26	47	109	0	0	113	19	319
	8:00 AM	0	0	0	3	0	44	93	97	0	0	106	27	370
	8:15 AM	0	0	0	5	0	77	126	55	0	0	62	25	350
	8:30 AM	0	0	0	2	0	43	48	54	0	0	56	15	218
	8:45 AM	0	0	0	2	0	6	31	51	0	0	59	8	157
	VOLUMES	0	0	0	22	0	248	432	567	0	0	626	118	2,013
	APPROACH %	0%	0%	0%	8%	0%	92%	43%	57%	0%	0%	84%	16%	
APP/DEPART	0	/	550	270	/	0	999	/	589	744	/	874	0	
BEGIN PEAK HR	7:30 AM													
VOLUMES	0	0	0	13	0	171	301	345	0	0	363	77	1,270	
APPROACH %	0%	0%	0%	7%	0%	93%	47%	53%	0%	0%	83%	18%		
PEAK HR FACTOR	0.000			0.561			0.850			0.827			0.858	
APP/DEPART	0	/	378	184	/	0	646	/	358	440	/	534	0	
PM	4:00 PM	0	0	0	6	0	69	27	96	0	0	100	12	310
	4:15 PM	0	0	0	5	0	43	20	86	0	0	103	5	262
	4:30 PM	0	0	0	14	0	47	37	81	0	0	111	5	295
	4:45 PM	0	0	0	8	0	43	33	68	0	0	122	5	279
	5:00 PM	0	0	0	20	0	65	43	110	0	0	134	10	382
	5:15 PM	0	0	0	12	0	63	51	108	0	0	117	6	357
	5:30 PM	0	0	0	9	0	63	26	108	0	0	94	7	307
	5:45 PM	0	0	0	7	0	38	25	110	0	0	91	5	276
	VOLUMES	0	0	0	81	0	431	262	767	0	0	872	55	2,468
	APPROACH %	0%	0%	0%	16%	0%	84%	25%	75%	0%	0%	94%	6%	
APP/DEPART	0	/	317	512	/	0	1,029	/	848	927	/	1,303	0	
BEGIN PEAK HR	4:45 PM													
VOLUMES	0	0	0	49	0	234	153	394	0	0	467	28	1,325	
APPROACH %	0%	0%	0%	17%	0%	83%	28%	72%	0%	0%	94%	6%		
PEAK HR FACTOR	0.000			0.832			0.860			0.859			0.867	
APP/DEPART	0	/	181	283	/	0	547	/	443	495	/	701	0	



INTERSECTION TURNING MOVEMENT COUNTS

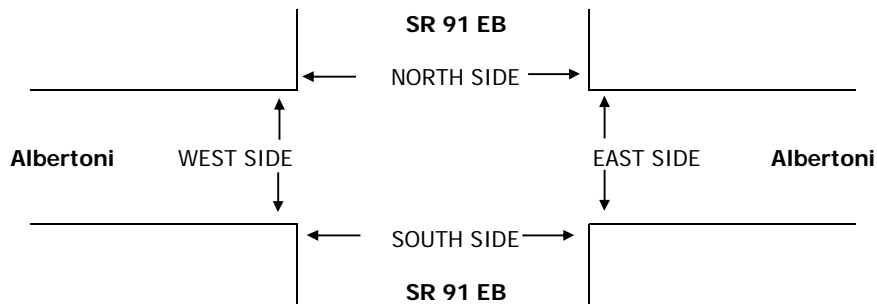
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wed, Apr 5, 17	LOCATION: NORTH & SOUTH: EAST & WEST:	CSU Dominguez Hills SR 91 EB Albertoni	PROJECT #: SC1281 LOCATION #: 10 CONTROL: SIGNAL
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NOTES:	AM		▲	
	PM		N	
	MD	◀ W		E ▶
	OTHER		S	
	OTHER		▼	

LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	SR 91 EB			SR 91 EB			Albertoni			Albertoni			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	X	X	X	1	X	1	2	2	X	X	2	0	

AM	7:00 AM	0	0	0	35	0	34	69	35	0	0	111	14	298
	7:15 AM	0	0	0	36	0	46	39	56	0	0	139	10	326
	7:30 AM	0	0	0	39	0	54	57	60	0	0	154	20	384
	7:45 AM	0	0	0	87	0	75	56	78	0	0	121	21	438
	8:00 AM	0	0	0	94	0	53	48	57	0	0	136	18	406
	8:15 AM	0	0	0	97	0	57	62	67	0	0	122	16	421
	8:30 AM	0	0	0	72	0	61	71	77	0	0	107	23	411
	8:45 AM	0	0	0	60	0	44	56	67	0	0	92	16	335
	VOLUMES	0	0	0	520	0	424	458	497	0	0	982	138	3,019
	APPROACH %	0%	0%	0%	55%	0%	45%	48%	52%	0%	0%	88%	12%	
APP/DEPART	0	/	596	944	/	0	955	/	1,017	1,120	/	1,406	0	
BEGIN PEAK HR	7:45 AM													
VOLUMES	0	0	0	350	0	246	237	279	0	0	486	78	1,676	
APPROACH %	0%	0%	0%	59%	0%	41%	46%	54%	0%	0%	86%	14%		
PEAK HR FACTOR	0.000			0.920			0.872			0.916			0.957	
APP/DEPART	0	/	315	596	/	0	516	/	629	564	/	732	0	
PM	4:02 PM	0	0	0	118	0	44	74	174	0	0	111	24	545
	4:17 PM	0	0	0	136	0	38	65	185	0	0	105	13	542
	4:32 PM	0	0	0	138	0	60	76	201	0	0	84	18	577
	4:47 PM	0	0	0	151	0	52	63	172	0	0	105	14	557
	5:02 PM	0	0	0	175	0	70	70	232	0	1	95	20	663
	5:17 PM	0	0	0	170	0	77	81	219	0	0	114	15	676
	5:32 PM	0	0	0	157	1	48	49	180	0	0	98	14	547
	5:47 PM	0	0	0	152	0	40	38	183	0	0	74	11	498
	VOLUMES	0	0	0	1,197	1	429	516	1,546	0	1	786	129	4,605
	APPROACH %	0%	0%	0%	74%	0%	26%	25%	75%	0%	0%	86%	14%	
APP/DEPART	0	/	645	1,627	/	1	2,062	/	2,744	916	/	1,215	0	
BEGIN PEAK HR	4:32 PM													
VOLUMES	0	0	0	634	0	259	290	824	0	1	398	67	2,473	
APPROACH %	0%	0%	0%	71%	0%	29%	26%	74%	0%	0%	85%	14%		
PEAK HR FACTOR	0.000			0.904			0.922			0.903			0.915	
APP/DEPART	0	/	357	893	/	0	1,114	/	1,459	466	/	657	0	



INTERSECTION TURNING MOVEMENT COUNTS

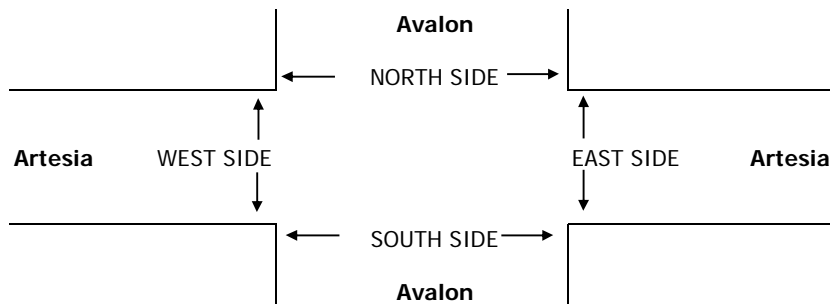
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wed, Apr 5, 17	LOCATION: NORTH & SOUTH: CSU Dominguez Hills EAST & WEST: Avalon Artesia	PROJECT #: SC1281 LOCATION #: 11 CONTROL: SIGNAL
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NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W E ▶ S ▼
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Avalon			Avalon			Artesia			Artesia			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	X	3	1	2	3	X	X	X	X	1.5	X	1.5	

AM	7:00 AM	0	118	30	37	160	0	0	0	0	76	0	111	532
	7:15 AM	0	168	36	26	175	0	0	0	0	89	0	137	631
	7:30 AM	0	197	38	52	223	0	0	0	0	88	0	142	740
	7:45 AM	0	250	34	27	278	0	0	0	0	86	0	148	823
	8:00 AM	0	243	35	50	255	0	0	0	0	98	0	146	827
	8:15 AM	0	196	45	23	212	0	0	0	0	78	0	119	673
	8:30 AM	0	174	37	32	207	0	0	0	0	74	0	100	624
	8:45 AM	1	147	32	41	152	0	0	0	0	87	0	127	587
	VOLUMES	1	1,493	287	288	1,662	0	0	0	0	676	0	1,030	5,437
	APPROACH %	0%	84%	16%	15%	85%	0%	0%	0%	0%	40%	0%	60%	
APP/DEPART	1,781	/	2,523	1,950	/	2,338	0	/	576	1,706	/	0	0	
BEGIN PEAK HR	7:30 AM													
VOLUMES	0	886	152	152	968	0	0	0	0	350	0	555	3,063	
APPROACH %	0%	85%	15%	14%	86%	0%	0%	0%	0%	39%	0%	61%		
PEAK HR FACTOR	0.914			0.918			0.000			0.927			0.926	
APP/DEPART	1,038	/	1,441	1,120	/	1,318	0	/	304	905	/	0	0	
PM	4:00 PM	0	233	46	62	265	0	0	0	0	86	0	103	795
	4:15 PM	0	219	47	38	257	0	0	0	0	54	0	111	726
	4:30 PM	1	269	46	44	270	0	0	0	0	86	0	99	815
	4:45 PM	1	242	55	34	255	0	0	0	0	88	0	98	773
	5:00 PM	0	308	54	50	309	0	0	0	0	89	0	111	921
	5:15 PM	0	319	40	43	262	0	0	0	0	81	0	100	845
	5:30 PM	1	283	63	39	250	0	0	0	0	61	0	72	769
	5:45 PM	0	224	45	33	200	0	0	0	0	53	0	78	633
	VOLUMES	3	2,097	396	343	2,068	0	0	0	0	598	0	772	6,277
	APPROACH %	0%	84%	16%	14%	86%	0%	0%	0%	0%	44%	0%	56%	
APP/DEPART	2,496	/	2,870	2,411	/	2,662	0	/	745	1,370	/	0	0	
BEGIN PEAK HR	4:30 PM													
VOLUMES	2	1,138	195	171	1,096	0	0	0	0	344	0	408	3,354	
APPROACH %	0%	85%	15%	13%	87%	0%	0%	0%	0%	46%	0%	54%		
PEAK HR FACTOR	0.922			0.882			0.000			0.940			0.910	
APP/DEPART	1,335	/	1,546	1,267	/	1,436	0	/	372	752	/	0	0	



INTERSECTION TURNING MOVEMENT COUNTS

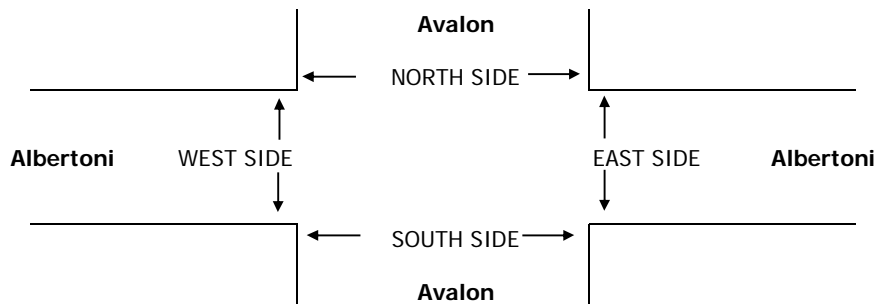
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wed, Apr 5, 17	LOCATION: NORTH & SOUTH: CSU Dominguez Hills EAST & WEST: Avalon Albertoni	PROJECT #: SC1281 LOCATION #: 12 CONTROL: SIGNAL
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NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W E ▶ S ▼
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	Avalon			Avalon			Albertoni			Albertoni			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	3	1	1	3	0	1	1.5	1.5	1	1.5	1.5	

AM	7:00 AM	30	102	39	56	88	59	17	19	11	8	1	27	457
	7:15 AM	34	145	29	62	132	85	27	11	36	12	2	28	603
	7:30 AM	47	161	29	70	146	77	25	15	26	12	6	25	639
	7:45 AM	28	199	50	74	233	89	45	31	53	17	6	52	877
	8:00 AM	38	161	37	86	184	73	60	27	55	14	3	44	782
	8:15 AM	44	157	38	78	150	73	35	28	90	11	8	46	758
	8:30 AM	42	136	53	73	128	66	39	36	57	8	7	46	691
	8:45 AM	35	118	33	73	137	69	35	36	39	13	8	49	645
	VOLUMES	298	1,179	308	572	1,198	591	283	203	367	95	41	317	5,452
	APPROACH %	17%	66%	17%	24%	51%	25%	33%	24%	43%	21%	9%	70%	
APP/DEPART	1,785	/	1,823	2,361	/	1,671	853	/	1,045	453	/	913	0	
BEGIN PEAK HR	7:45 AM													
VOLUMES	152	653	178	311	695	301	179	122	255	50	24	188	3,108	
APPROACH %	15%	66%	18%	24%	53%	23%	32%	22%	46%	19%	9%	72%		
PEAK HR FACTOR	0.887			0.825			0.908			0.873			0.886	
APP/DEPART	983	/	1,046	1,307	/	1,006	556	/	587	262	/	469	0	
PM	4:00 PM	42	206	47	80	212	64	60	129	93	24	12	27	996
	4:15 PM	60	160	45	69	219	46	68	150	85	18	6	35	961
	4:30 PM	46	210	39	63	210	55	60	148	107	21	9	44	1,012
	4:45 PM	54	180	39	63	195	58	74	158	105	22	7	41	996
	5:00 PM	46	222	35	75	245	73	71	175	98	24	15	41	1,120
	5:15 PM	61	243	57	68	230	59	83	191	136	36	13	50	1,227
	5:30 PM	37	222	41	78	191	64	71	167	113	34	4	44	1,066
	5:45 PM	39	163	40	55	150	45	67	163	119	31	9	57	938
	VOLUMES	385	1,606	343	551	1,652	464	554	1,281	856	210	75	339	8,316
	APPROACH %	16%	69%	15%	21%	62%	17%	21%	48%	32%	34%	12%	54%	
APP/DEPART	2,334	/	2,528	2,667	/	2,700	2,691	/	2,173	624	/	915	0	
BEGIN PEAK HR	4:45 PM													
VOLUMES	198	867	172	284	861	254	299	691	452	116	39	176	4,409	
APPROACH %	16%	70%	14%	20%	62%	18%	21%	48%	31%	35%	12%	53%		
PEAK HR FACTOR	0.857			0.890			0.879			0.836			0.898	
APP/DEPART	1,237	/	1,363	1,399	/	1,415	1,442	/	1,142	331	/	489	0	



INTERSECTION TURNING MOVEMENT COUNTS

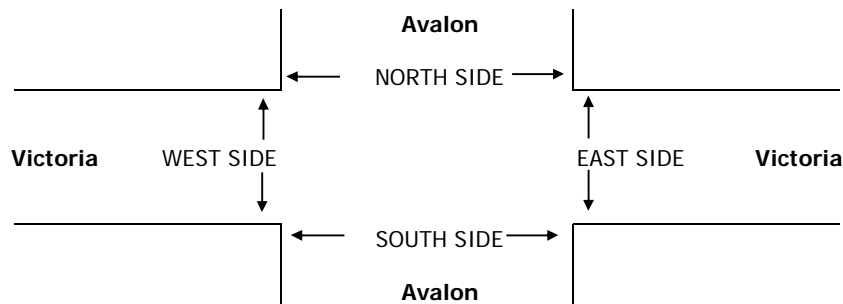
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Apr 4, 17	LOCATION: NORTH & SOUTH: CSU Dominguez Hills EAST & WEST: Avalon Victoria	PROJECT #: SC1281 LOCATION #: 13 CONTROL: SIGNAL
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NOTES:	AM PM MD OTHER OTHER	◀ W E ▶	▲ N S ▼
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	Avalon			Avalon			Victoria			Victoria			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
LANES:	1	3	1	2	3	0	1	2	1	1	2	1	

AM	7:00 AM	28	105	15	33	77	29	19	48	16	8	97	40	515
	7:15 AM	29	117	11	33	125	34	24	51	9	26	146	60	665
	7:30 AM	26	171	18	65	132	25	28	76	29	30	134	53	787
	7:45 AM	40	172	48	67	186	26	27	123	26	22	104	52	893
	8:00 AM	39	149	38	116	121	30	22	148	23	19	108	38	851
	8:15 AM	28	138	51	109	135	29	22	131	35	19	110	52	859
	8:30 AM	28	134	36	54	135	37	16	97	28	22	112	49	748
	8:45 AM	21	110	20	48	117	27	22	100	32	17	93	34	641
	VOLUMES	239	1,096	237	525	1,028	237	180	774	198	163	904	378	5,959
	APPROACH %	15%	70%	15%	29%	57%	13%	16%	67%	17%	11%	63%	26%	
APP/DEPART	1,572	/	1,701	1,790	/	1,402	1,152	/	1,489	1,445	/	1,367	0	
BEGIN PEAK HR	7:30 AM													
VOLUMES	133	630	155	357	574	110	99	478	113	90	456	195	3,390	
APPROACH %	14%	69%	17%	34%	55%	11%	14%	69%	16%	12%	62%	26%		
PEAK HR FACTOR	0.883			0.933			0.894			0.854			0.949	
APP/DEPART	918	/	955	1,041	/	784	690	/	959	741	/	692	0	
PM	4:00 PM	35	175	44	80	173	19	38	198	45	36	122	49	1,014
	4:15 PM	30	183	42	54	225	31	30	226	67	27	148	42	1,105
	4:30 PM	47	202	53	68	249	25	23	191	61	30	111	49	1,109
	4:45 PM	39	192	45	72	232	23	40	172	60	48	118	37	1,078
	5:00 PM	46	184	55	66	229	16	27	229	45	44	215	68	1,224
	5:15 PM	32	205	57	88	232	26	27	226	56	42	222	75	1,288
	5:30 PM	41	167	42	63	274	32	38	213	59	42	148	68	1,187
	5:45 PM	46	193	55	77	246	26	35	205	58	36	132	44	1,153
	VOLUMES	316	1,501	393	568	1,860	198	258	1,660	451	305	1,216	432	9,158
	APPROACH %	14%	68%	18%	22%	71%	8%	11%	70%	19%	16%	62%	22%	
APP/DEPART	2,210	/	2,220	2,626	/	2,654	2,369	/	2,593	1,953	/	1,691	0	
BEGIN PEAK HR	5:00 PM													
VOLUMES	165	749	209	294	981	100	127	873	218	164	717	255	4,852	
APPROACH %	15%	67%	19%	21%	71%	7%	10%	72%	18%	14%	63%	22%		
PEAK HR FACTOR	0.955			0.932			0.982			0.838			0.942	
APP/DEPART	1,123	/	1,146	1,375	/	1,382	1,218	/	1,361	1,136	/	963	0	



INTERSECTION TURNING MOVEMENT COUNTS

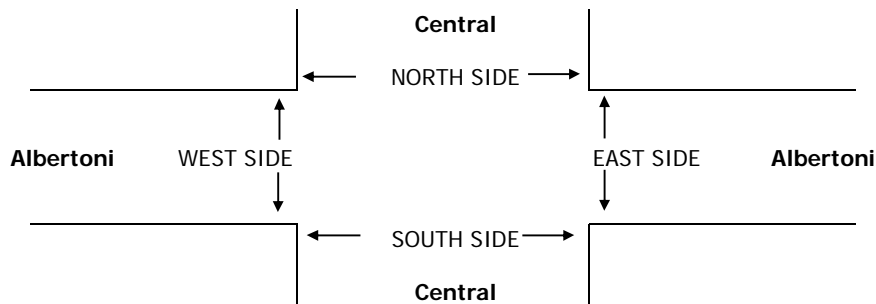
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wed, Apr 5, 17	LOCATION: NORTH & SOUTH: CSU Dominguez Hills EAST & WEST: Central Albertoni	PROJECT #: SC1281 LOCATION #: 15 CONTROL: SIGNAL
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NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W E ▶ S ▼
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	Central			Central			Albertoni			Albertoni			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	X	2	2	2	2	X	1.5	1	0.5	X	X	X	

AM	7:00 AM	0	107	94	98	165	0	58	42	97	0	0	0	661
	7:15 AM	0	103	88	111	190	0	71	48	72	0	0	0	683
	7:30 AM	0	150	104	133	247	0	66	29	96	0	0	0	825
	7:45 AM	0	168	84	119	323	0	64	47	128	0	0	0	933
	8:00 AM	0	146	95	119	336	0	90	48	118	0	0	0	952
	8:15 AM	0	132	73	91	308	0	95	40	107	0	0	0	846
	8:30 AM	0	130	78	93	219	0	66	48	97	0	0	0	731
	8:45 AM	0	105	41	90	247	0	74	33	97	0	0	0	687
	VOLUMES	0	1,041	657	854	2,035	0	584	335	812	0	0	0	6,318
	APPROACH %	0%	61%	39%	30%	70%	0%	34%	19%	47%	0%	0%	0%	
APP/DEPART	1,698	/	1,625	2,889	/	2,847	1,731	/	1,846	0	/	0	0	
BEGIN PEAK HR	7:30 AM													
VOLUMES	0	596	356	462	1,214	0	315	164	449	0	0	0	3,556	
APPROACH %	0%	63%	37%	28%	72%	0%	34%	18%	48%	0%	0%	0%		
PEAK HR FACTOR	0.937			0.921			0.906			0.000			0.934	
APP/DEPART	952	/	911	1,676	/	1,663	928	/	982	0	/	0	0	
PM	4:00 PM	0	206	135	72	235	0	59	168	70	0	0	0	945
	4:15 PM	0	164	108	77	183	0	72	173	64	0	0	0	841
	4:30 PM	0	227	125	70	222	0	53	204	59	0	0	0	960
	4:45 PM	0	204	94	63	202	0	85	164	58	0	0	0	870
	5:00 PM	0	232	124	115	261	0	52	177	60	0	0	0	1,021
	5:15 PM	0	210	150	61	241	0	50	191	64	0	0	0	967
	5:30 PM	0	187	107	64	206	0	68	209	49	0	0	0	890
	5:45 PM	0	171	101	61	212	0	59	184	65	0	0	0	853
	VOLUMES	0	1,601	944	583	1,762	0	498	1,470	489	0	0	0	7,347
	APPROACH %	0%	63%	37%	25%	75%	0%	20%	60%	20%	0%	0%	0%	
APP/DEPART	2,545	/	2,104	2,345	/	2,251	2,457	/	2,992	0	/	0	0	
BEGIN PEAK HR	4:30 PM													
VOLUMES	0	873	493	309	926	0	240	736	241	0	0	0	3,818	
APPROACH %	0%	64%	36%	25%	75%	0%	20%	60%	20%	0%	0%	0%		
PEAK HR FACTOR	0.949			0.821			0.963			0.000			0.935	
APP/DEPART	1,366	/	1,116	1,235	/	1,167	1,217	/	1,535	0	/	0	0	



INTERSECTION TURNING MOVEMENT COUNTS

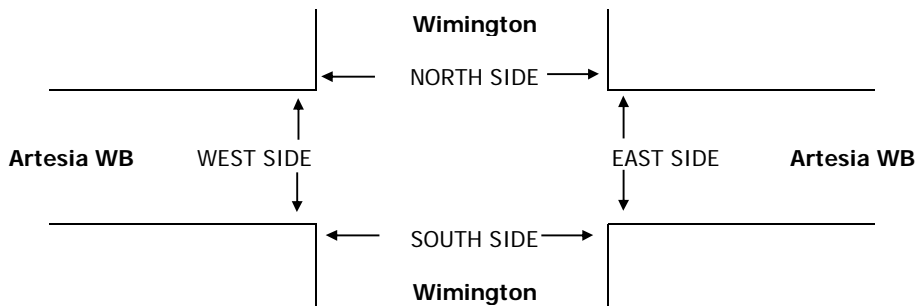
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wed, Apr 5, 17	LOCATION: NORTH & SOUTH: CSU Dominguez Hills EAST & WEST: Wilmington Artesia WB	PROJECT #: SC1281 LOCATION #: 17 CONTROL: SIGNAL
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NOTES:	AM PM MD OTHER OTHER	◀ W E ▶	▲ N S ▼
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Wilmington			Wilmington			Artesia WB			Artesia WB			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR		TOTAL
LANES:	1	2	X	X	3	0	X	X	X	1.5	1	0.5	

AM	7:00 AM	52	74	0	0	178	70	0	0	0	147	75	38	634
	7:15 AM	46	81	0	0	218	58	0	0	0	129	100	42	674
	7:30 AM	37	94	0	0	242	70	0	0	0	151	86	55	735
	7:45 AM	31	103	0	0	283	68	0	0	0	179	101	52	817
	8:00 AM	30	95	0	0	217	52	0	0	0	167	121	60	742
	8:15 AM	49	106	0	0	180	55	0	0	0	146	94	43	673
	8:30 AM	37	73	0	0	152	41	0	0	0	124	73	56	556
	8:45 AM	53	91	0	0	115	43	0	0	0	139	77	39	557
	VOLUMES	335	717	0	0	1,585	457	0	0	0	1,182	727	385	5,388
	APPROACH %	32%	68%	0%	0%	78%	22%	0%	0%	0%	52%	32%	17%	
APP/DEPART	1,052	/	1,102	2,042	/	2,767	0	/	0	2,294	/	1,519	0	
BEGIN PEAK HR	7:15 AM													
VOLUMES	144	373	0	0	960	248	0	0	0	626	408	209	2,968	
APPROACH %	28%	72%	0%	0%	79%	21%	0%	0%	0%	50%	33%	17%		
PEAK HR FACTOR	0.965												0.908	
APP/DEPART	517	/	582	1,208	/	1,586	0	/	0	1,243	/	800	0	
PM	4:00 PM	61	174	0	0	116	55	0	0	0	91	32	102	631
	4:15 PM	54	121	0	1	157	43	0	0	0	95	42	120	633
	4:30 PM	70	171	0	0	141	68	0	0	0	99	37	104	690
	4:45 PM	76	189	0	0	157	38	0	0	0	80	33	91	664
	5:00 PM	35	165	0	0	172	38	0	0	0	88	37	121	656
	5:15 PM	79	228	0	0	153	65	0	0	0	74	43	110	752
	5:30 PM	75	164	0	0	131	32	0	0	0	65	29	107	603
	5:45 PM	50	141	0	0	133	34	0	0	0	82	21	135	596
	VOLUMES	500	1,353	0	1	1,160	373	0	0	0	674	274	890	5,225
	APPROACH %	27%	73%	0%	0%	76%	24%	0%	0%	0%	37%	15%	48%	
APP/DEPART	1,853	/	2,244	1,534	/	1,834	0	/	0	1,838	/	1,147	0	
BEGIN PEAK HR	4:30 PM													
VOLUMES	260	753	0	0	623	209	0	0	0	341	150	426	2,762	
APPROACH %	26%	74%	0%	0%	75%	25%	0%	0%	0%	37%	16%	46%		
PEAK HR FACTOR	0.825												0.918	
APP/DEPART	1,013	/	1,179	832	/	964	0	/	0	917	/	619	0	



INTERSECTION TURNING MOVEMENT COUNTS

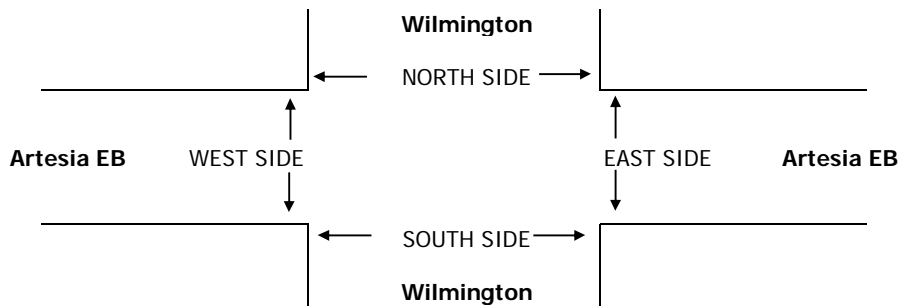
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wed, Apr 5, 17	LOCATION: NORTH & SOUTH: CSU Dominguez Hills EAST & WEST: Wilmington Artesia EB	PROJECT #: SC1281 LOCATION #: 18 CONTROL: SIGNAL
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NOTES: <p style="text-align: center; color: blue;">Queue NB PM</p>	AM PM MD OTHER OTHER	▲ N ◀ W E ▶ S ▼
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	Wilmington			Wilmington			Artesia EB			Artesia EB			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
LANES:	X	2	2	2	2	X	1.5	1	0.5	X	X	X	

AM	7:00 AM	0	89	90	130	193	0	40	17	98	0	0	0	657
	7:15 AM	0	84	107	165	178	0	45	17	111	0	0	0	707
	7:30 AM	0	75	93	163	228	0	59	21	103	0	0	0	742
	7:45 AM	0	93	74	166	295	0	42	20	145	0	0	0	835
	8:00 AM	0	70	108	122	259	0	56	22	106	0	0	0	743
	8:15 AM	0	106	93	115	209	0	52	13	87	0	0	0	675
	8:30 AM	0	66	82	113	160	0	47	25	95	0	0	0	588
	8:45 AM	0	84	77	76	174	0	62	24	90	0	0	0	587
	VOLUMES	0	667	724	1,050	1,696	0	403	159	835	0	0	0	5,534
	APPROACH %	0%	48%	52%	38%	62%	0%	29%	11%	60%	0%	0%	0%	
APP/DEPART	1,391	/	1,070	2,746	/	2,531	1,397	/	1,933	0	/	0	0	
BEGIN PEAK HR	7:15 AM													
VOLUMES	0	322	382	616	960	0	202	80	465	0	0	0	3,027	
APPROACH %	0%	46%	54%	39%	61%	0%	27%	11%	62%	0%	0%	0%		
PEAK HR FACTOR	0.921			0.855			0.902			0.000			0.906	
APP/DEPART	704	/	524	1,576	/	1,425	747	/	1,078	0	/	0	0	
PM	4:00 PM	0	198	179	61	146	0	40	203	49	0	0	0	876
	4:15 PM	0	135	134	64	187	0	39	200	39	0	0	0	798
	4:30 PM	0	207	186	72	167	0	34	214	49	0	0	0	929
	4:45 PM	0	237	146	92	144	0	32	184	36	0	0	0	871
	5:00 PM	0	156	182	97	163	0	44	211	50	0	0	0	903
	5:15 PM	0	263	199	82	143	0	44	191	42	0	0	0	964
	5:30 PM	0	206	174	70	126	0	34	221	25	0	0	0	856
	5:45 PM	0	137	144	64	150	0	54	204	26	0	0	0	779
	VOLUMES	0	1,539	1,344	602	1,226	0	321	1,628	316	0	0	0	6,976
	APPROACH %	0%	53%	47%	33%	67%	0%	14%	72%	14%	0%	0%	0%	
APP/DEPART	2,883	/	1,862	1,828	/	1,542	2,265	/	3,572	0	/	0	0	
BEGIN PEAK HR	4:30 PM													
VOLUMES	0	863	713	343	617	0	154	800	177	0	0	0	3,667	
APPROACH %	0%	55%	45%	36%	64%	0%	14%	71%	16%	0%	0%	0%		
PEAK HR FACTOR	0.853			0.923			0.927			0.000			0.951	
APP/DEPART	1,576	/	1,018	960	/	794	1,131	/	1,855	0	/	0	0	



INTERSECTION TURNING MOVEMENT COUNTS

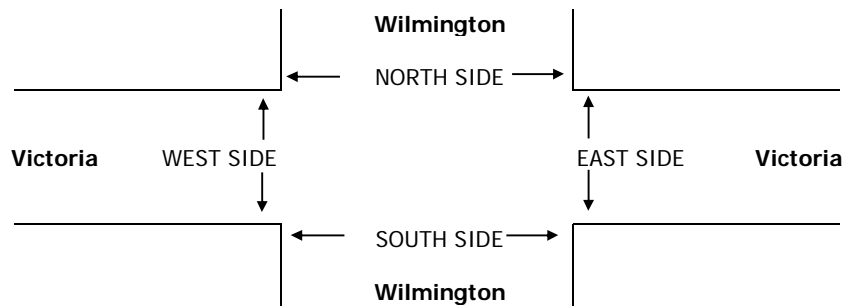
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Apr 4, 17	LOCATION: NORTH & SOUTH: CSU Dominguez Hills EAST & WEST: Wilmington Victoria	PROJECT #: SC1281 LOCATION #: 19 CONTROL: SIGNAL
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NOTES:	AM PM MD OTHER OTHER	◀ W E ▶	▲ N S ▼
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Wilmington			Wilmington			Victoria			Victoria			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	3	0	1	3	0	2	2	1	1	2	0	

AM	7:00 AM	13	69	4	35	176	26	14	16	8	3	26	59	449
	7:15 AM	15	102	6	30	200	53	11	22	11	3	34	41	528
	7:30 AM	13	104	3	41	252	42	16	17	15	1	41	52	597
	7:45 AM	20	102	0	38	251	33	27	25	13	7	38	45	599
	8:00 AM	25	125	13	46	234	66	16	30	16	6	28	38	643
	8:15 AM	31	104	9	49	195	57	14	36	17	4	22	35	573
	8:30 AM	17	92	3	47	176	43	13	21	18	6	41	54	531
	8:45 AM	18	93	5	41	177	46	24	25	13	6	36	39	523
	VOLUMES	152	791	43	327	1,661	366	135	192	111	36	266	363	4,443
	APPROACH %	15%	80%	4%	14%	71%	16%	31%	44%	25%	5%	40%	55%	
APP/DEPART	986	/	1,289	2,354	/	1,808	438	/	562	665	/	784	0	
BEGIN PEAK HR	7:30 AM													
VOLUMES	89	435	25	174	932	198	73	108	61	18	129	170	2,412	
APPROACH %	16%	79%	5%	13%	71%	15%	30%	45%	25%	6%	41%	54%		
PEAK HR FACTOR	0.842			0.942			0.903			0.843			0.938	
APP/DEPART	549	/	678	1,304	/	1,011	242	/	307	317	/	416	0	
PM	4:00 PM	31	254	9	28	110	16	92	73	26	7	33	56	735
	4:15 PM	14	175	7	23	127	17	57	77	26	9	35	38	605
	4:30 PM	30	219	2	17	123	16	85	91	27	5	50	64	729
	4:45 PM	19	207	5	40	148	36	74	73	25	5	37	38	707
	5:00 PM	28	283	5	15	150	28	80	56	38	12	46	62	803
	5:15 PM	17	206	9	28	134	18	78	71	43	6	31	52	693
	5:30 PM	15	188	11	27	115	16	96	96	27	18	66	61	736
	5:45 PM	26	213	4	20	133	13	70	83	25	4	42	52	685
	VOLUMES	180	1,745	52	198	1,040	160	632	620	237	66	340	423	5,693
	APPROACH %	9%	88%	3%	14%	74%	11%	42%	42%	16%	8%	41%	51%	
APP/DEPART	1,977	/	2,801	1,398	/	1,348	1,489	/	870	829	/	674	0	
BEGIN PEAK HR	4:45 PM													
VOLUMES	79	884	30	110	547	98	328	296	133	41	180	213	2,939	
APPROACH %	8%	89%	3%	15%	72%	13%	43%	39%	18%	9%	41%	49%		
PEAK HR FACTOR	0.786			0.843			0.864			0.748			0.915	
APP/DEPART	993	/	1,426	755	/	722	757	/	435	434	/	356	0	



INTERSECTION TURNING MOVEMENT COUNTS

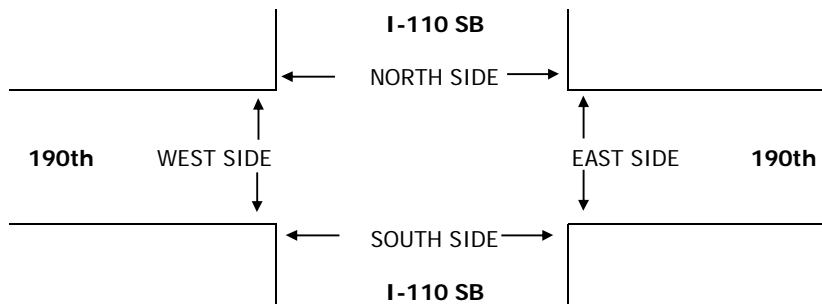
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Apr 4, 17	LOCATION: NORTH & SOUTH: CSU Dominguez Hills EAST & WEST: I-110 SB 190th	PROJECT #: SC1281 LOCATION #: 20 CONTROL: SIGNAL
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NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W E ▶ S ▼
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	I-110 SB			I-110 SB			190th			190th			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
LANES:	X	X	X	1	X	1	X	2	X	X	3	X	

AM	7:00 AM	0	0	0	66	0	170	0	131	0	0	174	0	541
	7:15 AM	0	0	0	51	0	220	0	154	0	0	204	0	629
	7:30 AM	0	0	0	57	0	229	0	176	0	0	223	0	685
	7:45 AM	0	0	0	65	0	257	0	259	0	0	257	0	838
	8:00 AM	0	0	0	105	0	253	0	233	0	0	205	0	796
	8:15 AM	0	0	0	89	0	219	0	254	0	0	238	0	800
	8:30 AM	0	0	0	77	0	197	0	230	0	0	206	0	710
	8:45 AM	0	0	0	67	0	198	0	233	0	0	211	0	709
	VOLUMES	0	0	0	577	0	1,743	0	1,670	0	0	1,718	0	5,708
	APPROACH %	0%	0%	0%	25%	0%	75%	0%	100%	0%	0%	100%	0%	
APP/DEPART	0	/	0	2,320	/	0	1,670	/	2,247	1,718	/	3,461	0	
BEGIN PEAK HR	7:45 AM													
VOLUMES	0	0	0	336	0	926	0	976	0	0	906	0	3,144	
APPROACH %	0%	0%	0%	27%	0%	73%	0%	100%	0%	0%	100%	0%		
PEAK HR FACTOR	0.000			0.881			0.942			0.881			0.938	
APP/DEPART	0	/	0	1,262	/	0	976	/	1,312	906	/	1,832	0	
PM	4:00 PM	0	0	0	131	0	111	0	435	0	0	198	0	875
	4:15 PM	0	0	0	147	0	88	0	408	0	0	189	0	832
	4:30 PM	0	0	0	141	0	98	0	429	0	0	208	0	876
	4:45 PM	0	0	0	168	0	119	0	397	0	0	210	0	894
	5:00 PM	0	0	0	142	0	122	0	468	0	0	212	0	944
	5:15 PM	0	0	0	155	0	111	0	432	0	0	243	0	941
	5:30 PM	0	0	0	164	0	110	0	415	0	0	221	0	910
	5:45 PM	0	0	0	168	0	105	0	430	0	0	171	0	874
	VOLUMES	0	0	0	1,216	0	864	0	3,414	0	0	1,652	0	7,146
	APPROACH %	0%	0%	0%	58%	0%	42%	0%	100%	0%	0%	100%	0%	
APP/DEPART	0	/	0	2,080	/	0	3,414	/	4,630	1,652	/	2,516	0	
BEGIN PEAK HR	4:45 PM													
VOLUMES	0	0	0	629	0	462	0	1,712	0	0	886	0	3,689	
APPROACH %	0%	0%	0%	58%	0%	42%	0%	100%	0%	0%	100%	0%		
PEAK HR FACTOR	0.000			0.950			0.915			0.912			0.977	
APP/DEPART	0	/	0	1,091	/	0	1,712	/	2,341	886	/	1,348	0	



INTERSECTION TURNING MOVEMENT COUNTS

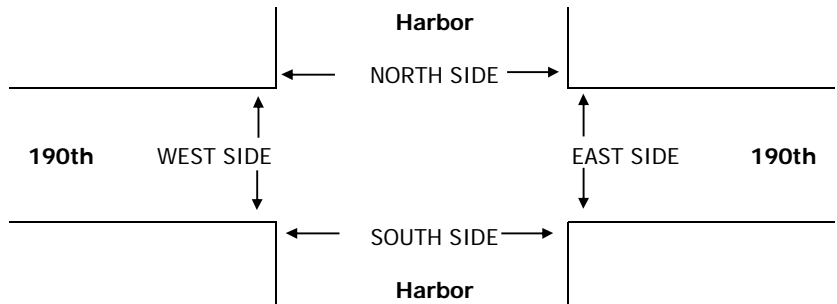
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Apr 4, 17	LOCATION: NORTH & SOUTH: CSU Dominguez Hills EAST & WEST: Harbor 190th	PROJECT #: SC1281 LOCATION #: 21 CONTROL: SIGNAL
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NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W E ▶ S ▼
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	Harbor			Harbor			190th			190th			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	0	0	X	X	X	2	2	0	1	2	1	

AM	7:00 AM	0	0	0	0	0	0	32	162	0	0	176	65	435
	7:15 AM	0	0	0	0	0	0	33	169	0	0	205	67	474
	7:30 AM	0	0	0	0	0	0	20	209	0	0	223	56	508
	7:45 AM	0	0	0	0	0	0	39	281	0	1	260	75	656
	8:00 AM	0	0	0	0	0	0	48	288	0	1	208	53	598
	8:15 AM	0	0	0	0	0	0	39	300	0	0	237	51	627
	8:30 AM	0	0	0	0	0	0	40	265	0	0	206	54	565
	8:45 AM	0	0	0	0	0	0	54	245	0	1	214	58	572
	VOLUMES	0	0	0	0	0	0	305	1,919	0	3	1,729	479	4,435
	APPROACH %	0%	0%	0%	0%	0%	0%	14%	86%	0%	0%	78%	22%	
APP/DEPART	0	/	784	0	/	0	2,224	/	1,922	2,211	/	1,729	0	
BEGIN PEAK HR	7:45 AM													
VOLUMES	0	0	0	0	0	0	166	1,134	0	2	911	233	2,446	
APPROACH %	0%	0%	0%	0%	0%	0%	13%	87%	0%	0%	79%	20%		
PEAK HR FACTOR	0.000			0.000			0.959			0.853			0.932	
APP/DEPART	0	/	399	0	/	0	1,300	/	1,136	1,146	/	911	0	
PM	4:00 PM	0	0	0	0	0	0	118	447	0	2	199	75	841
	4:15 PM	0	0	0	0	0	0	104	448	0	1	190	60	803
	4:30 PM	0	0	0	0	0	0	144	424	0	0	208	59	835
	4:45 PM	0	0	0	0	0	0	98	466	0	0	210	60	834
	5:00 PM	0	0	0	0	0	0	146	464	0	2	212	68	892
	5:15 PM	0	0	0	0	0	0	131	455	0	0	244	81	911
	5:30 PM	0	0	0	0	0	0	123	454	0	0	223	60	860
	5:45 PM	0	0	0	0	0	0	136	461	0	0	172	63	832
	VOLUMES	0	0	0	0	0	0	1,000	3,619	0	5	1,658	526	6,808
	APPROACH %	0%	0%	0%	0%	0%	0%	22%	78%	0%	0%	76%	24%	
APP/DEPART	0	/	1,526	0	/	0	4,619	/	3,624	2,189	/	1,658	0	
BEGIN PEAK HR	4:45 PM													
VOLUMES	0	0	0	0	0	0	498	1,839	0	2	889	269	3,497	
APPROACH %	0%	0%	0%	0%	0%	0%	21%	79%	0%	0%	77%	23%		
PEAK HR FACTOR	0.000			0.000			0.958			0.892			0.960	
APP/DEPART	0	/	767	0	/	0	2,337	/	1,841	1,160	/	889	0	



INTERSECTION TURNING MOVEMENT COUNTS

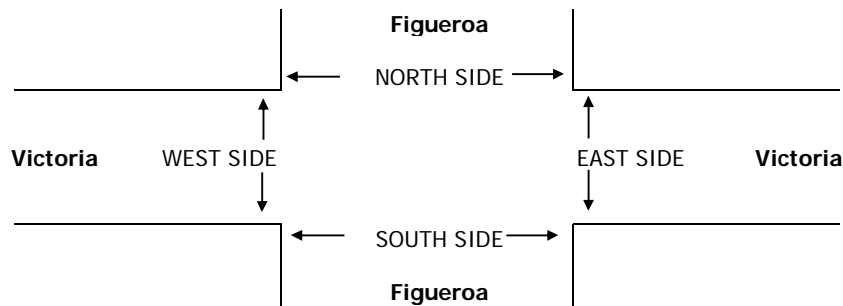
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Apr 4, 17	LOCATION: NORTH & SOUTH: CSU Dominguez Hills EAST & WEST: Figueroa Victoria	PROJECT #: SC1281 LOCATION #: 22 CONTROL: SIGNAL
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NOTES:	AM PM MD OTHER OTHER	◀ W E ▶	▲ N S ▼
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	Figueroa			Figueroa			Victoria			Victoria			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	0	1	3	0	1	3	0	1	2	0	

AM	7:00 AM	47	153	7	3	74	35	42	88	30	18	162	28	687
	7:15 AM	45	155	13	6	118	32	30	106	33	26	194	31	789
	7:30 AM	56	158	19	5	136	56	41	136	32	22	173	23	857
	7:45 AM	43	219	24	11	124	50	51	193	38	23	247	18	1,041
	8:00 AM	52	155	23	15	90	29	49	190	48	25	189	15	880
	8:15 AM	51	172	25	13	99	33	54	194	50	18	219	26	954
	8:30 AM	46	143	27	14	96	34	64	148	51	21	185	22	851
	8:45 AM	47	126	20	15	75	32	45	141	59	21	202	22	805
	VOLUMES	387	1,281	158	82	812	301	376	1,196	341	174	1,571	185	6,864
	APPROACH %	21%	70%	9%	7%	68%	25%	20%	63%	18%	9%	81%	10%	
APP/DEPART	1,826	/	1,839	1,195	/	1,356	1,913	/	1,435	1,930	/	2,234	0	
BEGIN PEAK HR	7:30 AM													
VOLUMES	202	704	91	44	449	168	195	713	168	88	828	82	3,732	
APPROACH %	20%	71%	9%	7%	68%	25%	18%	66%	16%	9%	83%	8%		
PEAK HR FACTOR	0.872			0.839			0.903			0.866			0.896	
APP/DEPART	997	/	979	661	/	720	1,076	/	848	998	/	1,185	0	
PM	4:00 PM	40	123	24	32	201	37	36	309	101	23	203	25	1,154
	4:15 PM	43	132	35	28	153	31	33	287	126	15	183	14	1,080
	4:30 PM	36	136	34	26	189	42	33	281	109	16	193	25	1,120
	4:45 PM	41	101	29	36	212	36	35	283	145	13	198	17	1,146
	5:00 PM	31	153	37	20	274	42	30	318	115	19	212	25	1,276
	5:15 PM	34	141	39	24	230	54	30	303	121	24	240	31	1,271
	5:30 PM	30	143	26	23	224	34	41	285	127	11	223	16	1,183
	5:45 PM	45	92	33	34	192	34	32	302	123	9	159	27	1,082
	VOLUMES	300	1,021	257	223	1,675	310	270	2,368	967	130	1,611	180	9,312
	APPROACH %	19%	65%	16%	10%	76%	14%	7%	66%	27%	7%	84%	9%	
APP/DEPART	1,578	/	1,468	2,208	/	2,787	3,605	/	2,849	1,921	/	2,208	0	
BEGIN PEAK HR	4:45 PM													
VOLUMES	136	538	131	103	940	166	136	1,189	508	67	873	89	4,876	
APPROACH %	17%	67%	16%	9%	78%	14%	7%	65%	28%	7%	85%	9%		
PEAK HR FACTOR	0.911			0.900			0.990			0.872			0.955	
APP/DEPART	805	/	763	1,209	/	1,521	1,833	/	1,423	1,029	/	1,169	0	



INTERSECTION TURNING MOVEMENT COUNTS

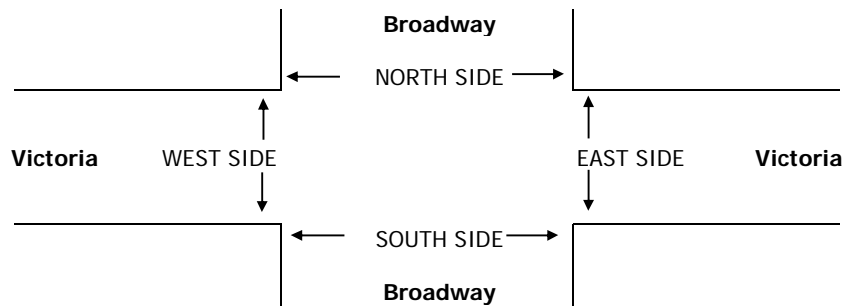
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Apr 4, 17	LOCATION: NORTH & SOUTH: CSU Dominguez Hills EAST & WEST: Broadway Victoria	PROJECT #: SC1281 LOCATION #: 23 CONTROL: SIGNAL
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NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W E ▶ S ▼
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	Broadway			Broadway			Victoria			Victoria			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
LANES:	1	2	0	1	2	0	1	2	0	1	2	0	

AM	7:00 AM	18	33	8	4	21	14	13	84	16	11	190	16	428
	7:15 AM	10	41	6	4	20	13	11	91	8	5	238	14	461
	7:30 AM	12	49	2	8	33	20	24	130	13	15	219	18	543
	7:45 AM	16	53	2	14	37	29	23	157	11	10	222	18	592
	8:00 AM	12	34	1	14	36	16	30	200	16	8	209	12	588
	8:15 AM	14	33	5	7	32	21	22	156	20	11	216	8	545
	8:30 AM	8	36	3	8	27	19	26	163	17	12	202	14	535
	8:45 AM	11	32	3	11	26	16	23	139	13	11	195	14	494
	VOLUMES	101	311	30	70	232	148	172	1,120	114	83	1,691	114	4,186
	APPROACH %	23%	70%	7%	16%	52%	33%	12%	80%	8%	4%	90%	6%	
APP/DEPART	442	/	575	450	/	417	1,406	/	1,232	1,888	/	1,962	0	
BEGIN PEAK HR	7:30 AM													
VOLUMES	54	169	10	43	138	86	99	643	60	44	866	56	2,268	
APPROACH %	23%	73%	4%	16%	52%	32%	12%	80%	7%	5%	90%	6%		
PEAK HR FACTOR	0.820			0.834			0.815			0.958			0.958	
APP/DEPART	233	/	310	267	/	236	802	/	702	966	/	1,020	0	
PM	4:00 PM	14	28	6	15	80	18	34	296	34	22	179	14	740
	4:15 PM	10	36	10	21	58	16	24	297	32	11	168	23	706
	4:30 PM	13	38	6	20	86	19	19	276	29	13	202	13	734
	4:45 PM	15	39	10	17	89	19	24	291	32	8	171	13	728
	5:00 PM	14	49	16	17	90	19	27	289	40	21	242	19	843
	5:15 PM	19	47	12	12	90	14	29	303	44	10	242	14	836
	5:30 PM	9	27	4	22	71	12	30	286	33	9	231	9	743
	5:45 PM	18	22	2	16	66	10	22	312	24	15	178	8	693
	VOLUMES	112	286	66	140	630	127	209	2,350	268	109	1,613	113	6,023
	APPROACH %	24%	62%	14%	16%	70%	14%	7%	83%	9%	6%	88%	6%	
APP/DEPART	464	/	566	897	/	992	2,827	/	2,571	1,835	/	1,894	0	
BEGIN PEAK HR	4:45 PM													
VOLUMES	57	162	42	68	340	64	110	1,169	149	48	886	55	3,150	
APPROACH %	22%	62%	16%	14%	72%	14%	8%	82%	10%	5%	90%	6%		
PEAK HR FACTOR	0.826			0.937			0.949			0.877			0.934	
APP/DEPART	261	/	312	472	/	533	1,428	/	1,283	989	/	1,022	0	



INTERSECTION TURNING MOVEMENT COUNTS

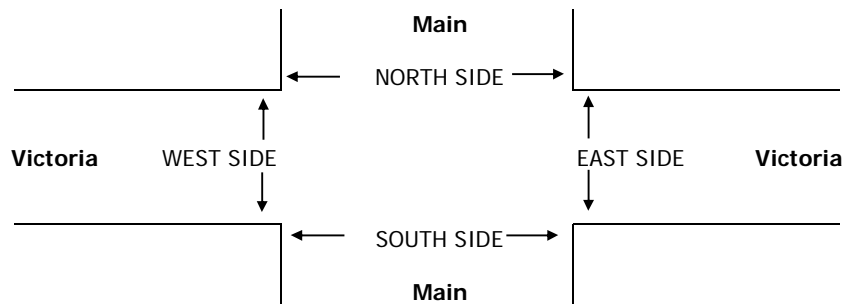
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Apr 4, 17	LOCATION: NORTH & SOUTH: CSU Dominguez Hills EAST & WEST: Main Victoria	PROJECT #: SC1281 LOCATION #: 24 CONTROL: SIGNAL
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NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W E ▶ S ▼
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	Main			Main			Victoria			Victoria			
LANES:	NL 1	NT 2	NR 1	SL 1	ST 2	SR 0	EL 1	ET 2	ER 0	WL 1	WT 2	WR 0	

AM	7:00 AM	9	53	4	9	61	34	13	65	6	21	174	13	462
	7:15 AM	12	76	5	5	74	30	22	69	7	50	206	24	580
	7:30 AM	15	76	17	13	103	37	22	98	9	49	197	18	654
	7:45 AM	27	132	18	12	100	40	26	123	5	27	191	22	723
	8:00 AM	13	93	22	10	62	46	18	178	11	21	164	24	662
	8:15 AM	10	85	15	12	73	41	21	120	15	19	178	19	608
	8:30 AM	13	71	16	13	76	49	27	130	10	25	163	22	615
	8:45 AM	13	56	14	6	61	39	19	118	11	24	164	15	540
	VOLUMES	112	642	111	80	610	316	168	901	74	236	1,437	157	4,844
	APPROACH %	13%	74%	13%	8%	61%	31%	15%	79%	6%	13%	79%	9%	
APP/DEPART	865	/	966	1,006	/	920	1,143	/	1,091	1,830	/	1,867	0	
BEGIN PEAK HR	7:30 AM													
VOLUMES	65	386	72	47	338	164	87	519	40	116	730	83	2,647	
APPROACH %	12%	74%	14%	9%	62%	30%	13%	80%	6%	12%	79%	9%		
PEAK HR FACTOR	0.739			0.897			0.780			0.880			0.915	
APP/DEPART	523	/	555	549	/	494	646	/	638	929	/	960	0	
PM	4:00 PM	17	100	27	21	122	37	26	244	23	10	143	24	794
	4:15 PM	14	58	26	25	109	27	36	271	23	26	149	21	785
	4:30 PM	15	77	12	26	115	34	30	252	33	23	162	19	798
	4:45 PM	12	83	21	23	131	31	29	247	29	23	126	21	776
	5:00 PM	19	72	26	37	166	43	29	275	34	25	191	21	938
	5:15 PM	13	84	27	43	170	30	19	275	36	31	227	29	984
	5:30 PM	6	85	29	31	140	24	20	269	36	21	204	23	888
	5:45 PM	12	63	20	28	168	21	24	261	29	21	153	19	819
	VOLUMES	108	622	188	234	1,121	247	213	2,094	243	180	1,355	177	6,782
	APPROACH %	12%	68%	20%	15%	70%	15%	8%	82%	10%	11%	79%	10%	
APP/DEPART	918	/	1,008	1,602	/	1,544	2,550	/	2,515	1,712	/	1,715	0	
BEGIN PEAK HR	5:00 PM													
VOLUMES	50	304	102	139	644	118	92	1,080	135	98	775	92	3,629	
APPROACH %	11%	67%	22%	15%	71%	13%	7%	83%	10%	10%	80%	10%		
PEAK HR FACTOR	0.919			0.916			0.967			0.841			0.922	
APP/DEPART	456	/	485	901	/	877	1,307	/	1,321	965	/	946	0	



INTERSECTION TURNING MOVEMENT COUNTS

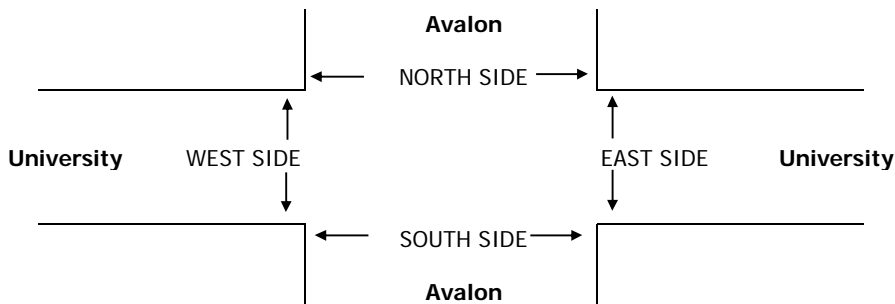
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Apr 4, 17	LOCATION: NORTH & SOUTH: CSU Dominguez Hills EAST & WEST: Avalon University	PROJECT #: SC1281 LOCATION #: 25 CONTROL: SIGNAL
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NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W E ▶ S ▼
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	Avalon			Avalon			University			University			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	X	3	1	2	3	X	X	X	X	1	X	1	

AM	7:00 AM	0	120	42	20	110	0	0	0	0	30	0	55	377
	7:15 AM	0	141	60	40	135	0	0	0	0	50	0	60	486
	7:30 AM	0	158	67	55	172	0	0	0	0	42	0	70	564
	7:45 AM	0	178	87	90	203	0	0	0	0	49	0	87	694
	8:00 AM	0	197	118	69	154	0	0	0	0	56	0	91	685
	8:15 AM	0	181	131	49	149	0	0	0	0	76	0	52	638
	8:30 AM	0	161	76	45	130	0	0	0	0	57	0	44	513
	8:45 AM	0	151	56	36	137	0	0	0	0	32	0	39	451
	VOLUMES	0	1,287	637	404	1,190	0	0	0	0	392	0	498	4,408
	APPROACH %	0%	67%	33%	25%	75%	0%	0%	0%	0%	44%	0%	56%	
APP/DEPART	1,924	/	1,849	1,594	/	1,582	0	/	977	890	/	0	0	
BEGIN PEAK HR	7:30 AM													
VOLUMES	0	714	403	263	678	0	0	0	0	223	0	300	2,581	
APPROACH %	0%	64%	36%	28%	72%	0%	0%	0%	0%	43%	0%	57%		
PEAK HR FACTOR	0.887			0.803			0.000			0.889			0.930	
APP/DEPART	1,117	/	1,041	941	/	901	0	/	639	523	/	0	0	
PM	4:00 PM	0	218	68	59	219	0	0	0	103	0	47	714	
	4:15 PM	0	229	64	96	242	0	0	0	83	0	59	773	
	4:30 PM	0	234	75	69	244	0	0	0	89	0	66	777	
	4:45 PM	1	204	79	78	256	0	0	0	87	0	56	761	
	5:00 PM	1	217	94	93	243	1	0	0	138	0	75	862	
	5:15 PM	0	229	104	89	250	0	0	0	100	0	48	820	
	5:30 PM	0	202	60	118	268	1	0	0	118	0	56	823	
	5:45 PM	0	243	69	72	238	0	0	0	85	0	37	744	
	VOLUMES	2	1,776	613	674	1,960	2	0	0	0	803	0	444	6,274
	APPROACH %	0%	74%	26%	26%	74%	0%	0%	0%	0%	64%	0%	36%	
APP/DEPART	2,391	/	2,390	2,636	/	2,763	0	/	1,117	1,247	/	4	0	
BEGIN PEAK HR	4:45 PM													
VOLUMES	2	852	337	378	1,017	2	0	0	0	443	0	235	3,266	
APPROACH %	0%	72%	28%	27%	73%	0%	0%	0%	0%	65%	0%	35%		
PEAK HR FACTOR	0.894			0.902			0.000			0.796			0.947	
APP/DEPART	1,191	/	1,180	1,397	/	1,460	0	/	622	678	/	4	0	



INTERSECTION TURNING MOVEMENT COUNTS

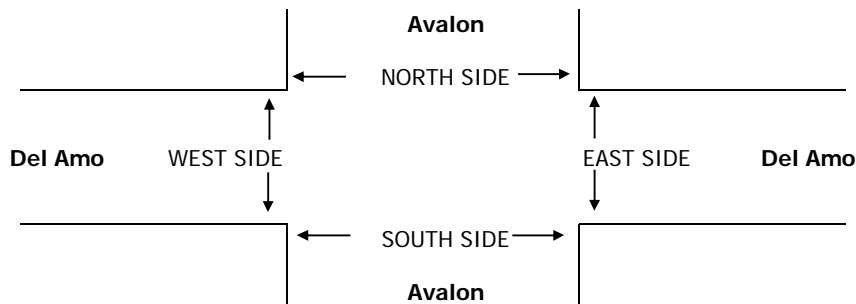
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wed, Apr 5, 17	LOCATION: NORTH & SOUTH: CSU Dominguez Hills EAST & WEST: Avalon Del Amo	PROJECT #: SC1281 LOCATION #: 26 CONTROL: SIGNAL
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NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W E ▶ S ▼
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	Avalon			Avalon			Del Amo			Del Amo			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
LANES:	1	3	1	2	3	0	1	2	1	1	2	1	

AM	7:00 AM	57	100	18	24	90	41	32	57	3	30	240	24	716
	7:15 AM	59	124	21	33	113	75	38	83	10	27	295	22	900
	7:30 AM	69	157	19	34	167	68	48	107	9	39	243	20	980
	7:45 AM	76	230	33	48	176	69	51	164	23	30	210	27	1,137
	8:00 AM	51	209	32	49	123	54	74	122	18	37	192	29	990
	8:15 AM	36	219	23	43	118	65	62	144	12	54	182	31	989
	8:30 AM	41	164	29	42	121	59	54	99	22	52	222	23	928
	8:45 AM	38	128	20	57	105	48	51	89	11	44	154	25	770
	VOLUMES	427	1,331	195	330	1,013	479	410	865	108	313	1,738	201	7,410
	APPROACH %	22%	68%	10%	18%	56%	26%	30%	63%	8%	14%	77%	9%	
APP/DEPART	1,953	/	2,034	1,822	/	1,477	1,383	/	1,312	2,252	/	2,587	0	
BEGIN PEAK HR	7:30 AM													
VOLUMES	232	815	107	174	584	256	235	537	62	160	827	107	4,096	
APPROACH %	20%	71%	9%	17%	58%	25%	28%	64%	7%	15%	76%	10%		
PEAK HR FACTOR	0.851			0.865			0.876			0.906			0.901	
APP/DEPART	1,154	/	1,210	1,014	/	835	834	/	772	1,094	/	1,279	0	
PM	4:00 PM	46	226	44	73	214	58	59	186	57	62	107	31	1,163
	4:15 PM	40	191	39	81	217	51	54	225	47	58	105	36	1,144
	4:30 PM	43	207	37	83	185	57	48	260	54	53	158	47	1,232
	4:45 PM	40	219	47	82	246	59	46	236	46	47	149	29	1,246
	5:00 PM	44	209	43	64	251	79	39	229	63	60	133	43	1,257
	5:15 PM	43	239	45	82	239	60	42	232	59	60	170	37	1,308
	5:30 PM	47	208	40	72	235	60	44	203	61	72	160	24	1,226
	5:45 PM	32	239	40	78	205	63	45	214	53	57	96	23	1,145
	VOLUMES	335	1,738	335	615	1,792	487	377	1,785	440	469	1,078	270	9,721
	APPROACH %	14%	72%	14%	21%	62%	17%	14%	69%	17%	26%	59%	15%	
APP/DEPART	2,408	/	2,540	2,894	/	2,675	2,602	/	2,653	1,817	/	1,853	0	
BEGIN PEAK HR	4:30 PM													
VOLUMES	170	874	172	311	921	255	175	957	222	220	610	156	5,043	
APPROACH %	14%	72%	14%	21%	62%	17%	13%	71%	16%	22%	62%	16%		
PEAK HR FACTOR	0.930			0.944			0.935			0.923			0.964	
APP/DEPART	1,216	/	1,284	1,487	/	1,360	1,354	/	1,392	986	/	1,007	0	



INTERSECTION TURNING MOVEMENT COUNTS

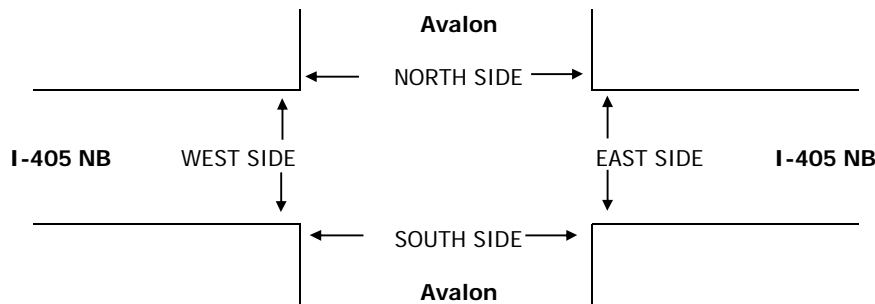
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wed, Apr 5, 17	LOCATION: NORTH & SOUTH: CSU Dominguez Hills EAST & WEST: Avalon I-405 NB	PROJECT #: SC1281 LOCATION #: 27 CONTROL: SIGNAL
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NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W E ▶ S ▼
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	Avalon			Avalon			I-405 NB			I-405 NB			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	2	2	X	X	3	1	X	X	X	1.5	0.5	1	

AM	7:00 AM	58	171	0	0	119	45	0	0	0	12	0	114	519
	7:15 AM	91	193	0	0	161	43	0	0	0	12	1	89	590
	7:30 AM	90	229	0	0	205	46	0	0	0	20	1	114	705
	7:45 AM	92	313	0	0	199	48	0	0	0	12	4	131	799
	8:00 AM	86	305	0	0	157	56	0	0	0	29	0	151	784
	8:15 AM	74	269	0	0	158	69	0	0	0	21	1	127	719
	8:30 AM	59	194	0	0	165	53	0	0	0	14	0	107	592
	8:45 AM	54	200	0	0	138	50	0	0	0	16	1	101	560
	VOLUMES	604	1,874	0	0	1,302	410	0	0	0	136	8	934	5,268
	APPROACH %	24%	76%	0%	0%	76%	24%	0%	0%	0%	13%	1%	87%	
APP/DEPART	2,478	/	2,808	1,712	/	1,438	0	/	0	1,078	/	1,022	0	
BEGIN PEAK HR	7:30 AM													
VOLUMES	342	1,116	0	0	719	219	0	0	0	82	6	523	3,007	
APPROACH %	23%	77%	0%	0%	77%	23%	0%	0%	0%	13%	1%	86%		
PEAK HR FACTOR	0.900			0.934			0.000			0.849			0.941	
APP/DEPART	1,458	/	1,639	938	/	801	0	/	0	611	/	567	0	
PM	4:00 PM	83	249	0	0	322	155	0	0	0	31	0	92	932
	4:15 PM	50	225	0	0	330	123	0	0	0	20	1	85	834
	4:30 PM	71	237	0	0	309	153	0	0	0	16	1	96	883
	4:45 PM	56	262	0	0	331	101	0	0	0	29	0	112	891
	5:00 PM	86	231	0	0	313	138	0	0	0	26	0	117	911
	5:15 PM	79	240	0	0	379	148	0	0	0	33	0	109	988
	5:30 PM	61	224	0	0	340	123	0	0	0	26	0	100	874
	5:45 PM	68	265	0	0	318	110	0	0	0	26	0	112	899
	VOLUMES	554	1,933	0	0	2,642	1,051	0	0	0	207	2	823	7,212
	APPROACH %	22%	78%	0%	0%	72%	28%	0%	0%	0%	20%	0%	80%	
APP/DEPART	2,487	/	2,756	3,693	/	2,849	0	/	0	1,032	/	1,607	0	
BEGIN PEAK HR	4:30 PM													
VOLUMES	292	970	0	0	1,332	540	0	0	0	104	1	434	3,673	
APPROACH %	23%	77%	0%	0%	71%	29%	0%	0%	0%	19%	0%	81%		
PEAK HR FACTOR	0.989			0.888			0.000			0.942			0.929	
APP/DEPART	1,262	/	1,404	1,872	/	1,436	0	/	0	539	/	833	0	



INTERSECTION TURNING MOVEMENT COUNTS

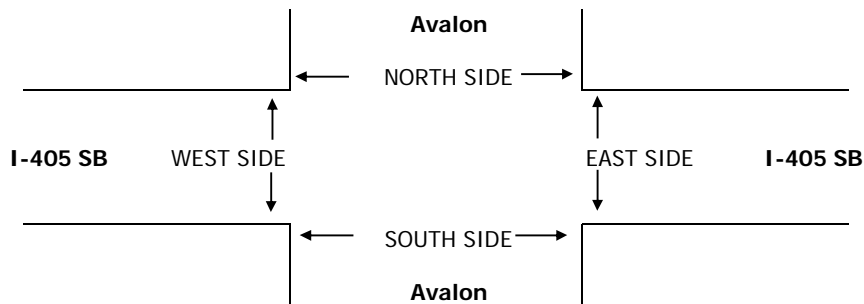
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wed, Apr 5, 17	LOCATION: NORTH & SOUTH: CSU Dominguez Hills EAST & WEST: Avalon I-405 SB	PROJECT #: SC1281 LOCATION #: 28 CONTROL: SIGNAL
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NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W E ▶ S ▼
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	Avalon			Avalon			I-405 SB			I-405 SB			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	0	0	2	1	2	2	1	X	X	X	

AM	7:00 AM	0	171	24	0	77	53	60	0	71	0	0	0	456
	7:15 AM	0	193	31	0	124	48	93	1	77	0	0	0	567
	7:30 AM	0	235	42	0	152	72	86	0	122	0	0	0	709
	7:45 AM	0	277	27	0	144	65	129	0	132	0	0	0	774
	8:00 AM	0	279	27	0	135	51	112	2	104	0	0	0	710
	8:15 AM	0	241	27	0	111	68	102	0	86	0	0	0	635
	8:30 AM	0	166	29	0	119	57	89	1	94	0	0	0	555
	8:45 AM	0	171	27	0	114	39	88	0	80	0	0	0	519
	VOLUMES	0	1,733	234	0	976	453	759	4	766	0	0	0	4,926
	APPROACH %	0%	88%	12%	0%	68%	32%	50%	0%	50%	0%	0%	0%	
APP/DEPART	1,967	/	2,492	1,429	/	1,742	1,530	/	238	0	/	454	0	
BEGIN PEAK HR	7:30 AM													
VOLUMES	0	1,032	123	0	542	256	429	2	444	0	0	0	2,829	
APPROACH %	0%	89%	11%	0%	68%	32%	49%	0%	51%	0%	0%	0%		
PEAK HR FACTOR	0.944			0.891			0.839			0.000			0.914	
APP/DEPART	1,155	/	1,461	798	/	986	876	/	125	0	/	257	0	
PM	4:00 PM	0	266	34	0	265	85	68	32	73	0	0	0	823
	4:15 PM	0	211	36	0	247	102	65	31	75	0	0	0	767
	4:30 PM	0	255	34	0	224	100	53	25	96	0	0	0	787
	4:45 PM	0	258	34	0	274	85	61	39	62	0	0	0	813
	5:00 PM	0	276	42	0	228	108	43	32	87	0	0	0	816
	5:15 PM	0	272	31	0	315	96	49	37	86	0	0	0	886
	5:30 PM	0	227	28	0	283	78	62	28	100	0	0	0	806
	5:45 PM	0	288	24	0	250	89	45	33	100	0	0	0	829
	VOLUMES	0	2,053	263	0	2,086	743	446	257	679	0	0	0	6,528
	APPROACH %	0%	89%	11%	0%	74%	26%	32%	19%	49%	0%	0%	0%	
APP/DEPART	2,316	/	2,500	2,830	/	2,765	1,382	/	520	0	/	743	0	
BEGIN PEAK HR	5:00 PM													
VOLUMES	0	1,063	125	0	1,076	371	199	130	373	0	0	0	3,338	
APPROACH %	0%	89%	11%	0%	74%	26%	28%	19%	53%	0%	0%	0%		
PEAK HR FACTOR	0.934			0.879			0.924			0.000			0.941	
APP/DEPART	1,188	/	1,263	1,448	/	1,449	702	/	255	0	/	371	0	



INTERSECTION TURNING MOVEMENT COUNTS

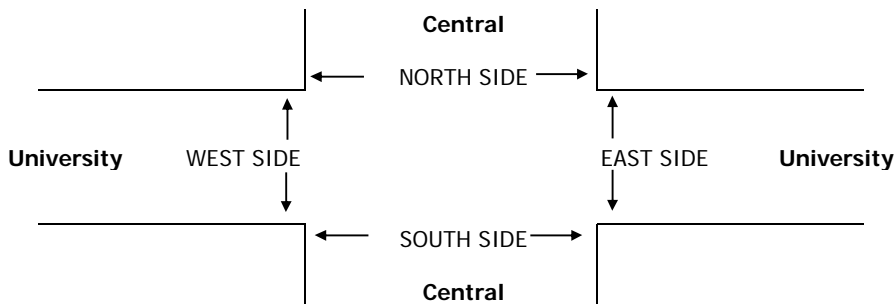
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wed, Apr 5, 17	LOCATION: NORTH & SOUTH: CSU Dominguez Hills EAST & WEST: Central University	PROJECT #: SC1281 LOCATION #: 29 CONTROL: SIGNAL
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NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W E ▶ S ▼
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	Central			Central			University			University			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
LANES:	1	2	0	1	2	1	1	2	0	1	2	0	

AM	7:00 AM	24	97	9	19	58	9	26	23	1	4	29	27	326
	7:15 AM	14	110	3	12	79	9	26	35	14	4	43	20	369
	7:30 AM	26	130	4	21	94	13	45	41	15	7	39	33	468
	7:45 AM	35	174	8	29	121	31	43	61	23	17	49	31	622
	8:00 AM	34	144	7	23	90	29	48	45	18	7	48	47	540
	8:15 AM	27	118	9	25	73	22	35	26	9	6	29	30	409
	8:30 AM	22	87	3	12	79	23	36	21	6	3	22	33	347
	8:45 AM	14	66	4	9	71	14	23	23	7	2	25	18	276
	VOLUMES	196	926	47	150	665	150	282	275	93	50	284	239	3,357
	APPROACH %	17%	79%	4%	16%	69%	16%	43%	42%	14%	9%	50%	42%	
APP/DEPART	1,169	/	1,448	965	/	809	650	/	471	573	/	629	0	
BEGIN PEAK HR	7:30 AM													
VOLUMES	122	566	28	98	378	95	171	173	65	37	165	141	2,039	
APPROACH %	17%	79%	4%	17%	66%	17%	42%	42%	16%	11%	48%	41%		
PEAK HR FACTOR	0.825			0.789			0.805			0.841			0.820	
APP/DEPART	716	/	879	571	/	481	409	/	298	343	/	381	0	
PM	4:00 PM	19	118	6	18	154	45	20	44	25	7	39	17	512
	4:15 PM	20	109	4	21	157	34	16	49	16	12	46	12	496
	4:30 PM	14	104	6	27	164	38	26	52	21	7	54	16	529
	4:45 PM	20	106	3	22	127	54	15	39	24	3	49	11	473
	5:00 PM	15	116	6	20	162	48	15	58	32	10	72	27	581
	5:15 PM	18	97	4	32	158	47	29	66	25	7	61	11	555
	5:30 PM	22	110	5	22	153	45	16	55	25	5	36	17	511
	5:45 PM	18	100	9	24	138	41	25	67	21	7	42	13	505
	VOLUMES	146	860	43	186	1,213	352	162	430	189	58	399	124	4,162
	APPROACH %	14%	82%	4%	11%	69%	20%	21%	55%	24%	10%	69%	21%	
APP/DEPART	1,049	/	1,144	1,751	/	1,462	781	/	659	581	/	897	0	
BEGIN PEAK HR	5:00 PM													
VOLUMES	73	423	24	98	611	181	85	246	103	29	211	68	2,152	
APPROACH %	14%	81%	5%	11%	69%	20%	20%	57%	24%	9%	69%	22%		
PEAK HR FACTOR	0.949			0.939			0.904			0.706			0.926	
APP/DEPART	520	/	576	890	/	745	434	/	368	308	/	463	0	



INTERSECTION TURNING MOVEMENT COUNTS

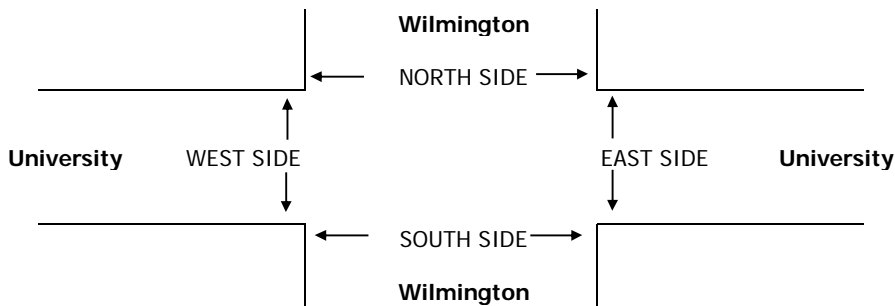
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wed, Apr 5, 17	LOCATION: NORTH & SOUTH: CSU Dominguez Hills EAST & WEST: Wilmington University	PROJECT #: SC1281 LOCATION #: 30 CONTROL: SIGNAL
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NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W S ▼ E ▶
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Wilmington			Wilmington			University			University			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	3	0	1	3	0	2	0.5	0.5	1	1	0	

AM	7:00 AM	18	133	29	18	99	2	19	19	18	6	6	7	374
	7:15 AM	22	129	21	25	102	3	15	7	23	4	10	8	369
	7:30 AM	38	159	23	18	120	17	12	16	33	11	4	4	455
	7:45 AM	39	154	42	28	165	23	26	25	40	11	8	6	567
	8:00 AM	52	168	33	15	127	16	28	21	31	3	6	12	512
	8:15 AM	34	167	26	11	92	18	14	7	24	16	3	6	418
	8:30 AM	30	139	25	11	95	5	11	10	14	9	5	9	363
	8:45 AM	17	109	19	10	105	7	4	13	10	14	4	18	330
	VOLUMES	250	1,158	218	136	905	91	129	118	193	74	46	70	3,388
	APPROACH %	15%	71%	13%	12%	80%	8%	29%	27%	44%	39%	24%	37%	
APP/DEPART	1,626	/	1,359	1,132	/	1,173	440	/	470	190	/	386	0	
BEGIN PEAK HR	7:30 AM													
VOLUMES	163	648	124	72	504	74	80	69	128	41	21	28	1,952	
APPROACH %	17%	69%	13%	11%	78%	11%	29%	25%	46%	46%	23%	31%		
PEAK HR FACTOR	0.924			0.752			0.761			0.900			0.861	
APP/DEPART	935	/	757	650	/	673	277	/	264	90	/	258	0	
PM	4:00 PM	21	142	8	11	179	13	15	14	29	36	17	22	507
	4:15 PM	21	129	7	4	147	20	15	7	34	18	14	11	427
	4:30 PM	41	168	7	7	193	19	17	3	44	32	18	17	566
	4:45 PM	29	131	5	5	174	17	12	7	37	20	13	14	464
	5:00 PM	38	184	7	8	199	23	13	9	36	52	34	21	624
	5:15 PM	24	146	6	4	181	18	23	10	44	23	21	15	515
	5:30 PM	26	130	9	2	174	20	20	10	40	22	13	6	472
	5:45 PM	18	129	6	3	144	22	19	7	39	14	14	12	427
	VOLUMES	218	1,159	55	44	1,391	152	134	67	303	217	144	118	4,002
	APPROACH %	15%	81%	4%	3%	88%	10%	27%	13%	60%	45%	30%	25%	
APP/DEPART	1,432	/	1,413	1,587	/	1,911	504	/	164	479	/	514	0	
BEGIN PEAK HR	4:30 PM													
VOLUMES	132	629	25	24	747	77	65	29	161	127	86	67	2,169	
APPROACH %	17%	80%	3%	3%	88%	9%	25%	11%	63%	45%	31%	24%		
PEAK HR FACTOR	0.858			0.922			0.828			0.654			0.869	
APP/DEPART	786	/	763	848	/	1,035	255	/	76	280	/	295	0	



INTERSECTION TURNING MOVEMENT COUNTS

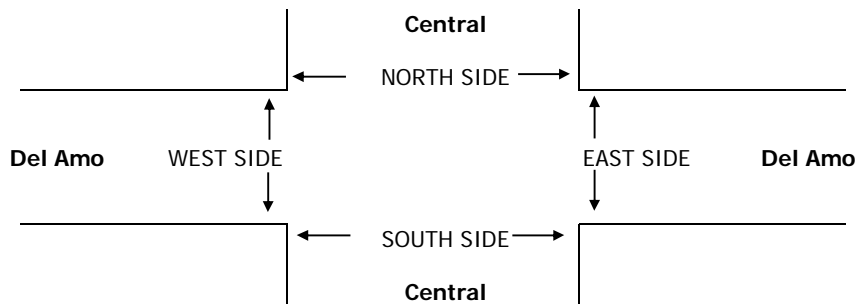
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wed, Apr 5, 17	LOCATION: NORTH & SOUTH: CSU Dominguez Hills EAST & WEST: Central Del Amo	PROJECT #: SC1281 LOCATION #: 31 CONTROL: SIGNAL
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NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W E ▶ S ▼
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	Central			Central			Del Amo			Del Amo			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
LANES:	X	X	X	2	X	2	1	2	X	X	2	0	

AM	7:00 AM	0	0	0	41	0	55	49	97	0	1	234	26	503
	7:15 AM	0	0	0	38	0	68	42	106	0	0	293	39	586
	7:30 AM	0	0	0	48	0	82	72	108	0	0	255	69	634
	7:45 AM	0	0	0	76	0	75	82	165	0	0	200	62	660
	8:00 AM	0	0	0	61	0	49	89	131	0	0	222	59	611
	8:15 AM	0	0	0	54	0	50	78	128	0	0	232	56	598
	8:30 AM	0	0	0	42	0	64	46	128	0	0	260	40	580
	8:45 AM	0	0	0	28	0	65	39	110	0	0	175	23	440
	VOLUMES	0	0	0	388	0	508	497	973	0	1	1,871	374	4,612
	APPROACH %	0%	0%	0%	43%	0%	57%	34%	66%	0%	0%	83%	17%	
APP/DEPART	0	/	938	896	/	0	1,470	/	1,295	2,246	/	2,379	0	
BEGIN PEAK HR	7:30 AM													
VOLUMES	0	0	0	239	0	256	321	532	0	0	909	246	2,503	
APPROACH %	0%	0%	0%	48%	0%	52%	38%	62%	0%	0%	79%	21%		
PEAK HR FACTOR	0.000			0.820			0.863			0.891			0.948	
APP/DEPART	0	/	605	495	/	0	853	/	733	1,155	/	1,165	0	
PM	4:00 PM	0	0	0	82	0	81	88	256	0	0	189	46	742
	4:15 PM	0	0	0	95	0	85	89	287	0	0	165	40	761
	4:30 PM	0	0	0	66	0	100	93	271	0	0	228	65	823
	4:45 PM	0	0	0	79	0	87	97	288	0	0	177	50	778
	5:00 PM	0	0	0	97	0	93	91	277	0	0	223	52	833
	5:15 PM	0	0	0	79	0	101	96	254	0	0	220	42	792
	5:30 PM	0	0	0	77	0	98	83	278	0	0	188	38	762
	5:45 PM	0	0	0	87	0	82	80	274	0	0	148	34	705
	VOLUMES	0	0	0	662	0	727	717	2,185	0	0	1,538	367	6,196
	APPROACH %	0%	0%	0%	48%	0%	52%	25%	75%	0%	0%	81%	19%	
APP/DEPART	0	/	1,166	1,389	/	0	2,902	/	2,765	1,905	/	2,265	0	
BEGIN PEAK HR	4:30 PM													
VOLUMES	0	0	0	321	0	381	377	1,090	0	0	848	209	3,226	
APPROACH %	0%	0%	0%	46%	0%	54%	26%	74%	0%	0%	80%	20%		
PEAK HR FACTOR	0.000			0.924			0.953			0.902			0.968	
APP/DEPART	0	/	621	702	/	0	1,467	/	1,376	1,057	/	1,229	0	



INTERSECTION TURNING MOVEMENT COUNTS

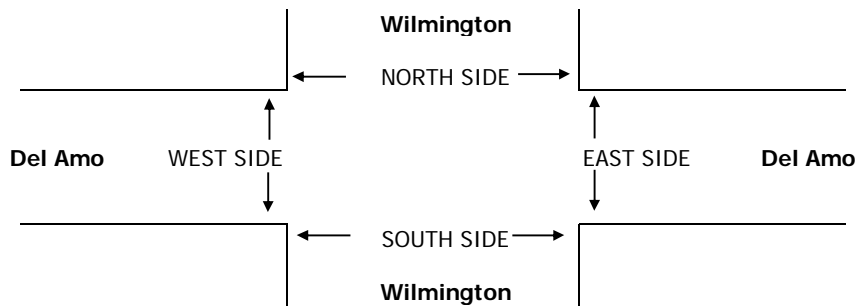
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Apr 4, 17	LOCATION: NORTH & SOUTH: CSU Dominguez Hills EAST & WEST: Wilmington Del Amo	PROJECT #: SC1281 LOCATION #: 32 CONTROL: SIGNAL
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NOTES: car accident at 8:53:29 Am till 9.00 Am	AM PM MD OTHER OTHER	▲ N ◀ W E ▶ S ▼
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Wilmington			Wilmington			Del Amo			Del Amo			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	1	3	0	2	3	0	1	3	0	1	2	1	

AM	7:00 AM	40	97	31	40	57	25	25	84	23	31	227	79	759
	7:15 AM	23	118	13	20	72	18	32	79	17	26	211	71	700
	7:30 AM	32	139	27	43	88	27	28	99	37	25	249	100	894
	7:45 AM	24	183	33	37	113	20	39	135	38	26	192	105	945
	8:00 AM	33	142	18	50	57	16	44	123	33	29	224	102	871
	8:15 AM	31	158	26	29	83	21	24	86	35	33	217	92	835
	8:30 AM	28	97	26	30	65	16	33	101	23	30	211	70	730
	8:45 AM	22	104	23	25	79	19	22	64	27	29	117	58	589
	VOLUMES	233	1,038	197	274	614	162	247	771	233	229	1,648	677	6,323
	APPROACH %	16%	71%	13%	26%	58%	15%	20%	62%	19%	9%	65%	27%	
APP/DEPART	1,468	/	1,957	1,050	/	1,074	1,251	/	1,243	2,554	/	2,049	0	
BEGIN PEAK HR	7:30 AM													
VOLUMES	120	622	104	159	341	84	135	443	143	113	882	399	3,545	
APPROACH %	14%	74%	12%	27%	58%	14%	19%	61%	20%	8%	63%	29%		
PEAK HR FACTOR	0.881			0.859			0.850			0.932			0.938	
APP/DEPART	846	/	1,155	584	/	596	721	/	707	1,394	/	1,087	0	
PM	4:00 PM	23	83	43	69	121	41	31	244	38	36	170	47	946
	4:15 PM	28	84	26	73	130	32	28	268	40	27	113	46	895
	4:30 PM	30	94	25	74	160	58	25	287	38	34	156	52	1,033
	4:45 PM	44	113	24	82	152	35	30	262	40	36	134	38	990
	5:00 PM	33	91	36	76	199	57	41	292	46	27	178	52	1,128
	5:15 PM	24	97	43	102	182	51	24	243	39	36	134	49	1,024
	5:30 PM	34	94	30	64	151	36	36	257	32	31	145	43	953
	5:45 PM	23	97	18	67	142	32	21	207	49	20	109	54	839
	VOLUMES	239	753	245	607	1,237	342	236	2,060	322	247	1,139	381	7,808
	APPROACH %	19%	61%	20%	28%	57%	16%	9%	79%	12%	14%	64%	22%	
APP/DEPART	1,237	/	1,347	2,186	/	1,802	2,618	/	2,915	1,767	/	1,744	0	
BEGIN PEAK HR	4:30 PM													
VOLUMES	131	395	128	334	693	201	120	1,084	163	133	602	191	4,175	
APPROACH %	20%	60%	20%	27%	56%	16%	9%	79%	12%	14%	65%	21%		
PEAK HR FACTOR	0.903			0.916			0.902			0.901			0.925	
APP/DEPART	654	/	694	1,228	/	986	1,367	/	1,549	926	/	946	0	



INTERSECTION TURNING MOVEMENT COUNTS

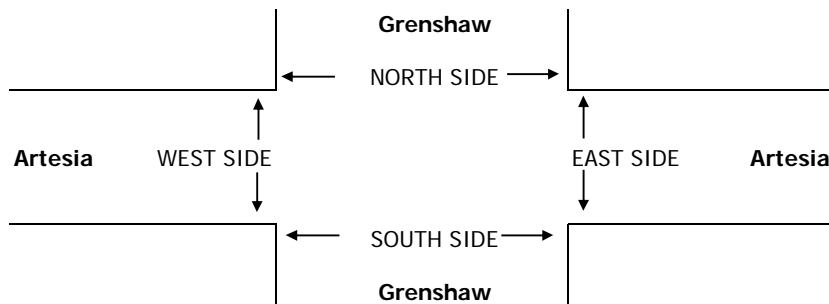
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Apr 4, 17	LOCATION: NORTH & SOUTH: SCU Dominguez Hills EAST & WEST: Greshaw Artesia	PROJECT #: SC1281 LOCATION #: 33 CONTROL: SIGNAL
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NOTES:	AM PM MD OTHER OTHER	◀ W E ▶	▲ N S ▼
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	Greshaw			Greshaw			Artesia			Artesia			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	1	1	3	0	1	2	1	2	2	0	

AM	7:00 AM	42	205	22	26	145	10	9	101	21	35	232	17	865
	7:15 AM	35	210	18	40	161	12	17	145	15	29	290	26	998
	7:30 AM	38	298	22	42	275	19	12	123	33	48	261	25	1,196
	7:45 AM	46	227	30	41	220	13	16	137	32	68	244	14	1,088
	8:00 AM	36	202	33	32	214	22	8	163	24	54	250	17	1,055
	8:15 AM	40	188	51	35	270	21	21	192	27	60	256	21	1,182
	8:30 AM	43	201	41	41	303	28	17	182	42	86	257	26	1,267
	8:45 AM	54	278	78	40	265	11	25	207	35	80	268	20	1,361
	VOLUMES	334	1,809	295	297	1,853	136	125	1,250	229	460	2,058	166	9,012
	APPROACH %	14%	74%	12%	13%	81%	6%	8%	78%	14%	17%	77%	6%	
APP/DEPART	2,438	/	2,098	2,286	/	2,542	1,604	/	1,841	2,684	/	2,531	0	
BEGIN PEAK HR	8:00 AM													
VOLUMES	173	869	203	148	1,052	82	71	744	128	280	1,031	84	4,865	
APPROACH %	14%	70%	16%	12%	82%	6%	8%	79%	14%	20%	74%	6%		
PEAK HR FACTOR	0.759			0.862			0.883			0.945			0.894	
APP/DEPART	1,245	/	1,024	1,282	/	1,460	943	/	1,094	1,395	/	1,287	0	
PM	4:00 PM	36	199	54	53	281	28	19	278	30	57	210	31	1,276
	4:15 PM	44	251	61	64	248	24	16	281	25	49	224	57	1,344
	4:30 PM	38	223	73	50	242	31	13	273	31	74	231	33	1,312
	4:45 PM	49	265	89	60	294	22	18	264	31	64	218	41	1,415
	5:00 PM	46	271	92	68	253	21	25	259	40	56	210	33	1,374
	5:15 PM	45	302	105	49	267	31	22	267	38	77	193	41	1,437
	5:30 PM	52	259	80	71	261	30	24	278	29	65	202	59	1,410
	5:45 PM	45	267	78	62	252	27	21	276	28	80	207	38	1,381
	VOLUMES	355	2,037	632	477	2,098	214	158	2,176	252	522	1,695	333	10,949
	APPROACH %	12%	67%	21%	17%	75%	8%	6%	84%	10%	20%	66%	13%	
APP/DEPART	3,024	/	2,525	2,789	/	2,872	2,586	/	3,285	2,550	/	2,267	0	
BEGIN PEAK HR	4:45 PM													
VOLUMES	192	1,097	366	248	1,075	104	89	1,068	138	262	823	174	5,636	
APPROACH %	12%	66%	22%	17%	75%	7%	7%	82%	11%	21%	65%	14%		
PEAK HR FACTOR	0.915			0.949			0.978			0.965			0.981	
APP/DEPART	1,655	/	1,359	1,427	/	1,475	1,295	/	1,682	1,259	/	1,120	0	



INTERSECTION TURNING MOVEMENT COUNTS

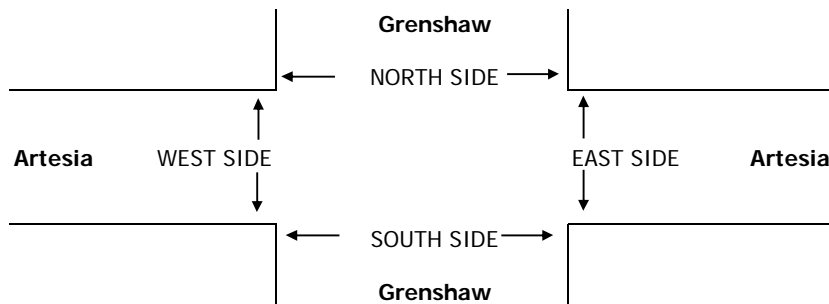
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wed, Apr 5, 17	LOCATION: NORTH & SOUTH: CSU Dominguez Hills EAST & WEST: Greshaw Artesia	PROJECT #: SC1281 LOCATION #: 33 CONTROL: SIGNAL
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NOTES:	AM PM MD OTHER OTHER	◀ W E ▶	▲ N S ▼
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Greshaw			Greshaw			Artesia			Artesia			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR		TOTAL
LANES:	1	2	1	1	3	0	1	2	1	2	2	0	

AM	7:00 AM	42	181	8	29	129	17	5	115	20	35	298	16	895
	7:15 AM	31	207	32	44	172	22	17	140	28	47	282	21	1,043
	7:30 AM	50	247	39	41	275	17	22	161	29	73	263	24	1,241
	7:45 AM	46	266	80	39	324	21	25	204	47	88	268	22	1,430
	8:00 AM	44	262	55	42	302	28	23	167	23	63	250	25	1,284
	8:15 AM	33	262	50	45	256	30	26	174	31	58	225	40	1,230
	8:30 AM	47	213	45	25	228	21	18	173	44	47	279	32	1,172
	8:45 AM	48	239	39	54	246	18	10	168	30	51	269	49	1,221
	VOLUMES	341	1,877	348	319	1,932	174	146	1,302	252	462	2,134	229	9,516
	APPROACH %	13%	73%	14%	13%	80%	7%	9%	77%	15%	16%	76%	8%	
APP/DEPART	2,566	/	2,250	2,425	/	2,646	1,700	/	1,970	2,825	/	2,650	0	
BEGIN PEAK HR	7:30 AM													
VOLUMES	173	1,037	224	167	1,157	96	96	706	130	282	1,006	111	5,185	
APPROACH %	12%	72%	16%	12%	81%	7%	10%	76%	14%	20%	72%	8%		
PEAK HR FACTOR	0.915			0.924			0.844			0.925			0.906	
APP/DEPART	1,434	/	1,242	1,420	/	1,570	932	/	1,097	1,399	/	1,276	0	
PM	4:00 PM	44	227	54	59	215	25	14	285	37	58	187	32	1,237
	4:15 PM	40	204	65	58	249	23	20	267	28	45	166	29	1,194
	4:30 PM	45	203	79	62	224	27	20	263	31	63	164	45	1,226
	4:45 PM	44	244	96	73	251	31	16	262	26	51	210	46	1,350
	5:00 PM	45	249	77	63	259	24	19	276	30	53	192	41	1,328
	5:15 PM	48	277	73	49	270	27	22	283	28	61	215	37	1,390
	5:30 PM	45	286	98	57	272	24	12	264	34	74	187	45	1,398
	5:45 PM	42	289	88	63	267	21	16	277	16	69	246	62	1,456
	VOLUMES	353	1,979	630	484	2,007	202	139	2,177	230	474	1,567	337	10,579
	APPROACH %	12%	67%	21%	18%	75%	8%	5%	86%	9%	20%	66%	14%	
APP/DEPART	2,962	/	2,455	2,693	/	2,711	2,546	/	3,291	2,378	/	2,122	0	
BEGIN PEAK HR	5:00 PM													
VOLUMES	180	1,101	336	232	1,068	96	69	1,100	108	257	840	185	5,572	
APPROACH %	11%	68%	21%	17%	77%	7%	5%	86%	8%	20%	66%	14%		
PEAK HR FACTOR	0.942			0.989			0.959			0.850			0.957	
APP/DEPART	1,617	/	1,355	1,396	/	1,433	1,277	/	1,668	1,282	/	1,116	0	



INTERSECTION TURNING MOVEMENT COUNTS

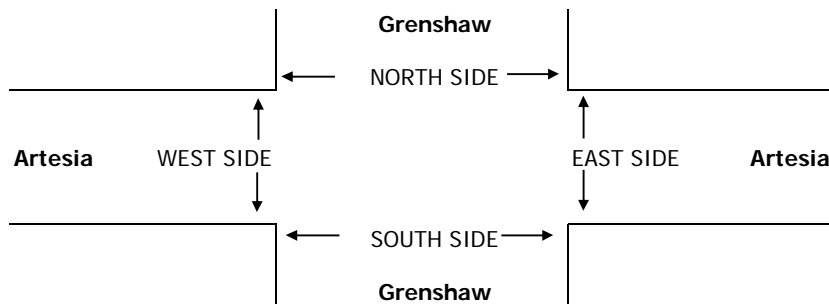
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thu, Apr 6, 17	LOCATION: NORTH & SOUTH: CSU Dominguez Hills EAST & WEST: Greshaw Artesia	PROJECT #: SC1281 LOCATION #: 33 CONTROL: SIGNAL
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NOTES:	AM PM MD OTHER OTHER	◀ W ▶ E	▲ N ▼ S
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Greshaw			Greshaw			Artesia			Artesia			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR		TOTAL
LANES:	1	2	1	1	3	0	1	2	1	2	2	0	

AM	7:00 AM	35	170	23	28	115	11	6	134	20	37	270	34	883
	7:15 AM	36	234	26	33	207	11	22	137	26	51	231	32	1,046
	7:30 AM	45	286	58	45	294	26	21	158	34	80	292	21	1,360
	7:45 AM	37	268	62	44	344	25	27	186	32	97	287	18	1,427
	8:00 AM	50	241	45	47	238	22	25	167	36	57	268	20	1,216
	8:15 AM	36	196	35	46	243	17	23	176	35	65	263	21	1,156
	8:30 AM	39	220	34	34	248	19	17	142	31	48	248	25	1,105
	8:45 AM	41	216	44	33	247	21	13	193	26	60	319	25	1,238
	VOLUMES	319	1,831	327	310	1,936	152	154	1,293	240	495	2,178	196	9,431
	APPROACH %	13%	74%	13%	13%	81%	6%	9%	77%	14%	17%	76%	7%	
APP/DEPART	2,477	/	2,178	2,398	/	2,671	1,687	/	1,930	2,869	/	2,652	0	
BEGIN PEAK HR	7:30 AM													
VOLUMES	168	991	200	182	1,119	90	96	687	137	299	1,110	80	5,159	
APPROACH %	12%	73%	15%	13%	80%	6%	10%	75%	15%	20%	75%	5%		
PEAK HR FACTOR	0.873			0.842			0.939			0.926			0.904	
APP/DEPART	1,359	/	1,165	1,391	/	1,555	920	/	1,069	1,489	/	1,370	0	
PM	4:00 PM	37	220	67	56	281	24	21	270	22	63	207	30	1,298
	4:15 PM	41	215	55	50	231	26	24	289	24	64	205	34	1,258
	4:30 PM	39	244	72	59	260	28	21	269	28	68	222	26	1,336
	4:45 PM	39	254	83	54	281	36	28	299	35	43	175	52	1,379
	5:00 PM	45	288	75	55	260	23	27	275	32	58	218	34	1,390
	5:15 PM	46	296	88	42	285	31	24	265	34	70	181	45	1,407
	5:30 PM	48	247	81	75	273	29	15	266	37	66	194	41	1,372
	5:45 PM	44	271	90	69	259	27	27	282	32	59	203	38	1,401
	VOLUMES	339	2,035	611	460	2,130	224	187	2,215	244	491	1,605	300	10,841
	APPROACH %	11%	68%	20%	16%	76%	8%	7%	84%	9%	20%	67%	13%	
APP/DEPART	2,985	/	2,520	2,814	/	2,865	2,646	/	3,286	2,396	/	2,170	0	
BEGIN PEAK HR	5:00 PM													
VOLUMES	183	1,102	334	241	1,077	110	93	1,088	135	253	796	158	5,570	
APPROACH %	11%	68%	21%	17%	75%	8%	7%	83%	10%	21%	66%	13%		
PEAK HR FACTOR	0.941			0.947			0.965			0.973			0.990	
APP/DEPART	1,619	/	1,352	1,428	/	1,465	1,316	/	1,663	1,207	/	1,090	0	



INTERSECTION TURNING MOVEMENT COUNTS

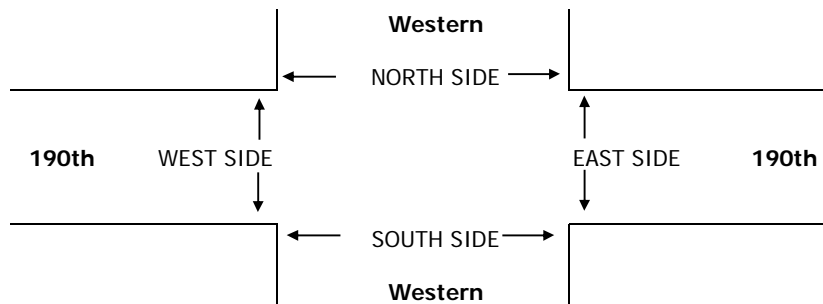
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Apr 4, 17	LOCATION: NORTH & SOUTH: CSU Dominguez Hills EAST & WEST: Western 190th	PROJECT #: SC1281 LOCATION #: 34 CONTROL: SIGNAL
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NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W E ▶ S ▼
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Western			Western			190th			190th			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	2	3	1	2	3	1	2	3	1	2	3	0	

AM	7:00 AM	35	198	12	32	232	93	25	99	77	87	234	30	1,154
	7:15 AM	39	194	24	19	225	79	32	130	125	115	297	28	1,307
	7:30 AM	34	252	26	33	349	111	43	175	111	122	257	26	1,539
	7:45 AM	19	290	26	39	367	91	40	181	133	149	265	27	1,627
	8:00 AM	34	241	33	35	371	95	42	194	134	113	252	21	1,565
	8:15 AM	33	230	28	38	390	76	47	154	136	119	256	29	1,536
	8:30 AM	35	222	39	33	367	90	40	162	123	111	246	37	1,505
	8:45 AM	35	167	30	30	323	86	51	199	159	110	213	29	1,432
	VOLUMES	264	1,794	218	259	2,624	721	320	1,294	998	926	2,020	227	11,665
	APPROACH %	12%	79%	10%	7%	73%	20%	12%	50%	38%	29%	64%	7%	
APP/DEPART	2,276	/	2,342	3,604	/	4,549	2,612	/	1,770	3,173	/	3,004	0	
BEGIN PEAK HR	7:30 AM													
VOLUMES	120	1,013	113	145	1,477	373	172	704	514	503	1,030	103	6,267	
APPROACH %	10%	81%	9%	7%	74%	19%	12%	51%	37%	31%	63%	6%		
PEAK HR FACTOR	0.930			0.990			0.939			0.927			0.963	
APP/DEPART	1,246	/	1,289	1,995	/	2,494	1,390	/	961	1,636	/	1,523	0	
PM	4:00 PM	25	312	84	37	182	82	77	325	104	43	278	105	1,654
	4:15 PM	39	276	91	36	198	102	76	326	89	60	248	89	1,630
	4:30 PM	42	291	68	26	235	62	96	341	91	74	217	73	1,616
	4:45 PM	34	324	56	32	258	88	94	315	83	53	186	62	1,585
	5:00 PM	49	329	58	38	300	81	113	359	107	54	218	107	1,813
	5:15 PM	44	397	69	28	274	98	120	302	87	84	254	68	1,825
	5:30 PM	60	351	57	42	216	104	89	326	95	44	214	82	1,680
	5:45 PM	42	367	64	27	275	89	107	344	106	60	195	61	1,737
	VOLUMES	335	2,647	547	266	1,938	706	772	2,638	762	472	1,810	647	13,540
	APPROACH %	9%	75%	16%	9%	67%	24%	19%	63%	18%	16%	62%	22%	
APP/DEPART	3,529	/	4,067	2,910	/	3,173	4,172	/	3,450	2,929	/	2,850	0	
BEGIN PEAK HR	5:00 PM													
VOLUMES	195	1,444	248	135	1,065	372	429	1,331	395	242	881	318	7,055	
APPROACH %	10%	77%	13%	9%	68%	24%	20%	62%	18%	17%	61%	22%		
PEAK HR FACTOR	0.925			0.938			0.930			0.887			0.966	
APP/DEPART	1,887	/	2,192	1,572	/	1,703	2,155	/	1,713	1,441	/	1,447	0	



INTERSECTION TURNING MOVEMENT COUNTS

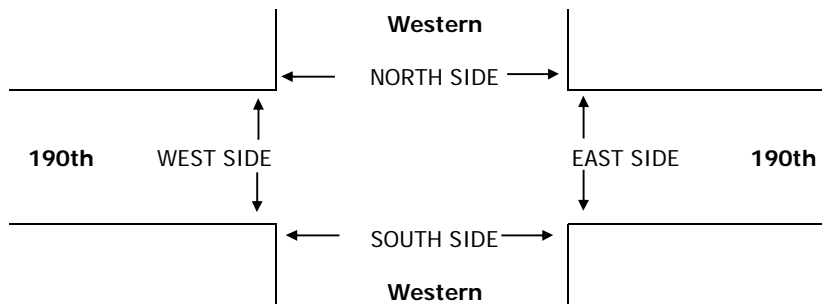
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wed, Apr 5, 17	LOCATION: NORTH & SOUTH: CSU Dominguez Hills WESTERN EAST & WEST: 190th	PROJECT #: SC1281 LOCATION #: 34 CONTROL: SIGNAL
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NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W E ▶ S ▼
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Western			Western			190th			190th			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
LANES:	2	3	1	2	3	1	2	3	1	2	3	0	

AM	7:00 AM	32	192	25	27	202	98	27	114	77	91	296	44	1,225
	7:15 AM	29	256	27	21	230	95	28	128	120	134	280	27	1,375
	7:30 AM	40	262	29	26	322	96	33	130	93	115	292	23	1,461
	7:45 AM	33	312	37	40	357	129	45	210	149	165	247	28	1,752
	8:00 AM	42	218	35	36	366	119	47	213	118	121	249	28	1,592
	8:15 AM	30	267	39	34	342	99	51	178	113	126	254	36	1,569
	8:30 AM	38	200	24	36	303	128	53	152	128	88	246	43	1,439
	8:45 AM	33	242	27	32	322	136	46	168	145	88	212	22	1,473
	VOLUMES	277	1,949	243	252	2,444	900	330	1,293	943	928	2,076	251	11,886
	APPROACH %	11%	79%	10%	7%	68%	25%	13%	50%	37%	29%	64%	8%	
APP/DEPART	2,469	/	2,530	3,596	/	4,315	2,566	/	1,788	3,255	/	3,253	0	
BEGIN PEAK HR	7:30 AM													
VOLUMES	145	1,059	140	136	1,387	443	176	731	473	527	1,042	115	6,374	
APPROACH %	11%	79%	10%	7%	71%	23%	13%	53%	34%	31%	62%	7%		
PEAK HR FACTOR	0.880			0.934			0.854			0.957			0.910	
APP/DEPART	1,344	/	1,350	1,966	/	2,387	1,380	/	1,007	1,684	/	1,630	0	
PM	4:00 PM	30	329	78	53	300	97	64	306	88	54	137	66	1,602
	4:15 PM	50	315	73	37	260	79	77	298	84	53	183	54	1,563
	4:30 PM	38	336	68	36	295	86	107	353	83	47	155	69	1,673
	4:45 PM	45	348	54	39	275	91	77	341	89	58	186	71	1,674
	5:00 PM	48	371	78	42	294	96	110	330	105	65	182	84	1,805
	5:15 PM	42	388	73	26	291	75	115	350	105	65	270	102	1,902
	5:30 PM	62	425	75	27	269	88	85	300	112	59	212	72	1,786
	5:45 PM	45	302	75	37	272	89	79	345	117	53	214	72	1,700
	VOLUMES	360	2,814	574	297	2,256	701	714	2,623	783	454	1,539	590	13,705
	APPROACH %	10%	75%	15%	9%	69%	22%	17%	64%	19%	18%	60%	23%	
APP/DEPART	3,748	/	4,120	3,254	/	3,493	4,120	/	3,492	2,583	/	2,600	0	
BEGIN PEAK HR	5:00 PM													
VOLUMES	197	1,486	301	132	1,126	348	389	1,325	439	242	878	330	7,193	
APPROACH %	10%	75%	15%	8%	70%	22%	18%	62%	20%	17%	61%	23%		
PEAK HR FACTOR	0.883			0.929			0.944			0.830			0.945	
APP/DEPART	1,984	/	2,207	1,606	/	1,807	2,153	/	1,756	1,450	/	1,423	0	



INTERSECTION TURNING MOVEMENT COUNTS

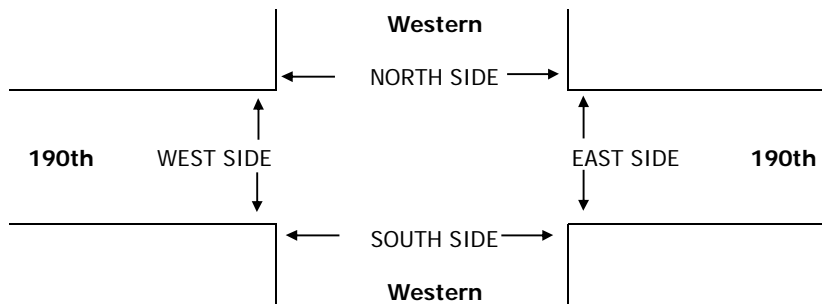
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thu, Apr 6, 17	LOCATION: NORTH & SOUTH: CSU Dominguez Hills WESTERN: Western EAST & WEST: 190th	PROJECT #: SC1281 LOCATION #: 34 CONTROL: SIGNAL
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NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W E ▶ S ▼
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Western			Western			190th			190th			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR		TOTAL
LANES:	2	3	1	2	3	1	2	3	1	2	3	0	

AM	7:00 AM	40	208	21	18	208	105	26	108	70	92	250	17	1,163
	7:15 AM	32	230	30	28	246	98	38	114	114	110	267	33	1,340
	7:30 AM	32	246	26	24	280	126	39	171	102	148	326	26	1,546
	7:45 AM	30	329	32	43	382	124	49	184	124	179	265	20	1,761
	8:00 AM	26	252	32	33	361	145	47	191	141	141	262	31	1,662
	8:15 AM	34	249	47	41	345	122	47	174	133	101	212	33	1,538
	8:30 AM	38	214	27	44	303	99	40	170	145	97	269	33	1,479
	8:45 AM	28	206	27	39	340	131	55	146	131	70	210	28	1,411
	VOLUMES	260	1,934	242	270	2,465	950	341	1,258	960	938	2,061	221	11,900
	APPROACH %	11%	79%	10%	7%	67%	26%	13%	49%	38%	29%	64%	7%	
APP/DEPART	2,436	/	2,499	3,685	/	4,363	2,559	/	1,767	3,220	/	3,271	0	
BEGIN PEAK HR	7:30 AM													
VOLUMES	122	1,076	137	141	1,368	517	182	720	500	569	1,065	110	6,507	
APPROACH %	9%	81%	10%	7%	68%	26%	13%	51%	36%	33%	61%	6%		
PEAK HR FACTOR	0.854			0.923			0.925			0.872			0.924	
APP/DEPART	1,335	/	1,369	2,026	/	2,437	1,402	/	997	1,744	/	1,704	0	
PM	4:00 PM	53	304	78	41	268	84	68	345	98	45	173	79	1,636
	4:15 PM	47	290	70	43	288	104	83	328	91	58	172	70	1,644
	4:30 PM	42	325	69	23	296	102	100	352	100	62	216	70	1,757
	4:45 PM	40	400	74	50	251	64	79	364	88	50	185	59	1,704
	5:00 PM	45	359	84	37	261	73	106	347	102	53	208	72	1,747
	5:15 PM	46	410	68	42	288	80	117	331	106	49	228	87	1,852
	5:30 PM	50	400	79	46	261	85	115	326	103	78	257	73	1,873
	5:45 PM	39	353	59	44	298	96	93	307	115	59	233	68	1,764
	VOLUMES	362	2,841	581	326	2,211	688	761	2,700	803	454	1,672	578	13,977
	APPROACH %	10%	75%	15%	10%	69%	21%	18%	63%	19%	17%	62%	21%	
APP/DEPART	3,784	/	4,181	3,225	/	3,467	4,264	/	3,607	2,704	/	2,722	0	
BEGIN PEAK HR	5:00 PM													
VOLUMES	180	1,522	290	169	1,108	334	431	1,311	426	239	926	300	7,236	
APPROACH %	9%	76%	15%	10%	69%	21%	20%	60%	20%	16%	63%	20%		
PEAK HR FACTOR	0.941			0.920			0.977			0.898			0.966	
APP/DEPART	1,992	/	2,254	1,611	/	1,772	2,168	/	1,770	1,465	/	1,440	0	



INTERSECTION TURNING MOVEMENT COUNTS

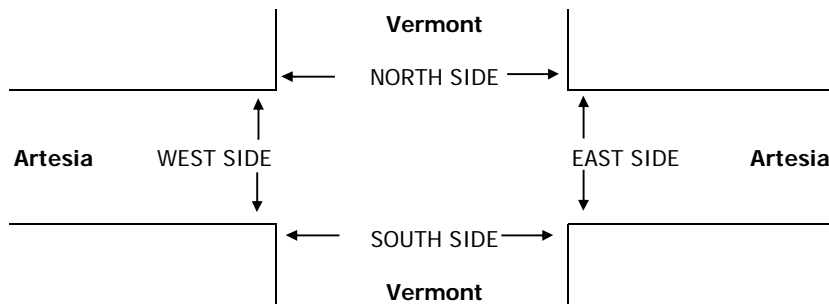
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Apr 4, 17	LOCATION: NORTH & SOUTH: EAST & WEST:	CSU Dominguez Hills Vermont Artesia	PROJECT #: SC1281 LOCATION #: 35 CONTROL: SIGNAL
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NOTES:	AM PM MD OTHER OTHER	◀ W	▲ N S ▼	E ▶
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LANES:	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	Vermont			Vermont			Artesia			Artesia			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	2	2	1	2	2	0	1	4	1	2	3.5	0.5	

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL	
	Vermont			Vermont			Artesia			Artesia				
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR		
AM	7:00 AM	32	65	67	91	99	13	17	243	36	187	621	62	1,533
	7:15 AM	49	62	56	125	133	14	16	325	43	116	566	49	1,554
	7:30 AM	37	73	78	104	181	11	19	387	56	146	536	77	1,705
	7:45 AM	52	108	79	100	263	22	21	324	80	178	473	60	1,760
	8:00 AM	49	102	96	106	262	34	29	342	46	119	521	61	1,767
	8:15 AM	38	85	70	79	137	19	38	328	57	165	542	58	1,616
	8:30 AM	57	64	68	92	121	22	25	298	59	141	509	53	1,509
	8:45 AM	53	81	61	89	131	28	26	290	45	142	558	71	1,575
	VOLUMES	367	640	575	786	1,327	163	191	2,537	422	1,194	4,326	491	13,019
	APPROACH %	23%	40%	36%	35%	58%	7%	6%	81%	13%	20%	72%	8%	
APP/DEPART	1,582	/	1,311	2,276	/	2,931	3,150	/	3,910	6,011	/	4,867	0	
BEGIN PEAK HR	7:30 AM													
VOLUMES	176	368	323	389	843	86	107	1,381	239	608	2,072	256	6,848	
APPROACH %	20%	42%	37%	30%	64%	7%	6%	80%	14%	21%	71%	9%		
PEAK HR FACTOR	0.878			0.820			0.935			0.959			0.969	
APP/DEPART	867	/	724	1,318	/	1,685	1,727	/	2,098	2,936	/	2,341	0	
PM	4:00 PM	56	145	130	103	137	29	47	463	86	76	327	84	1,683
	4:15 PM	62	145	131	90	140	21	44	504	78	88	433	81	1,817
	4:30 PM	58	125	140	97	127	32	42	559	67	99	504	86	1,936
	4:45 PM	65	155	192	90	152	41	36	484	77	110	437	91	1,930
	5:00 PM	64	153	172	101	157	24	33	544	87	89	502	105	2,031
	5:15 PM	51	156	164	94	148	37	35	580	93	100	500	95	2,053
	5:30 PM	72	162	154	95	141	31	46	521	78	106	401	93	1,900
	5:45 PM	72	175	146	83	157	29	38	551	82	86	493	108	2,020
	VOLUMES	500	1,216	1,229	753	1,159	244	321	4,206	648	754	3,597	743	15,370
	APPROACH %	17%	41%	42%	35%	54%	11%	6%	81%	13%	15%	71%	15%	
APP/DEPART	2,945	/	2,259	2,156	/	2,543	5,175	/	6,206	5,094	/	4,362	0	
BEGIN PEAK HR	5:00 PM													
VOLUMES	259	646	636	373	603	121	152	2,196	340	381	1,896	401	8,004	
APPROACH %	17%	42%	41%	34%	55%	11%	6%	82%	13%	14%	71%	15%		
PEAK HR FACTOR	0.980			0.973			0.949			0.962			0.975	
APP/DEPART	1,541	/	1,190	1,097	/	1,313	2,688	/	3,216	2,678	/	2,285	0	



INTERSECTION TURNING MOVEMENT COUNTS

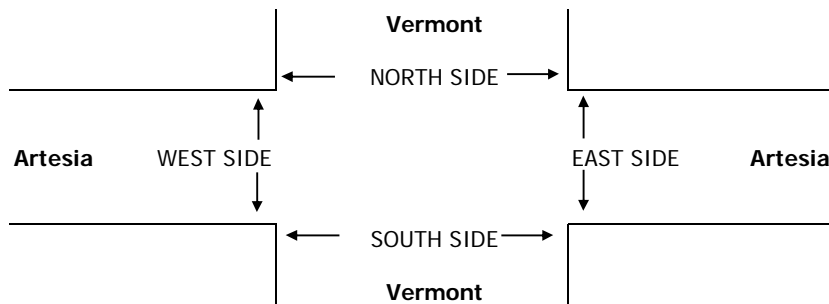
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wed, Apr 5, 17	LOCATION: NORTH & SOUTH: CSU Dominguez Hills EAST & WEST: Vermont Artesia	PROJECT #: SC1281 LOCATION #: 35 CONTROL: SIGNAL
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NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W E ▶ S ▼
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	Vermont			Vermont			Artesia			Artesia			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	2	2	1	2	2	0	1	4	1	2	3.5	0.5	

AM	7:00 AM	33	71	75	106	104	15	13	207	26	182	527	57	1,416
	7:15 AM	36	87	61	113	141	21	13	322	39	128	607	53	1,621
	7:30 AM	29	75	72	116	160	27	20	348	65	142	547	69	1,670
	7:45 AM	59	116	70	132	271	31	25	314	58	129	483	67	1,755
	8:00 AM	48	101	72	113	224	24	26	362	74	108	497	72	1,721
	8:15 AM	53	87	72	81	132	20	31	389	55	164	492	46	1,622
	8:30 AM	45	69	89	91	147	17	26	264	42	116	466	51	1,423
	8:45 AM	46	81	62	87	132	34	24	270	50	129	493	70	1,478
	VOLUMES	349	687	573	839	1,311	189	178	2,476	409	1,098	4,112	485	12,706
	APPROACH %	22%	43%	36%	36%	56%	8%	6%	81%	13%	19%	72%	9%	
APP/DEPART	1,609	/	1,337	2,339	/	2,803	3,063	/	3,902	5,695	/	4,664	0	
BEGIN PEAK HR	7:30 AM													
VOLUMES	189	379	286	442	787	102	102	1,413	252	543	2,019	254	6,768	
APPROACH %	22%	44%	33%	33%	59%	8%	6%	80%	14%	19%	72%	9%		
PEAK HR FACTOR	0.871			0.767			0.930			0.929			0.964	
APP/DEPART	854	/	727	1,331	/	1,574	1,767	/	2,149	2,816	/	2,318	0	
PM	4:00 PM	58	144	142	112	136	31	38	452	71	86	297	70	1,637
	4:15 PM	63	136	136	115	115	29	34	492	74	78	374	84	1,730
	4:30 PM	59	113	169	90	140	39	37	521	78	85	441	89	1,861
	4:45 PM	78	163	180	103	157	34	34	448	67	90	415	83	1,852
	5:00 PM	69	154	149	100	177	33	36	514	84	101	506	107	2,030
	5:15 PM	62	134	154	95	118	24	44	532	80	104	489	103	1,939
	5:30 PM	77	163	155	105	157	36	31	454	83	101	425	103	1,890
	5:45 PM	63	137	135	85	162	15	35	508	84	76	456	114	1,870
	VOLUMES	529	1,144	1,220	805	1,162	241	289	3,921	621	721	3,403	753	14,809
	APPROACH %	18%	40%	42%	36%	53%	11%	6%	81%	13%	15%	70%	15%	
APP/DEPART	2,893	/	2,171	2,208	/	2,472	4,831	/	5,978	4,877	/	4,188	0	
BEGIN PEAK HR	5:00 PM													
VOLUMES	271	588	593	385	614	108	146	2,008	331	382	1,876	427	7,729	
APPROACH %	19%	40%	41%	35%	55%	10%	6%	81%	13%	14%	70%	16%		
PEAK HR FACTOR	0.919			0.893			0.947			0.940			0.952	
APP/DEPART	1,452	/	1,153	1,107	/	1,313	2,485	/	3,000	2,685	/	2,263	0	



INTERSECTION TURNING MOVEMENT COUNTS

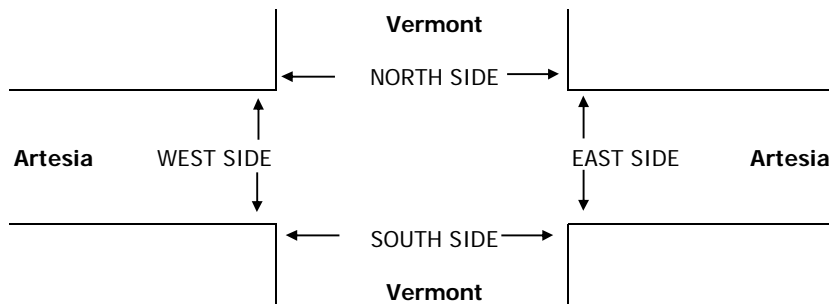
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thu, Apr 6, 17	LOCATION: NORTH & SOUTH: Vermont EAST & WEST: Artesia	CSU Dominguez Hills Vermont Artesia	PROJECT #: SC1281 LOCATION #: 35 CONTROL: SIGNAL
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NOTES:	AM PM MD OTHER OTHER	◀ W S ▶ E	▲ N S ▼
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	Vermont			Vermont			Artesia			Artesia			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	2	2	1	2	2	0	1	4	1	2	3.5	0.5	

AM	7:00 AM	31	68	63	91	99	13	14	220	42	179	526	74	1,420
	7:15 AM	37	72	76	111	137	22	12	372	48	131	647	72	1,737
	7:30 AM	49	79	67	114	149	22	22	394	42	148	640	71	1,797
	7:45 AM	44	130	98	120	281	33	14	415	61	143	577	77	1,993
	8:00 AM	49	102	70	94	225	27	27	368	85	146	650	58	1,901
	8:15 AM	37	77	84	99	141	18	30	405	68	148	611	55	1,773
	8:30 AM	40	80	81	103	114	23	20	257	63	122	493	27	1,423
	8:45 AM	47	81	82	87	124	25	22	233	43	161	524	36	1,465
	VOLUMES	334	689	621	819	1,270	183	161	2,664	452	1,178	4,668	470	13,509
	APPROACH %	20%	42%	38%	36%	56%	8%	5%	81%	14%	19%	74%	7%	
APP/DEPART	1,644	/	1,305	2,272	/	2,887	3,277	/	4,117	6,316	/	5,200	0	
BEGIN PEAK HR	7:30 AM													
VOLUMES	179	388	319	427	796	100	93	1,582	256	585	2,478	261	7,464	
APPROACH %	20%	44%	36%	32%	60%	8%	5%	82%	13%	18%	75%	8%		
PEAK HR FACTOR	0.814			0.762			0.960			0.967			0.936	
APP/DEPART	886	/	733	1,323	/	1,634	1,931	/	2,331	3,324	/	2,766	0	
PM	4:00 PM	60	141	166	83	140	27	34	457	77	109	409	80	1,783
	4:15 PM	58	114	145	118	158	30	30	570	65	88	509	89	1,974
	4:30 PM	56	136	160	82	144	26	33	551	105	95	509	104	2,001
	4:45 PM	82	169	156	96	157	27	29	565	69	91	538	84	2,063
	5:00 PM	63	121	140	121	154	35	29	644	76	89	655	101	2,228
	5:15 PM	58	156	175	107	159	19	31	665	82	106	639	97	2,294
	5:30 PM	69	168	180	101	157	21	32	490	67	100	483	95	1,963
	5:45 PM	73	146	131	84	152	36	34	555	78	84	547	105	2,025
	VOLUMES	519	1,151	1,253	792	1,221	221	252	4,497	619	762	4,289	755	16,331
	APPROACH %	18%	39%	43%	35%	55%	10%	5%	84%	12%	13%	74%	13%	
APP/DEPART	2,923	/	2,143	2,234	/	2,574	5,368	/	6,570	5,806	/	5,044	0	
BEGIN PEAK HR	4:30 PM													
VOLUMES	259	582	631	406	614	107	122	2,425	332	381	2,341	386	8,586	
APPROACH %	18%	40%	43%	36%	54%	9%	4%	84%	12%	12%	75%	12%		
PEAK HR FACTOR	0.904			0.909			0.925			0.920			0.936	
APP/DEPART	1,472	/	1,083	1,127	/	1,317	2,879	/	3,472	3,108	/	2,714	0	



INTERSECTION TURNING MOVEMENT COUNTS

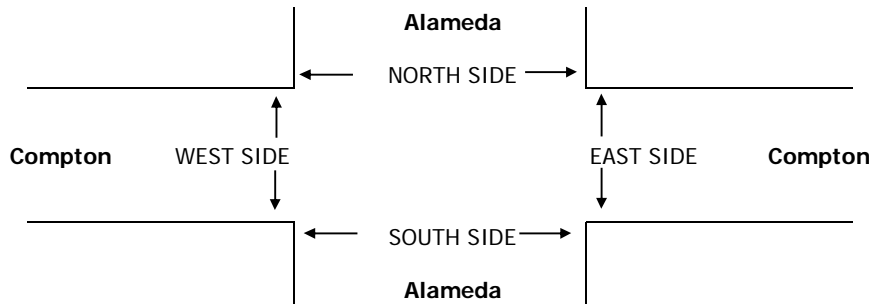
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Apr 4, 17	LOCATION: NORTH & SOUTH: CSU Dominguez Hills EAST & WEST: Alameda Compton	PROJECT #: SC1281 LOCATION #: 36 CONTROL: SIGNAL
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NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W E ▶ S ▼
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	Alameda			Alameda			Compton			Compton			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
LANES:	1	2	0	1	2	0	1	2	0	1	2	0	

AM	7:00 AM	9	99	0	23	142	19	8	63	14	2	120	25	524
	7:15 AM	7	101	4	19	191	8	13	100	13	3	139	34	632
	7:30 AM	8	106	2	29	185	18	14	102	14	4	177	35	694
	7:45 AM	5	98	7	17	244	13	10	129	12	11	164	24	734
	8:00 AM	9	104	4	22	175	21	14	118	24	10	184	30	715
	8:15 AM	14	84	5	30	144	22	15	113	14	3	152	22	618
	8:30 AM	13	86	9	15	140	18	15	123	17	9	137	23	605
	8:45 AM	11	97	7	20	116	16	16	104	14	8	121	24	554
	VOLUMES	76	775	38	175	1,337	135	105	852	122	50	1,194	217	5,076
	APPROACH %	9%	87%	4%	11%	81%	8%	10%	79%	11%	3%	82%	15%	
APP/DEPART	889	/	1,097	1,647	/	1,508	1,079	/	1,066	1,461	/	1,405	0	
BEGIN PEAK HR	7:15 AM													
VOLUMES	29	409	17	87	795	60	51	449	63	28	664	123	2,775	
APPROACH %	6%	90%	4%	9%	84%	6%	9%	80%	11%	3%	81%	15%		
PEAK HR FACTOR	0.972			0.859			0.902			0.910			0.945	
APP/DEPART	455	/	583	942	/	885	563	/	554	815	/	753	0	
PM	4:00 PM	18	147	12	32	140	17	24	218	18	5	148	21	800
	4:15 PM	21	187	15	46	152	10	23	192	9	9	134	24	822
	4:30 PM	23	147	7	43	168	16	23	188	12	11	134	20	792
	4:45 PM	16	180	6	39	153	17	30	181	12	9	125	23	791
	5:00 PM	19	169	17	36	153	13	23	197	12	11	134	17	801
	5:15 PM	16	174	13	30	156	17	24	198	8	8	162	15	821
	5:30 PM	21	179	11	49	169	12	22	200	12	7	109	27	818
	5:45 PM	20	161	9	38	178	12	25	197	13	10	125	15	803
	VOLUMES	154	1,344	90	313	1,269	114	194	1,571	96	70	1,071	162	6,448
	APPROACH %	10%	85%	6%	18%	75%	7%	10%	84%	5%	5%	82%	12%	
APP/DEPART	1,588	/	1,700	1,696	/	1,437	1,861	/	1,974	1,303	/	1,337	0	
BEGIN PEAK HR	5:00 PM													
VOLUMES	76	683	50	153	656	54	94	792	45	36	530	74	3,243	
APPROACH %	9%	84%	6%	18%	76%	6%	10%	85%	5%	6%	83%	12%		
PEAK HR FACTOR	0.959			0.938			0.990			0.865			0.988	
APP/DEPART	809	/	851	863	/	737	931	/	995	640	/	660	0	



INTERSECTION TURNING MOVEMENT COUNTS

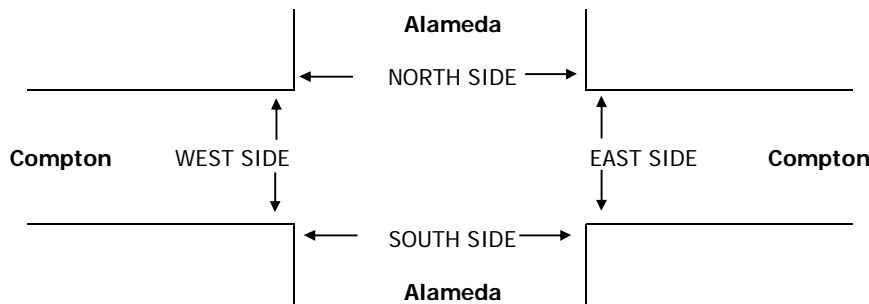
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wed, Apr 5, 17	LOCATION: NORTH & SOUTH: CSU Dominguez Hills EAST & WEST: Alameda Compton	PROJECT #: SC1281 LOCATION #: 36 CONTROL: SIGNAL
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NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W E ▶ S ▼
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	Alameda			Alameda			Compton			Compton			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
LANES:	1	2	0	1	2	0	1	2	0	1	2	0	

AM	7:00 AM	7	98	1	18	136	9	9	65	16	2	127	22	510
	7:15 AM	10	104	4	24	176	10	16	102	16	4	179	38	683
	7:30 AM	10	102	8	30	217	8	13	99	17	11	139	29	683
	7:45 AM	13	110	6	25	198	10	11	126	9	10	206	37	761
	8:00 AM	12	113	6	26	205	20	12	106	16	7	150	23	696
	8:15 AM	11	90	3	21	162	15	19	128	10	12	144	25	640
	8:30 AM	16	74	10	24	138	11	17	95	13	5	155	26	584
	8:45 AM	12	91	5	17	119	13	11	91	12	7	126	24	528
	VOLUMES	91	782	43	185	1,351	96	108	812	109	58	1,226	224	5,085
	APPROACH %	10%	85%	5%	11%	83%	6%	10%	79%	11%	4%	81%	15%	
APP/DEPART	916	/	1,114	1,632	/	1,518	1,029	/	1,040	1,508	/	1,413	0	
BEGIN PEAK HR	7:15 AM													
VOLUMES	45	429	24	105	796	48	52	433	58	32	674	127	2,823	
APPROACH %	9%	86%	5%	11%	84%	5%	10%	80%	11%	4%	81%	15%		
PEAK HR FACTOR	0.950			0.930			0.930			0.823			0.927	
APP/DEPART	498	/	608	949	/	886	543	/	562	833	/	767	0	
PM	4:00 PM	18	176	14	33	167	16	20	165	17	10	124	16	776
	4:15 PM	21	160	14	34	167	18	39	213	10	10	150	14	850
	4:30 PM	33	140	18	48	172	13	16	185	16	10	127	19	797
	4:45 PM	24	179	9	38	163	19	29	192	14	8	126	22	823
	5:00 PM	14	182	13	39	157	18	25	223	17	9	131	30	858
	5:15 PM	28	180	16	47	185	9	24	184	15	9	134	25	856
	5:30 PM	23	164	18	35	159	14	26	197	14	13	119	24	806
	5:45 PM	26	145	15	43	162	14	32	209	15	3	126	29	819
	VOLUMES	187	1,326	117	317	1,332	121	211	1,568	118	72	1,037	179	6,585
	APPROACH %	11%	81%	7%	18%	75%	7%	11%	83%	6%	6%	81%	14%	
APP/DEPART	1,630	/	1,716	1,770	/	1,522	1,897	/	2,002	1,288	/	1,345	0	
BEGIN PEAK HR	4:45 PM													
VOLUMES	89	705	56	159	664	60	104	796	60	39	510	101	3,343	
APPROACH %	10%	83%	7%	18%	75%	7%	11%	83%	6%	6%	78%	16%		
PEAK HR FACTOR	0.949			0.916			0.906			0.956			0.974	
APP/DEPART	850	/	910	883	/	763	960	/	1,011	650	/	659	0	



INTERSECTION TURNING MOVEMENT COUNTS

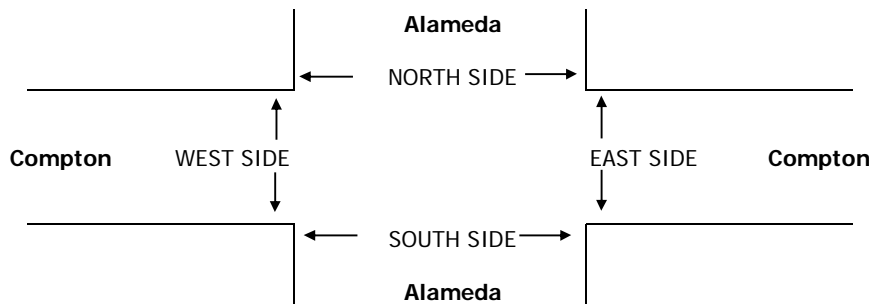
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thu, Apr 6, 17	LOCATION: NORTH & SOUTH: CSU Dominguez Hills EAST & WEST: Alameda Compton	PROJECT #: SC1281 LOCATION #: 36 CONTROL: SIGNAL
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NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W E ▶ S ▼
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	Alameda			Alameda			Compton			Compton			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	0	1	2	0	1	2	0	1	2	0	

AM	7:00 AM	9	102	1	17	137	12	7	94	15	7	155	31	587
	7:15 AM	12	109	7	25	214	9	10	89	9	10	145	28	667
	7:30 AM	14	88	8	32	218	13	19	115	18	5	182	25	737
	7:45 AM	7	107	6	26	190	14	12	127	17	7	175	22	710
	8:00 AM	14	110	7	26	188	22	9	115	15	7	167	33	713
	8:15 AM	14	78	6	25	167	13	12	123	16	3	157	23	637
	8:30 AM	16	79	9	13	138	18	9	84	14	4	139	24	547
	8:45 AM	23	94	10	20	107	12	14	116	17	13	125	22	573
	VOLUMES	109	767	54	184	1,359	113	92	863	121	56	1,245	208	5,171
	APPROACH %	12%	82%	6%	11%	82%	7%	9%	80%	11%	4%	83%	14%	
APP/DEPART	930	/	1,067	1,656	/	1,536	1,076	/	1,101	1,509	/	1,467	0	
BEGIN PEAK HR	7:15 AM													
VOLUMES	47	414	28	109	810	58	50	446	59	29	669	108	2,827	
APPROACH %	10%	85%	6%	11%	83%	6%	9%	80%	11%	4%	83%	13%		
PEAK HR FACTOR	0.933			0.929			0.889			0.950			0.959	
APP/DEPART	489	/	572	977	/	898	555	/	583	806	/	774	0	
PM	4:00 PM	24	158	21	26	177	14	25	174	16	14	117	13	779
	4:15 PM	27	164	21	30	146	15	23	178	14	13	129	21	781
	4:30 PM	32	148	9	34	151	19	22	179	12	15	157	22	800
	4:45 PM	16	198	17	50	155	17	21	164	11	16	121	24	810
	5:00 PM	21	149	17	27	162	16	31	225	11	10	133	23	825
	5:15 PM	14	181	13	44	177	12	24	183	9	9	157	26	849
	5:30 PM	20	171	12	30	161	14	28	197	9	7	116	18	783
	5:45 PM	24	153	17	45	157	15	22	218	14	9	129	22	825
	VOLUMES	178	1,322	127	286	1,286	122	196	1,518	96	93	1,059	169	6,452
	APPROACH %	11%	81%	8%	17%	76%	7%	11%	84%	5%	7%	80%	13%	
APP/DEPART	1,627	/	1,687	1,694	/	1,475	1,810	/	1,931	1,321	/	1,359	0	
BEGIN PEAK HR	4:30 PM													
VOLUMES	83	676	56	155	645	64	98	751	43	50	568	95	3,284	
APPROACH %	10%	83%	7%	18%	75%	7%	11%	84%	5%	7%	80%	13%		
PEAK HR FACTOR	0.882			0.927			0.835			0.919			0.967	
APP/DEPART	815	/	869	864	/	738	892	/	962	713	/	715	0	



INTERSECTION TURNING MOVEMENT COUNTS

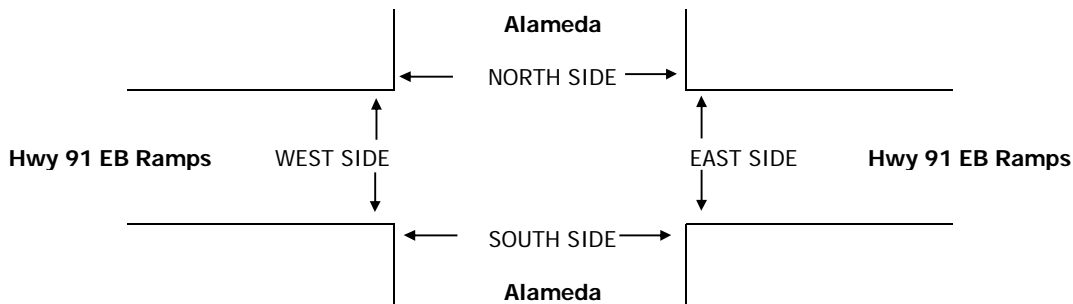
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Tue, Apr 4, 17	LOCATION: NORTH & SOUTH: CSU Dominguez Hills EAST & WEST: Alameda Hwy 91 EB Ramps	PROJECT #: SC1281 LOCATION #: 37 CONTROL: SIGNAL
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NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W E ▶ S ▼
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	Alameda			Alameda			Hwy 91 EB Ramps			Hwy 91 EB Ramps			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
LANES:	1	2	X	X	2	1	1	X	1	X	X	X	

AM	7:00 AM	27	51	0	0	169	81	22	0	26	0	0	0	376
	7:15 AM	24	52	0	0	165	103	30	0	34	0	0	0	408
	7:30 AM	26	73	0	0	251	112	21	0	39	0	0	0	522
	7:45 AM	21	79	0	0	333	77	33	0	50	0	0	0	593
	8:00 AM	17	65	0	0	206	82	37	0	38	0	0	0	445
	8:15 AM	16	65	0	0	177	77	26	0	37	0	0	0	398
	8:30 AM	18	53	0	0	119	88	32	0	34	0	0	0	344
	8:45 AM	22	55	0	0	148	72	30	0	28	0	0	0	355
	VOLUMES	171	493	0	0	1,568	692	231	0	286	0	0	0	3,441
	APPROACH %	26%	74%	0%	0%	69%	31%	45%	0%	55%	0%	0%	0%	
APP/DEPART	664	/	722	2,260	/	1,855	517	/	0	0	/	864	0	
BEGIN PEAK HR	7:15 AM													
VOLUMES	88	269	0	0	955	374	121	0	161	0	0	0	1,968	
APPROACH %	25%	75%	0%	0%	72%	28%	43%	0%	57%	0%	0%	0%		
PEAK HR FACTOR	0.893			0.810			0.849			0.000			0.830	
APP/DEPART	357	/	389	1,329	/	1,116	282	/	0	0	/	463	0	
PM	4:00 PM	132	138	0	0	110	76	21	0	14	0	0	0	491
	4:15 PM	142	145	0	0	106	99	11	0	9	0	0	0	512
	4:30 PM	131	176	0	0	130	86	25	0	10	0	0	0	558
	4:45 PM	134	173	0	0	130	78	13	0	9	0	0	0	537
	5:00 PM	170	231	0	0	103	99	20	0	4	0	0	0	627
	5:15 PM	171	200	0	0	117	103	8	0	7	0	0	0	606
	5:30 PM	156	154	0	0	109	84	9	0	10	0	0	0	522
	5:45 PM	128	126	0	0	96	88	13	0	5	0	0	0	456
	VOLUMES	1,164	1,343	0	0	901	713	120	0	68	0	0	0	4,309
	APPROACH %	46%	54%	0%	0%	56%	44%	64%	0%	36%	0%	0%	0%	
APP/DEPART	2,507	/	1,463	1,614	/	969	188	/	0	0	/	1,877	0	
BEGIN PEAK HR	4:30 PM													
VOLUMES	606	780	0	0	480	366	66	0	30	0	0	0	2,328	
APPROACH %	44%	56%	0%	0%	57%	43%	69%	0%	31%	0%	0%	0%		
PEAK HR FACTOR	0.864			0.961			0.686			0.000			0.928	
APP/DEPART	1,386	/	846	846	/	510	96	/	0	0	/	972	0	



INTERSECTION TURNING MOVEMENT COUNTS

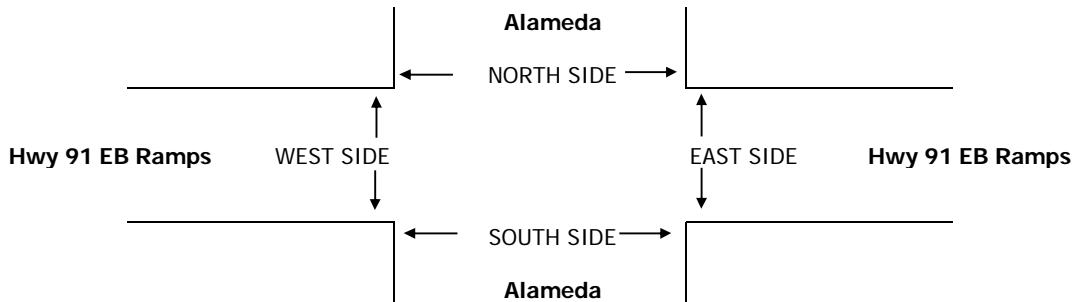
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Wed, Apr 5, 17	LOCATION: NORTH & SOUTH: CSU Dominguez Hills EAST & WEST: Alameda Hwy 91 EB Ramps	PROJECT #: SC1281 LOCATION #: 37 CONTROL: SIGNAL
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NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W E ▶ S ▼
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	Alameda			Alameda			Hwy 91 EB Ramps			Hwy 91 EB Ramps			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	X	X	2	1	1	X	1	X	X	X	

AM	7:00 AM	23	54	0	0	176	78	25	0	25	0	0	0	381
	7:15 AM	25	56	0	0	169	97	31	0	37	0	0	0	415
	7:30 AM	27	76	0	0	265	117	29	0	43	0	0	0	557
	7:45 AM	25	78	0	0	341	86	36	0	54	0	0	0	620
	8:00 AM	20	69	0	0	219	88	42	0	41	0	0	0	479
	8:15 AM	19	66	0	0	186	83	34	0	36	0	0	0	424
	8:30 AM	17	57	0	0	143	91	31	0	33	0	0	0	372
	8:45 AM	23	52	0	0	149	80	35	0	27	0	0	0	366
	VOLUMES	179	508	0	0	1,648	720	263	0	296	0	0	0	3,614
	APPROACH %	26%	74%	0%	0%	70%	30%	47%	0%	53%	0%	0%	0%	
APP/DEPART	687	/	771	2,368	/	1,944	559	/	0	0	/	899	0	
BEGIN PEAK HR	7:30 AM													
VOLUMES	91	289	0	0	1,011	374	141	0	174	0	0	0	2,080	
APPROACH %	24%	76%	0%	0%	73%	27%	45%	0%	55%	0%	0%	0%		
PEAK HR FACTOR	0.922			0.811										
APP/DEPART	380	/	430	1,385	/	1,185	315	/	0	0	/	465	0	
PM	4:00 PM	136	142	0	0	108	75	22	0	16	0	0	0	499
	4:15 PM	144	155	0	0	112	97	15	0	12	0	0	0	535
	4:30 PM	137	181	0	0	128	90	24	0	9	0	0	0	569
	4:45 PM	142	190	0	0	135	83	17	0	11	0	0	0	578
	5:00 PM	181	238	0	0	112	96	21	0	7	0	0	0	655
	5:15 PM	186	219	0	0	119	99	14	0	9	0	0	0	646
	5:30 PM	164	167	0	0	103	85	10	0	8	0	0	0	537
	5:45 PM	139	141	0	0	97	83	12	0	6	0	0	0	478
	VOLUMES	1,229	1,433	0	0	914	708	135	0	78	0	0	0	4,497
	APPROACH %	46%	54%	0%	0%	56%	44%	63%	0%	37%	0%	0%	0%	
APP/DEPART	2,662	/	1,568	1,622	/	992	213	/	0	0	/	1,937	0	
BEGIN PEAK HR	4:30 PM													
VOLUMES	646	828	0	0	494	368	76	0	36	0	0	0	2,448	
APPROACH %	44%	56%	0%	0%	57%	43%	68%	0%	32%	0%	0%	0%		
PEAK HR FACTOR	0.879			0.989										
APP/DEPART	1,474	/	904	862	/	530	112	/	0	0	/	1,014	0	



INTERSECTION TURNING MOVEMENT COUNTS

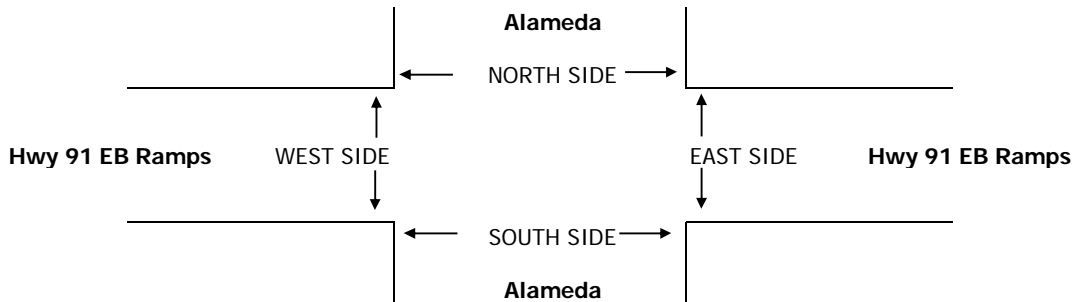
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE: Thu, Apr 6, 17	LOCATION: NORTH & SOUTH: CSU Dominguez Hills EAST & WEST: Alameda Hwy 91 EB Ramps	PROJECT #: SC1281 LOCATION #: 37 CONTROL: SIGNAL
--------------------------------	--	---

NOTES:	AM PM MD OTHER OTHER	◀ W E ▶	▲ N S ▼
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	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			TOTAL
	Alameda			Alameda			Hwy 91 EB Ramps			Hwy 91 EB Ramps			
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
LANES:	1	2	X	X	2	1	1	X	1	X	X	X	

AM	7:00 AM	25	54	0	0	179	86	23	0	24	0	0	0	391
	7:15 AM	23	56	0	0	187	109	27	0	31	0	0	0	433
	7:30 AM	27	75	0	0	251	117	20	0	37	0	0	0	527
	7:45 AM	19	86	0	0	328	80	28	0	46	0	0	0	587
	8:00 AM	18	71	0	0	217	79	35	0	43	0	0	0	463
	8:15 AM	15	67	0	0	192	76	28	0	41	0	0	0	419
	8:30 AM	16	57	0	0	148	82	29	0	35	0	0	0	367
	8:45 AM	20	56	0	0	155	75	31	0	32	0	0	0	369
	VOLUMES	163	522	0	0	1,657	704	221	0	289	0	0	0	3,556
	APPROACH %	24%	76%	0%	0%	70%	30%	43%	0%	57%	0%	0%	0%	
APP/DEPART	685	/	743	2,361	/	1,946	510	/	0	0	/	867	0	
BEGIN PEAK HR	7:15 AM													
VOLUMES	87	288	0	0	983	385	110	0	157	0	0	0	2,010	
APPROACH %	23%	77%	0%	0%	72%	28%	41%	0%	59%	0%	0%	0%		
PEAK HR FACTOR	0.893			0.838			0.856			0.000			0.856	
APP/DEPART	375	/	398	1,368	/	1,140	267	/	0	0	/	472	0	
PM	4:00 PM	128	137	0	0	115	81	19	0	13	0	0	0	493
	4:15 PM	136	145	0	0	117	103	13	0	14	0	0	0	528
	4:30 PM	133	177	0	0	139	90	18	0	11	0	0	0	568
	4:45 PM	132	180	0	0	145	84	21	0	8	0	0	0	570
	5:00 PM	166	228	0	0	115	102	16	0	9	0	0	0	636
	5:15 PM	168	207	0	0	132	108	9	0	5	0	0	0	629
	5:30 PM	159	181	0	0	121	92	8	0	9	0	0	0	570
	5:45 PM	131	128	0	0	110	89	10	0	7	0	0	0	475
	VOLUMES	1,153	1,383	0	0	994	749	114	0	76	0	0	0	4,469
	APPROACH %	45%	55%	0%	0%	57%	43%	60%	0%	40%	0%	0%	0%	
APP/DEPART	2,536	/	1,497	1,743	/	1,070	190	/	0	0	/	1,902	0	
BEGIN PEAK HR	4:45 PM													
VOLUMES	625	796	0	0	513	386	54	0	31	0	0	0	2,405	
APPROACH %	44%	56%	0%	0%	57%	43%	64%	0%	36%	0%	0%	0%		
PEAK HR FACTOR	0.902			0.936			0.733			0.000			0.945	
APP/DEPART	1,421	/	850	899	/	544	85	/	0	0	/	1,011	0	



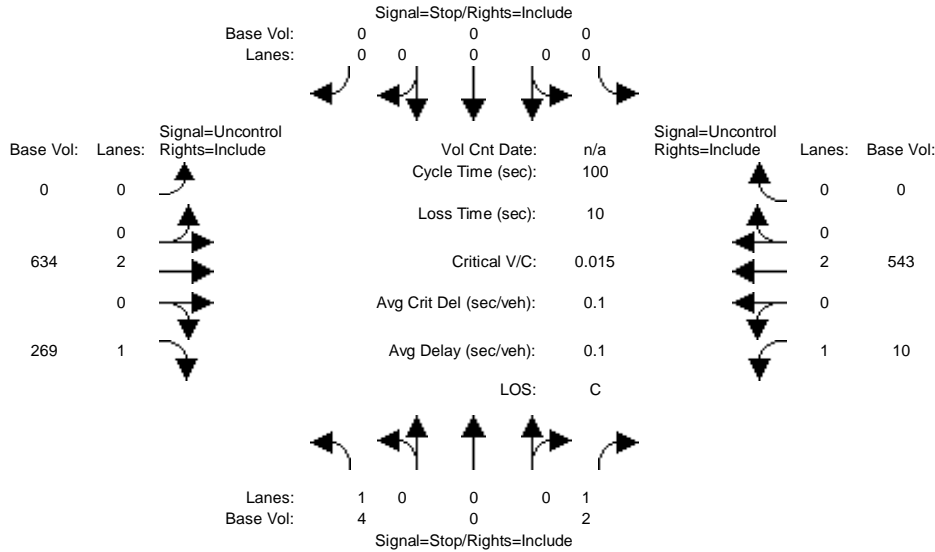
Appendix C

Intersection LOS Worksheets for Existing Weekday Conditions

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 Existing Weekday AM

Intersection #1: Victoria St. & Drive D



Street Name: Drive D Victoria St..
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R

Volume Module:												
	Drive D North Bound			Drive D South Bound			Victoria St. East Bound			Victoria St. West Bound		
	L	T	R	L	T	R	L	T	R	L	T	R
Base Vol:	4	0	2	0	0	0	0	634	269	10	543	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	0	2	0	0	0	0	634	269	10	543	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	4	0	2	0	0	0	0	634	269	10	543	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	4	0	2	0	0	0	0	634	269	10	543	0

Critical Gap Module:												
	Drive D North Bound			Drive D South Bound			Victoria St. East Bound			Victoria St. West Bound		
Critical Gp:	6.8	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx

Capacity Module:												
	Drive D North Bound			Drive D South Bound			Victoria St. East Bound			Victoria St. West Bound		
Cnflct Vol:	926	xxxx	317	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	903	xxxx	xxxxx
Potent Cap.:	272	xxxx	685	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	761	xxxx	xxxxx
Move Cap.:	269	xxxx	685	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	761	xxxx	xxxxx
Volume/Cap:	0.01	xxxx	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx

Level Of Service Module:												
	Drive D North Bound			Drive D South Bound			Victoria St. East Bound			Victoria St. West Bound		
	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
2Way95thQ:	0.0	xxxx	0.0	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	18.6	xxxx	10.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.8	xxxx	xxxxx
LOS by Move:	C	*	B	*	*	*	*	*	*	A	*	*
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	15.8			xxxxxxx			xxxxxxx			xxxxxxx		

ApproachLOS: C * * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #1 Victoria St. & Drive D

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 2 0 1	1 0 2 0 0
Initial Vol:	4 0 2	0 0 0	0 634 269	10 543 0
ApproachDel:	15.8	xxxxxx	xxxxxx	xxxxxx

Approach[northbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.0]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=6]

FAIL - Approach volume less than 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=1462]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #1 Victoria St. & Drive D

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 2 0 1	1 0 2 0 0
Initial Vol:	4 0 2	0 0 0	0 634 269	10 543 0

Major Street Volume: 1456

Minor Approach Volume: 6

Minor Approach Volume Threshold: 213

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

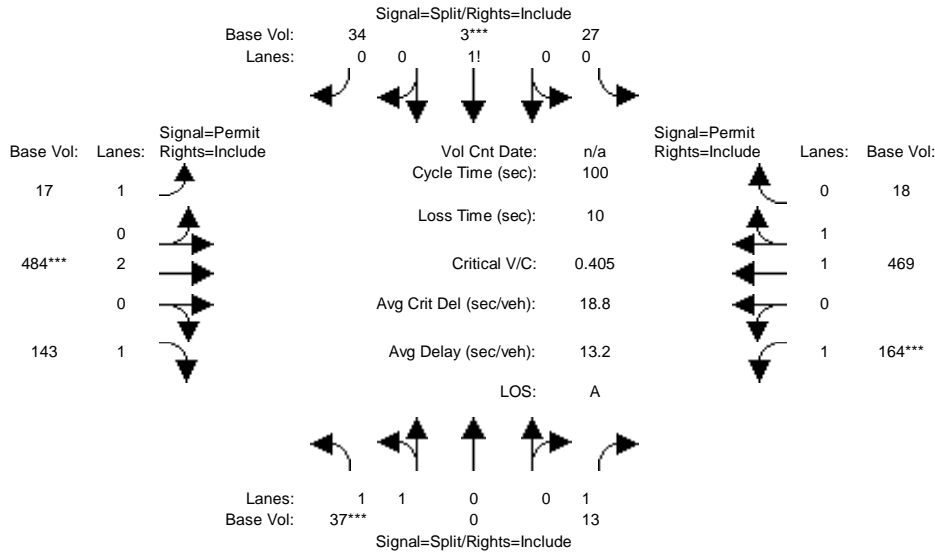
The peak hour warrant analysis in this report is not intended to replace

a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday AM

Intersection #2: Victoria St. & Tamcliff Ave.

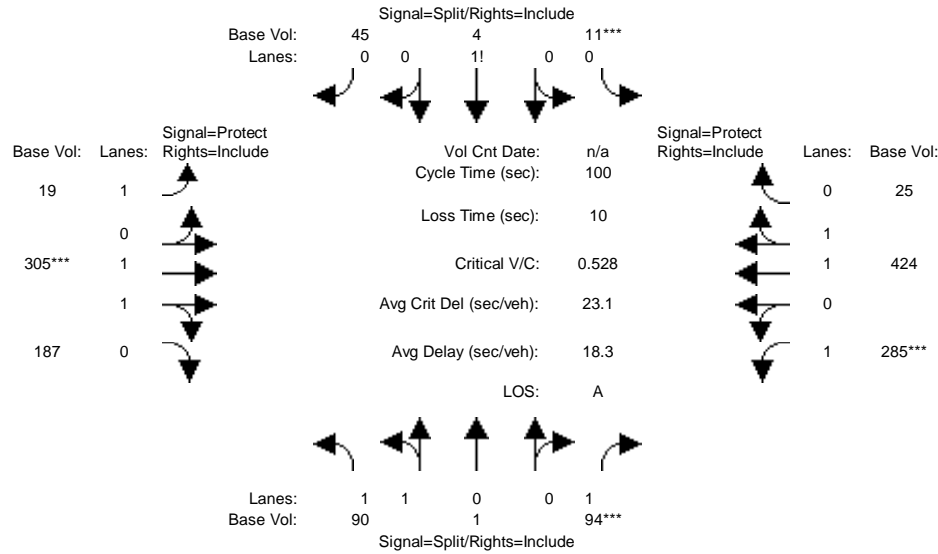


Street Name:	Victoria St.						Tamcliff Ave.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	37	0	13	27	3	34	17	484	143	164	469	18
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	37	0	13	27	3	34	17	484	143	164	469	18
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	37	0	13	27	3	34	17	484	143	164	469	18
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	37	0	13	27	3	34	17	484	143	164	469	18
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	37	0	13	27	3	34	17	484	143	164	469	18
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.42	0.05	0.53	1.00	2.00	1.00	1.00	1.93	0.07
Final Sat.:	3200	0	1600	675	75	850	1600	3200	1600	1600	3082	118
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.01	0.04	0.04	0.04	0.01	0.15	0.09	0.10	0.15	0.15
Crit Moves:	***			***	***		***	***		***	***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday AM

Intersection #3: Victoria St. & Birchknoll Dr.

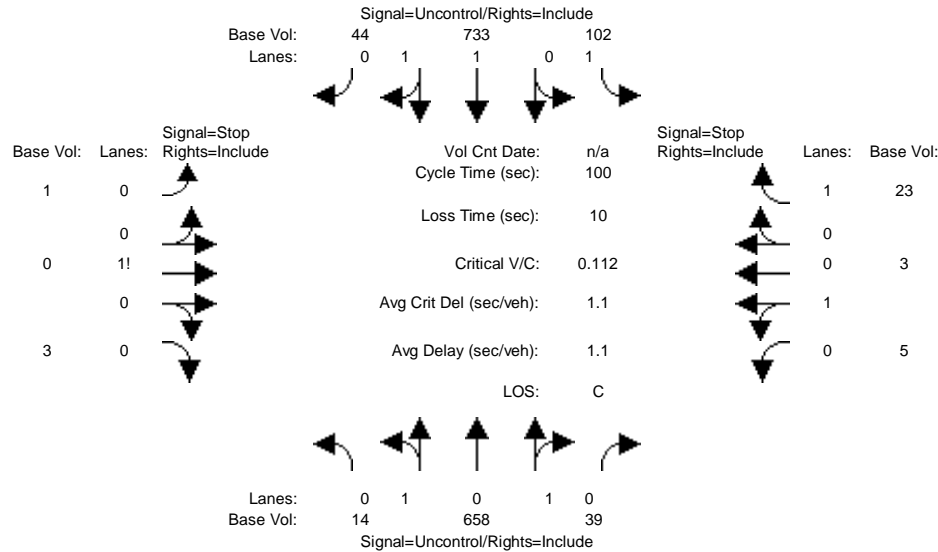


Street Name:	Victoria St.						Birchknoll Dr.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	90	1	94	11	4	45	19	305	187	285	424	25
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	1	94	11	4	45	19	305	187	285	424	25
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	1	94	11	4	45	19	305	187	285	424	25
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	1	94	11	4	45	19	305	187	285	424	25
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	90	1	94	11	4	45	19	305	187	285	424	25
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.98	0.02	1.00	0.18	0.07	0.75	1.00	1.24	0.76	1.00	1.89	0.11
Final Sat.:	3165	35	1600	293	107	1200	1600	1984	1216	1600	3022	178
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.06	0.04	0.04	0.04	0.01	0.15	0.15	0.18	0.14	0.14
Crit Moves:			***	***				***		***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
Existing Weekday AM

Intersection #5: Central Ave. & Charles Willard St.



Street Name:	Central Ave.						Charles Willard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	14	658	39	102	733	44	1	0	3	5	3	23
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	14	658	39	102	733	44	1	0	3	5	3	23
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	14	658	39	102	733	44	1	0	3	5	3	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	14	658	39	102	733	44	1	0	3	5	3	23
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	4.1	xxxx	xxxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxxx	2.2	xxxx	xxxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflct Vol:	777	xxxx	xxxxxx	697	xxxx	xxxxxx	1318	1684	389	1276	1687	349
Potent Cap.:	848	xxxx	xxxxxx	909	xxxx	xxxxxx	117	95	616	126	95	653
Move Cap.:	848	xxxx	xxxxxx	909	xxxx	xxxxxx	99	83	616	113	83	653
Volume/Cap:	0.02	xxxx	xxxxxx	0.11	xxxx	xxxxxx	0.01	0.00	0.00	0.04	0.04	0.04
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxxx	0.4	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	0.1
Control Del:	9.3	xxxx	xxxxxx	9.5	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	10.7
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	B
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	268	xxxxxx	99	xxxx	xxxxxx
SharedQueue:	0.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	0.0	xxxxxx	0.3	xxxx	xxxxxx
Shrd ConDel:	9.3	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	18.7	xxxxxx	44.4	xxxx	xxxxxx
Shared LOS:	A	*	*	*	*	*	*	C	*	E	*	*

ApproachDel:	xxxxxx	xxxxxx	18.7	19.4
ApproachLOS:	*	*	C	C

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #5 Central Ave. & Charles Willard St.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 1 0 1 0	1 0 1 1 0	0 0 1! 0 0	0 1 0 0 1
Initial Vol:	14 658 39	102 733 44	1 0 3	5 3 23
ApproachDel:	xxxxxx	xxxxxx	18.7	19.4

Approach[eastbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.0]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=4]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=1625]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Approach[westbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.2]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=31]

FAIL - Approach volume less than 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=1625]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #5 Central Ave. & Charles Willard St.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 1 0 1 0	1 0 1 1 0	0 0 1! 0 0	0 1 0 0 1
Initial Vol:	14 658 39	102 733 44	1 0 3	5 3 23
Major Street Volume:	1590			
Minor Approach Volume:	31			

Minor Approach Volume Threshold: 175

SIGNAL WARRANT DISCLAIMER

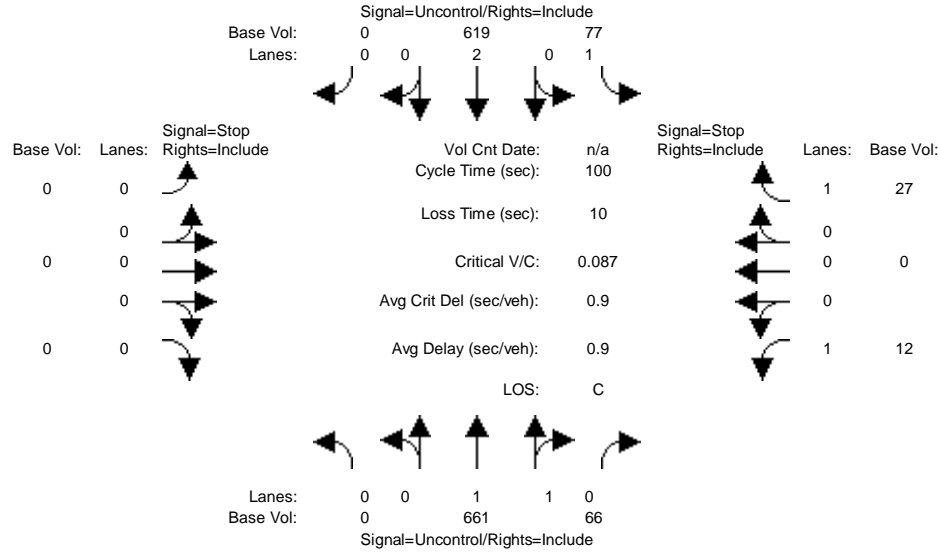
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 Existing Weekday AM

Intersection #6: Central Ave. & Project Driveway/Beachey Pl.



Street Name:	Central Ave.					Beachey Pl.						
Approach:	North Bound		South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	661	66	77	619	0	0	0	0	12	0	27
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	661	66	77	619	0	0	0	0	12	0	27
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	661	66	77	619	0	0	0	0	12	0	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	0	661	66	77	619	0	0	0	0	12	0	27
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	xxxx	6.9
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3
Capacity Module:												
Cnflct Vol:	xxxx	xxxx	xxxxx	727	xxxx	xxxxx	xxxx	xxxx	xxxxx	1158	xxxx	364
Potent Cap.:	xxxx	xxxx	xxxxx	886	xxxx	xxxxx	xxxx	xxxx	xxxxx	192	xxxx	639
Move Cap.:	xxxx	xxxx	xxxxx	886	xxxx	xxxxx	xxxx	xxxx	xxxxx	180	xxxx	639
Volume/Cap:	xxxx	xxxx	xxxx	0.09	xxxx	xxxx	xxxx	xxxx	xxxx	0.07	xxxx	0.04
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.2	xxxx	0.1
Control Del:	xxxxx	xxxx	xxxxx	9.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	26.5	xxxx	10.9
LOS by Move:	*	*	*	A	*	*	*	*	*	D	*	B
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shared Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*

ApproachDel:	xxxxxx	xxxxxx	xxxxxx	15.7
ApproachLOS:	*	*	*	C

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #6 Central Ave. & Project Driveway/Beachey Pl.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 0 1 1 0	1 0 2 0 0	0 0 0 0 0	1 0 0 0 1
Initial Vol:	0 661 66	77 619 0	0 0 0 0	12 0 27
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	15.7

Approach[westbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.2]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=39]

FAIL - Approach volume less than 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=1462]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #6 Central Ave. & Project Driveway/Beachey Pl.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 0 1 1 0	1 0 2 0 0	0 0 0 0 0	1 0 0 0 1
Initial Vol:	0 661 66	77 619 0	0 0 0 0	12 0 27

Major Street Volume: 1423
 Minor Approach Volume: 39
 Minor Approach Volume Threshold: 222

SIGNAL WARRANT DISCLAIMER

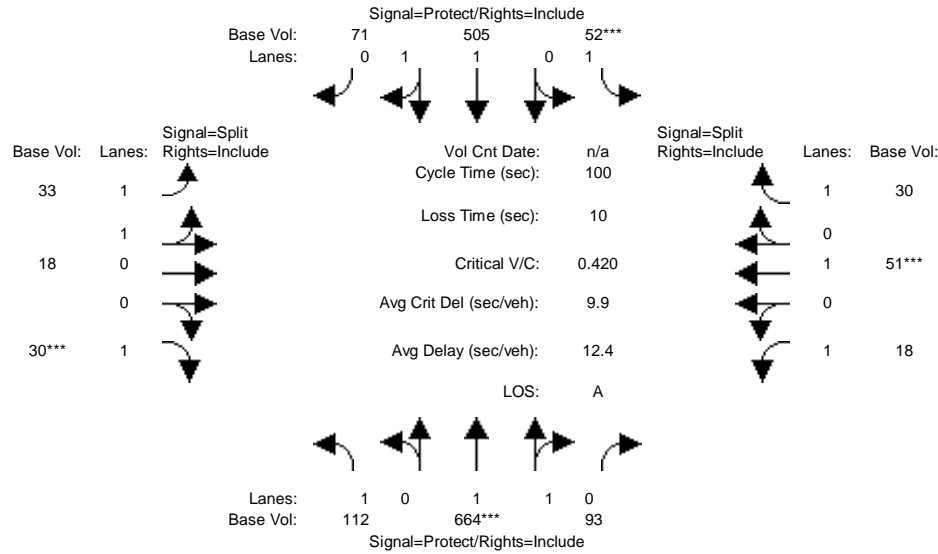
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday AM

Intersection #7: Central Ave. & Glenn Curtiss St.

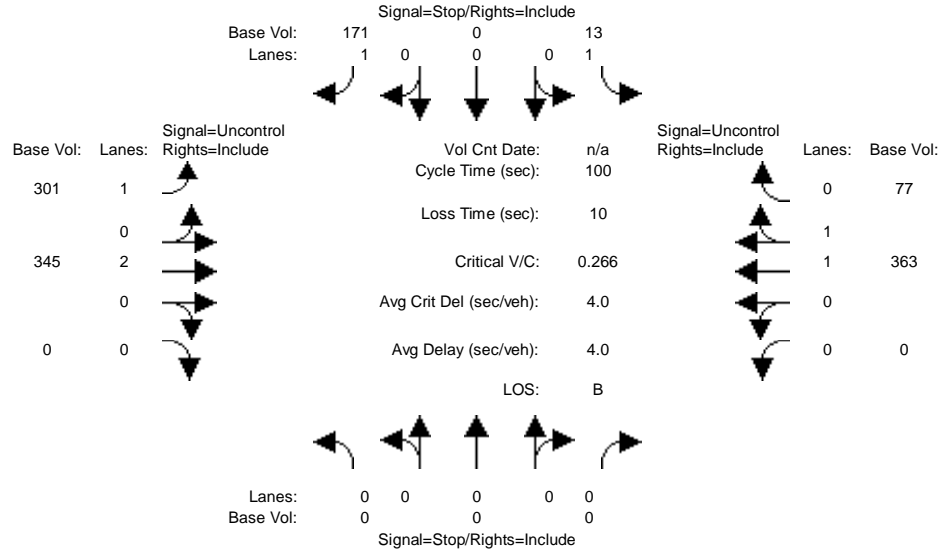


Street Name:	Central Ave.						Glenn Curtiss St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	112	664	93	52	505	71	33	18	30	18	51	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	112	664	93	52	505	71	33	18	30	18	51	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	112	664	93	52	505	71	33	18	30	18	51	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	112	664	93	52	505	71	33	18	30	18	51	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	112	664	93	52	505	71	33	18	30	18	51	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.75	0.25	1.00	1.75	0.25	1.29	0.71	1.00	1.00	1.00	1.00
Final Sat.:	1600	2807	393	1600	2806	394	2071	1129	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.24	0.24	0.03	0.18	0.18	0.02	0.02	0.02	0.01	0.03	0.02
Crit Moves:	****			****				****			****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
Existing Weekday AM

Intersection #9: University Dr. & Toro Center Dr.



Street Name:	University Dr.						Toro Center Dr.						
Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Volume Module:													
Base Vol:	0	0	0	13	0	171	301	345	0	0	0	363	77
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	13	0	171	301	345	0	0	0	363	77
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	13	0	171	301	345	0	0	0	363	77
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	13	0	171	301	345	0	0	0	363	77
Critical Gap Module:													
Critical Gp:	xxxxx	xxxx	xxxxx	6.8	xxxx	6.9	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
Capacity Module:													
Cnflct Vol:	xxxx	xxxx	xxxxx	1176	xxxx	220	440	xxxx	xxxxx	xxxx	xxxx	xxxxx	
Potent Cap.:	xxxx	xxxx	xxxxx	187	xxxx	790	1131	xxxx	xxxxx	xxxx	xxxx	xxxxx	
Move Cap.:	xxxx	xxxx	xxxxx	149	xxxx	790	1131	xxxx	xxxxx	xxxx	xxxx	xxxxx	
Volume/Cap:	xxxx	xxxx	xxxx	0.09	xxxx	0.22	0.27	xxxx	xxxx	xxxx	xxxx	xxxx	
Level Of Service Module:													
2Way95thQ:	xxxx	xxxx	xxxxx	0.3	xxxx	0.8	1.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	31.5	xxxx	10.8	9.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
LOS by Move:	*	*	*	D	*	B	A	*	*	*	*	*	
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*	

ApproachDel: xxxxxxx 12.3 xxxxxxx xxxxxxx
 ApproachLOS: * B * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #9 University Dr. & Toro Center Dr.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 0	1 0 0 0 1	1 0 2 0 0	0 0 1 1 0
Initial Vol:	0 0 0 0	13 0 171	301 345 0	0 363 77
ApproachDel:	xxxxxxx	12.3	xxxxxxx	xxxxxxx

Approach[southbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.6]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=184]

SUCCEED - Approach volume >= 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=1270]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #9 University Dr. & Toro Center Dr.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 0	1 0 0 0 1	1 0 2 0 0	0 0 1 1 0
Initial Vol:	0 0 0 0	13 0 171	301 345 0	0 363 77

Major Street Volume: 1086

Minor Approach Volume: 184

Minor Approach Volume Threshold: 339

SIGNAL WARRANT DISCLAIMER

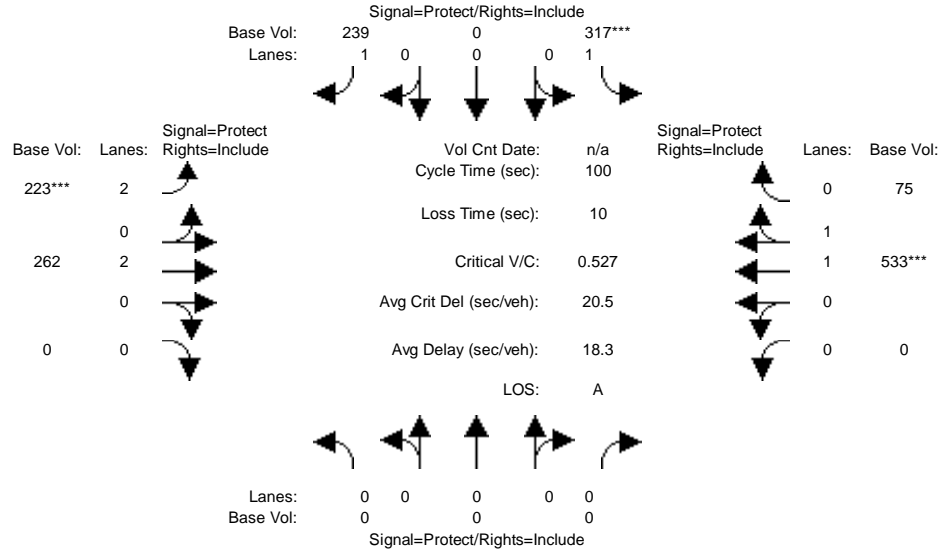
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday AM

Intersection #10: Albertoni St. & SR 91 EB Ramps

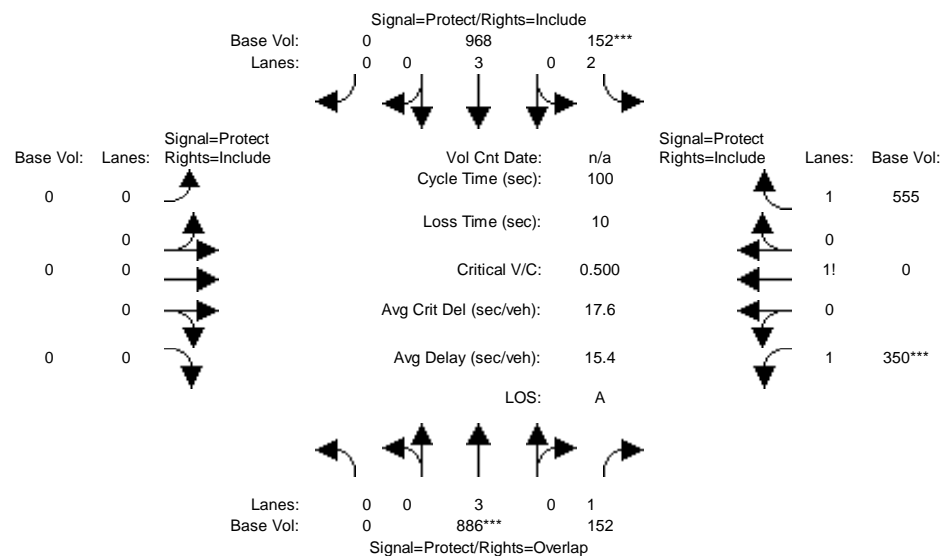


Street Name:	Albertoni St.						SR 91 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	317	0	239	223	262	0	0	533	75
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	317	0	239	223	262	0	0	533	75
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	317	0	239	223	262	0	0	533	75
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	317	0	239	223	262	0	0	533	75
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	317	0	239	223	262	0	0	533	75
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.75	0.25
Final Sat.:	0	0	0	1600	0	1600	5760	3200	0	0	2805	395
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.20	0.00	0.15	0.04	0.08	0.00	0.00	0.19	0.19
Crit Moves:				****			****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday AM

Intersection #11: Avalon Blvd. & SR 91 WB On-Ramp

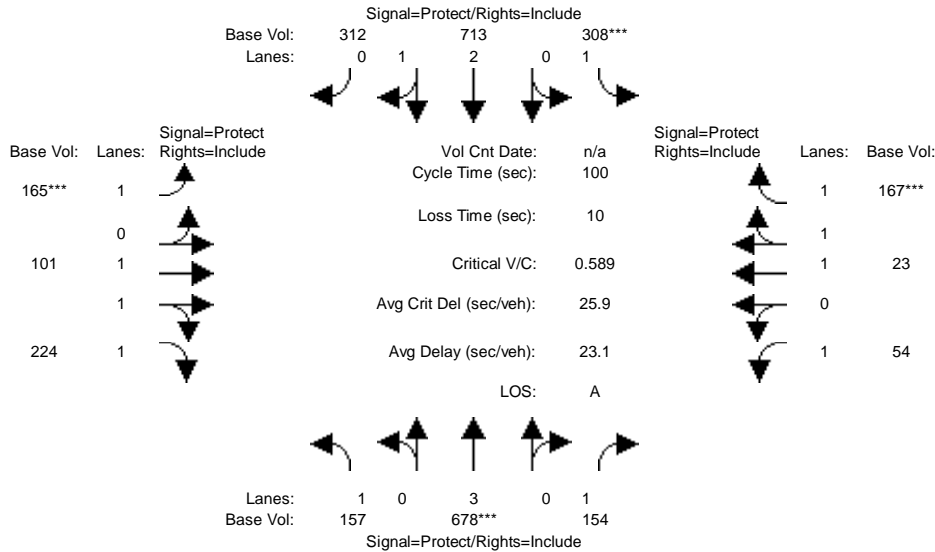


Street Name:	Avalon Blvd.						SR 91 WB On-Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	886	152	152	968	0	0	0	0	350	0	555
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	886	152	152	968	0	0	0	0	350	0	555
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	886	152	152	968	0	0	0	0	350	0	555
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	886	152	152	968	0	0	0	0	350	0	555
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	886	152	152	968	0	0	0	0	350	0	555
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.16	0.01	1.83
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	1856	0	2944
Capacity Analysis Module:												
Vol/Sat:	0.00	0.18	0.10	0.03	0.20	0.00	0.00	0.00	0.00	0.19	0.00	0.19
OvlAdjV/S:	0.00											
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday AM

Intersection #12: Avalon Blvd. & Albertoni St.

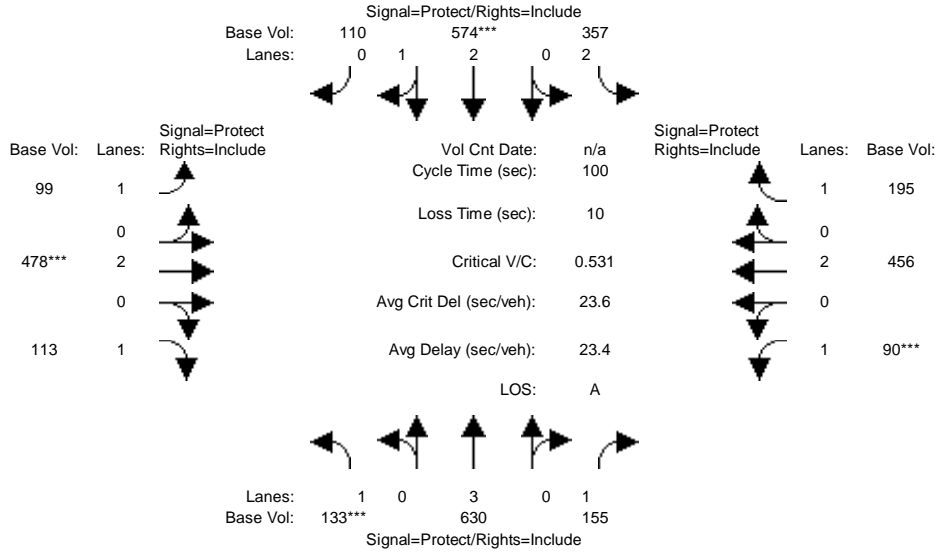


Street Name:	Avalon Blvd.						Albertoni St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	157	678	154	308	713	312	165	101	224	54	23	167
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	157	678	154	308	713	312	165	101	224	54	23	167
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	157	678	154	308	713	312	165	101	224	54	23	167
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	157	678	154	308	713	312	165	101	224	54	23	167
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	157	678	154	308	713	312	165	101	224	54	23	167
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.09	0.91	1.00	1.00	2.00	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3339	1461	1600	1600	3200	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.10	0.14	0.10	0.19	0.21	0.21	0.10	0.06	0.07	0.03	0.01	0.05
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday AM

Intersection #13: Avalon Blvd. & Victoria St.

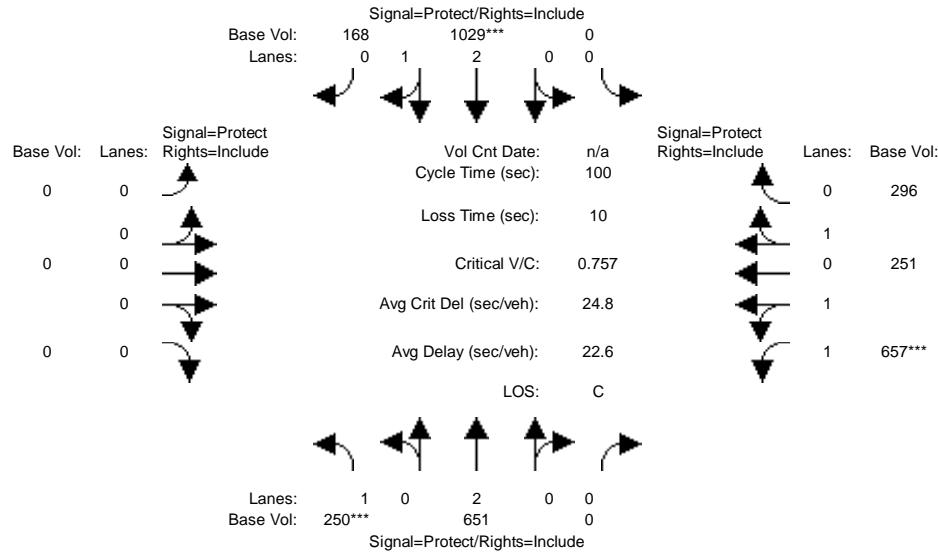


Street Name:	Avalon Blvd.						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	133	630	155	357	574	110	99	478	113	90	456	195
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	133	630	155	357	574	110	99	478	113	90	456	195
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	133	630	155	357	574	110	99	478	113	90	456	195
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	133	630	155	357	574	110	99	478	113	90	456	195
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	133	630	155	357	574	110	99	478	113	90	456	195
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.52	0.48	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4028	772	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.13	0.10	0.06	0.14	0.14	0.06	0.15	0.07	0.06	0.14	0.12
Crit Moves:	***			***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday AM

Intersection #14: Central Ave. & Artesia Blvd.

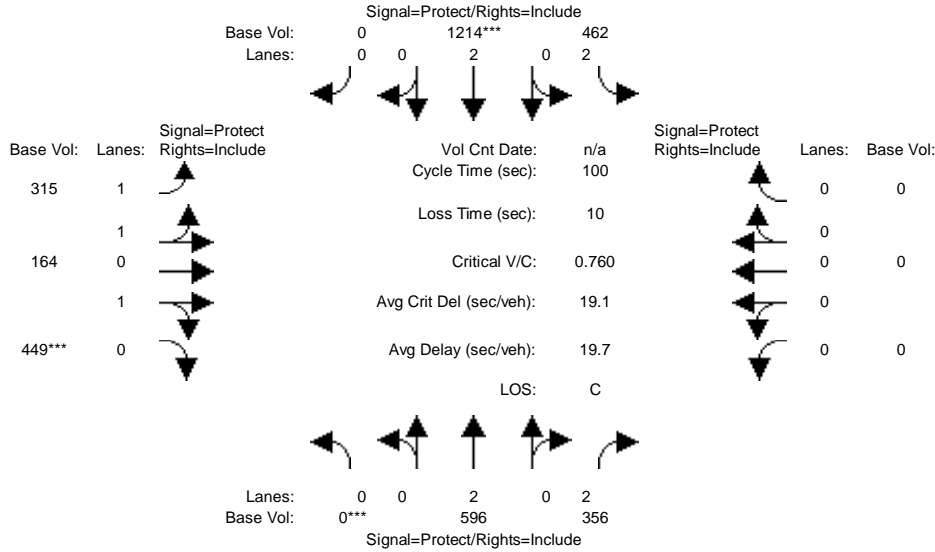


Street Name:	Central Ave.						Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	250	651	0	0	1029	168	0	0	0	657	251	296
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	250	651	0	0	1029	168	0	0	0	657	251	296
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	250	651	0	0	1029	168	0	0	0	657	251	296
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	250	651	0	0	1029	168	0	0	0	657	251	296
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	250	651	0	0	1029	168	0	0	0	657	251	296
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.58	0.42	0.00	0.00	0.00	1.63	0.63	0.74
Final Sat.:	1600	3200	0	0	4126	674	0	0	0	2611	1001	1187
Capacity Analysis Module:												
Vol/Sat:	0.16	0.20	0.00	0.00	0.25	0.25	0.00	0.00	0.00	0.25	0.25	0.25
Crit Moves:	***				***	***				***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday AM

Intersection #15: Central Ave. & Albertoni St./Artesia Blvd. EB



Street Name: Central Ave. Albertoni St./Artesia Blvd. EB

Approach: North Bound South Bound East Bound West Bound

Movement:	North Bound			South Bound			East Bound			West Bound		
	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0

Volume Module:

Base Vol:	0	596	356	462	1214	0	315	164	449	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	596	356	462	1214	0	315	164	449	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	596	356	462	1214	0	315	164	449	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	596	356	462	1214	0	315	164	449	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	596	356	462	1214	0	315	164	449	0	0	0

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.32	0.68	1.00	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	2104	1096	1600	0	0	0

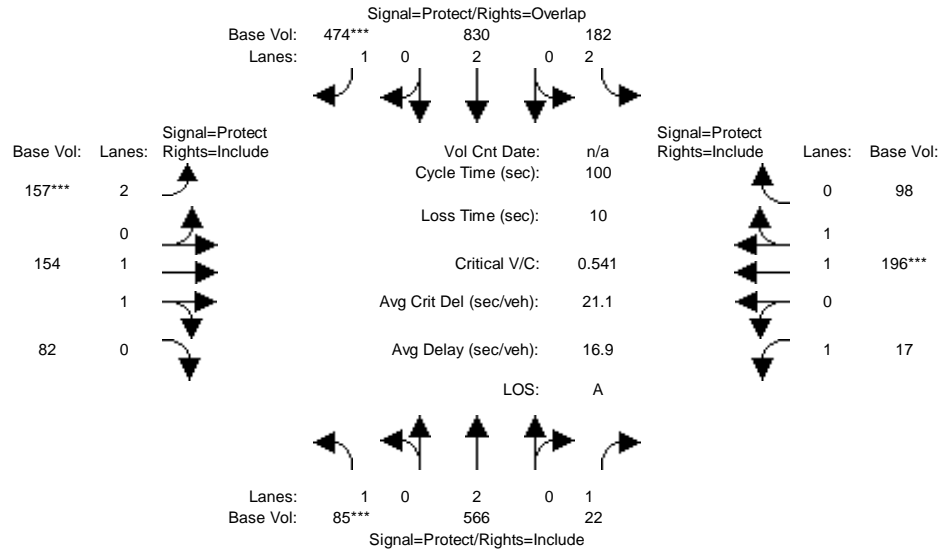
Capacity Analysis Module:

Vol/Sat:	0.00	0.19	0.11	0.08	0.38	0.00	0.15	0.15	0.28	0.00	0.00	0.00
Crit Moves:	***			***	***				***			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday AM

Intersection #16: Central Ave. & Victoria St.

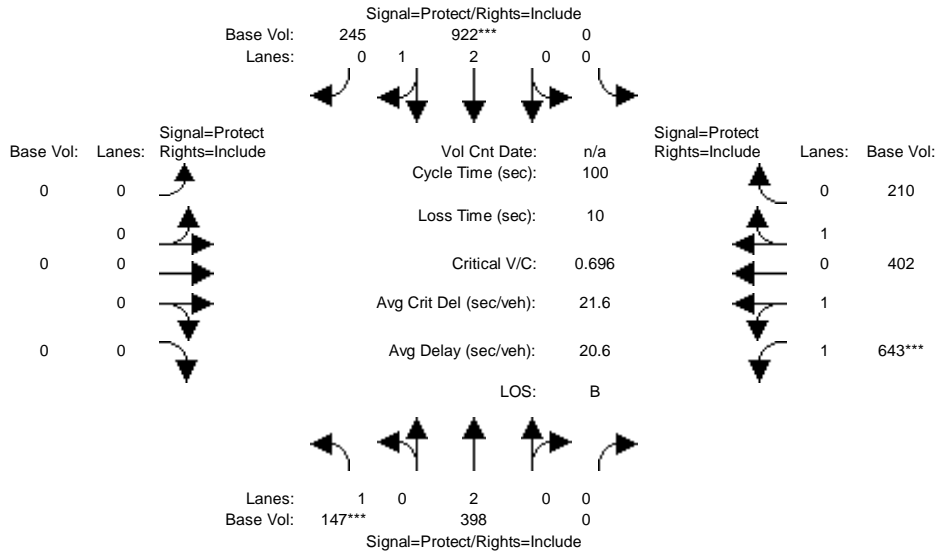


Street Name:	Central Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	85	566	22	182	830	474	157	154	82	17	196	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	85	566	22	182	830	474	157	154	82	17	196	98
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	85	566	22	182	830	474	157	154	82	17	196	98
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	85	566	22	182	830	474	157	154	82	17	196	98
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	85	566	22	182	830	474	157	154	82	17	196	98
OvlAdjVol:	430											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.31	0.69	1.00	1.33	0.67
Final Sat.:	1600	3200	1600	5760	3200	1600	5760	2088	1112	1600	2133	1067
Capacity Analysis Module:												
Vol/Sat:	0.05	0.18	0.01	0.03	0.26	0.30	0.03	0.07	0.07	0.01	0.09	0.09
OvlAdjV/S:	0.27											
Crit Moves:	****				****	****	****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday AM

Intersection #17: Wilmington Ave. & Artesia Blvd. WB

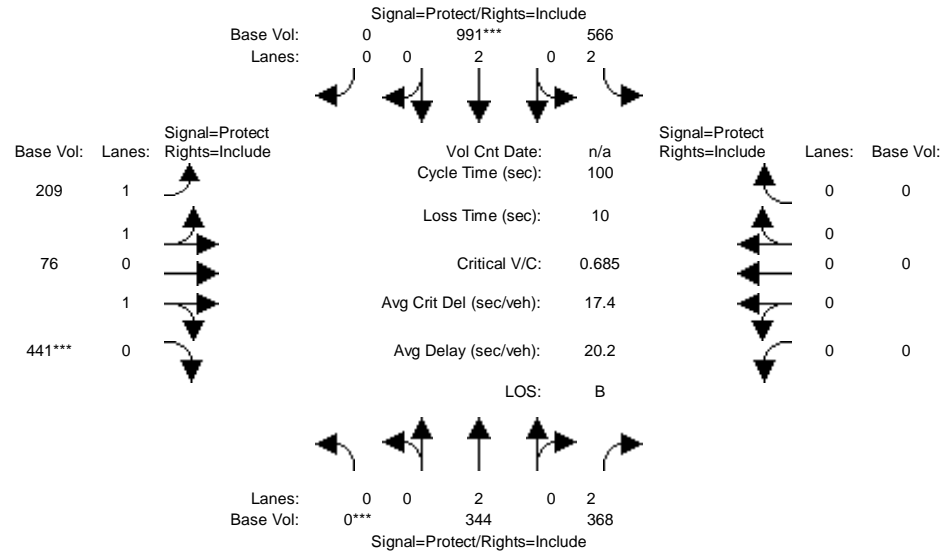


Street Name:	Wilmington Ave.						Artesia Blvd. WB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	147	398	0	0	922	245	0	0	0	643	402	210
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	147	398	0	0	922	245	0	0	0	643	402	210
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	147	398	0	0	922	245	0	0	0	643	402	210
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	147	398	0	0	922	245	0	0	0	643	402	210
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	147	398	0	0	922	245	0	0	0	643	402	210
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.37	0.63	0.00	0.00	0.00	1.54	0.96	0.50
Final Sat.:	1600	3200	0	0	3792	1008	0	0	0	2461	1537	802
Capacity Analysis Module:												
Vol/Sat:	0.09	0.12	0.00	0.00	0.24	0.24	0.00	0.00	0.00	0.26	0.26	0.26
Crit Moves:	***				***					***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday AM

Intersection #18: Wilmington Ave. & Artesia Blvd. EB

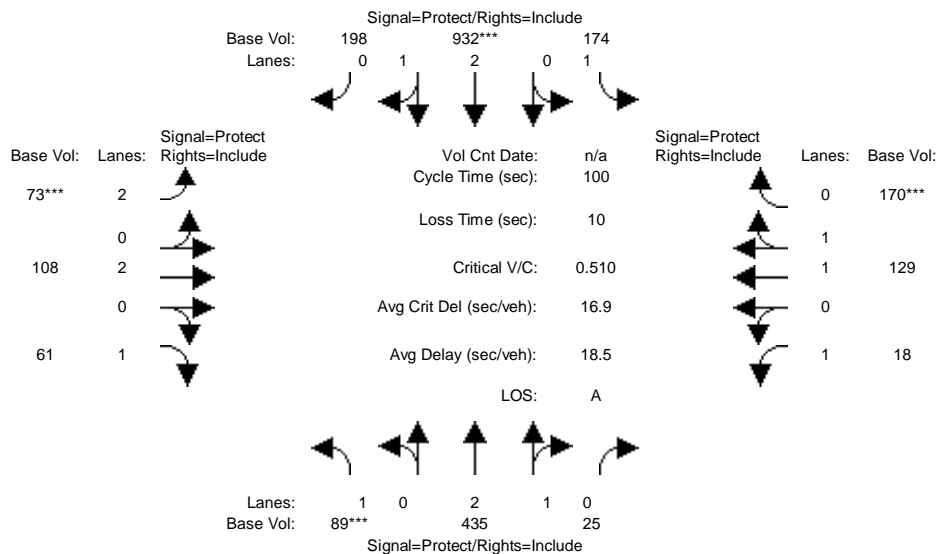


Street Name:	Wilmington Ave.						Artesia Blvd. EB					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	344	368	566	991	0	209	76	441	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	344	368	566	991	0	209	76	441	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	344	368	566	991	0	209	76	441	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	344	368	566	991	0	209	76	441	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	344	368	566	991	0	209	76	441	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.47	0.53	1.00	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	2347	853	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.11	0.12	0.10	0.31	0.00	0.09	0.09	0.28	0.00	0.00	0.00
Crit Moves:	***				***				***			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday AM

Intersection #19: Wilmington Ave. & Victoria St.

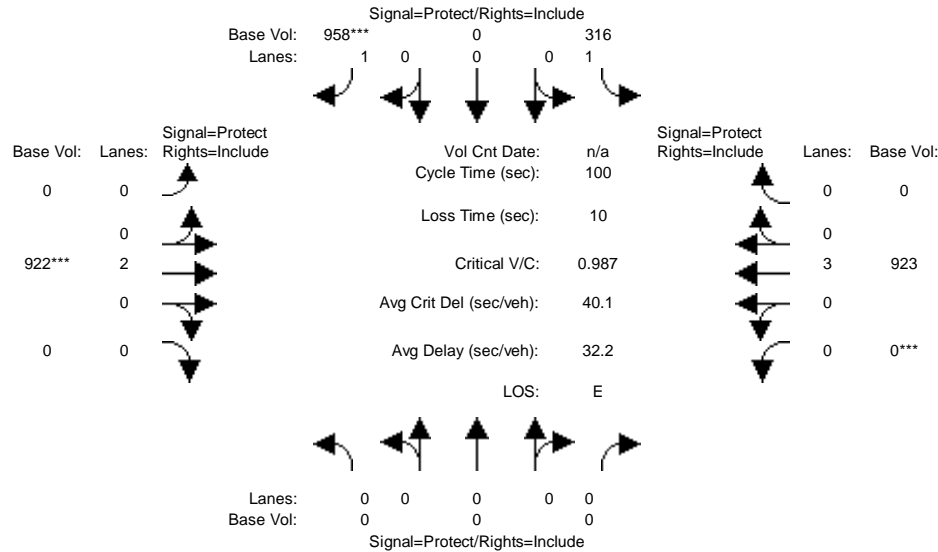


Street Name:	Wilmington Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	89	435	25	174	932	198	73	108	61	18	129	170
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	89	435	25	174	932	198	73	108	61	18	129	170
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	89	435	25	174	932	198	73	108	61	18	129	170
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	89	435	25	174	932	198	73	108	61	18	129	170
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	89	435	25	174	932	198	73	108	61	18	129	170
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.84	0.16	1.00	2.47	0.53	2.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	4539	261	1600	3959	841	5760	3200	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.10	0.10	0.11	0.24	0.24	0.01	0.03	0.04	0.01	0.08	0.11
Crit Moves:	***			***	***		***			***		***

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday AM

Intersection #20: I-110 SB Off-Ramp & 190th St.

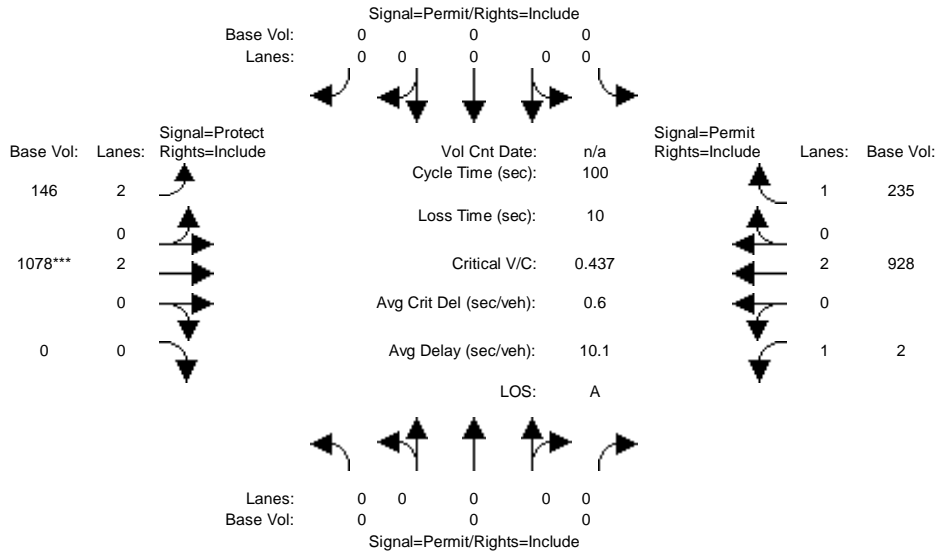


Street Name:	I-110 SB Off-Ramp						190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	316	0	958	0	922	0	0	923	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	316	0	958	0	922	0	0	923	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	316	0	958	0	922	0	0	923	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	316	0	958	0	922	0	0	923	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	316	0	958	0	922	0	0	923	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.20	0.00	0.60	0.00	0.29	0.00	0.00	0.19	0.00
Crit Moves:						***		***			***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday AM

Intersection #21: I-110 NB On-Ramp & 190th St.

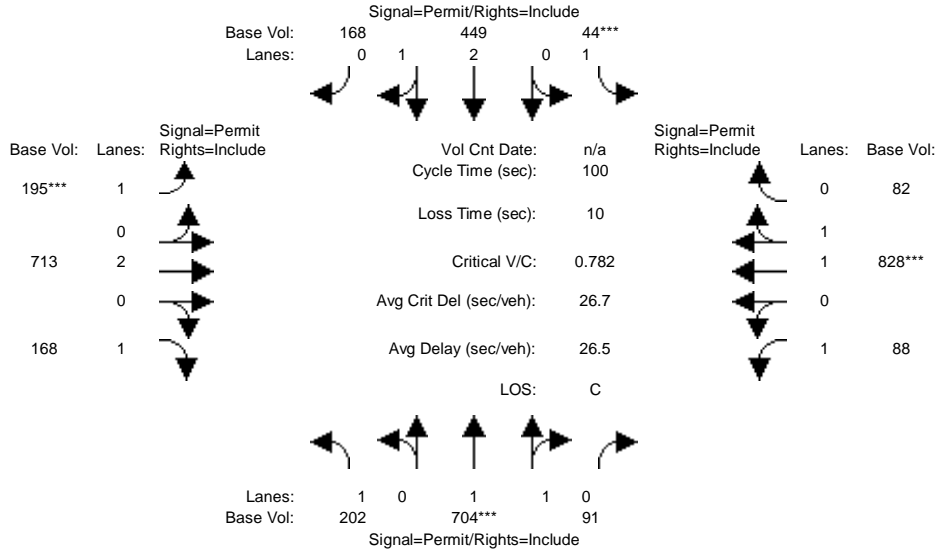


Street Name:	I-110 NB On-Ramp						190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	0	0	0	146	1078	0	2	928	235
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	146	1078	0	2	928	235
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	146	1078	0	2	928	235
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	146	1078	0	2	928	235
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	0	0	0	146	1078	0	2	928	235
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	0	0	0	0	0	5760	3200	0	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.34	0.00	0.00	0.29	0.15
Crit Moves:	****											

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday AM

Intersection #22: Figueroa St. & 190th St./Victoria St.

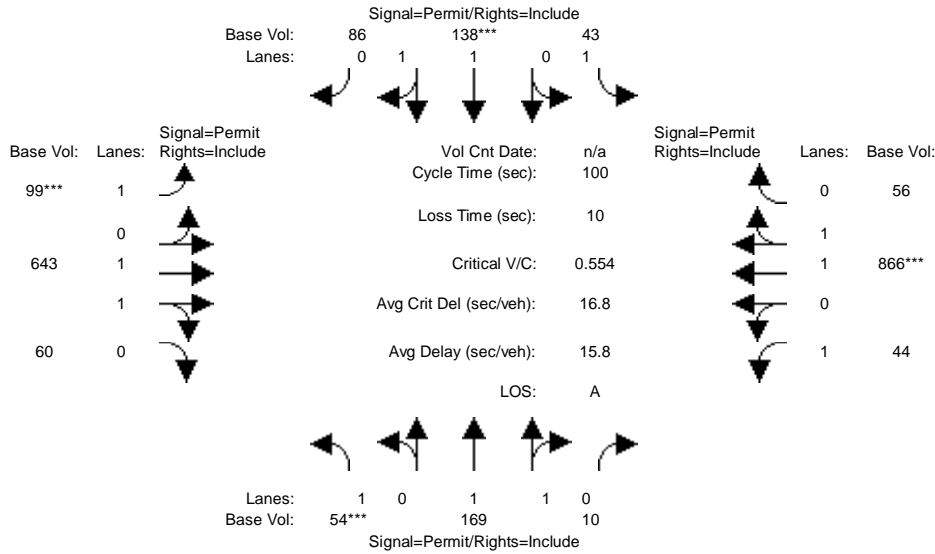


Street Name:	Figueroa St.						190th St./Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	202	704	91	44	449	168	195	713	168	88	828	82
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	202	704	91	44	449	168	195	713	168	88	828	82
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	202	704	91	44	449	168	195	713	168	88	828	82
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	202	704	91	44	449	168	195	713	168	88	828	82
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	202	704	91	44	449	168	195	713	168	88	828	82
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.77	0.23	1.00	2.18	0.82	1.00	2.00	1.00	1.00	1.82	0.18
Final Sat.:	1600	2834	366	1600	3493	1307	1600	3200	1600	1600	2912	288
Capacity Analysis Module:												
Vol/Sat:	0.13	0.25	0.25	0.03	0.13	0.13	0.12	0.22	0.11	0.06	0.28	0.28
Crit Moves:	****			****			****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday AM

Intersection #23: Broadway & Victoria St.

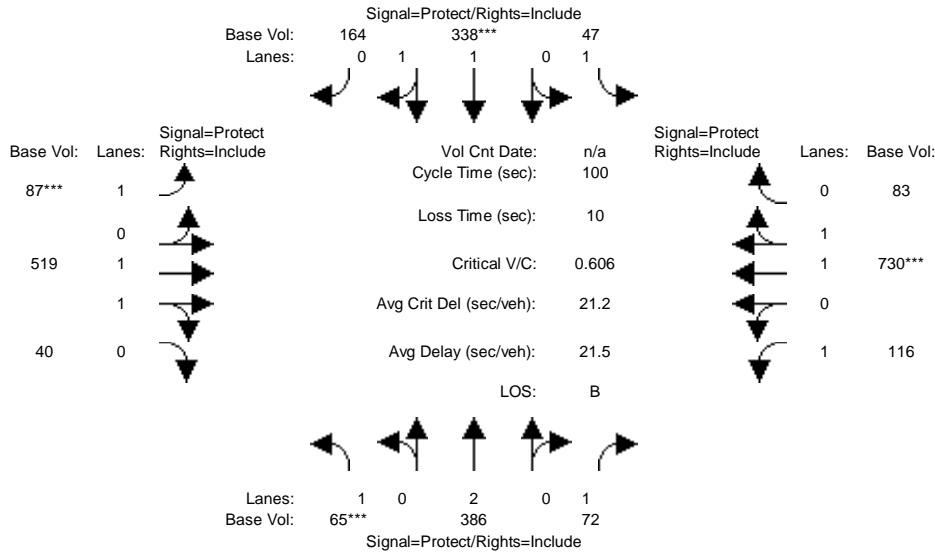


Street Name:	Broadway						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	54	169	10	43	138	86	99	643	60	44	866	56
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	54	169	10	43	138	86	99	643	60	44	866	56
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	54	169	10	43	138	86	99	643	60	44	866	56
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	54	169	10	43	138	86	99	643	60	44	866	56
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	54	169	10	43	138	86	99	643	60	44	866	56
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.89	0.11	1.00	1.23	0.77	1.00	1.83	0.17	1.00	1.88	0.12
Final Sat.:	1600	3021	179	1600	1971	1229	1600	2927	273	1600	3006	194
Capacity Analysis Module:												
Vol/Sat:	0.03	0.06	0.06	0.03	0.07	0.07	0.06	0.22	0.22	0.03	0.29	0.29
Crit Moves:	***				***		***				***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday AM

Intersection #24: Main St. & Victoria St.

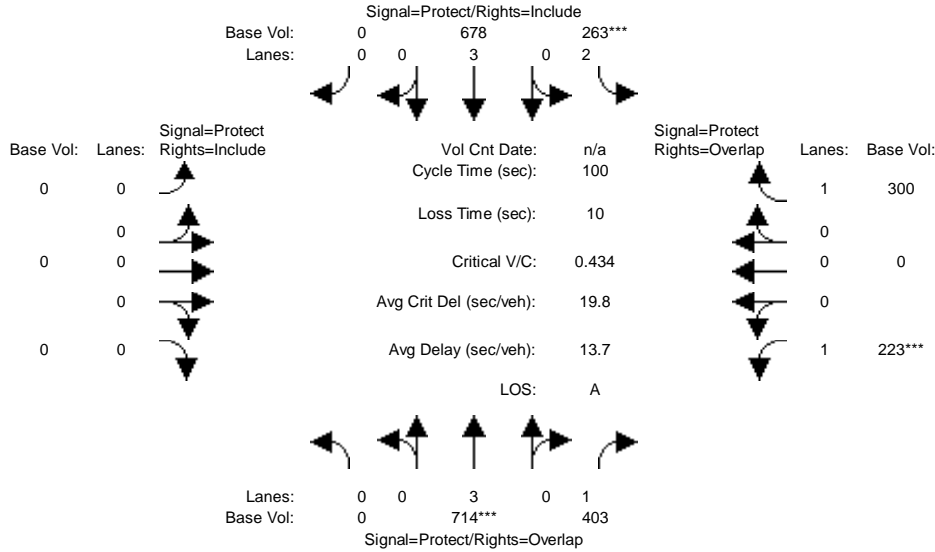


Street Name:	Main St.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	65	386	72	47	338	164	87	519	40	116	730	83
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	65	386	72	47	338	164	87	519	40	116	730	83
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	65	386	72	47	338	164	87	519	40	116	730	83
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	65	386	72	47	338	164	87	519	40	116	730	83
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	65	386	72	47	338	164	87	519	40	116	730	83
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.35	0.65	1.00	1.86	0.14	1.00	1.80	0.20
Final Sat.:	1600	3200	1600	1600	2155	1045	1600	2971	229	1600	2873	327
Capacity Analysis Module:												
Vol/Sat:	0.04	0.12	0.05	0.03	0.16	0.16	0.05	0.17	0.17	0.07	0.25	0.25
Crit Moves:	***				***		***				***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday AM

Intersection #25: Avalon Blvd. & University Dr.

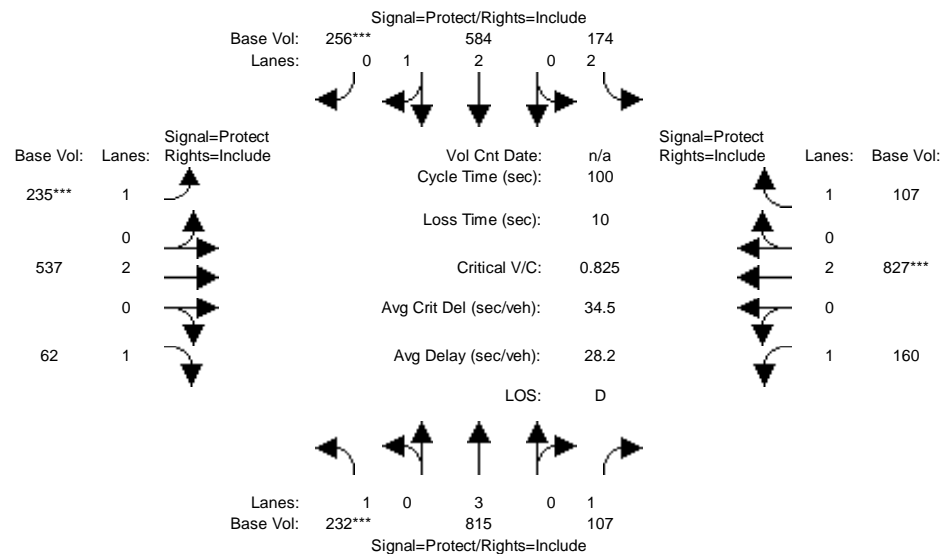


Street Name:	Avalon Blvd.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	714	403	263	678	0	0	0	0	223	0	300
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	714	403	263	678	0	0	0	0	223	0	300
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	714	403	263	678	0	0	0	0	223	0	300
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	714	403	263	678	0	0	0	0	223	0	300
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	714	403	263	678	0	0	0	0	223	0	300
OvlAdjVol:	180									227		
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.15	0.25	0.05	0.14	0.00	0.00	0.00	0.00	0.14	0.00	0.19
OvlAdjV/S:	0.11									0.14		
Crit Moves:	****			****						****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday AM

Intersection #26: Avalon Blvd. & Del Amo Blvd.

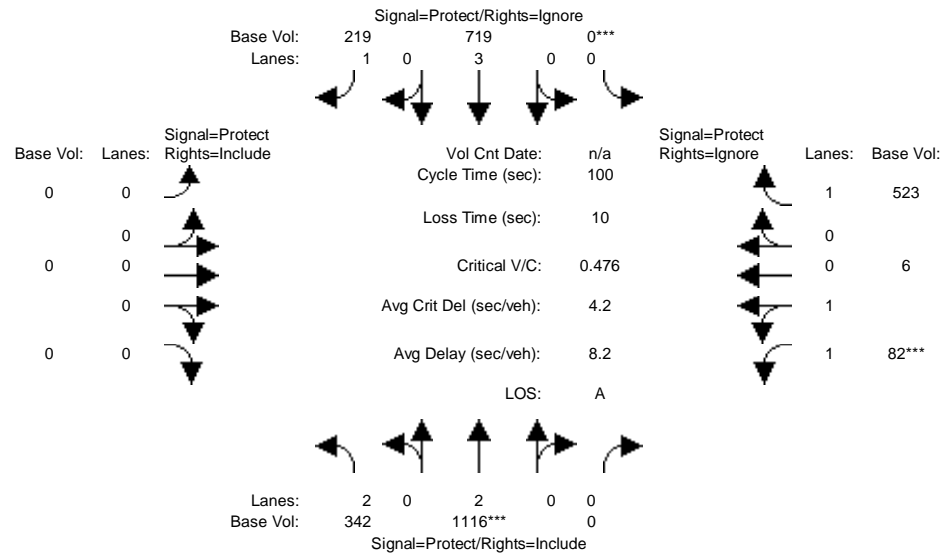


Street Name:	Avalon Blvd.						Del Amo Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	232	815	107	174	584	256	235	537	62	160	827	107
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	232	815	107	174	584	256	235	537	62	160	827	107
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	232	815	107	174	584	256	235	537	62	160	827	107
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	232	815	107	174	584	256	235	537	62	160	827	107
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	232	815	107	174	584	256	235	537	62	160	827	107
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.09	0.91	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	3337	1463	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.15	0.17	0.07	0.03	0.17	0.18	0.15	0.17	0.04	0.10	0.26	0.07
Crit Moves:	***					***	***				***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday AM

Intersection #27: Avalon Blvd. & I-405 NB Ramps

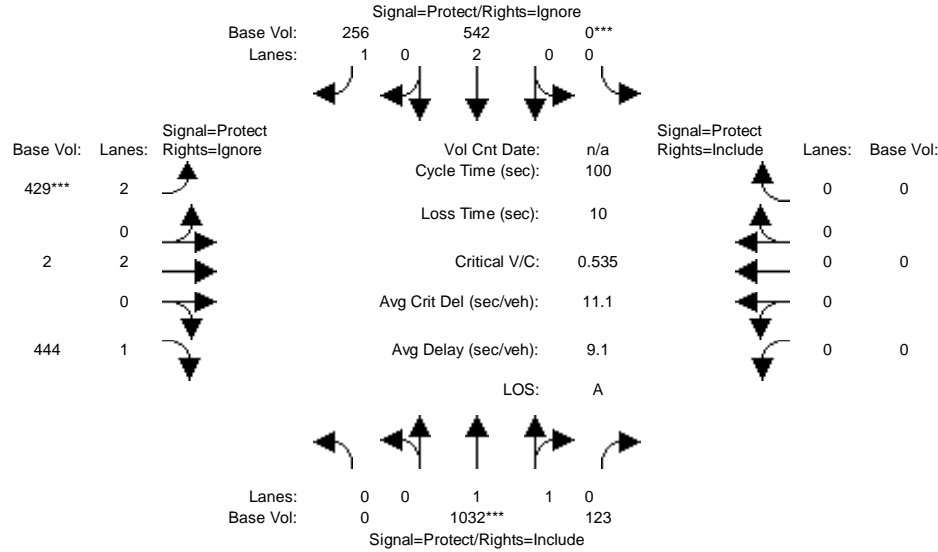


Street Name:	Avalon Blvd.						I-405 NB Ramps						
	North Bound			South Bound			East Bound			West Bound			
Approach:	L	T	R	L	T	R	L	T	R	L	T	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Volume Module:													
Base Vol:	342	1116	0	0	0	719	219	0	0	0	82	6	523
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	342	1116	0	0	0	719	219	0	0	0	82	6	523
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	342	1116	0	0	0	719	0	0	0	0	82	6	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	342	1116	0	0	0	719	0	0	0	0	82	6	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Volume:	342	1116	0	0	0	719	0	0	0	0	82	6	0
Saturation Flow Module:													
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.86	0.14	1.00	1.00
Final Sat.:	5760	3200	0	0	4800	1600	0	0	0	2982	218	1600	1600
Capacity Analysis Module:													
Vol/Sat:	0.06	0.35	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.03	0.03	0.00	0.00
Crit Moves:	****			****						****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday AM

Intersection #28: Avalon Blvd. & I-405 SB Ramps

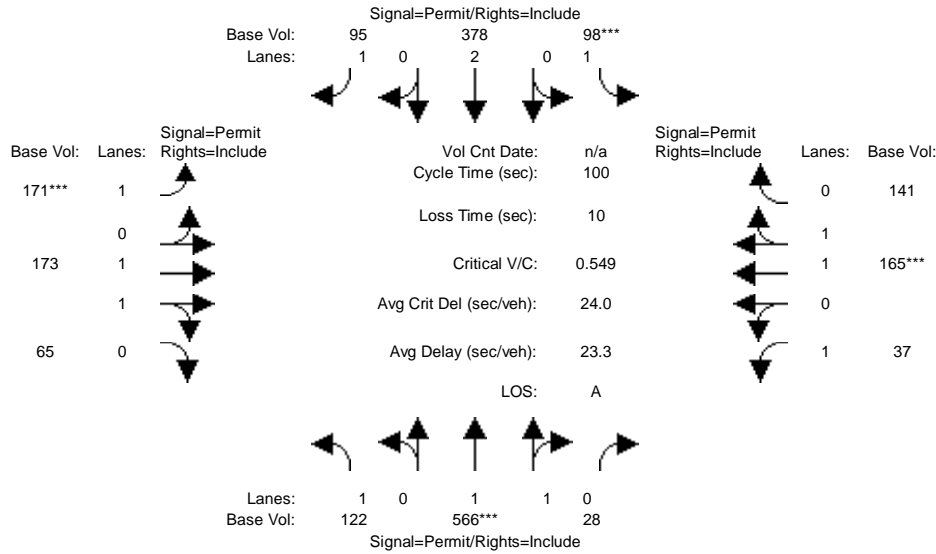


Street Name:	Avalon Blvd.						I-405 SB Ramps					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1032	123	0	542	256	429	2	444	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1032	123	0	542	256	429	2	444	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	1032	123	0	542	0	429	2	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1032	123	0	542	0	429	2	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Volume:	0	1032	123	0	542	0	429	2	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.79	0.21	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	0	2859	341	0	3200	1600	5760	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.36	0.36	0.00	0.17	0.00	0.07	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday AM

Intersection #29: Central Ave. & University Dr.

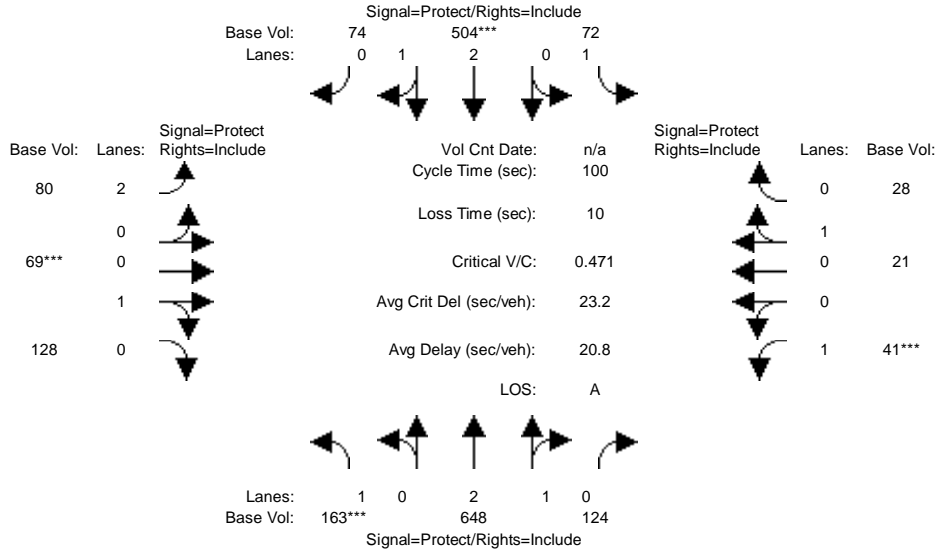


Street Name:	Central Ave.						University Dr.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	122	566	28	98	378	95	171	173	65	37	165	141
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	122	566	28	98	378	95	171	173	65	37	165	141
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	122	566	28	98	378	95	171	173	65	37	165	141
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	122	566	28	98	378	95	171	173	65	37	165	141
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	122	566	28	98	378	95	171	173	65	37	165	141
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.91	0.09	1.00	2.00	1.00	1.00	1.45	0.55	1.00	1.08	0.92
Final Sat.:	1600	3049	151	1600	3200	1600	1600	2326	874	1600	1725	1475
Capacity Analysis Module:												
Vol/Sat:	0.08	0.19	0.19	0.06	0.12	0.06	0.11	0.07	0.07	0.02	0.10	0.10
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday AM

Intersection #30: Wilmington Ave. & University Dr.

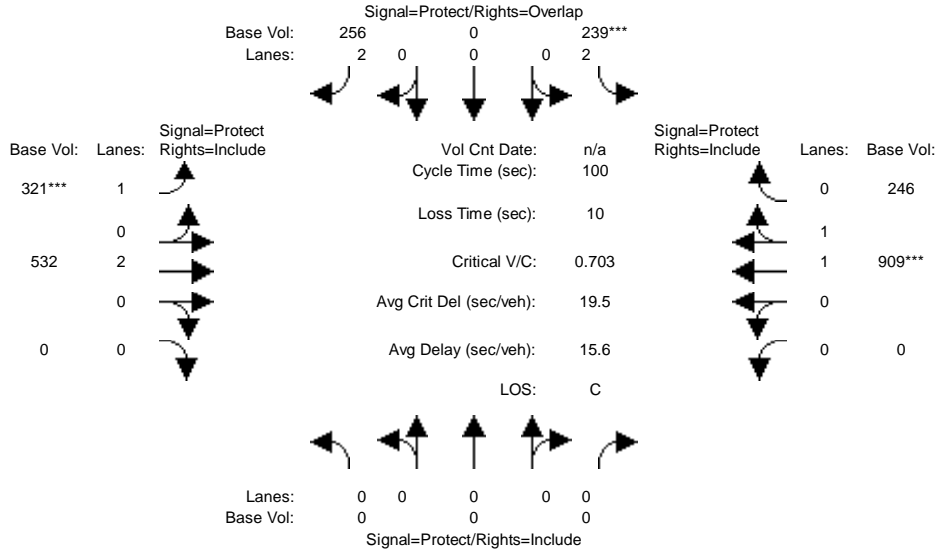


Street Name:	Wilmington Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	163	648	124	72	504	74	80	69	128	41	21	28
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	163	648	124	72	504	74	80	69	128	41	21	28
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	163	648	124	72	504	74	80	69	128	41	21	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	163	648	124	72	504	74	80	69	128	41	21	28
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	163	648	124	72	504	74	80	69	128	41	21	28
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.52	0.48	1.00	2.62	0.38	2.00	0.35	0.65	1.00	0.43	0.57
Final Sat.:	1600	4029	771	1600	4185	615	5760	560	1040	1600	686	914
Capacity Analysis Module:												
Vol/Sat:	0.10	0.16	0.16	0.05	0.12	0.12	0.01	0.12	0.12	0.03	0.03	0.03
Crit Moves:	***				***			***			***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday AM

Intersection #31: Central Ave. & Del Amo Blvd.

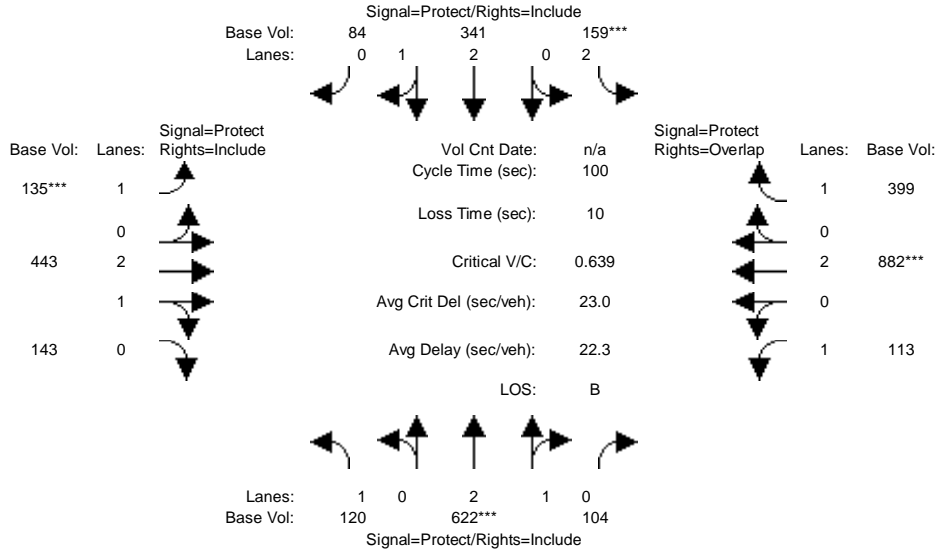


Street Name:	Central Ave.						Del Amo Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	239	0	256	321	532	0	0	909	246
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	239	0	256	321	532	0	0	909	246
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	239	0	256	321	532	0	0	909	246
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	239	0	256	321	532	0	0	909	246
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	239	0	256	321	532	0	0	909	246
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	2.00	1.00	2.00	0.00	0.00	1.57	0.43
Final Sat.:	0	0	0	5760	0	3200	1600	3200	0	0	2518	682
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.04	0.00	0.08	0.20	0.17	0.00	0.00	0.36	0.36
OvlAdjV/S:	0.00											
Crit Moves:				****				****				****

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday AM

Intersection #32: Wilmington Ave. & Del Amo Blvd.

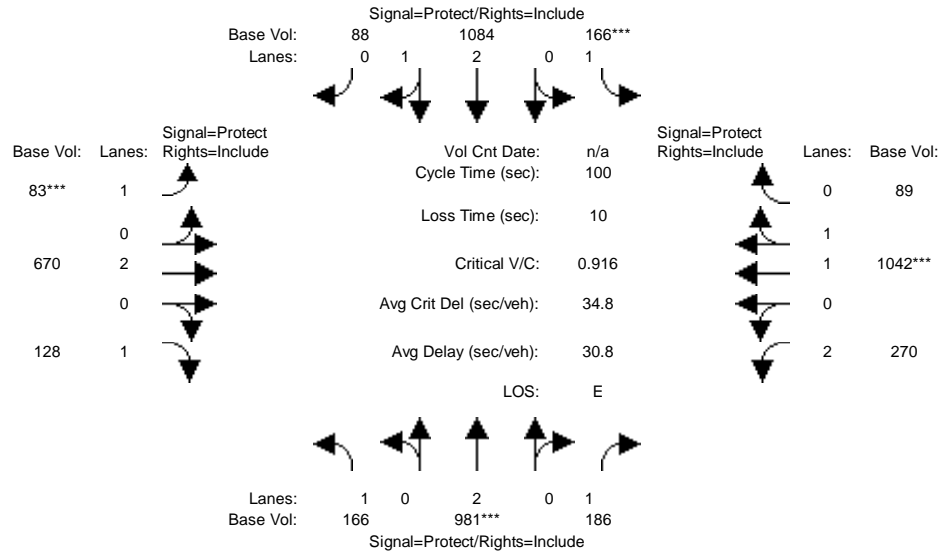


Street Name:	Wilmington Ave.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	120	622	104	159	341	84	135	443	143	113	882	399
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	120	622	104	159	341	84	135	443	143	113	882	399
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	120	622	104	159	341	84	135	443	143	113	882	399
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	622	104	159	341	84	135	443	143	113	882	399
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	120	622	104	159	341	84	135	443	143	113	882	399
OvlAdjVol:												355
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.57	0.43	2.00	2.41	0.59	1.00	2.27	0.73	1.00	2.00	1.00
Final Sat.:	1600	4112	688	5760	3851	949	1600	3629	1171	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.15	0.15	0.03	0.09	0.09	0.08	0.12	0.12	0.07	0.28	0.25
OvlAdjV/S:												0.22
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday AM

Intersection #33: W. Artesia Blvd. & Crenshaw Blvd.

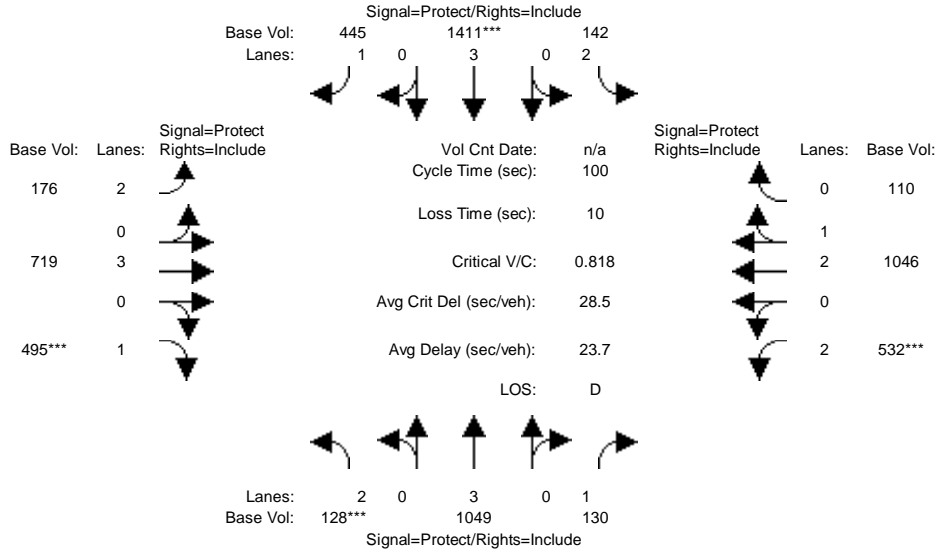


Street Name:	Crenshaw Blvd.						W. Artesia Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	166	981	186	166	1084	88	83	670	128	270	1042	89
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	166	981	186	166	1084	88	83	670	128	270	1042	89
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	166	981	186	166	1084	88	83	670	128	270	1042	89
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	166	981	186	166	1084	88	83	670	128	270	1042	89
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	166	981	186	166	1084	88	83	670	128	270	1042	89
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.77	0.23	1.00	2.00	1.00	2.00	1.84	0.16
Final Sat.:	1600	3200	1600	1600	4440	360	1600	3200	1600	5760	2948	252
Capacity Analysis Module:												
Vol/Sat:	0.10	0.31	0.12	0.10	0.24	0.24	0.05	0.21	0.08	0.05	0.35	0.35
Crit Moves:	****			****			****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday AM

Intersection #34: W 190th St. & South Western Ave.

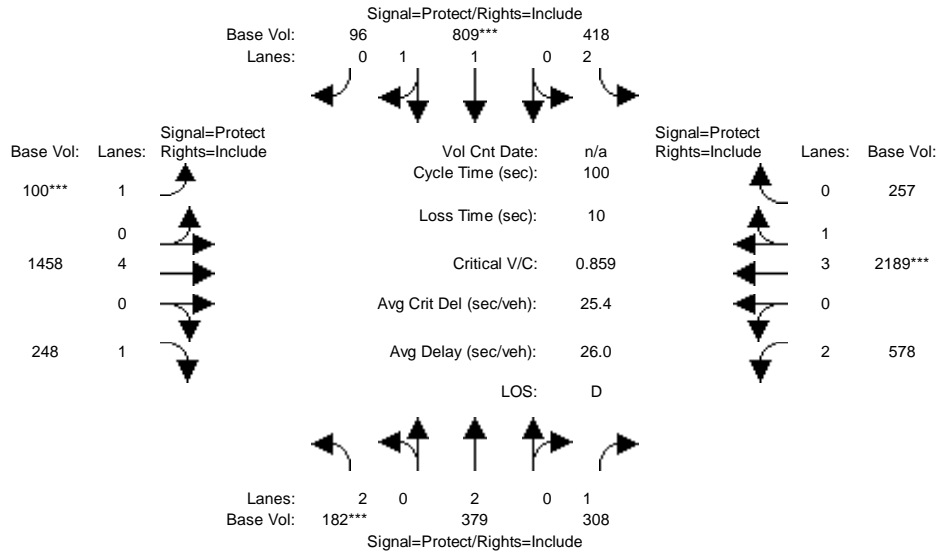


Street Name:	S. Western Ave.						W. 190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	128	1049	130	142	1411	445	176	719	495	532	1046	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	128	1049	130	142	1411	445	176	719	495	532	1046	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	128	1049	130	142	1411	445	176	719	495	532	1046	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	128	1049	130	142	1411	445	176	719	495	532	1046	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	128	1049	130	142	1411	445	176	719	495	532	1046	110
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.71	0.29
Final Sat.:	5760	4800	1600	5760	4800	1600	5760	4800	1600	5760	4343	457
Capacity Analysis Module:												
Vol/Sat:	0.02	0.22	0.08	0.02	0.29	0.28	0.03	0.15	0.31	0.09	0.24	0.24
Crit Moves:	***			***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday AM

Intersection #35: W. Artesia Blvd. & Vermont Av.e

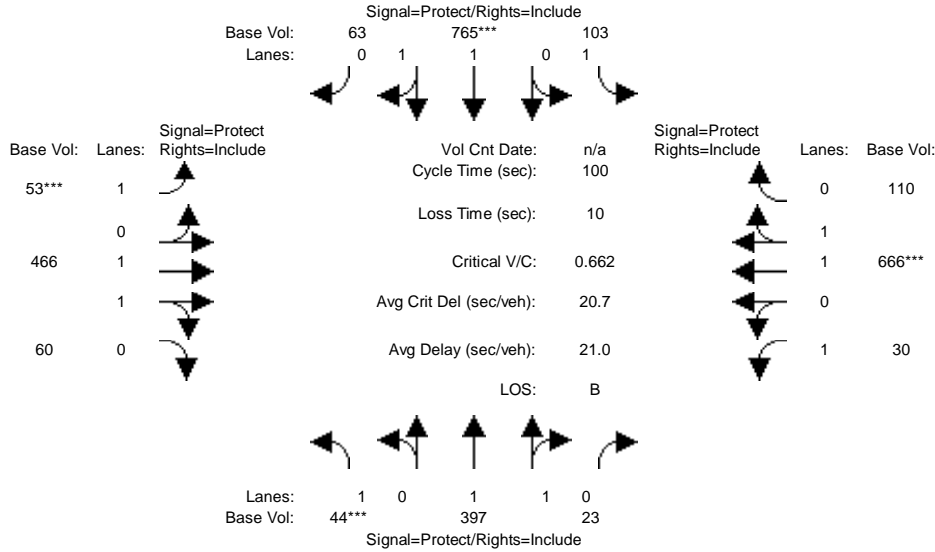


Street Name:	Vermont Ave.						W. Artesia Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	182	379	308	418	809	96	100	1458	248	578	2189	257
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	182	379	308	418	809	96	100	1458	248	578	2189	257
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	182	379	308	418	809	96	100	1458	248	578	2189	257
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	182	379	308	418	809	96	100	1458	248	578	2189	257
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	182	379	308	418	809	96	100	1458	248	578	2189	257
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	1.79	0.21	1.00	4.00	1.00	2.00	3.58	0.42
Final Sat.:	5760	3200	1600	5760	2861	339	1600	6400	1600	5760	5728	672
Capacity Analysis Module:												
Vol/Sat:	0.03	0.12	0.19	0.07	0.28	0.28	0.06	0.23	0.16	0.10	0.38	0.38
Crit Moves:	***				***		***				***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday AM

Intersection #36: Alameda St. & Compton Blvd.

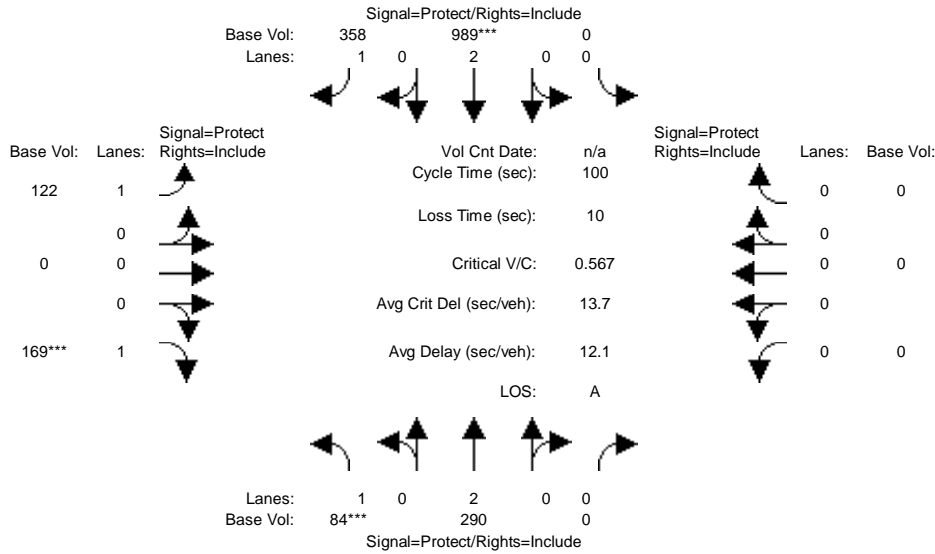


Street Name:	Alameda St.						Compton Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	44	397	23	103	765	63	53	466	60	30	666	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	44	397	23	103	765	63	53	466	60	30	666	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	44	397	23	103	765	63	53	466	60	30	666	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	44	397	23	103	765	63	53	466	60	30	666	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	44	397	23	103	765	63	53	466	60	30	666	110
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.89	0.11	1.00	1.85	0.15	1.00	1.77	0.23	1.00	1.72	0.28
Final Sat.:	1600	3025	175	1600	2957	243	1600	2835	365	1600	2746	454
Capacity Analysis Module:												
Vol/Sat:	0.03	0.13	0.13	0.06	0.26	0.26	0.03	0.16	0.16	0.02	0.24	0.24
Crit Moves:	***				***		***				***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday AM

Intersection #37: Alameda St. & SR 91 EB Ramps

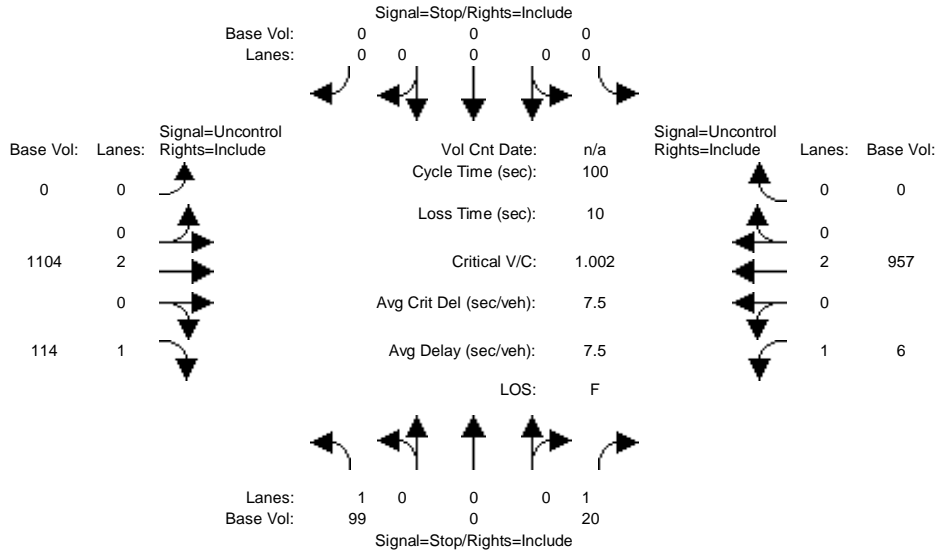


Street Name:	Alameda St.						SR 91 EB Ramps					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	84	290	0	0	989	358	122	0	169	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	84	290	0	0	989	358	122	0	169	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	84	290	0	0	989	358	122	0	169	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	84	290	0	0	989	358	122	0	169	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	84	290	0	0	989	358	122	0	169	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	3200	0	0	3200	1600	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.09	0.00	0.00	0.31	0.22	0.08	0.00	0.11	0.00	0.00	0.00
Crit Moves:	***				***				***			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
Existing Weekday PM

Intersection #1: Victoria St. & Drive D



Street Name:	Drive D						Victoria St..					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	99	0	20	0	0	0	0	1104	114	6	957	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	99	0	20	0	0	0	0	1104	114	6	957	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	99	0	20	0	0	0	0	1104	114	6	957	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	99	0	20	0	0	0	0	1104	114	6	957	0
Critical Gap Module:												
Critical Gp:	6.8	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	1595	xxxx	552	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1218	xxxx	xxxxx
Potent Cap.:	100	xxxx	483	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	580	xxxx	xxxxx
Move Cap.:	99	xxxx	483	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	580	xxxx	xxxxx
Volume/Cap:	1.00	xxxx	0.04	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	6.1	xxxx	0.1	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:	170.1	xxxx	12.8	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	11.3	xxxx	xxxxx
LOS by Move:	F	*	B	*	*	*	*	*	*	B	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shared Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	143.6			xxxxxxx			xxxxxxx			xxxxxxx		

ApproachLOS: F * * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #1 Victoria St. & Drive D

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 2 0 1	1 0 2 0 0
Initial Vol:	99 0 20	0 0 0	0 1104 114	6 957 0
ApproachDel:	143.6	xxxxxx	xxxxxx	xxxxxx

Approach[northbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=4.7]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=119]

FAIL - Approach volume less than 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=2300]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #1 Victoria St. & Drive D

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 2 0 1	1 0 2 0 0
Initial Vol:	99 0 20	0 0 0	0 1104 114	6 957 0

Major Street Volume: 2181

Minor Approach Volume: 119

Minor Approach Volume Threshold: 39 [less than minimum of 150]

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

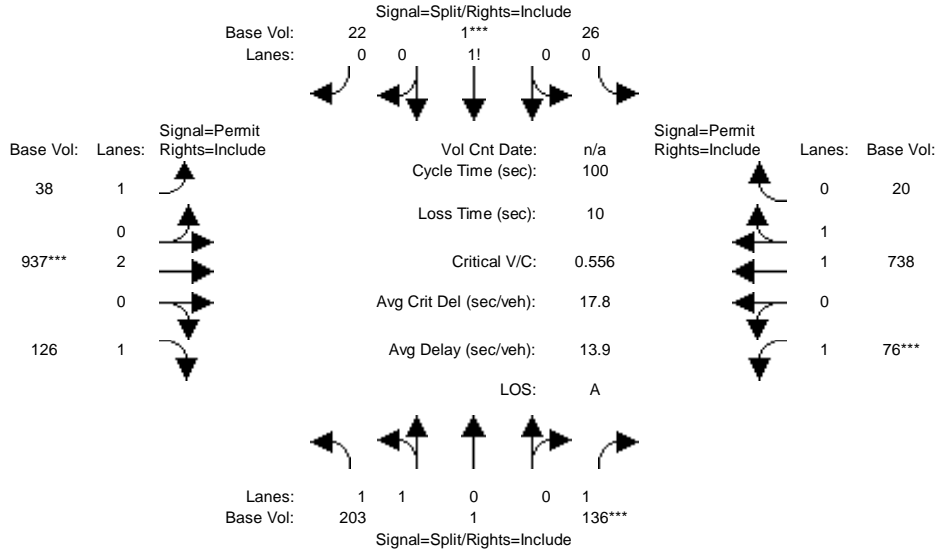
The peak hour warrant analysis in this report is not intended to replace

a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday PM

Intersection #2: Victoria St. & Tamcliff Ave.

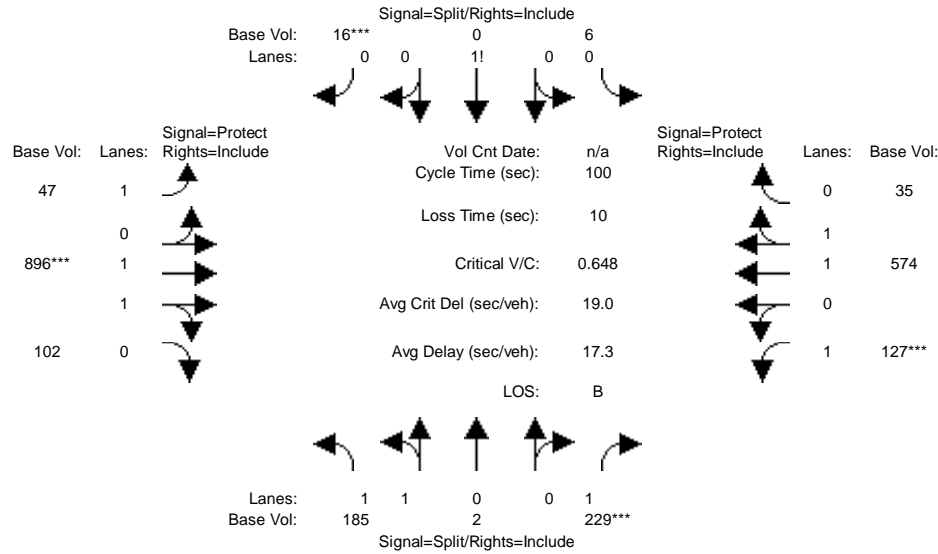


Street Name:	Victoria St.						Tamcliff Ave.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	203	1	136	26	1	22	38	937	126	76	738	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	203	1	136	26	1	22	38	937	126	76	738	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	203	1	136	26	1	22	38	937	126	76	738	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	203	1	136	26	1	22	38	937	126	76	738	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	203	1	136	26	1	22	38	937	126	76	738	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.99	0.01	1.00	0.53	0.02	0.45	1.00	2.00	1.00	1.00	1.95	0.05
Final Sat.:	3184	16	1600	849	33	718	1600	3200	1600	1600	3116	84
Capacity Analysis Module:												
Vol/Sat:	0.06	0.06	0.09	0.03	0.03	0.03	0.02	0.29	0.08	0.05	0.24	0.24
Crit Moves:			****		****			****		****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday PM

Intersection #3: Victoria St. & Birchknoll Dr.

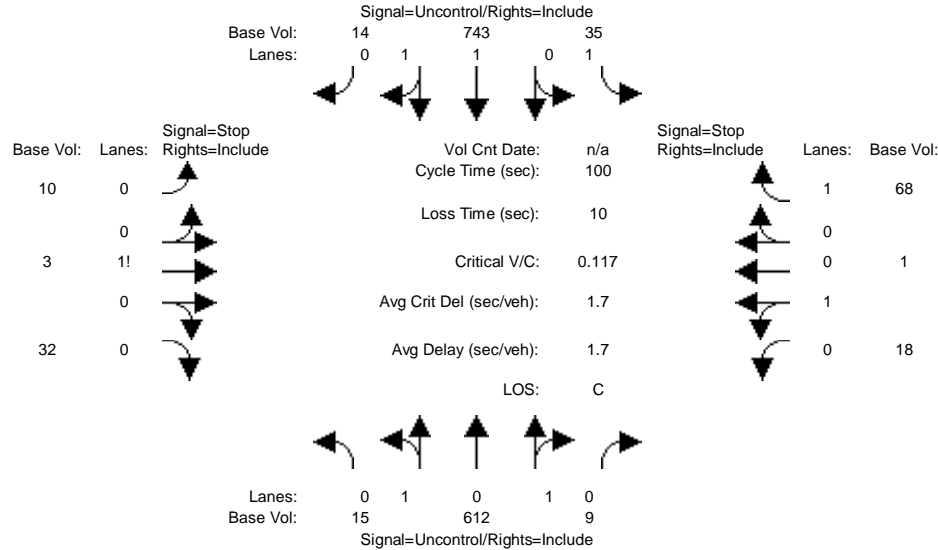


Street Name:	Victoria St.						Birchknoll Dr.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	185	2	229	6	0	16	47	896	102	127	574	35
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	185	2	229	6	0	16	47	896	102	127	574	35
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	185	2	229	6	0	16	47	896	102	127	574	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	185	2	229	6	0	16	47	896	102	127	574	35
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	185	2	229	6	0	16	47	896	102	127	574	35
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.98	0.02	1.00	0.27	0.00	0.73	1.00	1.80	0.20	1.00	1.89	0.11
Final Sat.:	3166	34	1600	436	0	1164	1600	2873	327	1600	3016	184
Capacity Analysis Module:												
Vol/Sat:	0.06	0.06	0.14	0.01	0.00	0.01	0.03	0.31	0.31	0.08	0.19	0.19
Crit Moves:			***			***		***		***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
Existing Weekday PM

Intersection #5: Central Ave. & Charles Willard St.



Street Name:	Central Ave.						Charles Willard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	15	612	9	35	743	14	10	3	32	18	1	68
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	15	612	9	35	743	14	10	3	32	18	1	68
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	15	612	9	35	743	14	10	3	32	18	1	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	15	612	9	35	743	14	10	3	32	18	1	68
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	4.1	xxxx	xxxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxxx	2.2	xxxx	xxxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflct Vol:	757	xxxx	xxxxxx	621	xxxx	xxxxxx	1157	1471	379	1090	1474	311
Potent Cap.:	863	xxxx	xxxxxx	969	xxxx	xxxxxx	154	128	625	172	128	691
Move Cap.:	863	xxxx	xxxxxx	969	xxxx	xxxxxx	132	122	625	154	121	691
Volume/Cap:	0.02	xxxx	xxxx	0.04	xxxx	xxxx	0.08	0.02	0.05	0.12	0.01	0.10
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxxx	0.1	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	0.3
Control Del:	9.2	xxxx	xxxxxx	8.9	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	10.8
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	B
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	297	xxxxxx	152	xxxx	xxxxxx
Shared Queue:	0.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	0.5	xxxxxx	0.4	xxxx	xxxxxx
Shrd ConDel:	9.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	19.3	xxxxxx	32.1	xxxx	xxxxxx
Shared LOS:	A	*	*	*	*	*	*	C	*	D	*	*

ApproachDel:	xxxxxx	xxxxxx	19.3	15.4
ApproachLOS:	*	*	C	C

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #5 Central Ave. & Charles Willard St.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 1 0 1 0	1 0 1 1 0	0 0 1! 0 0	0 1 0 0 1
Initial Vol:	15 612 9	35 743 14	10 3 32	18 1 68
ApproachDel:	xxxxxx	xxxxxx	19.3	15.4

Approach[eastbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.2]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=45]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=1560]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Approach[westbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.4]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=87]

FAIL - Approach volume less than 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=1560]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #5 Central Ave. & Charles Willard St.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 1 0 1 0	1 0 1 1 0	0 0 1! 0 0	0 1 0 0 1
Initial Vol:	15 612 9	35 743 14	10 3 32	18 1 68
Major Street Volume:	1428			
Minor Approach Volume:	87			

Minor Approach Volume Threshold: 221

SIGNAL WARRANT DISCLAIMER

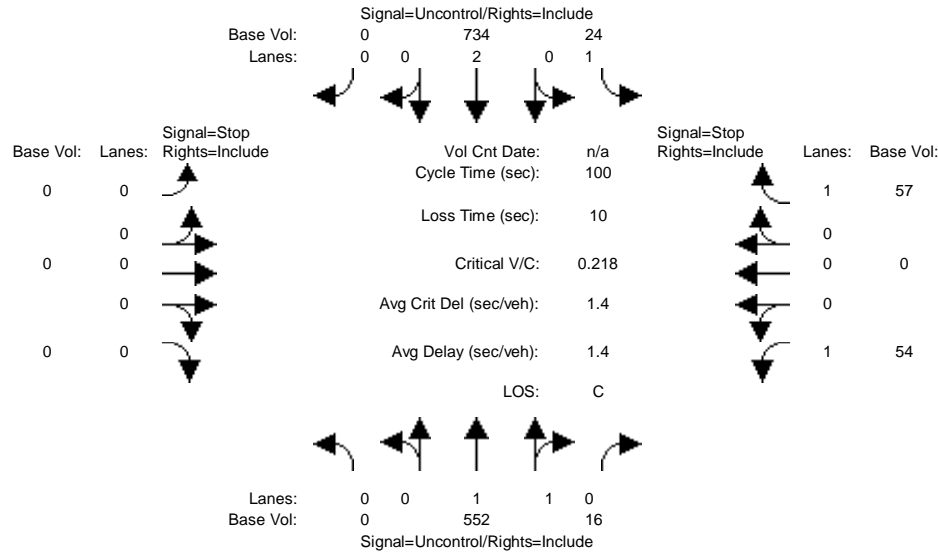
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
Existing Weekday PM

Intersection #6: Central Ave. & Project Driveway/Beachey Pl.



Street Name:	Central Ave.						Beachey Pl.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	552	16	24	734	0	0	0	0	54	0	57
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	552	16	24	734	0	0	0	0	54	0	57
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	552	16	24	734	0	0	0	0	54	0	57
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	0	552	16	24	734	0	0	0	0	54	0	57
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	xxxx	6.9
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3
Capacity Module:												
Cnflct Vol:	xxxx	xxxx	xxxxx	568	xxxx	xxxxx	xxxx	xxxx	xxxxx	975	xxxx	284
Potent Cap.:	xxxx	xxxx	xxxxx	1014	xxxx	xxxxx	xxxx	xxxx	xxxxx	252	xxxx	719
Move Cap.:	xxxx	xxxx	xxxxx	1014	xxxx	xxxxx	xxxx	xxxx	xxxxx	248	xxxx	719
Volume/Cap:	xxxx	xxxx	xxxx	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	0.22	xxxx	0.08
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.8	xxxx	0.3
Control Del:	xxxxx	xxxx	xxxxx	8.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx	23.5	xxxx	10.4
LOS by Move:	*	*	*	A	*	*	*	*	*	C	*	B
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shared Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*

ApproachDel:	xxxxxx	xxxxxx	xxxxxx	16.8
ApproachLOS:	*	*	*	C

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #6 Central Ave. & Project Driveway/Beachey Pl.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 0 1 1 0	1 0 2 0 0	0 0 0 0 0	1 0 0 0 1
Initial Vol:	0 552 16	24 734 0	0 0 0 0	54 0 57
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	16.8

Approach[westbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.5]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=111]

FAIL - Approach volume less than 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=1437]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #6 Central Ave. & Project Driveway/Beachey Pl.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 0 1 1 0	1 0 2 0 0	0 0 0 0 0	1 0 0 0 1
Initial Vol:	0 552 16	24 734 0	0 0 0 0	54 0 57

Major Street Volume: 1326
 Minor Approach Volume: 111
 Minor Approach Volume Threshold: 253

SIGNAL WARRANT DISCLAIMER

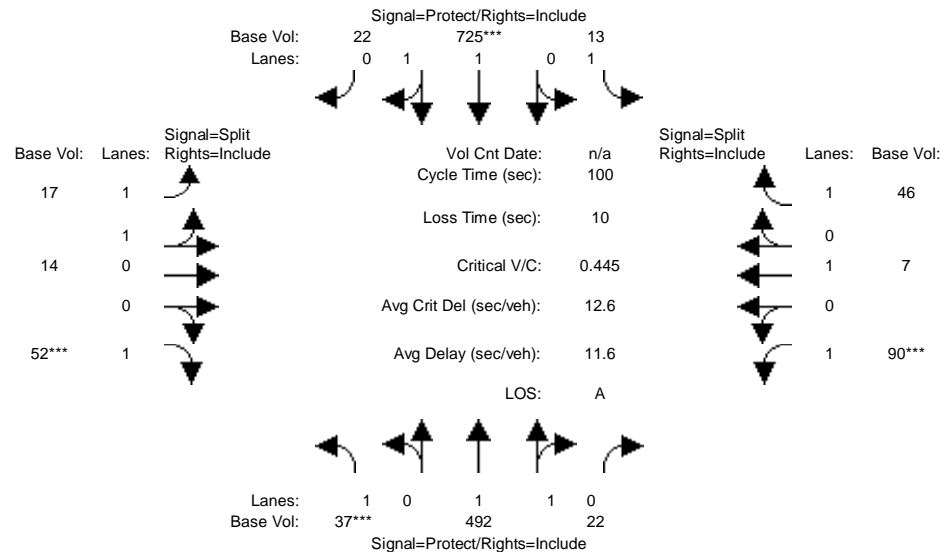
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday PM

Intersection #7: Central Ave. & Glenn Curtiss St.

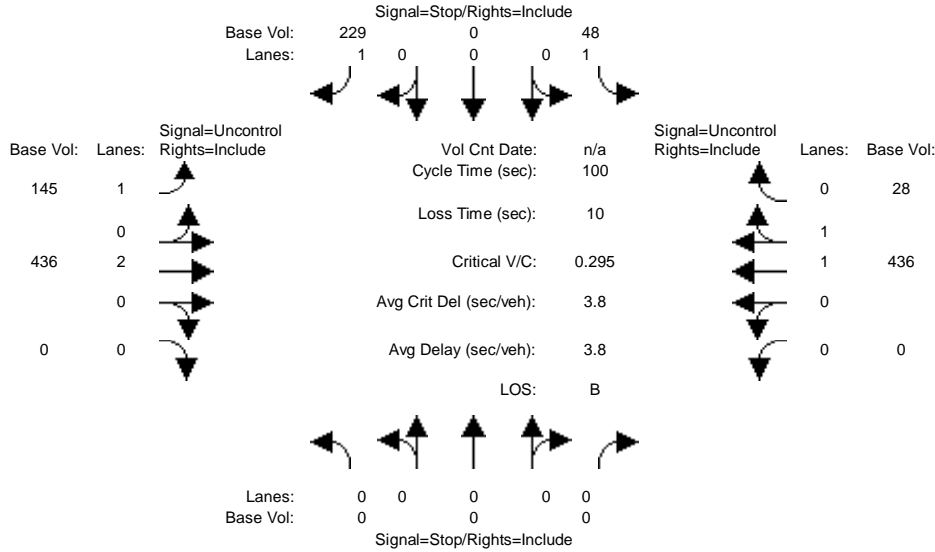


Street Name:	Central Ave.						Glenn Curtiss St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	37	492	22	13	725	22	17	14	52	90	7	46
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	37	492	22	13	725	22	17	14	52	90	7	46
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	37	492	22	13	725	22	17	14	52	90	7	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	37	492	22	13	725	22	17	14	52	90	7	46
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	37	492	22	13	725	22	17	14	52	90	7	46
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.91	0.09	1.00	1.94	0.06	1.10	0.90	1.00	1.00	1.00	1.00
Final Sat.:	1600	3063	137	1600	3106	94	1755	1445	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.16	0.16	0.01	0.23	0.23	0.01	0.01	0.03	0.06	0.00	0.03
Crit Moves:	***			***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
Existing Weekday PM

Intersection #9: University Dr. & Toro Center Dr.



Street Name:	University Dr.						Toro Center Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	48	0	229	145	436	0	0	436	28
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	48	0	229	145	436	0	0	436	28
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	48	0	229	145	436	0	0	436	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	0	0	0	48	0	229	145	436	0	0	436	28
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.8	xxxx	6.9	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	xxxx	xxxx	xxxxx	958	xxxx	232	464	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	259	xxxx	776	1108	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	233	xxxx	776	1108	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.21	xxxx	0.29	0.13	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.8	xxxx	1.2	0.5	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	24.4	xxxx	11.6	8.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	C	*	B	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shared Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*

ApproachDel: xxxxxxx 13.8 xxxxxxx xxxxxxx
 ApproachLOS: * B * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #9 University Dr. & Toro Center Dr.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 0	1 0 0 0 1	1 0 2 0 0	0 0 1 1 0
Initial Vol:	0 0 0 0	48 0 229	145 436 0	0 436 28
ApproachDel:	xxxxxxx	13.8	xxxxxxx	xxxxxxx

Approach[southbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=1.1]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=277]

SUCCEED - Approach volume >= 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=1322]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #9 University Dr. & Toro Center Dr.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 0	1 0 0 0 1	1 0 2 0 0	0 0 1 1 0
Initial Vol:	0 0 0 0	48 0 229	145 436 0	0 436 28

Major Street Volume: 1045

Minor Approach Volume: 277

Minor Approach Volume Threshold: 355

SIGNAL WARRANT DISCLAIMER

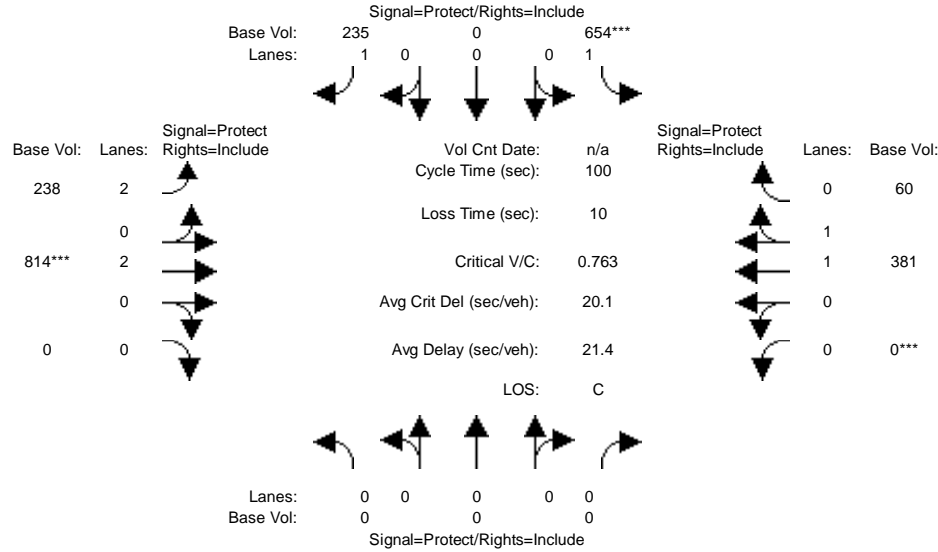
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday PM

Intersection #10: Albertoni St. & SR 91 EB Ramps

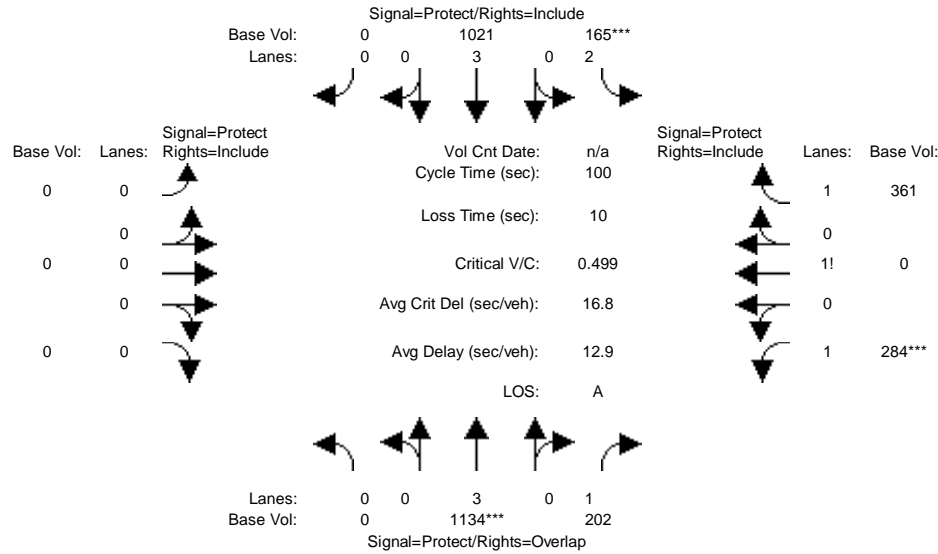


Street Name:	Albertoni St.						SR 91 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	654	0	235	238	814	0	0	381	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	654	0	235	238	814	0	0	381	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	654	0	235	238	814	0	0	381	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	654	0	235	238	814	0	0	381	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	654	0	235	238	814	0	0	381	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.73	0.27
Final Sat.:	0	0	0	1600	0	1600	5760	3200	0	0	2765	435
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.41	0.00	0.15	0.04	0.25	0.00	0.00	0.14	0.14
Crit Moves:				****				****		****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday PM

Intersection #11: Avalon Blvd. & SR 91 WB On-Ramp

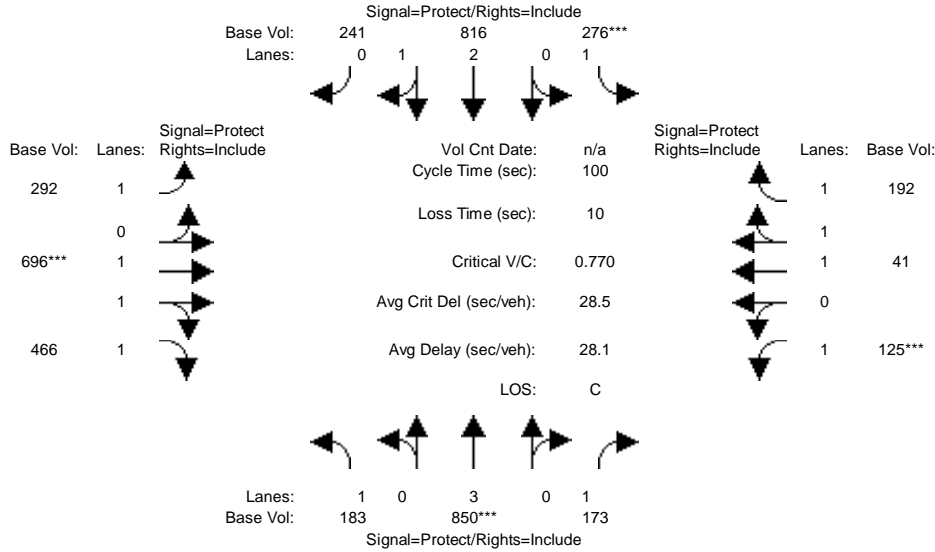


Street Name:	Avalon Blvd.						SR 91 WB On-Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1134	202	165	1021	0	0	0	0	284	0	361
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1134	202	165	1021	0	0	0	0	284	0	361
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1134	202	165	1021	0	0	0	0	284	0	361
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1134	202	165	1021	0	0	0	0	284	0	361
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1134	202	165	1021	0	0	0	0	284	0	361
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.32	0.00	1.68
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	2113	0	2687
Capacity Analysis Module:												
Vol/Sat:	0.00	0.24	0.13	0.03	0.21	0.00	0.00	0.00	0.00	0.13	0.00	0.13
OvlAdjV/S:	0.00											
Crit Moves:	****			****						****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday PM

Intersection #12: Avalon Blvd. & Albertoni St.

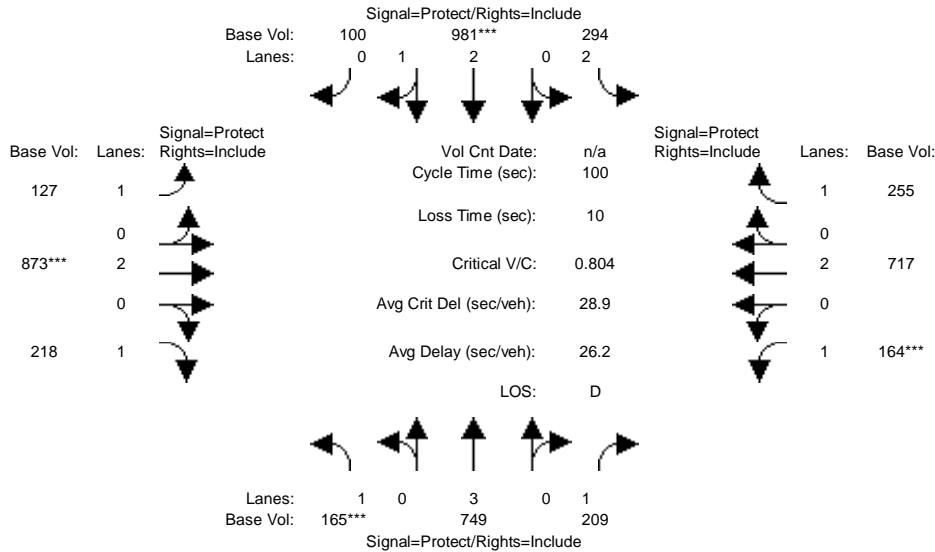


Street Name:	Avalon Blvd.						Albertoni St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	183	850	173	276	816	241	292	696	466	125	41	192
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	183	850	173	276	816	241	292	696	466	125	41	192
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	183	850	173	276	816	241	292	696	466	125	41	192
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	183	850	173	276	816	241	292	696	466	125	41	192
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	183	850	173	276	816	241	292	696	466	125	41	192
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.32	0.68	1.00	1.80	1.20	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3706	1094	1600	2875	1925	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.11	0.18	0.11	0.17	0.22	0.22	0.18	0.24	0.24	0.08	0.03	0.06
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday PM

Intersection #13: Avalon Blvd. & Victoria St.

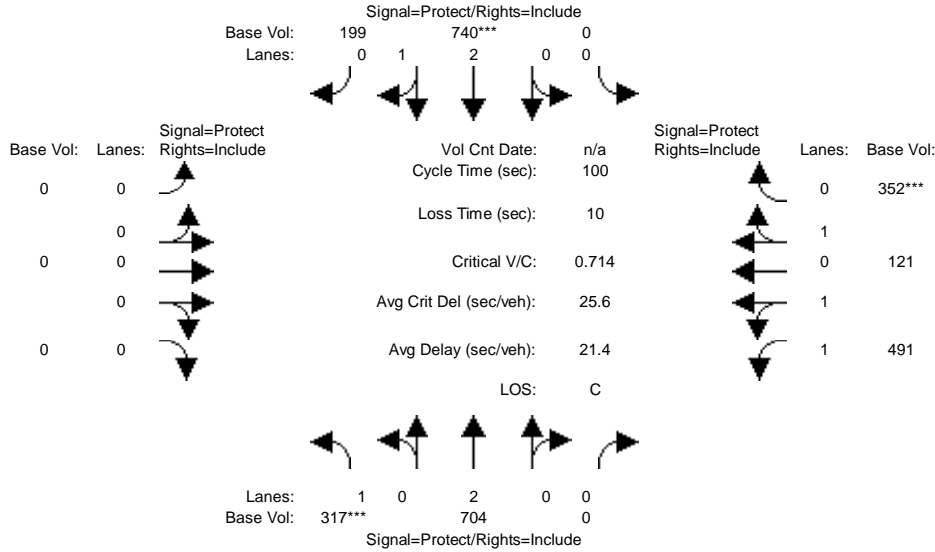


Street Name:	Avalon Blvd.						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	165	749	209	294	981	100	127	873	218	164	717	255
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	165	749	209	294	981	100	127	873	218	164	717	255
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	165	749	209	294	981	100	127	873	218	164	717	255
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	165	749	209	294	981	100	127	873	218	164	717	255
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	165	749	209	294	981	100	127	873	218	164	717	255
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.72	0.28	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4356	444	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.16	0.13	0.05	0.23	0.23	0.08	0.27	0.14	0.10	0.22	0.16
Crit Moves:	***				***			***			***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday PM

Intersection #14: Central Ave. & Artesia Blvd.

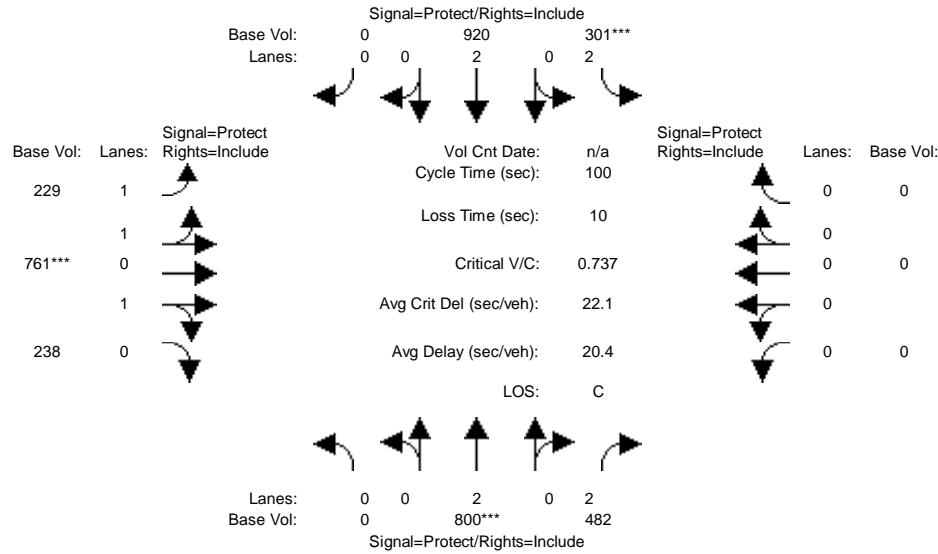


Street Name:	Central Ave.						Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	317	704	0	0	740	199	0	0	0	491	121	352
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	317	704	0	0	740	199	0	0	0	491	121	352
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	317	704	0	0	740	199	0	0	0	491	121	352
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	317	704	0	0	740	199	0	0	0	491	121	352
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	317	704	0	0	740	199	0	0	0	491	121	352
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.36	0.64	0.00	0.00	0.00	1.60	0.40	1.00
Final Sat.:	1600	3200	0	0	3783	1017	0	0	0	2567	633	1600
Capacity Analysis Module:												
Vol/Sat:	0.20	0.22	0.00	0.00	0.20	0.20	0.00	0.00	0.00	0.19	0.19	0.22
Crit Moves:	***				***							***

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday PM

Intersection #15: Central Ave. & Albertoni St./Artesia Blvd. EB

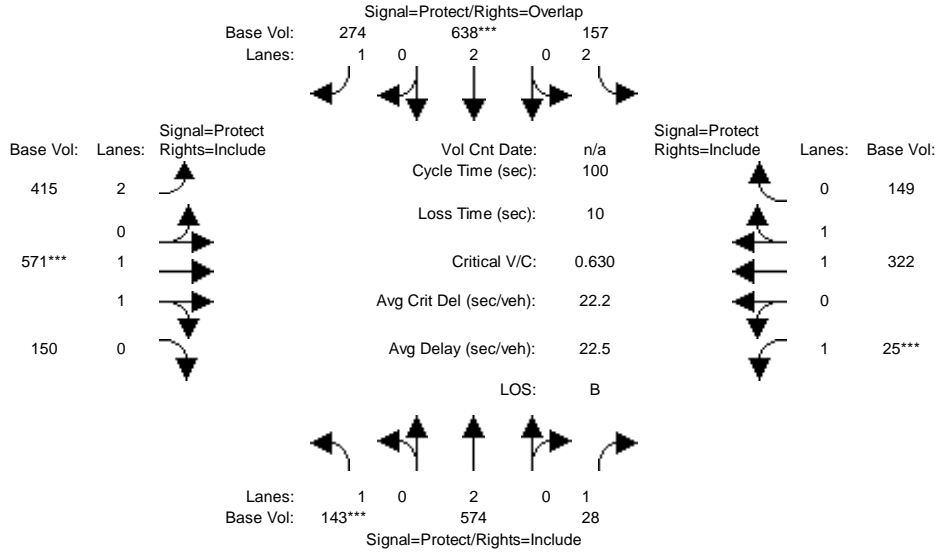


Street Name:	Central Ave.						Albertoni St./Artesia Blvd. EB					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	800	482	301	920	0	229	761	238	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	800	482	301	920	0	229	761	238	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	800	482	301	920	0	229	761	238	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	800	482	301	920	0	229	761	238	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	800	482	301	920	0	229	761	238	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.00	1.42	0.58	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	1600	2275	925	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.15	0.05	0.29	0.00	0.14	0.33	0.26	0.00	0.00	0.00
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday PM

Intersection #16: Central Ave. & Victoria St.

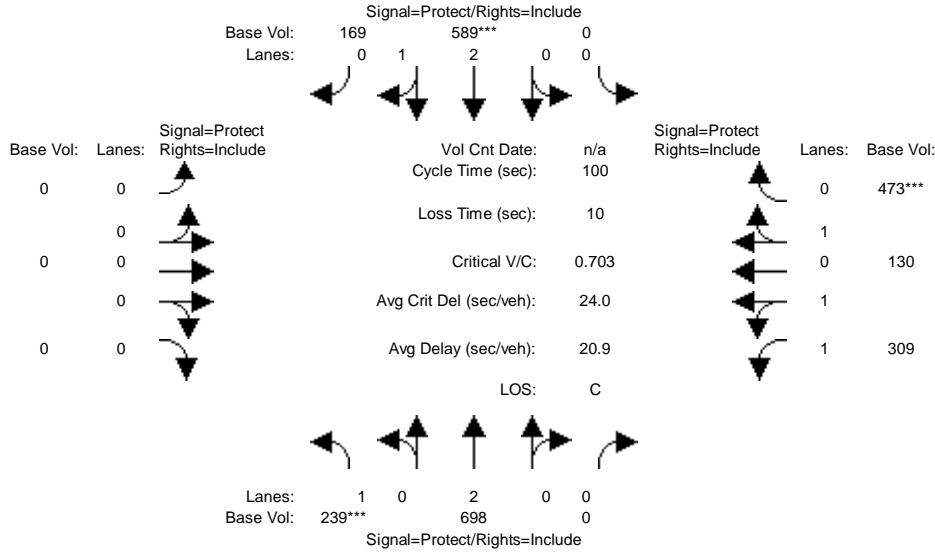


Street Name:	Central Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	143	574	28	157	638	274	415	571	150	25	322	149
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	143	574	28	157	638	274	415	571	150	25	322	149
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	143	574	28	157	638	274	415	571	150	25	322	149
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	143	574	28	157	638	274	415	571	150	25	322	149
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	143	574	28	157	638	274	415	571	150	25	322	149
OvlAdjVol:	159											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.58	0.42	1.00	1.37	0.63
Final Sat.:	1600	3200	1600	5760	3200	1600	5760	2534	666	1600	2188	1012
Capacity Analysis Module:												
Vol/Sat:	0.09	0.18	0.02	0.03	0.20	0.17	0.07	0.23	0.23	0.02	0.15	0.15
OvlAdjV/S:	0.10											
Crit Moves:	***			***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday PM

Intersection #17: Wilmington Ave. & Artesia Blvd. WB

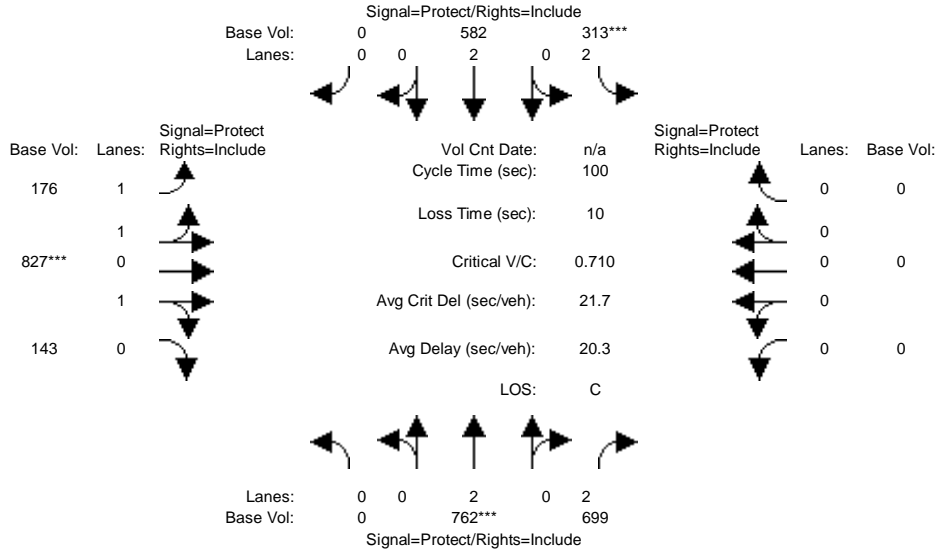


Street Name:	Wilmington Ave.						Artesia Blvd. WB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	239	698	0	0	589	169	0	0	0	309	130	473
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	239	698	0	0	589	169	0	0	0	309	130	473
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	239	698	0	0	589	169	0	0	0	309	130	473
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	239	698	0	0	589	169	0	0	0	309	130	473
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	239	698	0	0	589	169	0	0	0	309	130	473
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.33	0.67	0.00	0.00	0.00	1.41	0.59	1.00
Final Sat.:	1600	3200	0	0	3730	1070	0	0	0	2252	948	1600
Capacity Analysis Module:												
Vol/Sat:	0.15	0.22	0.00	0.00	0.16	0.16	0.00	0.00	0.00	0.14	0.14	0.30
Crit Moves:	***				***							***

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday PM

Intersection #18: Wilmington Ave. & Artesia Blvd. EB

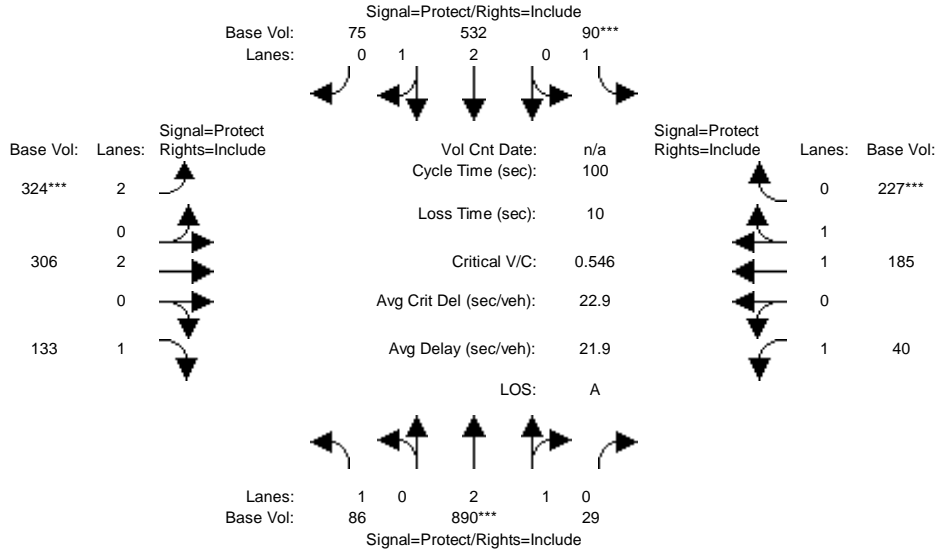


Street Name:	Wilmington Ave.						Artesia Blvd. EB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	762	699	313	582	0	176	827	143	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	762	699	313	582	0	176	827	143	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	762	699	313	582	0	176	827	143	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	762	699	313	582	0	176	827	143	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	762	699	313	582	0	176	827	143	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.00	1.63	0.37	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	1600	2602	598	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.24	0.22	0.05	0.18	0.00	0.11	0.32	0.24	0.00	0.00	0.00
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday PM

Intersection #19: Wilmington Ave. & Victoria St.

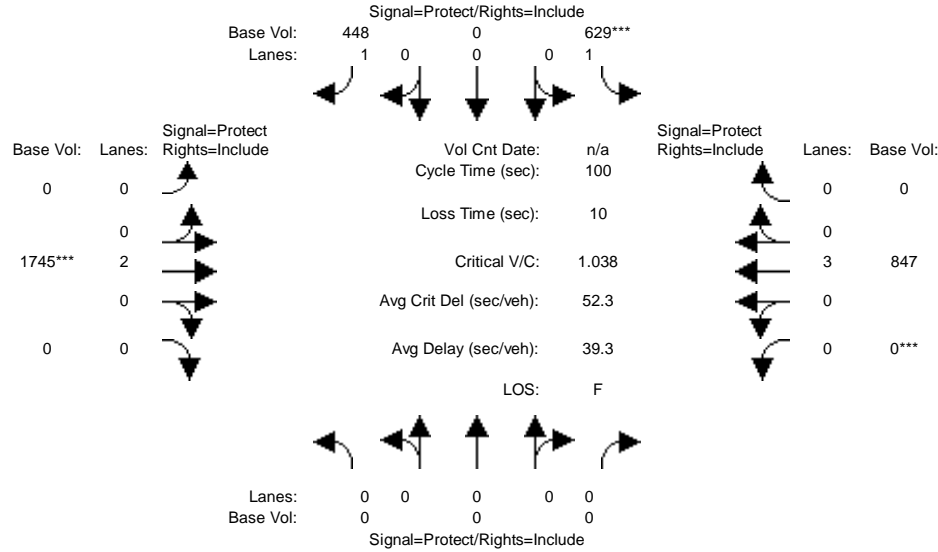


Street Name:	Wilmington Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	86	890	29	90	532	75	324	306	133	40	185	227
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	86	890	29	90	532	75	324	306	133	40	185	227
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	86	890	29	90	532	75	324	306	133	40	185	227
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	86	890	29	90	532	75	324	306	133	40	185	227
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	86	890	29	90	532	75	324	306	133	40	185	227
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.91	0.09	1.00	2.63	0.37	2.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	4649	151	1600	4207	593	5760	3200	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.19	0.19	0.06	0.13	0.13	0.06	0.10	0.08	0.03	0.12	0.14
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday PM

Intersection #20: I-110 SB Off-Ramp & 190th St.

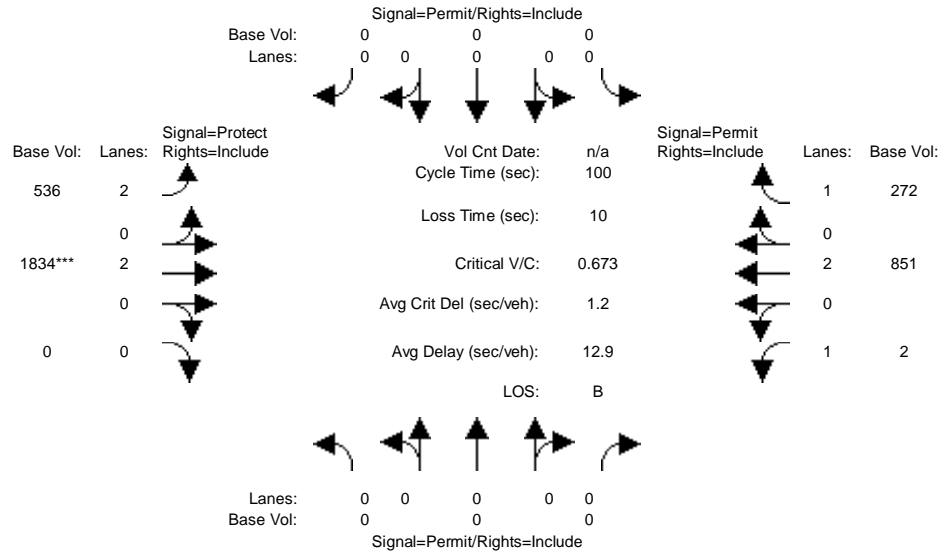


Street Name:	I-110 SB Off-Ramp						190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	629	0	448	0	1745	0	0	847	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	629	0	448	0	1745	0	0	847	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	629	0	448	0	1745	0	0	847	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	629	0	448	0	1745	0	0	847	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	629	0	448	0	1745	0	0	847	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.39	0.00	0.28	0.00	0.55	0.00	0.00	0.18	0.00
Crit Moves:				***				***			***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday PM

Intersection #21: I-110 NB On-Ramp & 190th St.

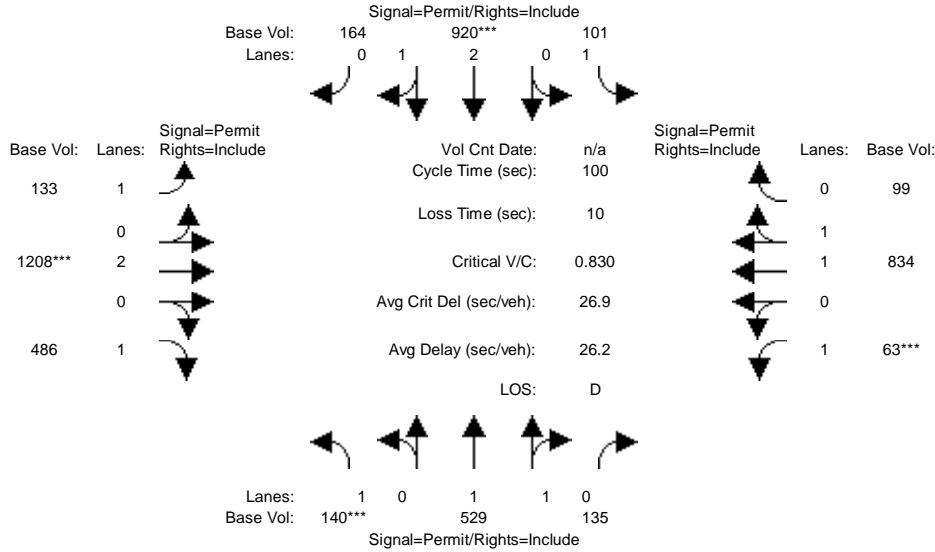


Street Name:	I-110 NB On-Ramp						190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	0	0	0	536	1834	0	2	851	272
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	536	1834	0	2	851	272
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	536	1834	0	2	851	272
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	536	1834	0	2	851	272
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	0	0	0	536	1834	0	2	851	272
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	0	0	0	0	0	5760	3200	0	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.57	0.00	0.00	0.27	0.17
Crit Moves:	****											

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday PM

Intersection #22: Figueroa St. & 190th St./Victoria St.

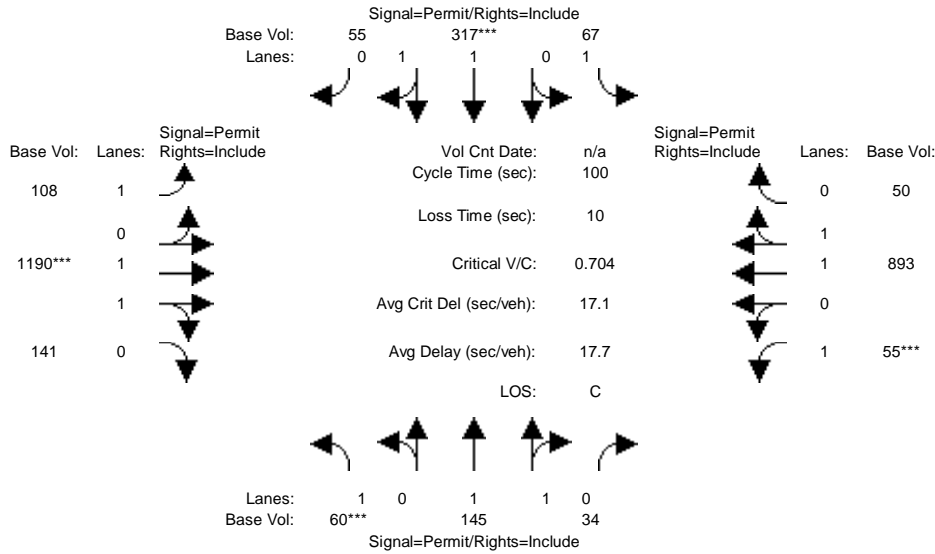


Street Name:	Figueroa St.						190th St./Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	140	529	135	101	920	164	133	1208	486	63	834	99
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	529	135	101	920	164	133	1208	486	63	834	99
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	140	529	135	101	920	164	133	1208	486	63	834	99
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	529	135	101	920	164	133	1208	486	63	834	99
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	140	529	135	101	920	164	133	1208	486	63	834	99
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.59	0.41	1.00	2.55	0.45	1.00	2.00	1.00	1.00	1.79	0.21
Final Sat.:	1600	2549	651	1600	4074	726	1600	3200	1600	1600	2860	340
Capacity Analysis Module:												
Vol/Sat:	0.09	0.21	0.21	0.06	0.23	0.23	0.08	0.38	0.30	0.04	0.29	0.29
Crit Moves:	***				***			***			***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday PM

Intersection #23: Broadway & Victoria St.

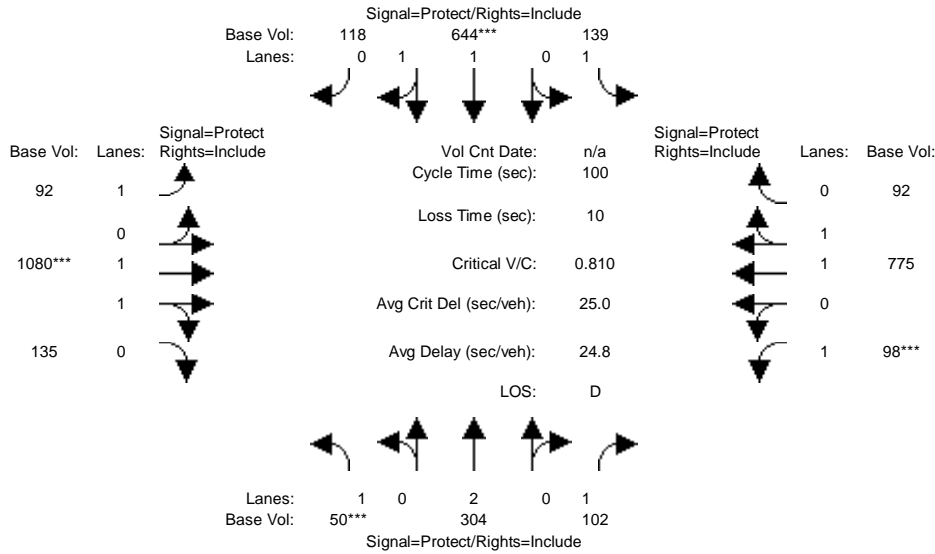


Street Name:	Broadway						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	60	145	34	67	317	55	108	1190	141	55	893	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	145	34	67	317	55	108	1190	141	55	893	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	145	34	67	317	55	108	1190	141	55	893	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	145	34	67	317	55	108	1190	141	55	893	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	60	145	34	67	317	55	108	1190	141	55	893	50
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.62	0.38	1.00	1.70	0.30	1.00	1.79	0.21	1.00	1.89	0.11
Final Sat.:	1600	2592	608	1600	2727	473	1600	2861	339	1600	3030	170
Capacity Analysis Module:												
Vol/Sat:	0.04	0.06	0.06	0.04	0.12	0.12	0.07	0.42	0.42	0.03	0.29	0.29
Crit Moves:	***			***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday PM

Intersection #24: Main St. & Victoria St.

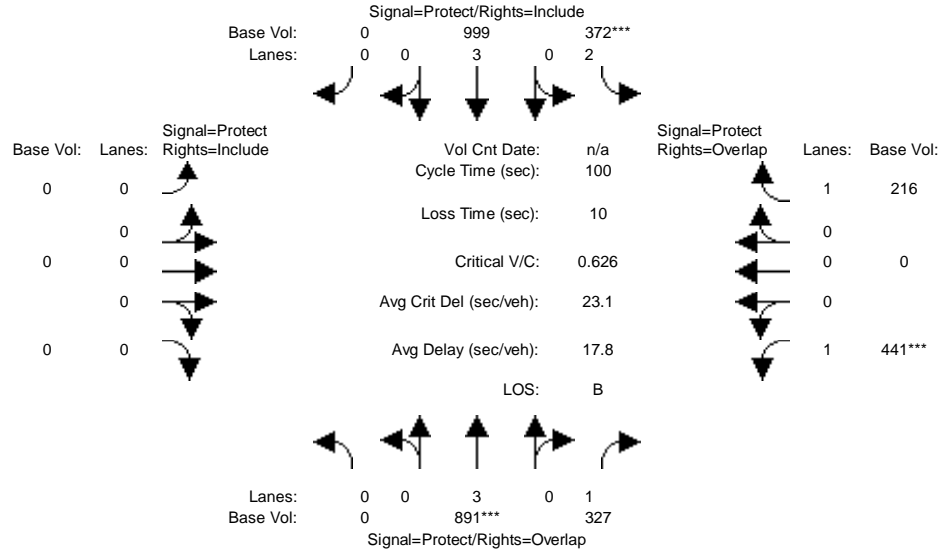


Street Name:	Main St.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	50	304	102	139	644	118	92	1080	135	98	775	92
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	304	102	139	644	118	92	1080	135	98	775	92
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	304	102	139	644	118	92	1080	135	98	775	92
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	304	102	139	644	118	92	1080	135	98	775	92
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	50	304	102	139	644	118	92	1080	135	98	775	92
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.69	0.31	1.00	1.78	0.22	1.00	1.79	0.21
Final Sat.:	1600	3200	1600	1600	2704	496	1600	2844	356	1600	2860	340
Capacity Analysis Module:												
Vol/Sat:	0.03	0.10	0.06	0.09	0.24	0.24	0.06	0.38	0.38	0.06	0.27	0.27
Crit Moves:	***				***			***			***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday PM

Intersection #25: Avalon Blvd. & University Dr.

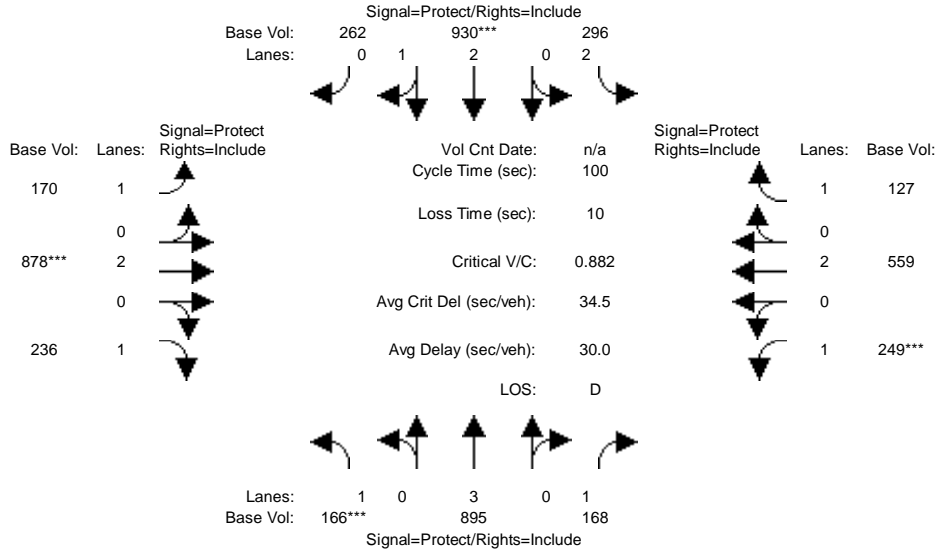


Street Name:	Avalon Blvd.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	891	327	372	999	0	0	0	0	441	0	216
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	891	327	372	999	0	0	0	0	441	0	216
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	891	327	372	999	0	0	0	0	441	0	216
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	891	327	372	999	0	0	0	0	441	0	216
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	891	327	372	999	0	0	0	0	441	0	216
OvlAdjVol:												113
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.19	0.20	0.06	0.21	0.00	0.00	0.00	0.00	0.28	0.00	0.14
OvlAdjV/S:												0.07
Crit Moves:	****			****						****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday PM

Intersection #26: Avalon Blvd. & Del Amo Blvd.

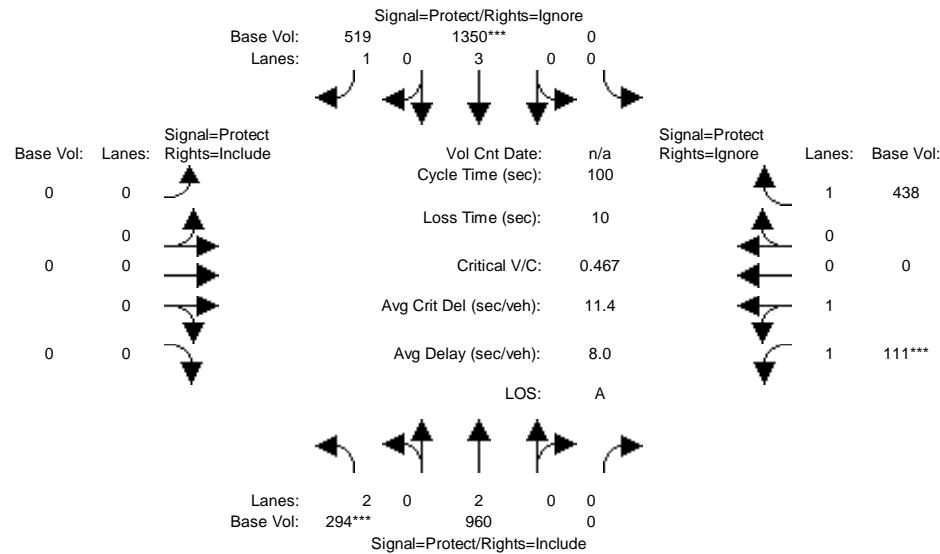


Street Name:	Avalon Blvd.						Del Amo Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	166	895	168	296	930	262	170	878	236	249	559	127
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	166	895	168	296	930	262	170	878	236	249	559	127
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	166	895	168	296	930	262	170	878	236	249	559	127
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	166	895	168	296	930	262	170	878	236	249	559	127
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	166	895	168	296	930	262	170	878	236	249	559	127
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.34	0.66	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	3745	1055	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.19	0.11	0.05	0.25	0.25	0.11	0.27	0.15	0.16	0.17	0.08
Crit Moves:	***				***			***			***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday PM

Intersection #27: Avalon Blvd. & I-405 NB Ramps

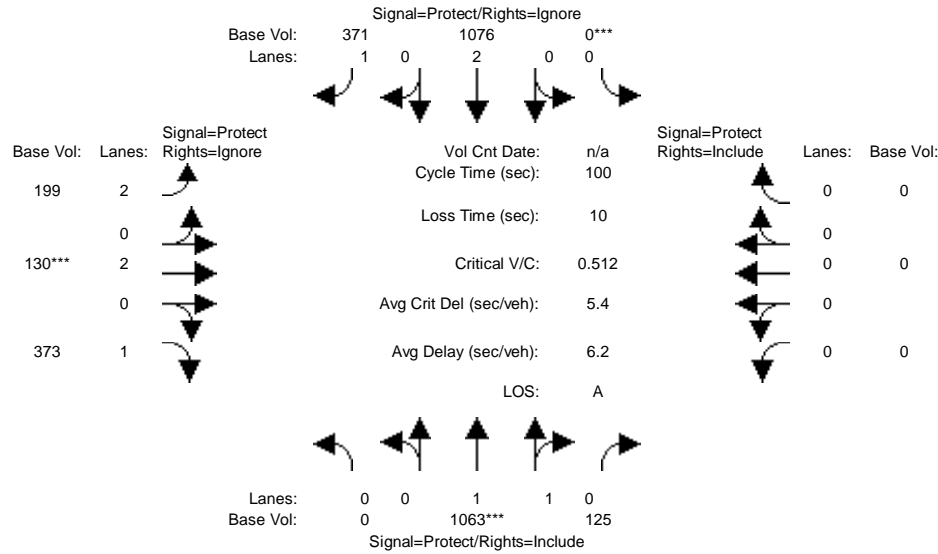


Street Name:	Avalon Blvd.						I-405 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	294	960	0	0	1350	519	0	0	0	111	0	438
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	294	960	0	0	1350	519	0	0	0	111	0	438
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	294	960	0	0	1350	0	0	0	0	111	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	294	960	0	0	1350	0	0	0	0	111	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Volume:	294	960	0	0	1350	0	0	0	0	111	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	5760	3200	0	0	4800	1600	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.30	0.00	0.00	0.28	0.00	0.00	0.00	0.00	0.03	0.00	0.00
Crit Moves:	***				***					***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday PM

Intersection #28: Avalon Blvd. & I-405 SB Ramps

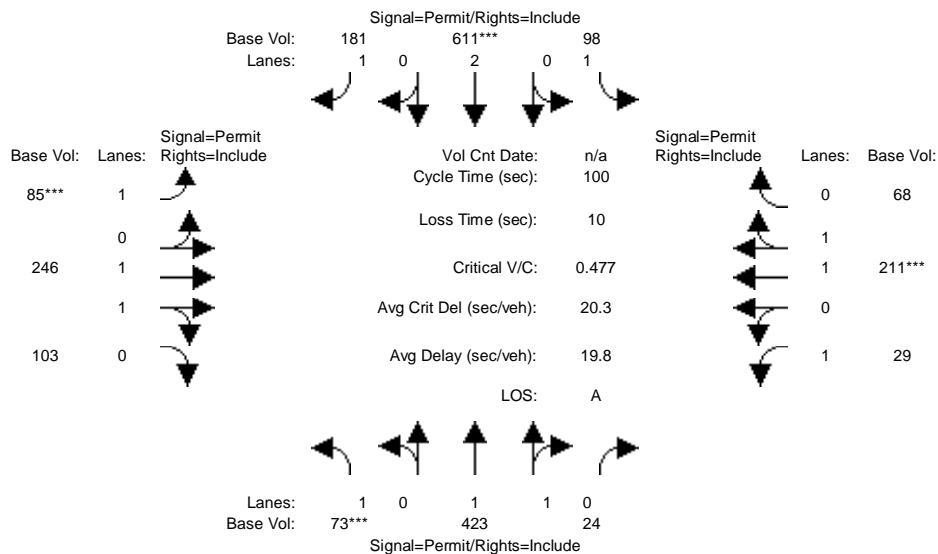


Street Name:	Avalon Blvd.						I-405 SB Ramps					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1063	125	0	1076	371	199	130	373	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1063	125	0	1076	371	199	130	373	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	1063	125	0	1076	0	199	130	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1063	125	0	1076	0	199	130	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Volume:	0	1063	125	0	1076	0	199	130	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.79	0.21	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	0	2863	337	0	3200	1600	5760	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.37	0.37	0.00	0.34	0.00	0.03	0.04	0.00	0.00	0.00	0.00
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday PM

Intersection #29: Central Ave. & University Dr.

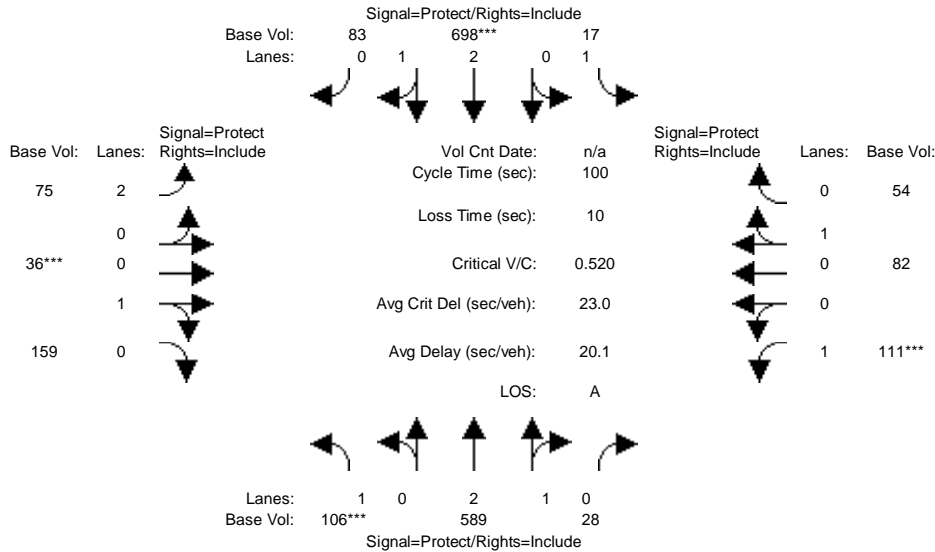


Street Name:	Central Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	73	423	24	98	611	181	85	246	103	29	211	68
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	73	423	24	98	611	181	85	246	103	29	211	68
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	73	423	24	98	611	181	85	246	103	29	211	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	73	423	24	98	611	181	85	246	103	29	211	68
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	73	423	24	98	611	181	85	246	103	29	211	68
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.89	0.11	1.00	2.00	1.00	1.00	1.41	0.59	1.00	1.51	0.49
Final Sat.:	1600	3028	172	1600	3200	1600	1600	2256	944	1600	2420	780
Capacity Analysis Module:												
Vol/Sat:	0.05	0.14	0.14	0.06	0.19	0.11	0.05	0.11	0.11	0.02	0.09	0.09
Crit Moves:	***				***		***				***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday PM

Intersection #30: Wilmington Ave. & University Dr.

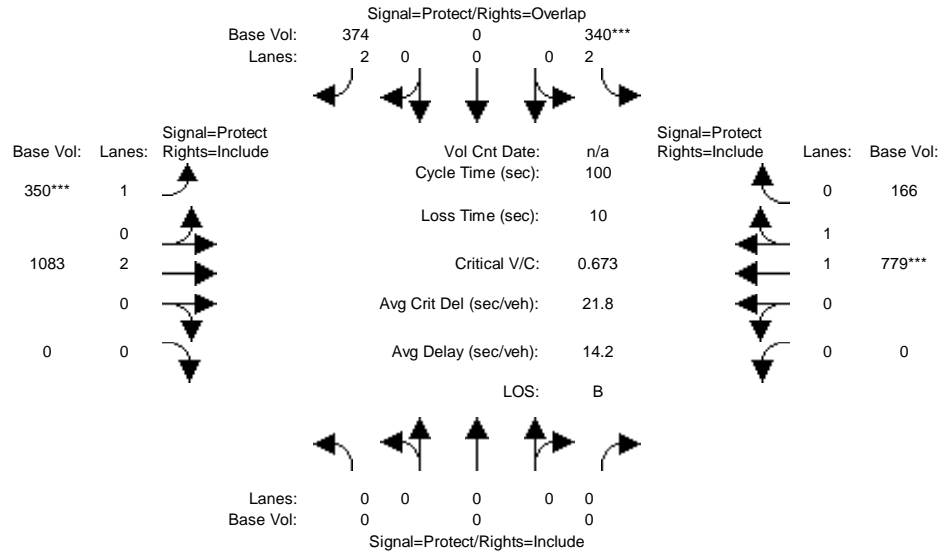


Street Name:	Wilmington Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	106	589	28	17	698	83	75	36	159	111	82	54
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	106	589	28	17	698	83	75	36	159	111	82	54
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	106	589	28	17	698	83	75	36	159	111	82	54
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	106	589	28	17	698	83	75	36	159	111	82	54
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	106	589	28	17	698	83	75	36	159	111	82	54
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.86	0.14	1.00	2.68	0.32	2.00	0.18	0.82	1.00	0.60	0.40
Final Sat.:	1600	4582	218	1600	4290	510	5760	295	1305	1600	965	635
Capacity Analysis Module:												
Vol/Sat:	0.07	0.13	0.13	0.01	0.16	0.16	0.01	0.12	0.12	0.07	0.09	0.08
Crit Moves:	***			***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday PM

Intersection #31: Central Ave. & Del Amo Blvd.

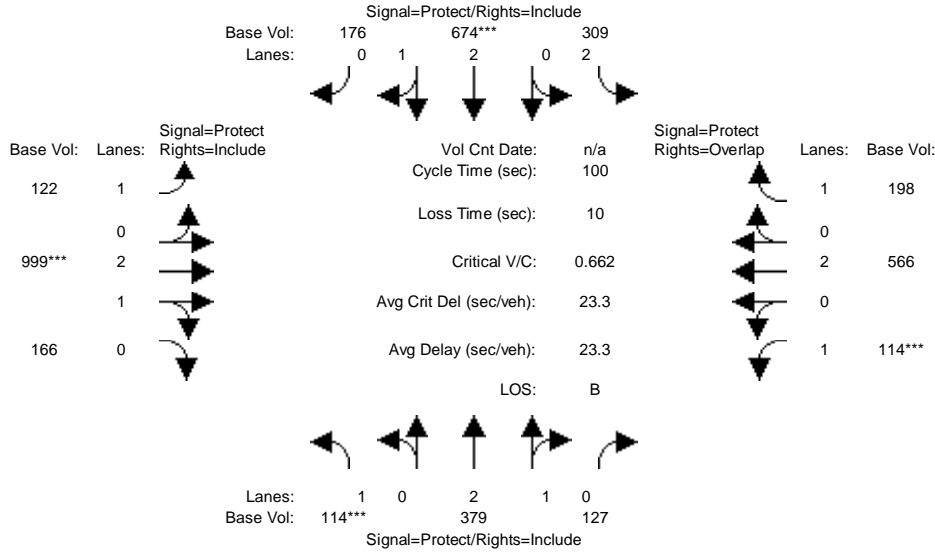


Street Name:	Central Ave.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	340	0	374	350	1083	0	0	779	166
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	340	0	374	350	1083	0	0	779	166
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	340	0	374	350	1083	0	0	779	166
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	340	0	374	350	1083	0	0	779	166
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	340	0	374	350	1083	0	0	779	166
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	2.00	1.00	2.00	0.00	0.00	1.65	0.35
Final Sat.:	0	0	0	5760	0	3200	1600	3200	0	0	2638	562
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.06	0.00	0.12	0.22	0.34	0.00	0.00	0.30	0.30
OvlAdjV/S:	0.00											
Crit Moves:				****				****				****

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday PM

Intersection #32: Wilmington Ave. & Del Amo Blvd.

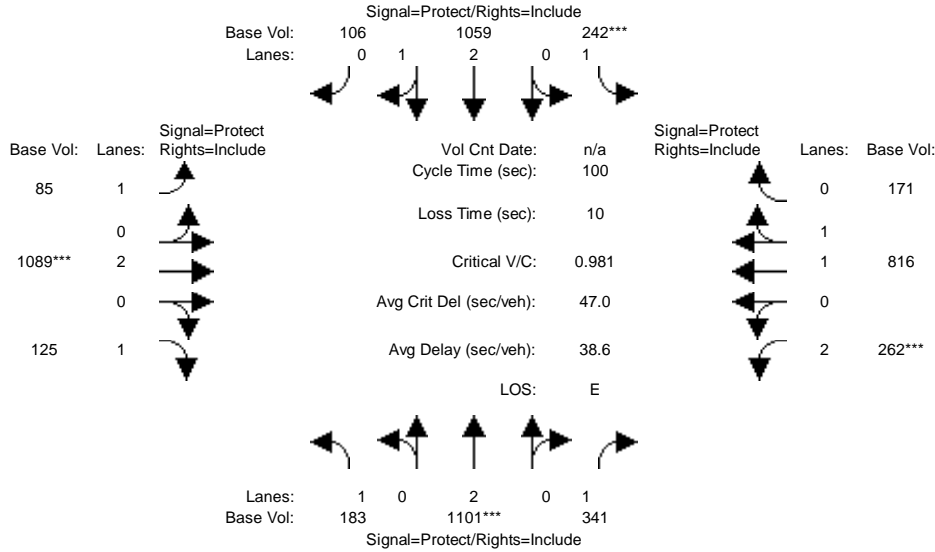


Street Name:	Wilmington Ave.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	114	379	127	309	674	176	122	999	166	114	566	198
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	114	379	127	309	674	176	122	999	166	114	566	198
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	114	379	127	309	674	176	122	999	166	114	566	198
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	114	379	127	309	674	176	122	999	166	114	566	198
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	114	379	127	309	674	176	122	999	166	114	566	198
OvlAdjVol:												112
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.25	0.75	2.00	2.38	0.62	1.00	2.57	0.43	1.00	2.00	1.00
Final Sat.:	1600	3595	1205	5760	3806	994	1600	4116	684	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.11	0.11	0.05	0.18	0.18	0.08	0.24	0.24	0.07	0.18	0.12
OvlAdjV/S:												0.07
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday PM

Intersection #33: W. Artesia Blvd. & Crenshaw Blvd.

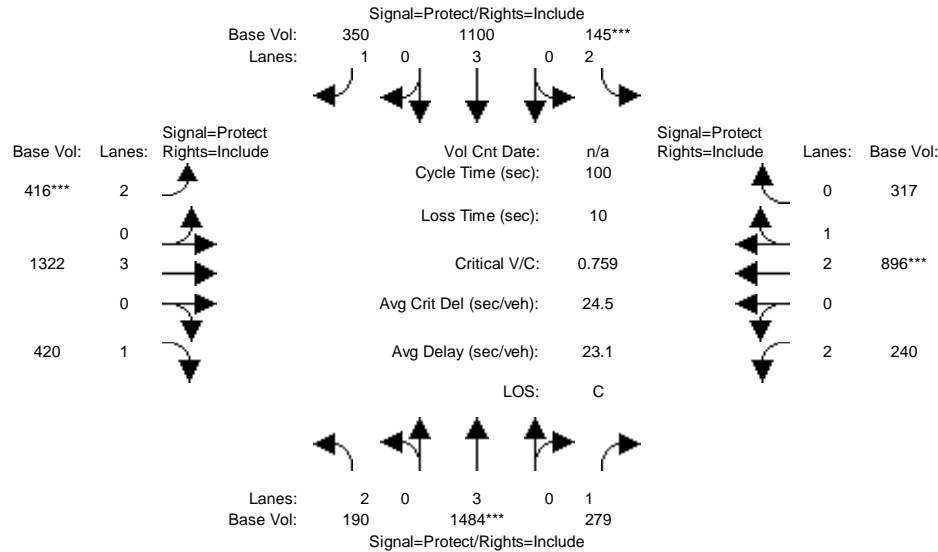


Street Name:	Crenshaw Blvd.						W. Artesia Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	183	1101	341	242	1059	106	85	1089	125	262	816	171
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	183	1101	341	242	1059	106	85	1089	125	262	816	171
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	183	1101	341	242	1059	106	85	1089	125	262	816	171
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	183	1101	341	242	1059	106	85	1089	125	262	816	171
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	183	1101	341	242	1059	106	85	1089	125	262	816	171
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.73	0.27	1.00	2.00	1.00	2.00	1.65	0.35
Final Sat.:	1600	3200	1600	1600	4363	437	1600	3200	1600	5760	2646	554
Capacity Analysis Module:												
Vol/Sat:	0.11	0.34	0.21	0.15	0.24	0.24	0.05	0.34	0.08	0.05	0.31	0.31
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday PM

Intersection #34: W 190th St. & South Western Ave.

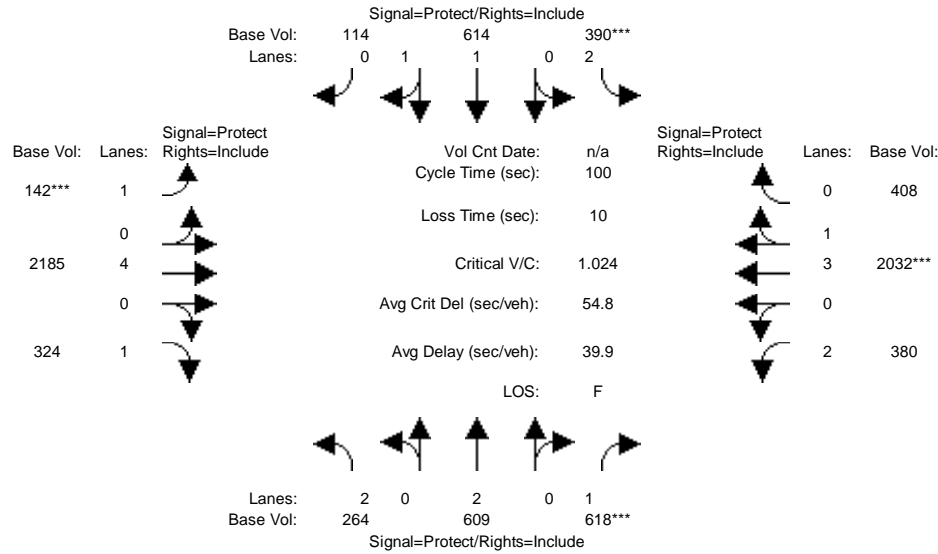


Street Name:	S. Western Ave.						W. 190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	190	1484	279	145	1100	350	416	1322	420	240	896	317
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	190	1484	279	145	1100	350	416	1322	420	240	896	317
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	190	1484	279	145	1100	350	416	1322	420	240	896	317
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	190	1484	279	145	1100	350	416	1322	420	240	896	317
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	190	1484	279	145	1100	350	416	1322	420	240	896	317
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.22	0.78
Final Sat.:	5760	4800	1600	5760	4800	1600	5760	4800	1600	5760	3546	1254
Capacity Analysis Module:												
Vol/Sat:	0.03	0.31	0.17	0.03	0.23	0.22	0.07	0.28	0.26	0.04	0.25	0.25
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday PM

Intersection #35: W. Artesia Blvd. & Vermont Av.e

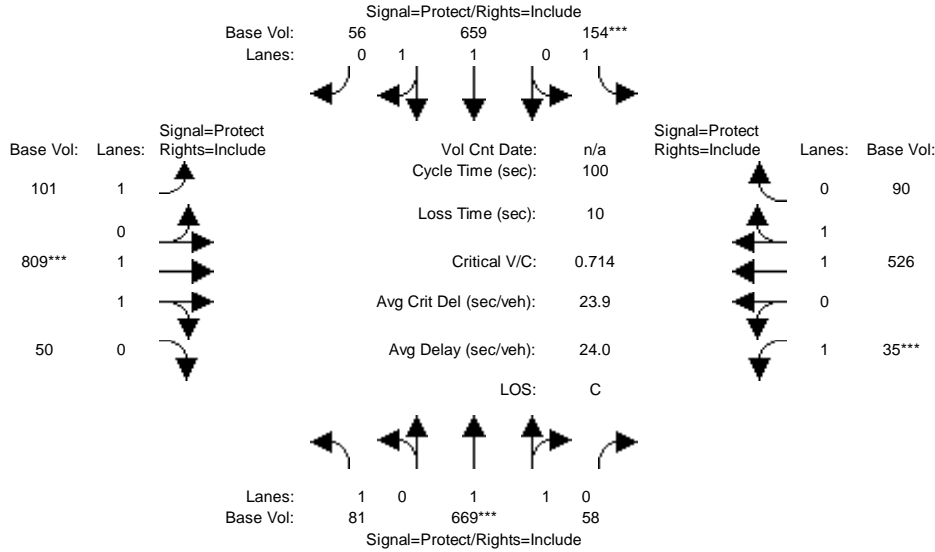


Street Name:	Vermont Ave.						W. Artesia Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	264	609	618	390	614	114	142	2185	324	380	2032	408
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	264	609	618	390	614	114	142	2185	324	380	2032	408
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	264	609	618	390	614	114	142	2185	324	380	2032	408
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	264	609	618	390	614	114	142	2185	324	380	2032	408
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	264	609	618	390	614	114	142	2185	324	380	2032	408
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	1.69	0.31	1.00	4.00	1.00	2.00	3.33	0.67
Final Sat.:	5760	3200	1600	5760	2699	501	1600	6400	1600	5760	5330	1070
Capacity Analysis Module:												
Vol/Sat:	0.05	0.19	0.39	0.07	0.23	0.23	0.09	0.34	0.20	0.07	0.38	0.38
Crit Moves:			***	***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday PM

Intersection #36: Alameda St. & Compton Blvd.

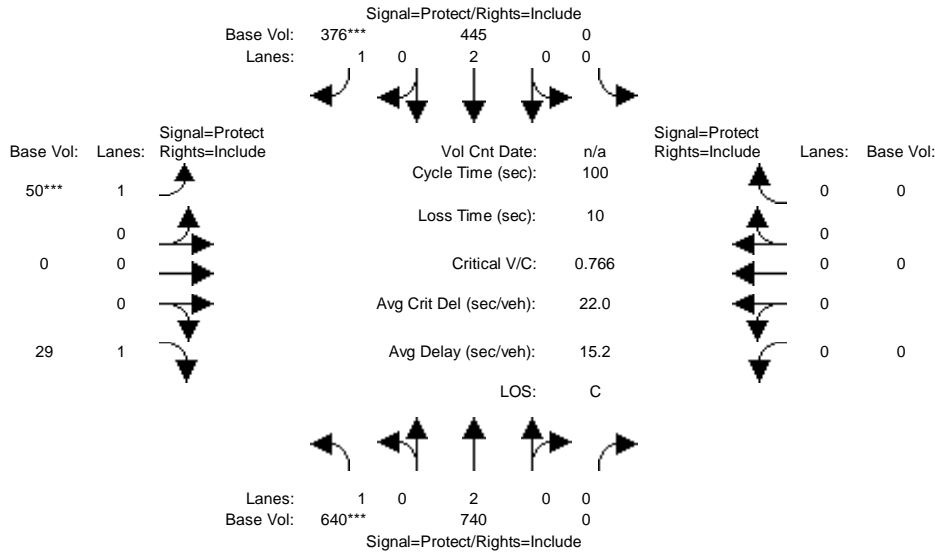


Street Name:	Alameda St.						Compton Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	81	669	58	154	659	56	101	809	50	35	526	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	81	669	58	154	659	56	101	809	50	35	526	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	81	669	58	154	659	56	101	809	50	35	526	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	81	669	58	154	659	56	101	809	50	35	526	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	81	669	58	154	659	56	101	809	50	35	526	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.84	0.16	1.00	1.84	0.16	1.00	1.88	0.12	1.00	1.71	0.29
Final Sat.:	1600	2945	255	1600	2949	251	1600	3014	186	1600	2732	468
Capacity Analysis Module:												
Vol/Sat:	0.05	0.23	0.23	0.10	0.22	0.22	0.06	0.27	0.27	0.02	0.19	0.19
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing Weekday PM

Intersection #37: Alameda St. & SR 91 EB Ramps



Street Name:	Alameda St.						SR 91 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	640	740	0	0	445	376	50	0	29	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	640	740	0	0	445	376	50	0	29	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	640	740	0	0	445	376	50	0	29	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	640	740	0	0	445	376	50	0	29	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	640	740	0	0	445	376	50	0	29	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	3200	0	0	3200	1600	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.40	0.23	0.00	0.00	0.14	0.24	0.03	0.00	0.02	0.00	0.00	0.00
Crit Moves:	***					***	***					

Appendix D

Sunday Intersection Count Data Sheets

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-001

Day: Sunday

City: Carson

Date: 2/12/2017

NOON

NS/EW Streets:	Avalon Blvd			Avalon Blvd			Artesia Blvd			Artesia Blvd			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	3	1	2	3	0	0	0	0	1.5	0	1.5	
12:00 PM	0	116	37	31	183	0	0	0	0	53	0	37	457
12:15 PM	1	130	41	29	167	0	0	0	0	51	0	37	456
12:30 PM	1	92	36	28	143	0	0	0	0	56	0	37	393
12:45 PM	0	123	46	27	121	0	0	0	0	53	0	35	405
1:00 PM	0	129	38	22	152	0	0	0	0	46	0	35	422
1:15 PM	2	122	36	24	210	0	0	0	0	58	0	46	498
1:30 PM	0	144	66	19	179	0	0	0	0	72	0	42	522
1:45 PM	0	125	60	30	163	0	0	0	0	45	0	34	457
TOTAL VOLUMES :	NL 4	NT 981	NR 360	SL 210	ST 1318	SR 0	EL 0	ET 0	ER 0	WL 434	WT 0	WR 303	TOTAL 3610
APPROACH %'s :	0.30%	72.94%	26.77%	13.74%	86.26%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	58.89%	0.00%	41.11%	

PEAK HR START TIME :	100 PM												TOTAL
PEAK HR VOL :	2	520	200	95	704	0	0	0	0	221	0	157	1899
PEAK HR FACTOR :	0.860			0.854			0.000			0.829			0.909

CONTROL : Signalized

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	0	0	0	0
12:30 AM	1	0	0	0
12:45 AM	1	0	0	0
1:00 AM	0	0	0	2
1:00 PM	0	0	0	0
1:15 PM	2	0	0	0
1:30 PM	0	0	0	0
1:45 PM	0	1	0	0
TOTAL VOLUMES	NB 4	SB 1	EB 0	WB 2
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-001

Day: Sunday

City: Carson

Date: 2/12/2017

PM

NS/EW Streets:	Avalon Blvd			Avalon Blvd			Artesia Blvd			Artesia Blvd			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	3	1	2	3	0	0	0	0	1.5	0	1.5	
4:00 PM	1	141	53	30	124	0	0	0	0	73	0	39	461
4:15 PM	0	127	44	27	123	0	0	0	0	78	0	37	436
4:30 PM	1	134	59	21	113	0	0	0	0	58	0	28	414
4:45 PM	2	125	31	15	118	0	0	0	0	65	0	32	388
5:00 PM	0	121	31	21	105	0	0	0	0	57	0	26	361
5:15 PM	0	125	50	27	97	0	0	0	0	64	0	32	395
5:30 PM	0	138	46	31	115	0	0	0	0	55	0	52	437
5:45 PM	0	133	29	19	115	0	0	0	0	46	0	57	399
TOTAL VOLUMES :	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	4	1044	343	191	910	0	0	0	0	496	0	303	3291
APPROACH %'s :	0.29%	75.05%	24.66%	17.35%	82.65%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	62.08%	0.00%	37.92%	
PEAK HR START TIME :	400 PM												TOTAL
PEAK HR VOL :	4	527	187	93	478	0	0	0	0	274	0	136	1699
PEAK HR FACTOR :	0.921			0.927			0.000			0.891			0.921

CONTROL : Signalized

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	1	0	0	0
12:30 AM	0	0	0	0
12:45 AM	1	0	0	0
1:00 AM	2	0	0	0
1:15 AM	0	0	0	0
1:30 AM	0	0	0	1
1:45 AM	0	0	0	0
2:00 AM	0	0	0	0
TOTAL VOLUMES	NB	SB	EB	WB
APPROACH %'s	4	0	0	1

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-002

Day: Sunday

City: Carson

Date: 2/12/2017

NOON

NS/EW Streets:	Avalon Blvd			Avalon Blvd			Albertoni St			Albertoni St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	3	1	1	3	0	1	1.5	1.5	1	1.5	1.5	
12:00 PM	22	116	42	47	167	28	27	10	36	15	11	16	537
12:15 PM	37	113	40	42	155	32	22	24	46	9	8	23	551
12:30 PM	34	83	39	41	132	30	23	18	56	18	8	18	500
12:45 PM	25	113	45	34	114	29	29	18	47	16	6	21	497
1:00 PM	45	114	42	41	120	33	25	14	46	13	4	25	522
1:15 PM	36	105	36	67	151	42	29	19	53	12	7	23	580
1:30 PM	38	158	49	48	162	31	27	23	71	10	8	27	652
1:45 PM	28	132	46	54	141	30	25	18	39	18	7	16	554
TOTAL VOLUMES :	265	934	339	374	1142	255	207	144	394	111	59	169	4393
APPROACH %'s :	17.23%	60.73%	22.04%	21.12%	64.48%	14.40%	27.79%	19.33%	52.89%	32.74%	17.40%	49.85%	

PEAK HR START TIME :	100 PM												TOTAL
PEAK HR VOL :	147	509	173	210	574	136	106	74	209	53	26	91	2308
PEAK HR FACTOR :	0.846			0.885			0.804			0.944			0.885

CONTROL : [Signalized](#)

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	0	5	0	2
12:30 AM	3	5	1	0
12:45 AM	1	4	0	2
1:00 AM	4	5	0	0
1:00 PM	1	7	0	0
1:15 PM	3	5	0	4
1:30 PM	3	2	0	1
1:45 PM	3	10	0	0
TOTAL VOLUMES	18	43	1	9
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-002

Day: Sunday

City: Carson

Date: 2/12/2017

PM

NS/EW Streets:	Avalon Blvd			Avalon Blvd			Albertoni St			Albertoni St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	3	1	1	3	0	1	1.5	1.5	1	1.5	1.5	
4:00 PM	39	141	61	39	117	28	27	21	57	10	4	12	556
4:15 PM	26	121	33	33	128	25	29	19	53	15	8	16	506
4:30 PM	30	139	33	45	120	25	34	16	55	15	5	16	533
4:45 PM	31	116	35	32	113	24	23	9	43	15	5	22	468
5:00 PM	35	117	42	41	91	27	18	16	37	11	4	23	462
5:15 PM	27	129	39	46	94	24	26	14	45	7	8	17	476
5:30 PM	33	139	39	35	107	26	33	16	47	12	10	16	513
5:45 PM	14	105	47	30	98	27	31	12	40	12	11	17	444
TOTAL VOLUMES :	235	1007	329	301	868	206	221	123	377	97	55	139	3958
APPROACH %'s :	14.96%	64.10%	20.94%	21.89%	63.13%	14.98%	30.65%	17.06%	52.29%	33.33%	18.90%	47.77%	

PEAK HR START TIME :	400 PM												TOTAL
PEAK HR VOL :	126	517	162	149	478	102	113	65	208	55	22	66	2063
PEAK HR FACTOR :	0.835			0.959			0.919			0.851			0.928

CONTROL : Signalized

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	2	2	0	0
12:30 AM	0	4	0	1
12:45 AM	4	5	0	2
1:00 AM	0	3	0	2
1:15 AM	0	7	0	0
1:30 AM	0	6	0	1
1:45 AM	1	4	0	1
2:00 AM	3	1	0	1
TOTAL VOLUMES	NB 10	SB 32	EB 0	WB 8
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-003

Day: Sunday

City: Carson

Date: 2/12/2017

NOON

NS/EW Streets:	Avalon Blvd			Avalon Blvd			Victoria St			Victoria St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	3	1	2	3	0	1	2	1	1	2	1	
12:00 PM	15	129	21	19	155	16	15	28	24	19	46	14	501
12:15 PM	29	139	21	22	185	19	28	26	19	17	35	21	561
12:30 PM	14	112	24	28	163	11	13	30	24	21	25	17	482
12:45 PM	12	149	23	20	159	12	13	28	29	21	36	23	525
1:00 PM	24	140	24	19	129	16	18	36	26	19	38	29	518
1:15 PM	22	160	20	22	178	13	19	36	31	25	33	24	583
1:30 PM	19	178	32	32	174	15	24	36	27	23	40	30	630
1:45 PM	16	193	20	14	188	14	21	39	25	32	40	23	625
TOTAL VOLUMES :	151	1200	185	176	1331	116	151	259	205	177	293	181	4425
APPROACH %'s :	9.83%	78.13%	12.04%	10.84%	82.01%	7.15%	24.55%	42.11%	33.33%	27.19%	45.01%	27.80%	
PEAK HR START TIME :	100 PM												TOTAL
PEAK HR VOL :	81	671	96	87	669	58	82	147	109	99	151	106	2356
PEAK HR FACTOR :	0.926			0.921			0.971			0.937			0.935

CONTROL : Signalized

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	5	4	0	0
12:30 AM	4	4	0	0
12:45 AM	1	2	0	0
1:00 AM	1	3	0	0
1:00 PM	9	3	0	1
1:15 PM	4	2	0	0
1:30 PM	2	8	0	0
1:45 PM	3	1	0	0
TOTAL VOLUMES	NB 29	SB 27	EB 0	WB 1
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-003

Day: Sunday

City: Carson

Date: 2/12/2017

PM

NS/EW Streets:	Avalon Blvd			Avalon Blvd			Victoria St			Victoria St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	3	1	2	3	0	1	2	1	1	2	1	
4:00 PM	17	161	33	15	143	14	22	29	26	13	37	19	529
4:15 PM	21	201	31	24	156	9	24	35	23	21	26	15	586
4:30 PM	24	126	21	19	134	9	12	32	20	21	30	23	471
4:45 PM	15	135	31	14	137	16	24	33	19	18	36	21	499
5:00 PM	9	147	20	18	111	15	12	27	29	16	30	21	455
5:15 PM	11	186	29	19	113	15	20	28	26	20	29	22	518
5:30 PM	30	146	26	14	112	16	20	32	20	19	25	21	481
5:45 PM	20	152	28	14	136	15	16	33	23	25	28	11	501
TOTAL VOLUMES :	147	1254	219	137	1042	109	150	249	186	153	241	153	4040
APPROACH %'s :	9.07%	77.41%	13.52%	10.64%	80.90%	8.46%	25.64%	42.56%	31.79%	27.97%	44.06%	27.97%	

PEAK HR START TIME :	400 PM												TOTAL
PEAK HR VOL :	77	623	116	72	570	48	82	129	88	73	129	78	2085
PEAK HR FACTOR :	0.806			0.913			0.912			0.933			0.890

CONTROL : Signalized

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	1	2	1	1
12:30 AM	2	7	1	0
12:45 AM	0	2	0	1
1:00 AM	3	4	1	0
1:15 AM	1	1	0	0
1:30 AM	2	3	0	0
1:45 AM	6	3	0	0
2:00 AM	1	5	0	0
TOTAL VOLUMES	NB 16	SB 27	EB 3	WB 2
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-004

Day: Sunday

City: Carson

Date: 2/12/2017

NOON

NS/EW Streets:	Avalon Blvd			Avalon Blvd			University Dr			University Dr			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	3	1	2	3	0	0	0	0	1	0	1	
12:00 PM	0	144	26	47	142	0	0	0	0	26	0	17	402
12:15 PM	0	152	33	49	168	0	0	0	0	23	0	31	456
12:30 PM	0	143	28	63	159	0	0	0	0	27	0	27	447
12:45 PM	0	140	26	53	149	0	0	0	0	31	0	27	426
1:00 PM	0	163	32	52	157	0	0	0	0	37	0	23	464
1:15 PM	0	168	35	46	187	0	0	0	0	40	0	28	504
1:30 PM	0	190	28	53	182	0	0	0	0	25	0	33	511
1:45 PM	0	181	33	60	189	0	0	0	0	21	0	28	512
TOTAL VOLUMES :	0	1281	241	423	1333	0	0	0	0	230	0	214	3722
APPROACH %'s :	0.00%	84.17%	15.83%	24.09%	75.91%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	51.80%	0.00%	48.20%	

PEAK HR START TIME :	100 PM												TOTAL
PEAK HR VOL :	0	702	128	211	715	0	0	0	0	123	0	112	1991
PEAK HR FACTOR :		0.952			0.930			0.000			0.864		0.972

CONTROL : Signalized

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	0	19	0	0
12:30 AM	0	21	0	0
12:45 AM	0	27	0	0
1:00 AM	0	11	0	0
1:00 PM	0	14	0	0
1:15 PM	0	14	0	0
1:30 PM	0	19	0	0
1:45 PM	0	28	0	0
TOTAL VOLUMES	0	153	0	0
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-004

Day: Sunday

City: Carson

Date: 2/12/2017

PM

NS/EW Streets:	Avalon Blvd			Avalon Blvd			University Dr			University Dr			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	3	1	2	3	0	0	0	0	1	0	1	
4:00 PM	0	182	35	53	155	0	0	0	0	30	0	23	478
4:15 PM	0	187	21	40	144	0	0	0	0	30	0	30	452
4:30 PM	0	159	28	41	150	0	0	0	0	29	0	21	428
4:45 PM	0	175	31	47	147	0	0	0	0	23	0	15	438
5:00 PM	6	173	26	37	131	0	0	0	0	27	0	24	424
5:15 PM	0	197	22	43	124	0	0	0	0	23	0	22	431
5:30 PM	0	161	25	47	123	0	0	0	0	24	0	35	415
5:45 PM	0	150	21	51	125	0	0	0	0	28	0	27	402
TOTAL VOLUMES :	6	1384	209	359	1099	0	0	0	0	214	0	197	3468
APPROACH %'s :	0.38%	86.55%	13.07%	24.62%	75.38%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	52.07%	0.00%	47.93%	

PEAK HR START TIME :	400 PM												TOTAL
PEAK HR VOL :	0	703	115	181	596	0	0	0	0	112	0	89	1796
PEAK HR FACTOR :	0.942			0.934			0.000			0.838			0.939

CONTROL : [Signalized](#)

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	0	14	0	0
12:30 AM	0	10	0	0
12:45 AM	0	15	0	0
1:00 AM	0	13	0	0
1:15 AM	6	9	0	0
1:30 AM	0	13	0	0
1:45 AM	0	23	0	0
2:00 AM	0	21	0	0
TOTAL VOLUMES	6	118	0	0
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-005

Day: Sunday

City: Carson

Date: 2/12/2017

NOON

NS/EW Streets:	Avalon Blvd			Avalon Blvd			Del Amo Blvd			Del Amo Blvd			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	3	1	2	3	0	1	2	1	1	2	1	
12:00 PM	19	128	23	45	117	24	33	79	26	51	68	21	634
12:15 PM	23	155	38	47	140	14	23	79	25	51	79	29	703
12:30 PM	21	149	44	51	167	25	35	44	28	54	66	18	702
12:45 PM	30	164	29	37	146	22	36	69	29	56	55	22	695
1:00 PM	27	158	42	63	147	28	22	72	28	55	85	15	742
1:15 PM	39	164	33	51	167	34	31	64	36	50	66	18	753
1:30 PM	27	184	45	53	141	23	28	75	32	47	67	23	745
1:45 PM	29	193	44	52	167	34	39	81	38	51	61	23	812
TOTAL VOLUMES :	215	1295	298	399	1192	204	247	563	242	415	547	169	5786
APPROACH %'s :	11.89%	71.63%	16.48%	22.23%	66.41%	11.36%	23.48%	53.52%	23.00%	36.69%	48.36%	14.94%	

PEAK HR START TIME :	100 PM												TOTAL
PEAK HR VOL :	122	699	164	219	622	119	120	292	134	203	279	79	3052
PEAK HR FACTOR :	0.926			0.949			0.864			0.905			0.940

CONTROL : Signalized

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	3	15	0	2
12:30 AM	4	22	0	7
12:45 AM	3	16	3	7
1:00 AM	5	13	2	13
1:00 PM	2	28	1	7
1:15 PM	5	24	1	10
1:30 PM	5	26	0	5
1:45 PM	9	17	6	8
TOTAL VOLUMES	NB 36	SB 161	EB 13	WB 59
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-005

Day: Sunday

City: Carson

Date: 2/12/2017

PM

NS/EW Streets:	Avalon Blvd			Avalon Blvd			Del Amo Blvd			Del Amo Blvd			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	3	1	2	3	0	1	2	1	1	2	1	
4:00 PM	39	186	44	64	116	22	30	62	31	55	50	23	722
4:15 PM	27	155	35	53	128	20	21	67	23	43	58	28	658
4:30 PM	37	164	24	65	128	18	24	71	28	62	56	26	703
4:45 PM	20	176	41	42	131	16	24	57	23	58	63	28	679
5:00 PM	28	196	42	50	120	22	27	63	34	60	43	19	704
5:15 PM	28	155	30	33	111	15	28	63	26	60	53	44	646
5:30 PM	34	158	37	48	107	22	25	54	21	65	60	22	653
5:45 PM	34	162	32	50	127	18	35	60	21	64	41	10	654
TOTAL VOLUMES :	NL 247	NT 1352	NR 285	SL 405	ST 968	SR 153	EL 214	ET 497	ER 207	WL 467	WT 424	WR 200	TOTAL 5419
APPROACH %'s :	13.11%	71.76%	15.13%	26.54%	63.43%	10.03%	23.31%	54.14%	22.55%	42.80%	38.86%	18.33%	

PEAK HR START TIME :	400 PM												TOTAL
PEAK HR VOL :	123	681	144	224	503	76	99	257	105	218	227	105	2762
PEAK HR FACTOR :	0.881			0.951			0.937			0.923			0.956

CONTROL : Signalized

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	6	17	1	11
12:30 AM	1	18	0	10
12:45 AM	11	27	1	7
1:00 AM	5	17	1	12
1:15 AM	1	22	0	11
1:30 AM	3	16	3	14
1:45 AM	2	21	0	15
2:00 AM	6	22	2	13
TOTAL VOLUMES	NB 35	SB 160	EB 8	WB 93
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-006

Day: Sunday

City: Carson

Date: 2/12/2017

NOON

NS/EW Streets:	Avalon Blvd			Avalon Blvd			I-405 NB Ramps			I-405 NB Ramps			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	2	2	0	0	3	1	0	0	0	1.5	0.5	1	
12:00 PM	79	263	0	0	182	112	0	0	0	15	0	84	735
12:15 PM	51	284	0	0	189	122	0	0	0	11	0	90	747
12:30 PM	65	308	0	0	201	112	0	0	0	17	1	76	780
12:45 PM	64	327	0	0	191	124	0	0	0	10	0	101	817
1:00 PM	68	317	0	0	223	118	0	0	0	22	0	92	840
1:15 PM	73	311	0	0	222	134	0	0	0	16	0	92	848
1:30 PM	78	352	0	0	236	143	0	0	0	18	1	85	913
1:45 PM	74	376	0	0	242	135	0	0	0	16	0	103	946
TOTAL VOLUMES :	552	2538	0	0	1686	1000	0	0	0	125	2	723	6626
APPROACH %'s :	17.86%	82.14%	0.00%	0.00%	62.77%	37.23%	#DIV/0!	#DIV/0!	#DIV/0!	14.71%	0.24%	85.06%	

PEAK HR START TIME :	100 PM												TOTAL
PEAK HR VOL :	293	1356	0	0	923	530	0	0	0	72	1	372	3547
PEAK HR FACTOR :	0.916			0.958			0.000			0.935			0.937

CONTROL : Signalized

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:00 PM	0	0	0	0
1:15 PM	0	0	0	0
1:30 PM	0	0	0	0
1:45 PM	0	0	0	0
TOTAL VOLUMES	NB 0	SB 0	EB 0	WB 0
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-006

Day: Sunday

City: Carson

Date: 2/12/2017

PM

NS/EW Streets:	Avalon Blvd		Avalon Blvd			I-405 NB Ramps			I-405 NB Ramps			TOTAL	
	NORTHBOUND		SOUTHBOUND			EASTBOUND			WESTBOUND				
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	2	2	0	0	3	1	0	0	0	1.5	0.5	1	
4:00 PM	56	293	0	1	244	160	0	0	0	14	0	93	861
4:15 PM	61	270	0	0	235	137	0	0	0	25	1	79	808
4:30 PM	73	227	0	0	229	140	0	0	0	19	0	82	770
4:45 PM	70	274	0	0	204	148	0	0	0	15	0	81	792
5:00 PM	64	293	0	0	213	135	0	0	0	18	1	94	818
5:15 PM	61	240	0	0	255	130	0	0	0	17	0	56	759
5:30 PM	61	278	0	0	226	145	0	0	0	7	0	65	782
5:45 PM	60	265	0	0	231	139	0	0	0	19	0	62	776

TOTAL VOLUMES :	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
APPROACH %'s :	506	2140	0	1	1837	1134	0	0	0	134	2	612	6366
	19.12%	80.88%	0.00%	0.03%	61.81%	38.16%	#DIV/0!	#DIV/0!	#DIV/0!	17.91%	0.27%	81.82%	

PEAK HR START TIME :	400 PM												TOTAL
PEAK HR VOL :	260	1064	0	1	912	585	0	0	0	73	1	335	3231
PEAK HR FACTOR :	0.948			0.925			0.000			0.956		0.938	

CONTROL : Signalized

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	0	1	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:15 AM	0	0	0	0
1:30 AM	1	0	0	0
1:45 AM	0	0	0	0
2:00 AM	0	0	0	0
TOTAL VOLUMES	NB	SB	EB	WB
APPROACH %'s	1	1	0	0

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-007

Day: Sunday

City: Carson

Date: 2/12/2017

NOON

NS/EW Streets:	Avalon Blvd			Avalon Blvd			I-405 SB Ramps			I-405 SB Ramps			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	0	0	2	1	2	2	1	0	0	0	
12:00 PM	0	204	25	0	148	55	134	0	67	0	0	0	633
12:15 PM	0	197	22	0	147	49	145	0	69	0	0	0	629
12:30 PM	0	219	18	0	166	61	152	1	77	0	0	0	694
12:45 PM	1	215	15	0	149	56	186	1	103	0	0	0	726
1:00 PM	0	231	15	0	183	51	160	0	70	0	0	0	710
1:15 PM	0	206	21	0	175	67	162	0	65	0	0	0	696
1:30 PM	0	231	24	0	172	86	201	0	68	0	0	0	782
1:45 PM	0	270	14	0	187	65	187	1	66	0	0	0	790
TOTAL VOLUMES :	NL 1	NT 1773	NR 154	SL 0	ST 1327	SR 490	EL 1327	ET 3	ER 585	WL 0	WT 0	WR 0	TOTAL 5660
APPROACH %'s :	0.05%	91.96%	7.99%	0.00%	73.03%	26.97%	69.30%	0.16%	30.55%	#DIV/0!	#DIV/0!	#DIV/0!	

PEAK HR START TIME :	100 PM												TOTAL
PEAK HR VOL :	0	938	74	0	717	269	710	1	269	0	0	0	2978
PEAK HR FACTOR :	0.891			0.955			0.911			0.000			0.942

CONTROL : [Signalized](#)

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	1	0	1	0
1:00 PM	0	0	0	0
1:15 PM	0	0	0	0
1:30 PM	0	0	0	0
1:45 PM	0	0	0	0
TOTAL VOLUMES	NB 1	SB 0	EB 1	WB 0
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-007

Day: Sunday

City: Carson

Date: 2/12/2017

PM

NS/EW Streets:	Avalon Blvd		Avalon Blvd			I-405 SB Ramps			I-405 SB Ramps			TOTAL	
	NORTHBOUND		SOUTHBOUND			EASTBOUND			WESTBOUND				
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	0	0	2	1	2	2	1	0	0	0	
4:00 PM	0	187	19	0	168	78	161	1	82	0	0	0	696
4:15 PM	0	194	17	0	185	89	143	1	70	0	0	0	699
4:30 PM	0	188	15	0	160	86	114	0	61	0	0	0	624
4:45 PM	0	218	15	0	162	61	117	0	55	0	0	0	628
5:00 PM	0	206	11	0	169	66	150	4	82	0	0	0	688
5:15 PM	0	188	15	0	188	84	113	0	57	0	0	0	645
5:30 PM	0	207	21	0	163	72	135	2	53	0	0	0	653
5:45 PM	0	212	15	0	176	71	122	0	75	0	0	0	671
TOTAL VOLUMES :	NL 0	NT 1600	NR 128	SL 0	ST 1371	SR 607	EL 1055	ET 8	ER 535	WL 0	WT 0	WR 0	TOTAL 5304
APPROACH %'s :	0.00%	92.59%	7.41%	0.00%	69.31%	30.69%	66.02%	0.50%	33.48%	#DIV/0!	#DIV/0!	#DIV/0!	
PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	813	62	0	696	293	520	6	267	0	0	0	2657
PEAK HR FACTOR :	0.959		0.909			0.840			0.000			0.965	

CONTROL : Signalized

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:15 AM	0	0	0	0
1:30 AM	0	0	0	0
1:45 AM	0	0	0	0
2:00 AM	0	0	0	0
TOTAL VOLUMES	NB 0	SB 0	EB 0	WB 0
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-008

Day: Sunday

City: Carson

Date: 2/12/2017

NOON

NS/EW Streets:	Figuroa St			Figuroa St			190th St/Victoria St			190th St/Victoria St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	0	1	3	0	1	2	1	1	2	0	
12:00 PM	19	38	8	5	35	11	14	73	16	11	85	4	319
12:15 PM	20	35	4	3	54	7	10	67	15	5	86	5	311
12:30 PM	21	35	10	6	42	7	10	96	13	5	73	12	330
12:45 PM	16	34	3	3	29	8	6	84	20	6	73	7	289
1:00 PM	25	41	9	6	55	21	8	101	12	7	63	12	360
1:15 PM	17	64	9	5	48	20	13	86	18	4	83	7	374
1:30 PM	25	54	10	9	53	19	11	110	16	10	77	6	400
1:45 PM	20	46	11	4	41	10	13	123	21	5	84	7	385
TOTAL VOLUMES :	163	347	64	41	357	103	85	740	131	53	624	60	2768
APPROACH %'s :	28.40%	60.45%	11.15%	8.18%	71.26%	20.56%	8.89%	77.41%	13.70%	7.19%	84.67%	8.14%	

PEAK HR START TIME :	100 PM												TOTAL
PEAK HR VOL :	87	205	39	24	197	70	45	420	67	26	307	32	1519
PEAK HR FACTOR :	0.919			0.887			0.847			0.951			0.949

CONTROL : Signalized

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	0	0	2	0
12:30 AM	0	0	0	0
12:45 AM	0	0	2	0
1:00 AM	0	0	0	0
1:00 PM	0	0	1	0
1:15 PM	0	0	1	0
1:30 PM	0	0	0	0
1:45 PM	0	0	0	0
TOTAL VOLUMES	NB 0	SB 0	EB 6	WB 0
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-008

Day: Sunday

City: Carson

Date: 2/12/2017

PM

NS/EW Streets:	Figuroa St		Figuroa St			190th St/Victoria St			190th St/Victoria St			TOTAL	
	NORTHBOUND		SOUTHBOUND			EASTBOUND			WESTBOUND				
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	0	1	3	0	1	2	1	1	2	0	
4:00 PM	20	38	12	5	46	9	6	92	14	6	75	8	331
4:15 PM	8	43	5	2	35	10	8	85	12	7	81	4	300
4:30 PM	15	30	10	5	37	8	6	79	8	3	83	6	290
4:45 PM	18	37	6	5	32	7	4	77	9	7	67	6	275
5:00 PM	21	38	5	11	26	8	9	80	20	5	63	7	293
5:15 PM	12	49	4	6	33	6	8	92	10	6	64	8	298
5:30 PM	6	39	8	8	26	6	6	79	10	4	67	6	265
5:45 PM	11	33	4	4	32	5	10	80	9	6	67	8	269
TOTAL VOLUMES :	NL 111	NT 307	NR 54	SL 46	ST 267	SR 59	EL 57	ET 664	ER 92	WL 44	WT 567	WR 53	TOTAL 2321
APPROACH %'s :	23.52%	65.04%	11.44%	12.37%	71.77%	15.86%	7.01%	81.67%	11.32%	6.63%	85.39%	7.98%	

PEAK HR START TIME :	400 PM												TOTAL
PEAK HR VOL :	61	148	33	17	150	34	24	333	43	23	306	24	1196
PEAK HR FACTOR :	0.864		0.838			0.893			0.959			0.903	

CONTROL : Signalized

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	0	0	1	0
12:30 AM	0	0	0	0
12:45 AM	2	0	0	0
1:00 AM	0	0	0	0
1:15 AM	0	0	2	0
1:30 AM	0	0	2	0
1:45 AM	0	0	1	0
2:00 AM	0	0	0	0
TOTAL VOLUMES	NB 2	SB 0	EB 6	WB 0
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-009

Day: Sunday

City: Carson

Date: 2/12/2017

NOON

NS/EW Streets:	Main St			Main St			Victoria St			Victoria St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	1	1	2	0	1	2	0	1	2	0	
12:00 PM	10	25	9	14	27	5	11	59	11	16	71	3	261
12:15 PM	7	24	23	7	27	9	5	57	6	9	78	11	263
12:30 PM	6	18	16	5	22	2	8	83	8	9	61	10	248
12:45 PM	6	28	14	8	35	6	10	69	11	9	73	7	276
1:00 PM	8	27	13	13	25	7	9	84	16	10	68	6	286
1:15 PM	10	23	22	9	30	9	13	75	5	12	59	11	278
1:30 PM	7	18	16	7	33	17	11	100	15	9	76	9	318
1:45 PM	12	37	14	10	30	9	15	101	13	8	77	6	332
TOTAL VOLUMES :	66	200	127	73	229	64	82	628	85	82	563	63	2262
APPROACH %'s :	16.79%	50.89%	32.32%	19.95%	62.57%	17.49%	10.31%	78.99%	10.69%	11.58%	79.52%	8.90%	

PEAK HR START TIME :	100 PM												TOTAL
PEAK HR VOL :	37	105	65	39	118	42	48	360	49	39	280	32	1214
PEAK HR FACTOR :	0.821			0.873			0.886			0.934			0.914

CONTROL : [Signalized](#)

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	0	0	2	1
12:30 AM	0	0	1	0
12:45 AM	0	0	2	0
1:00 AM	0	0	0	1
1:00 PM	0	0	1	0
1:15 PM	0	0	0	0
1:30 PM	0	0	1	1
1:45 PM	0	0	2	0
TOTAL VOLUMES	0	0	9	3
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-009

Day: Sunday

City: Carson

Date: 2/12/2017

PM

NS/EW Streets:	Main St			Main St			Victoria St			Victoria St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	1	1	2	0	1	2	0	1	2	0	
4:00 PM	12	27	20	10	23	6	9	70	18	9	74	9	287
4:15 PM	5	30	16	5	22	4	8	66	17	10	64	7	254
4:30 PM	11	17	10	8	28	4	9	71	5	10	64	6	243
4:45 PM	11	34	9	7	20	4	10	62	12	11	55	12	247
5:00 PM	7	22	14	6	29	5	16	60	10	8	52	7	236
5:15 PM	9	24	15	10	16	6	6	77	9	8	62	2	244
5:30 PM	7	21	13	7	17	7	9	66	9	6	63	7	232
5:45 PM	14	28	9	2	22	4	6	67	7	9	68	4	240
TOTAL VOLUMES :	NL 76	NT 203	NR 106	SL 55	ST 177	SR 40	EL 73	ET 539	ER 87	WL 71	WT 502	WR 54	TOTAL 1983
APPROACH %'s :	19.74%	52.73%	27.53%	20.22%	65.07%	14.71%	10.44%	77.11%	12.45%	11.32%	80.06%	8.61%	

PEAK HR START TIME :	400 PM												TOTAL
PEAK HR VOL :	39	108	55	30	93	18	36	269	52	40	257	34	1031
PEAK HR FACTOR :	0.856			0.881			0.920			0.899			0.898

CONTROL : [Signalized](#)

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	1	0	2	1
12:30 AM	0	0	2	1
12:45 AM	0	0	1	0
1:00 AM	0	0	3	0
1:15 AM	0	0	0	0
1:30 AM	0	0	0	1
1:45 AM	0	0	0	0
2:00 AM	0	0	0	0
TOTAL VOLUMES	NB 1	SB 0	EB 8	WB 3
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-010

Day: Sunday

City: Carson

Date: 2/12/2017

NOON

NS/EW Streets:	Main St			Main St			Albertoni St			Albertoni St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	0	1	2	0	1	2	0	1	2	0	
12:00 PM	6	27	11	15	24	10	6	45	4	12	34	23	217
12:15 PM	5	15	12	11	33	8	4	37	10	9	35	29	208
12:30 PM	8	18	10	13	17	12	5	40	4	10	37	27	201
12:45 PM	8	19	19	16	27	7	7	36	7	12	20	15	193
1:00 PM	6	22	12	21	27	9	1	41	14	8	40	19	220
1:15 PM	9	25	18	20	33	6	8	37	4	10	33	28	231
1:30 PM	5	16	22	18	35	8	6	48	7	15	33	25	238
1:45 PM	7	25	21	13	40	7	7	47	11	6	32	27	243
TOTAL VOLUMES :	54	167	125	127	236	67	44	331	61	82	264	193	1751
APPROACH %'s :	15.61%	48.27%	36.13%	29.53%	54.88%	15.58%	10.09%	75.92%	13.99%	15.21%	48.98%	35.81%	
PEAK HR START TIME :	100 PM												TOTAL
PEAK HR VOL :	27	88	73	72	135	30	22	173	36	39	138	99	932
PEAK HR FACTOR :	0.887			0.971			0.888			0.945			0.959

CONTROL : Signalized

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	2	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:00 PM	0	0	0	0
1:15 PM	2	0	0	0
1:30 PM	1	0	0	1
1:45 PM	0	0	0	1
TOTAL VOLUMES	5	0	0	2
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-010

Day: Sunday

City: Carson

Date: 2/12/2017

PM

NS/EW Streets:	Main St		Main St			Albertoni St			Albertoni St			TOTAL	
	NORTHBOUND		SOUTHBOUND			EASTBOUND			WESTBOUND				
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	0	1	2	0	1	2	0	1	2	0	
4:00 PM	9	16	14	18	21	6	8	47	7	8	26	32	212
4:15 PM	2	27	15	13	22	5	4	48	3	4	26	24	193
4:30 PM	3	16	11	13	36	12	2	41	6	6	27	25	198
4:45 PM	6	25	18	16	20	1	3	32	3	6	23	22	175
5:00 PM	5	34	19	12	25	11	5	35	4	5	35	21	211
5:15 PM	1	18	10	17	19	6	4	30	7	7	28	16	163
5:30 PM	4	21	15	11	20	4	3	29	6	6	26	27	172
5:45 PM	7	30	6	10	25	2	2	36	2	8	20	26	174
TOTAL VOLUMES :	NL 37	NT 187	NR 108	SL 110	ST 188	SR 47	EL 31	ET 298	ER 38	WL 50	WT 211	WR 193	TOTAL 1498
APPROACH %'s :	11.14%	56.33%	32.53%	31.88%	54.49%	13.62%	8.45%	81.20%	10.35%	11.01%	46.48%	42.51%	
PEAK HR START TIME :	400 PM												TOTAL
PEAK HR VOL :	20	84	58	60	99	24	17	168	19	24	102	103	778
PEAK HR FACTOR :	0.827		0.750			0.823			0.867			0.917	

CONTROL : Signalized

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	0	1	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:15 AM	2	1	0	0
1:30 AM	0	0	0	0
1:45 AM	0	0	0	0
2:00 AM	3	0	0	0
TOTAL VOLUMES	NB 5	SB 2	EB 0	WB 0
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-011

Day: Sunday

City: Carson

Date: 2/12/2017

NOON

NS/EW Streets:	Central Ave			Central Ave			Artesia Blvd/SR 91 WB Ramps			Artesia Blvd/SR 91 WB Ramps			TOTAL																										
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND																													
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR																											
	1	2	0	0	2.5	0.5	0	0	0	1.5	1	0.5																											
12:00 PM	55	63	0	0	158	71	0	0	0	60	9	43	459																										
12:15 PM	46	86	0	0	116	49	0	0	0	63	19	49	428																										
12:30 PM	33	58	0	0	113	37	0	0	0	61	16	43	361																										
12:45 PM	37	66	0	0	103	32	0	0	0	64	15	67	384																										
1:00 PM	38	85	0	0	111	44	0	0	0	61	7	63	409																										
1:15 PM	37	83	0	0	108	37	0	0	0	61	13	51	390																										
1:30 PM	30	95	0	0	124	43	0	0	0	64	11	54	421																										
1:45 PM	40	82	0	0	135	37	0	0	0	63	11	53	421																										
TOTAL VOLUMES :	316	618	0	0	968	350	0	0	0	497	101	423	3273																										
APPROACH %'s :	33.83%	66.17%	0.00%	0.00%	73.44%	26.56%	#DIV/0!	#DIV/0!	#DIV/0!	48.68%	9.89%	41.43%																											
PEAK HR START TIME :	100 PM												TOTAL																										
PEAK HR VOL :	145			345			0			0			478			161			0			0			0			249			42			221			1641		
PEAK HR FACTOR :	0.980			0.929			0.000			0.977			0.974																										

CONTROL : [Signalized](#)

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	0	0	0	0
12:30 AM	1	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:00 PM	0	0	0	0
1:15 PM	0	0	0	0
1:30 PM	0	0	0	0
1:45 PM	0	0	0	0
TOTAL VOLUMES	NB	SB	EB	WB
APPROACH %'s	1	0	0	0

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-011

Day: Sunday

City: Carson

Date: 2/12/2017

PM

NS/EW Streets:	Central Ave			Central Ave			Artesia Blvd/SR 91 WB Ramps			Artesia Blvd/SR 91 WB Ramps			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	0	0	2.5	0.5	0	0	0	1.5	1	0.5	
4:00 PM	37	79	0	0	103	35	0	0	0	60	10	56	380
4:15 PM	38	97	0	0	72	33	0	0	0	51	15	64	370
4:30 PM	29	81	0	0	111	19	0	0	0	50	5	68	363
4:45 PM	38	96	0	0	83	31	0	0	0	60	7	55	370
5:00 PM	39	98	0	0	97	34	0	0	0	55	16	50	389
5:15 PM	31	70	0	0	108	39	0	0	0	60	7	60	375
5:30 PM	37	84	0	0	88	33	0	0	0	58	14	59	373
5:45 PM	34	92	0	0	128	34	0	0	0	45	10	68	411
TOTAL VOLUMES :	NL 283	NT 697	NR 0	SL 0	ST 790	SR 258	EL 0	ET 0	ER 0	WL 439	WT 84	WR 480	TOTAL 3031
APPROACH %'s :	28.88%	71.12%	0.00%	0.00%	75.38%	24.62%	#DIV/0!	#DIV/0!	#DIV/0!	43.77%	8.37%	47.86%	

PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	141	344	0	0	421	140	0	0	0	218	47	237	1548
PEAK HR FACTOR :	0.885			0.866			0.000			0.958			0.942

CONTROL : [Signalized](#)

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:15 AM	0	0	0	0
1:30 AM	0	0	0	0
1:45 AM	0	0	0	0
2:00 AM	0	0	0	0
TOTAL VOLUMES	NB 0	SB 0	EB 0	WB 0
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-012

Day: Sunday

City: Carson

Date: 2/12/2017

NOON

NS/EW Streets:	Central Ave			Central Ave			Albertoni St/Artesia Blvd/SR 91 EB Ramps			Albertoni St/Artesia Blvd/SR 91 EB Ramps			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	2	2	2	2	0	1.5	1	0.5	0	0	0	
12:00 PM	0	70	49	81	142	0	49	12	37	0	0	0	440
12:15 PM	0	82	49	73	114	0	51	14	51	0	0	0	434
12:30 PM	0	57	47	69	104	0	34	14	45	0	0	0	370
12:45 PM	0	75	48	57	112	0	33	9	44	0	0	0	378
1:00 PM	0	77	51	59	111	0	46	8	39	0	0	0	391
1:15 PM	0	76	50	63	102	0	47	21	57	0	0	0	416
1:30 PM	0	76	65	63	126	0	42	11	59	0	0	0	442
1:45 PM	0	85	56	69	128	0	40	15	57	0	0	0	450
TOTAL VOLUMES :	0	598	415	534	939	0	342	104	389	0	0	0	3321
APPROACH %'s :	0.00%	59.03%	40.97%	36.25%	63.75%	0.00%	40.96%	12.46%	46.59%	#DIV/0!	#DIV/0!	#DIV/0!	

PEAK HR START TIME :	100 PM												TOTAL
PEAK HR VOL :	0	314	222	254	467	0	175	55	212	0	0	0	1699
PEAK HR FACTOR :		0.950			0.915			0.884			0.000		0.944

CONTROL : [Signalized](#)

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:00 PM	0	0	0	0
1:15 PM	0	0	0	0
1:30 PM	0	0	0	0
1:45 PM	0	0	0	0
TOTAL VOLUMES	0	0	0	0
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-012

Day: Sunday

City: Carson

Date: 2/12/2017

PM

NS/EW Streets:	Central Ave		Central Ave				Albertoni St/Artesia Blvd/SR 91 EB Ramps			Albertoni St/Artesia Blvd/SR 91 EB Ramps			TOTAL
	NORTHBOUND		SOUTHBOUND				EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	2	2	2	2	0	1.5	1	0.5	0	0	0	
4:00 PM	0	82	51	44	110	0	39	15	45	0	0	0	386
4:15 PM	0	80	59	46	82	0	55	15	36	0	0	0	373
4:30 PM	0	77	37	52	108	0	35	8	51	0	0	0	368
4:45 PM	0	85	49	47	105	0	47	12	43	0	0	0	388
5:00 PM	0	89	45	49	100	0	46	14	50	0	0	0	393
5:15 PM	0	69	52	53	107	0	41	15	37	0	0	0	374
5:30 PM	0	64	46	52	90	0	48	7	33	0	0	0	340
5:45 PM	0	87	37	71	106	0	38	10	38	0	0	0	387
TOTAL VOLUMES :	0	633	376	414	808	0	349	96	333	0	0	0	3009
APPROACH %'s :	0.00%	62.74%	37.26%	33.88%	66.12%	0.00%	44.86%	12.34%	42.80%	#DIV/0!	#DIV/0!	#DIV/0!	

PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	0	320	183	201	420	0	169	49	181	0	0	0	1523
PEAK HR FACTOR :		0.938			0.970			0.907			0.000		0.969

CONTROL : [Signalized](#)

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:15 AM	0	0	0	0
1:30 AM	0	0	0	0
1:45 AM	0	0	0	0
2:00 AM	0	0	0	0
TOTAL VOLUMES	0	0	0	0
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-013

Day: Sunday

City: Carson

Date: 2/12/2017

NOON

NS/EW Streets:	Central Ave			Central Ave			Victoria St			Victoria St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	1	2	2	1	2	2	0	1	2	0	
12:00 PM	3	68	0	7	104	23	17	8	6	0	5	3	244
12:15 PM	9	75	1	10	91	28	10	12	11	4	7	5	263
12:30 PM	6	56	0	5	89	27	29	10	9	2	5	7	245
12:45 PM	9	64	1	5	92	32	30	2	11	0	12	6	264
1:00 PM	4	80	1	6	88	34	20	12	8	1	11	8	273
1:15 PM	9	78	2	7	103	19	18	9	5	2	8	4	264
1:30 PM	9	88	2	6	106	20	31	16	13	3	5	12	311
1:45 PM	10	79	4	8	109	36	22	12	9	1	10	1	301
TOTAL VOLUMES :	59	588	11	54	782	219	177	81	72	13	63	46	2165
APPROACH %'s :	8.97%	89.36%	1.67%	5.12%	74.12%	20.76%	53.64%	24.55%	21.82%	10.66%	51.64%	37.70%	

PEAK HR START TIME :	100 PM												TOTAL
PEAK HR VOL :	32	325	9	27	406	109	91	49	35	7	34	25	1149
PEAK HR FACTOR :	0.924			0.886			0.729			0.825			0.924

CONTROL : [Signalized](#)

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:00 PM	0	0	0	0
1:15 PM	0	0	0	0
1:30 PM	1	0	0	0
1:45 PM	0	0	0	0
TOTAL VOLUMES	NB 1	SB 0	EB 0	WB 0
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-013

Day: Sunday

City: Carson

Date: 2/12/2017

PM

NS/EW Streets:	Central Ave			Central Ave			Victoria St			Victoria St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	1	2	2	1	2	2	0	1	2	0	
4:00 PM	11	70	1	5	93	28	28	13	5	1	5	5	265
4:15 PM	4	64	1	4	68	22	25	12	8	1	9	5	223
4:30 PM	8	68	0	4	91	22	25	16	5	0	4	4	247
4:45 PM	5	76	2	6	103	19	26	9	6	3	7	5	267
5:00 PM	6	98	0	6	88	21	25	13	2	0	6	5	270
5:15 PM	6	66	0	11	79	23	18	11	11	0	9	4	238
5:30 PM	7	66	0	2	73	25	20	12	3	0	7	4	219
5:45 PM	5	73	2	5	75	20	23	8	3	0	10	7	231
TOTAL VOLUMES :	52	581	6	43	670	180	190	94	43	5	57	39	1960
APPROACH %'s :	8.14%	90.92%	0.94%	4.82%	75.03%	20.16%	58.10%	28.75%	13.15%	4.95%	56.44%	38.61%	

PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	25	308	2	27	361	85	94	49	24	3	26	18	1022
PEAK HR FACTOR :	0.805			0.924			0.908			0.783			0.946

CONTROL : [Signalized](#)

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	0	0	0	0
12:30 AM	0	1	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:15 AM	0	0	0	0
1:30 AM	0	0	0	0
1:45 AM	0	0	0	0
2:00 AM	0	0	0	0
TOTAL VOLUMES	0	1	0	0
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-014

Day: Sunday

City: Carson

Date: 2/12/2017

NOON

NS/EW Streets:	Central Ave			Central Ave			University Dr			University Dr			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	0	1	2	1	1	2	0	1	2	0	
12:00 PM	14	49	3	12	79	15	13	18	6	2	19	10	240
12:15 PM	16	70	3	10	67	18	13	15	8	2	9	10	241
12:30 PM	11	46	2	11	79	16	5	20	15	3	9	6	223
12:45 PM	9	62	3	14	74	22	9	15	16	3	13	10	250
1:00 PM	14	59	7	9	57	24	13	21	15	2	18	9	248
1:15 PM	11	72	3	11	72	22	17	16	13	3	14	1	255
1:30 PM	21	74	4	14	99	18	12	22	17	6	19	6	312
1:45 PM	11	64	4	9	87	20	21	31	17	3	19	12	298
TOTAL VOLUMES :	NL 107	NT 496	NR 29	SL 90	ST 614	SR 155	EL 103	ET 158	ER 107	WL 24	WT 120	WR 64	TOTAL 2067
APPROACH %'s :	16.93%	78.48%	4.59%	10.48%	71.48%	18.04%	27.99%	42.93%	29.08%	11.54%	57.69%	30.77%	

PEAK HR START TIME :	100 PM												TOTAL
PEAK HR VOL :	57	269	18	43	315	84	63	90	62	14	70	28	1113
PEAK HR FACTOR :	0.869			0.844			0.779			0.824			0.892

CONTROL : Signalized

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	0	0	0	0
12:30 AM	1	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:00 PM	0	0	0	0
1:15 PM	0	0	0	0
1:30 PM	0	1	0	0
1:45 PM	1	0	0	0
TOTAL VOLUMES	NB 2	SB 1	EB 0	WB 0
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-014

Day: Sunday

City: Carson

Date: 2/12/2017

PM

NS/EW Streets:	Central Ave			Central Ave			University Dr			University Dr			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	0	1	2	1	1	2	0	1	2	0	
4:00 PM	8	56	4	14	60	24	17	20	13	4	23	6	249
4:15 PM	10	58	1	5	57	15	15	18	17	4	15	7	222
4:30 PM	14	51	5	6	64	26	12	18	11	0	6	11	224
4:45 PM	10	58	2	10	66	16	19	19	14	4	16	12	246
5:00 PM	6	70	2	15	70	13	19	21	9	5	10	7	247
5:15 PM	8	59	1	12	58	11	15	16	8	0	11	3	202
5:30 PM	14	43	1	5	58	23	18	16	13	4	15	13	223
5:45 PM	18	57	0	9	53	13	11	18	13	0	9	10	211
TOTAL VOLUMES :	88	452	16	76	486	141	126	146	98	21	105	69	1824
APPROACH %'s :	15.83%	81.29%	2.88%	10.81%	69.13%	20.06%	34.05%	39.46%	26.49%	10.77%	53.85%	35.38%	

PEAK HR START TIME :	400 PM												TOTAL
PEAK HR VOL :	42	223	12	35	247	81	63	75	55	12	60	36	941
PEAK HR FACTOR :	0.989			0.926			0.928			0.818			0.945

CONTROL : Signalized

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:15 AM	1	0	0	0
1:30 AM	0	0	0	0
1:45 AM	1	0	0	0
2:00 AM	0	0	0	0
TOTAL VOLUMES	NB 2	SB 0	EB 0	WB 0
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-015

Day: Sunday

City: Carson

Date: 2/12/2017

NOON

NS/EW Streets:	Central Ave			Central Ave			Del Amo Blvd			Del Amo Blvd			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	0	0	2	0	2	1	2	0	0	2	0	
12:00 PM	0	0	0	34	0	60	53	91	0	0	115	34	387
12:15 PM	0	0	0	28	0	53	50	106	0	0	126	39	402
12:30 PM	0	0	0	28	0	55	60	85	0	0	116	21	365
12:45 PM	0	0	0	25	0	68	50	100	0	0	119	34	396
1:00 PM	0	0	0	35	0	38	49	101	0	0	104	30	357
1:15 PM	0	0	0	42	0	59	60	92	0	0	108	29	390
1:30 PM	0	0	0	21	0	60	67	101	0	0	109	23	381
1:45 PM	0	0	0	30	0	67	67	115	0	0	105	28	412
TOTAL VOLUMES :	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	0	0	243	0	460	456	791	0	0	902	238	3090
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	34.57%	0.00%	65.43%	36.57%	63.43%	0.00%	0.00%	79.12%	20.88%	

PEAK HR START TIME :	1200 PM												TOTAL
PEAK HR VOL :	0	0	0	115	0	236	213	382	0	0	476	128	1550
PEAK HR FACTOR :	0.000			0.934			0.954			0.915			0.964

CONTROL : Signalized

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	0	7	0	0
12:30 AM	0	7	0	0
12:45 AM	0	7	0	0
1:00 AM	0	4	0	0
1:00 PM	0	8	0	0
1:15 PM	0	8	0	0
1:30 PM	0	4	0	0
1:45 PM	0	9	1	0
TOTAL VOLUMES	NB	SB	EB	WB
APPROACH %'s	0	54	1	0

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-015

Day: Sunday

City: Carson

Date: 2/12/2017

PM

NS/EW Streets:	Central Ave			Central Ave			Del Amo Blvd			Del Amo Blvd			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	0	0	2	0	2	1	2	0	0	2	0	
4:00 PM	0	0	0	30	0	58	66	116	0	0	96	11	377
4:15 PM	0	0	0	20	0	55	63	112	0	0	93	11	354
4:30 PM	0	0	0	17	0	52	53	104	0	1	106	16	349
4:45 PM	0	0	0	24	0	67	59	94	0	0	97	20	361
5:00 PM	0	0	0	24	0	65	44	101	0	0	95	13	342
5:15 PM	0	0	0	20	0	61	57	90	0	0	134	21	383
5:30 PM	0	0	0	30	0	50	45	98	0	0	77	26	326
5:45 PM	0	0	0	40	0	52	68	110	0	0	96	18	384
TOTAL VOLUMES :	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	0	0	205	0	460	455	825	0	1	794	136	2876
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	30.83%	0.00%	69.17%	35.55%	64.45%	0.00%	0.11%	85.28%	14.61%	

PEAK HR START TIME :	400 PM												TOTAL
PEAK HR VOL :	0	0	0	91	0	232	241	426	0	1	392	58	1441
PEAK HR FACTOR :	0.000			0.887			0.916			0.917			0.956

CONTROL : Signalized

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	0	9	0	0
12:30 AM	0	6	1	0
12:45 AM	0	5	0	1
1:00 AM	0	7	0	0
1:15 AM	0	6	0	0
1:30 AM	0	5	0	0
1:45 AM	0	16	0	0
2:00 AM	0	17	1	0
TOTAL VOLUMES	NB	SB	EB	WB
APPROACH %'s	0	71	2	1

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-016

Day: Sunday

City: Carson

Date: 2/12/2017

NOON

NS/EW Streets:	Wilmington Ave			Wilmington Ave			Artesia Blvd/SR 91 WB Ramps			Artesia Blvd/SR 91 WB Ramps			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	0	0	2.5	0.5	0	0	0	1.5	1	0.5	
12:00 PM	24	77	0	0	93	51	0	0	0	33	12	81	371
12:15 PM	17	69	0	0	116	63	0	0	0	29	18	64	376
12:30 PM	23	67	0	0	135	50	0	0	0	31	13	84	403
12:45 PM	17	59	0	0	114	47	0	0	0	43	13	85	378
1:00 PM	21	58	0	0	113	57	0	0	0	41	13	76	379
1:15 PM	27	64	0	0	122	55	0	0	0	37	11	67	383
1:30 PM	18	70	0	0	125	65	0	0	0	43	9	66	396
1:45 PM	25	89	0	0	161	81	0	0	0	30	11	96	493
TOTAL VOLUMES :	172	553	0	0	979	469	0	0	0	287	100	619	3179
APPROACH %'s :	23.72%	76.28%	0.00%	0.00%	67.61%	32.39%	#DIV/0!	#DIV/0!	#DIV/0!	28.53%	9.94%	61.53%	

PEAK HR START TIME :	100 PM												TOTAL
PEAK HR VOL :	91	281	0	0	521	258	0	0	0	151	44	305	1651
PEAK HR FACTOR :	0.816			0.805			0.000			0.912			0.837

CONTROL : [Signalized](#)

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:00 PM	0	0	0	0
1:15 PM	0	0	0	0
1:30 PM	0	0	0	0
1:45 PM	0	0	0	0
TOTAL VOLUMES	0	0	0	0
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-016

Day: Sunday

City: Carson

Date: 2/12/2017

PM

NS/EW Streets:	Wilmington Ave			Wilmington Ave			Artesia Blvd/SR 91 WB Ramps			Artesia Blvd/SR 91 WB Ramps			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	0	0	2.5	0.5	0	0	0	1.5	1	0.5	
4:00 PM	20	91	0	0	90	36	0	0	0	25	16	80	358
4:15 PM	23	102	0	0	106	38	0	0	0	38	14	75	396
4:30 PM	17	65	0	0	99	51	0	0	0	41	13	90	376
4:45 PM	14	78	0	0	114	48	0	0	0	47	7	91	399
5:00 PM	23	94	0	0	89	39	0	0	0	50	11	88	394
5:15 PM	24	78	0	0	98	52	0	0	0	48	14	94	408
5:30 PM	16	85	0	0	104	47	0	0	0	37	16	104	409
5:45 PM	19	78	0	0	101	45	0	0	0	46	10	108	407

	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
TOTAL VOLUMES :	156	671	0	0	801	356	0	0	0	332	101	730	3147
APPROACH %'s :	18.86%	81.14%	0.00%	0.00%	69.23%	30.77%	#DIV/0!	#DIV/0!	#DIV/0!	28.55%	8.68%	62.77%	

PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	82	335	0	0	392	183	0	0	0	181	51	394	1618
PEAK HR FACTOR :	0.891			0.952			0.000			0.954			0.989

CONTROL : Signalized

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:15 AM	1	0	0	0
1:30 AM	0	0	0	0
1:45 AM	0	0	0	0
2:00 AM	1	0	0	0
TOTAL VOLUMES	NB 2	SB 0	EB 0	WB 0
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-017

Day: Sunday

City: Carson

Date: 2/12/2017

NOON

NS/EW Streets:	Wilmington Ave			Wilmington Ave			Artesia Blvd/SR 91 EB Ramps			Artesia Blvd/SR 91 EB Ramps			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	2	2	2	2	0	1.5	1	0.5	0	0	0	
12:00 PM	0	46	40	63	61	0	52	10	16	0	0	0	288
12:15 PM	0	51	39	92	58	0	33	4	24	0	0	0	301
12:30 PM	0	45	53	101	60	0	47	4	12	0	0	0	322
12:45 PM	0	42	47	88	60	0	43	6	18	0	0	0	304
1:00 PM	0	41	33	98	62	0	27	9	13	0	0	0	283
1:15 PM	0	51	41	99	67	0	37	12	23	0	0	0	330
1:30 PM	0	50	42	92	72	0	44	10	23	0	0	0	333
1:45 PM	0	55	34	126	62	0	54	10	26	0	0	0	367
TOTAL VOLUMES :	0	381	329	759	502	0	337	65	155	0	0	0	2528
APPROACH %'s :	0.00%	53.66%	46.34%	60.19%	39.81%	0.00%	60.50%	11.67%	27.83%	#DIV/0!	#DIV/0!	#DIV/0!	

PEAK HR START TIME :	100 PM												TOTAL
PEAK HR VOL :	0	197	150	415	263	0	162	41	85	0	0	0	1313
PEAK HR FACTOR :		0.943			0.902			0.800			0.000		0.894

CONTROL : [Signalized](#)

UTURNS

LANES:	NB	SB	EB	WB
	12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:00 PM	0	0	0	0
1:15 PM	0	0	0	0
1:30 PM	0	0	0	0
1:45 PM	0	0	0	0
TOTAL VOLUMES	0	0	0	0
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-017

Day: Sunday

City: Carson

Date: 2/12/2017

PM

NS/EW Streets:	Wilmington Ave		Wilmington Ave				Artesia Blvd/SR 91 EB Ramps			Artesia Blvd/SR 91 EB Ramps			TOTAL
	NORTHBOUND		SOUTHBOUND				EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	2	2	2	2	0	1.5	1	0.5	0	0	0	
4:00 PM	0	63	40	72	53	0	41	11	24	0	0	0	304
4:15 PM	0	54	36	85	60	0	66	3	16	0	0	0	320
4:30 PM	0	55	38	77	62	0	33	6	15	0	0	0	286
4:45 PM	0	47	55	76	70	0	47	10	15	0	0	0	320
5:00 PM	0	55	49	80	73	0	57	4	22	0	0	0	340
5:15 PM	0	49	25	73	69	0	53	10	23	0	0	0	302
5:30 PM	0	38	40	70	65	0	63	10	16	0	0	0	302
5:45 PM	0	44	43	93	59	0	54	11	20	0	0	0	324
TOTAL VOLUMES :	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	405	326	626	511	0	414	65	151	0	0	0	2498
APPROACH %'s :	0.00%	55.40%	44.60%	55.06%	44.94%	0.00%	65.71%	10.32%	23.97%	#DIV/0!	#DIV/0!	#DIV/0!	

PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	186	157	316	266	0	227	35	81	0	0	0	1268
PEAK HR FACTOR :		0.825			0.951			0.963			0.000		0.932

CONTROL : [Signalized](#)

UTURNS

LANES:	NB	SB	EB	WB
	12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	1	0	0
1:00 AM	0	0	0	0
1:15 AM	0	0	0	0
1:30 AM	0	0	0	0
1:45 AM	0	0	0	0
2:00 AM	0	0	0	0
TOTAL VOLUMES	NB	SB	EB	WB
APPROACH %'s	0	1	0	0

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-018

Day: Sunday

City: Carson

Date: 2/12/2017

NOON

NS/EW Streets:	Wilmington Ave			Wilmington Ave			Victoria St			Victoria St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	3	0	1	3	0	2	2	1	1	2	0	
12:00 PM	1	39	1	16	52	3	4	5	3	0	4	24	152
12:15 PM	1	59	0	18	46	9	7	12	6	0	8	25	191
12:30 PM	1	48	1	12	57	2	5	10	3	0	8	28	175
12:45 PM	3	55	1	16	51	4	7	2	1	0	10	20	170
1:00 PM	5	41	0	14	45	8	5	7	5	1	6	22	159
1:15 PM	0	62	0	14	62	8	7	9	4	0	4	20	190
1:30 PM	0	52	3	14	69	11	7	8	5	3	5	19	196
1:45 PM	1	51	3	15	51	8	10	7	5	3	3	18	175
TOTAL VOLUMES :	12	407	9	119	433	53	52	60	32	7	48	176	1408
APPROACH %'s :	2.80%	95.09%	2.10%	19.67%	71.57%	8.76%	36.11%	41.67%	22.22%	3.03%	20.78%	76.19%	
PEAK HR START TIME :	100 PM												TOTAL
PEAK HR VOL :	6	206	6	57	227	35	29	31	19	7	18	79	720
PEAK HR FACTOR :	0.879			0.848			0.898			0.897			0.918

CONTROL : [Signalized](#)

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	0	1	0	0
12:30 AM	0	0	0	0
12:45 AM	1	0	0	0
1:00 AM	1	0	0	0
1:00 PM	0	0	0	0
1:15 PM	0	0	1	0
1:30 PM	0	0	1	0
1:45 PM	0	0	0	0
TOTAL VOLUMES	NB 2	SB 1	EB 2	WB 0
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-018

Day: Sunday

City: Carson

Date: 2/12/2017

PM

NS/EW Streets:	Wilmington Ave		Wilmington Ave			Victoria St			Victoria St			TOTAL	
	NORTHBOUND		SOUTHBOUND			EASTBOUND			WESTBOUND				
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	3	0	1	3	0	2	2	1	1	2	0	
4:00 PM	3	60	1	15	52	8	9	8	8	3	5	14	186
4:15 PM	3	72	0	16	44	6	8	5	2	1	3	18	178
4:30 PM	3	43	2	11	51	9	6	5	3	0	3	10	146
4:45 PM	7	49	0	11	60	4	13	8	5	0	3	15	175
5:00 PM	4	73	0	18	53	8	7	10	6	1	7	13	200
5:15 PM	5	47	2	22	54	14	5	4	7	1	3	24	188
5:30 PM	1	47	3	10	53	9	10	14	1	3	2	14	167
5:45 PM	1	59	2	13	50	7	6	6	3	1	13	18	179
TOTAL VOLUMES :	NL 27	NT 450	NR 10	SL 116	ST 417	SR 65	EL 64	ET 60	ER 35	WL 10	WT 39	WR 126	TOTAL 1419
APPROACH %'s :	5.54%	92.40%	2.05%	19.40%	69.73%	10.87%	40.25%	37.74%	22.01%	5.71%	22.29%	72.00%	

PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	11	226	7	63	210	38	28	34	17	6	25	69	734
PEAK HR FACTOR :	0.792			0.864			0.790				0.781		0.918

CONTROL : Signalized

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	1	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	1	0	0
1:00 AM	0	0	0	0
1:15 AM	0	0	0	0
1:30 AM	1	0	0	0
1:45 AM	0	0	0	0
2:00 AM	0	1	0	0
TOTAL VOLUMES	NB 2	SB 2	EB 0	WB 0
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-019

Day: Sunday

City: Carson

Date: 2/12/2017

NOON

NS/EW Streets:	Wilmington Ave			Wilmington Ave			University Dr			University Dr			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	3	0	1	3	0	2	0.5	0.5	1	1	0	
12:00 PM	10	38	2	0	46	9	7	3	15	1	5	0	136
12:15 PM	5	56	2	2	42	8	2	3	3	0	1	0	124
12:30 PM	10	36	1	1	46	10	4	5	11	3	1	3	131
12:45 PM	5	43	2	1	42	11	11	1	11	0	1	3	131
1:00 PM	11	47	1	0	44	10	5	2	13	0	2	0	135
1:15 PM	7	49	4	1	43	18	8	3	5	0	2	1	141
1:30 PM	11	41	1	1	63	10	9	8	14	2	2	3	165
1:45 PM	15	45	4	0	47	11	7	6	18	2	4	1	160
TOTAL VOLUMES :	NL 74	NT 355	NR 17	SL 6	ST 373	SR 87	EL 53	ET 31	ER 90	WL 8	WT 18	WR 11	TOTAL 1123
APPROACH %'s :	16.59%	79.60%	3.81%	1.29%	80.04%	18.67%	30.46%	17.82%	51.72%	21.62%	48.65%	29.73%	

PEAK HR START TIME :	100 PM												TOTAL
PEAK HR VOL :	44	182	10	2	197	49	29	19	50	4	10	5	601
PEAK HR FACTOR :	0.922			0.838			0.790			0.679			0.911

CONTROL : [Signalized](#)

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	1	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	1	0	0
1:00 PM	0	0	0	0
1:15 PM	0	0	0	0
1:30 PM	0	0	0	0
1:45 PM	0	0	0	0
TOTAL VOLUMES	NB 1	SB 1	EB 0	WB 0
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-019

Day: Sunday

City: Carson

Date: 2/12/2017

PM

NS/EW Streets:	Wilmington Ave		Wilmington Ave			University Dr			University Dr			TOTAL	
	NORTHBOUND		SOUTHBOUND			EASTBOUND			WESTBOUND				
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	3	0	1	3	0	2	0.5	0.5	1	1	0	
4:00 PM	8	49	1	1	50	9	16	5	11	2	1	2	155
4:15 PM	5	53	0	0	34	9	7	1	7	3	4	4	127
4:30 PM	8	39	1	3	45	6	10	4	10	2	2	0	130
4:45 PM	9	56	0	2	59	11	11	6	13	0	6	1	174
5:00 PM	6	57	5	2	46	8	7	4	19	1	3	3	161
5:15 PM	1	44	2	2	56	5	5	3	9	4	4	1	136
5:30 PM	7	44	3	3	38	10	8	2	9	3	1	0	128
5:45 PM	5	48	4	9	44	6	4	3	9	4	2	4	142
TOTAL VOLUMES :	NL 49	NT 390	NR 16	SL 22	ST 372	SR 64	EL 68	ET 28	ER 87	WL 19	WT 23	WR 15	TOTAL 1153
APPROACH %'s :	10.77%	85.71%	3.52%	4.80%	81.22%	13.97%	37.16%	15.30%	47.54%	33.33%	40.35%	26.32%	
PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	24	196	8	9	206	30	33	17	51	7	15	5	601
PEAK HR FACTOR :	0.838			0.851			0.842			0.750			0.864

CONTROL : Signalized

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	1	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	1	0	0
1:00 AM	0	0	0	0
1:15 AM	0	0	0	0
1:30 AM	0	0	0	0
1:45 AM	0	0	0	0
2:00 AM	0	0	0	0
TOTAL VOLUMES	NB 1	SB 1	EB 0	WB 0
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-020

Day: Sunday

City: Carson

Date: 2/12/2017

NOON

NS/EW Streets:	Wilmington Ave			Wilmington Ave			Del Amo Blvd			Del Amo Blvd			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	3	0	2	3	0	1	3	0	1	2	1	
12:00 PM	14	31	14	13	24	19	11	65	17	14	70	13	305
12:15 PM	28	43	17	25	23	17	26	85	21	14	76	13	388
12:30 PM	19	23	13	18	29	24	11	76	8	10	89	15	335
12:45 PM	12	30	16	16	25	19	11	66	16	16	90	13	330
1:00 PM	14	30	18	13	19	19	15	76	15	14	67	13	313
1:15 PM	13	27	18	14	26	18	21	74	16	11	87	14	339
1:30 PM	13	26	11	18	30	17	13	67	14	13	81	27	330
1:45 PM	11	32	8	16	35	17	19	82	16	15	79	23	353
TOTAL VOLUMES :	NL 124	NT 242	NR 115	SL 133	ST 211	SR 150	EL 127	ET 591	ER 123	WL 107	WT 639	WR 131	TOTAL 2693
APPROACH %'s :	25.78%	50.31%	23.91%	26.92%	42.71%	30.36%	15.10%	70.27%	14.63%	12.20%	72.86%	14.94%	

PEAK HR START TIME :	1215 PM												TOTAL
PEAK HR VOL :	73	126	64	72	96	79	63	303	60	54	322	54	1366
PEAK HR FACTOR :	0.747			0.870			0.807			0.903			0.880

CONTROL : [Signalized](#)

UTURNS

LANES:	NB	SB	EB	WB
	12:15 AM	0	0	2	0
12:30 AM	0	1	1	0
12:45 AM	0	3	1	0
1:00 AM	0	0	1	0
1:00 PM	0	0	0	0
1:15 PM	0	0	0	0
1:30 PM	0	0	0	0
1:45 PM	0	0	3	0
TOTAL VOLUMES	NB 0	SB 4	EB 8	WB 0
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-020

Day: Sunday

City: Carson

Date: 2/12/2017

PM

NS/EW Streets:	Wilmington Ave			Wilmington Ave			Del Amo Blvd			Del Amo Blvd			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	3	0	2	3	0	1	3	0	1	2	1	
4:00 PM	8	36	5	25	21	22	16	90	11	10	65	9	318
4:15 PM	13	23	7	9	27	16	23	74	13	13	57	14	289
4:30 PM	10	31	10	19	25	16	12	60	11	10	70	14	288
4:45 PM	16	29	10	16	22	18	21	86	11	17	76	14	336
5:00 PM	6	38	14	11	34	22	14	62	10	8	68	18	305
5:15 PM	21	25	18	16	28	25	15	67	14	15	101	11	356
5:30 PM	10	35	13	11	24	11	11	61	11	10	68	20	285
5:45 PM	14	26	14	14	28	16	25	72	13	7	64	20	313
TOTAL VOLUMES :	NL 98	NT 243	NR 91	SL 121	ST 209	SR 146	EL 137	ET 572	ER 94	WL 90	WT 569	WR 120	TOTAL 2490
APPROACH %'s :	22.69%	56.25%	21.06%	25.42%	43.91%	30.67%	17.06%	71.23%	11.71%	11.55%	73.04%	15.40%	

PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	53	123	52	62	109	81	62	275	46	50	315	57	1285
PEAK HR FACTOR :	0.891			0.913			0.811			0.831			0.902

CONTROL : Signalized

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	1	2	0
1:15 AM	0	0	0	0
1:30 AM	0	0	2	0
1:45 AM	0	0	1	0
2:00 AM	0	1	3	0
TOTAL VOLUMES	NB 0	SB 2	EB 8	WB 0
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-021

Day: Sunday

City: Carson

Date: 2/12/2017

NOON

NS/EW Streets:	Wilmington Ave			Wilmington Ave			I-405 NB Ramps			I-405 NB Ramps			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	1.5	0.5	0	2	0	0	0	0	2	0	1	
12:00 PM	0	37	13	0	62	0	0	0	0	101	0	32	245
12:15 PM	0	41	10	3	73	0	0	0	0	112	0	41	280
12:30 PM	0	42	9	0	79	0	0	0	0	130	0	32	292
12:45 PM	0	42	10	1	63	0	0	0	0	113	0	39	268
1:00 PM	0	44	13	2	58	0	0	0	0	131	0	45	293
1:15 PM	0	34	19	1	60	0	0	0	0	144	0	26	284
1:30 PM	0	36	15	0	67	0	0	0	0	125	0	42	285
1:45 PM	0	41	11	1	60	0	0	0	0	133	0	35	281
TOTAL VOLUMES :	0	317	100	8	522	0	0	0	0	989	0	292	2228
APPROACH %'s :	0.00%	76.02%	23.98%	1.51%	98.49%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	77.21%	0.00%	22.79%	
PEAK HR START TIME :	100 PM												TOTAL
PEAK HR VOL :	0	155	58	4	245	0	0	0	0	533	0	148	1143
PEAK HR FACTOR :	0.934			0.929			0.000			0.967			0.975

CONTROL : Signalized

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:00 PM	0	0	0	0
1:15 PM	0	0	0	0
1:30 PM	0	0	0	0
1:45 PM	0	0	0	0
TOTAL VOLUMES	0	0	0	0
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-021

Day: Sunday

City: Carson

Date: 2/12/2017

PM

NS/EW Streets:	Wilmington Ave		Wilmington Ave				I-405 NB Ramps			I-405 NB Ramps			TOTAL
	NORTHBOUND		SOUTHBOUND				EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	1.5	0.5	0	2	0	0	0	0	2	0	1	
4:00 PM	0	35	11	4	50	0	0	0	0	119	0	42	261
4:15 PM	0	26	10	3	60	0	0	0	0	130	0	35	264
4:30 PM	0	37	12	0	69	0	0	0	0	101	0	23	242
4:45 PM	0	23	8	2	60	0	0	0	0	111	0	40	244
5:00 PM	0	28	12	3	61	0	0	0	0	129	0	40	273
5:15 PM	0	33	8	2	72	0	0	0	0	116	0	44	275
5:30 PM	0	29	18	1	39	0	0	0	0	136	0	34	257
5:45 PM	0	34	8	3	63	0	0	0	0	137	0	38	283
TOTAL VOLUMES :	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	245	87	18	474	0	0	0	0	979	0	296	2099
APPROACH %'s :	0.00%	73.80%	26.20%	3.66%	96.34%	0.00%	#DIV/0!	#DIV/0!	#DIV/0!	76.78%	0.00%	23.22%	

PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	124	46	9	235	0	0	0	0	518	0	156	1088
PEAK HR FACTOR :	0.904			0.824			0.000			0.963			0.961

CONTROL : Signalized

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:15 AM	0	0	0	0
1:30 AM	0	0	0	0
1:45 AM	0	0	0	0
2:00 AM	0	0	0	0
TOTAL VOLUMES	NB	SB	EB	WB
APPROACH %'s	0	0	0	0

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-022

Day: Sunday

City: Carson

Date: 2/12/2017

NOON

NS/EW Streets:	Wilmington Ave			Wilmington Ave			I-405 SB Ramps			I-405 SB Ramps			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	2	1	1	2	0	0.5	1	0.5	0	0	0	
12:00 PM	0	38	95	36	138	0	11	0	13	0	0	0	331
12:15 PM	0	45	105	44	142	0	5	1	16	0	0	0	358
12:30 PM	0	49	109	52	153	0	6	0	19	0	0	0	388
12:45 PM	0	48	103	38	135	0	6	0	18	0	0	0	348
1:00 PM	0	45	116	35	166	0	10	0	18	0	0	0	390
1:15 PM	0	47	97	30	156	0	7	0	16	0	0	0	353
1:30 PM	0	41	93	36	161	0	8	0	18	0	0	0	357
1:45 PM	0	44	81	40	157	0	8	0	13	0	0	0	343
TOTAL VOLUMES :	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	357	799	311	1208	0	61	1	131	0	0	0	2868
APPROACH %'s :	0.00%	30.88%	69.12%	20.47%	79.53%	0.00%	31.61%	0.52%	67.88%	#DIV/0!	#DIV/0!	#DIV/0!	

PEAK HR START TIME :	1215 PM												TOTAL
PEAK HR VOL :	0	187	433	169	596	0	27	1	71	0	0	0	1484
PEAK HR FACTOR :	0.963			0.933			0.884			0.000			0.951

CONTROL : Signalized

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:00 PM	0	1	0	0
1:15 PM	0	0	0	0
1:30 PM	0	0	0	0
1:45 PM	0	0	0	0
TOTAL VOLUMES	NB	SB	EB	WB
APPROACH %'s	0	1	0	0

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-022

Day: Sunday

City: Carson

Date: 2/12/2017

PM

NS/EW Streets:	Wilmington Ave		Wilmington Ave			I-405 SB Ramps			I-405 SB Ramps			TOTAL	
	NORTHBOUND		SOUTHBOUND			EASTBOUND			WESTBOUND				
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	2	1	1	2	0	0.5	1	0.5	0	0	0	
4:00 PM	0	39	114	27	137	0	6	0	19	0	0	0	342
4:15 PM	0	29	100	38	156	0	4	0	12	0	0	0	339
4:30 PM	0	39	86	27	142	0	9	0	22	0	0	0	325
4:45 PM	0	23	69	23	139	0	8	0	17	0	0	0	279
5:00 PM	0	33	102	34	164	0	6	1	15	0	0	0	355
5:15 PM	0	33	87	34	157	0	8	0	18	0	0	0	337
5:30 PM	0	43	103	26	146	0	4	0	15	0	0	0	337
5:45 PM	0	37	108	35	162	0	3	0	16	0	0	0	361
TOTAL VOLUMES :	0	276	769	244	1203	0	48	1	134	0	0	0	2675
APPROACH %'s :	0.00%	26.41%	73.59%	16.86%	83.14%	0.00%	26.23%	0.55%	73.22%	#DIV/0!	#DIV/0!	#DIV/0!	

PEAK HR START TIME :	500 PM												TOTAL
PEAK HR VOL :	0	146	400	129	629	0	21	1	64	0	0	0	1390
PEAK HR FACTOR :		0.935			0.957			0.827			0.000		0.963

CONTROL : [Signalized](#)

UTURNS

LANES:	NB	SB	EB	WB
	12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:15 AM	0	0	0	0
1:30 AM	0	0	0	0
1:45 AM	0	0	0	0
2:00 AM	0	0	0	0
TOTAL VOLUMES	0	0	0	0
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-023

Day: Sunday

City: Carson

Date: 2/12/2017

NOON

NS/EW Streets:	Main St			Main St			Del Amo Blvd			Del Amo Blvd			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	0	1	2	0	1	3	0	1	3	0	
12:00 PM	4	49	35	1	46	12	18	94	25	32	70	3	389
12:15 PM	15	64	44	7	51	14	14	82	15	31	74	2	413
12:30 PM	9	45	36	7	34	15	10	68	13	26	78	1	342
12:45 PM	10	64	47	3	54	1	9	77	7	26	69	1	368
1:00 PM	8	50	50	9	44	8	9	68	18	29	94	3	390
1:15 PM	5	44	52	10	45	6	9	73	11	22	93	10	380
1:30 PM	7	42	48	6	57	9	20	86	10	18	89	4	396
1:45 PM	8	52	49	5	48	12	18	92	16	31	98	1	430
TOTAL VOLUMES :	66	410	361	48	379	77	107	640	115	215	665	25	3108
APPROACH %'s :	7.89%	48.98%	43.13%	9.52%	75.20%	15.28%	12.41%	74.25%	13.34%	23.76%	73.48%	2.76%	

PEAK HR START TIME :	100 PM												TOTAL
PEAK HR VOL :	28	188	199	30	194	35	56	319	55	100	374	18	1596
PEAK HR FACTOR :	0.952			0.899			0.853			0.946			0.928

CONTROL : Signalized

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	0	0	0	0
12:30 AM	0	0	2	0
12:45 AM	0	0	0	0
1:00 AM	0	0	1	0
1:00 PM	0	0	0	0
1:15 PM	0	0	0	0
1:30 PM	0	0	0	1
1:45 PM	1	0	0	0
TOTAL VOLUMES	NB 1	SB 0	EB 3	WB 1
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-023

Day: Sunday

City: Carson

Date: 2/12/2017

PM

NS/EW Streets:	Main St			Main St			Del Amo Blvd			Del Amo Blvd			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	0	1	2	0	1	3	0	1	3	0	
4:00 PM	6	52	56	7	42	15	16	58	14	28	68	3	365
4:15 PM	8	58	38	8	33	12	11	71	8	21	74	5	347
4:30 PM	2	30	41	4	56	9	9	72	6	26	67	4	326
4:45 PM	5	46	44	7	47	7	5	56	14	27	70	1	329
5:00 PM	4	36	48	8	47	3	11	60	4	17	70	5	313
5:15 PM	3	46	37	4	39	9	9	65	5	20	61	3	301
5:30 PM	5	42	40	5	33	9	15	53	9	29	81	3	324
5:45 PM	4	35	48	2	53	6	8	70	9	19	58	6	318
TOTAL VOLUMES :	NL 37	NT 345	NR 352	SL 45	ST 350	SR 70	EL 84	ET 505	ER 69	WL 187	WT 549	WR 30	TOTAL 2623
APPROACH %'s :	5.04%	47.00%	47.96%	9.68%	75.27%	15.05%	12.77%	76.75%	10.49%	24.41%	71.67%	3.92%	

PEAK HR START TIME :	400 PM												TOTAL
PEAK HR VOL :	21	186	179	26	178	43	41	257	42	102	279	13	1367
PEAK HR FACTOR :	0.846			0.895			0.944			0.985			0.936

CONTROL : Signalized

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	0	0	0	1
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:15 AM	1	0	0	0
1:30 AM	1	0	0	0
1:45 AM	0	0	0	0
2:00 AM	0	0	0	0
TOTAL VOLUMES	NB 2	SB 0	EB 0	WB 1
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-024

Day: Sunday

City: Carson

Date: 2/12/2017

NOON

NS/EW Streets:	Rainsbury Ave			Rainsbury Ave			Victoria St			Victoria St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	0	0	0	1	0	1	2	0	0	2	0	
12:00 PM	0	0	0	1	0	23	12	48	0	0	53	2	139
12:15 PM	0	0	0	0	0	19	19	53	0	0	51	3	145
12:30 PM	0	0	0	0	0	18	23	57	0	0	49	1	148
12:45 PM	0	0	0	4	0	21	15	58	0	0	57	1	156
1:00 PM	0	0	0	1	0	18	16	56	0	0	69	3	163
1:15 PM	0	0	0	2	0	20	23	53	0	0	59	2	159
1:30 PM	0	0	0	2	0	18	17	74	0	0	80	0	191
1:45 PM	0	0	0	1	0	14	24	53	0	0	79	4	175
TOTAL VOLUMES :	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	0	0	11	0	151	149	452	0	0	497	16	1276
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	6.79%	0.00%	93.21%	24.79%	75.21%	0.00%	0.00%	96.88%	3.12%	
PEAK HR START TIME :	100 PM												TOTAL
PEAK HR VOL :	0	0	0	6	0	70	80	236	0	0	287	9	688
PEAK HR FACTOR :	0.000			0.864			0.868			0.892			0.901

CONTROL : 1-Way Stop(SB)

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	1	0
1:00 PM	0	0	0	0
1:15 PM	0	0	0	0
1:30 PM	0	0	0	0
1:45 PM	0	0	0	0
TOTAL VOLUMES	NB	SB	EB	WB
	0	0	1	0
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-024

Day: Sunday

City: Carson

Date: 2/12/2017

PM

NS/EW Streets:	Rainsbury Ave			Rainsbury Ave			Victoria St			Victoria St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	0	0	0	1	0	1	2	0	0	2	0	
4:00 PM	0	0	0	0	0	12	13	69	0	0	50	3	147
4:15 PM	0	0	0	0	0	18	19	59	0	0	47	4	147
4:30 PM	0	0	0	3	0	18	17	60	0	0	53	2	153
4:45 PM	0	0	0	4	0	11	18	48	0	0	53	2	136
5:00 PM	0	0	0	1	0	16	13	55	0	0	58	2	145
5:15 PM	0	0	0	4	0	20	21	56	0	0	52	4	157
5:30 PM	0	0	0	0	0	15	17	48	0	0	48	3	131
5:45 PM	0	0	0	2	0	21	18	53	0	0	44	0	138
TOTAL VOLUMES :	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	0	0	14	0	131	136	448	0	0	405	20	1154
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	9.66%	0.00%	90.34%	23.29%	76.71%	0.00%	0.00%	95.29%	4.71%	
PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	0	0	0	12	0	65	69	219	0	0	216	10	591
PEAK HR FACTOR :	0.000			0.802			0.935			0.942			0.941

CONTROL : 1-Way Stop(SB)

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:15 AM	0	0	0	0
1:30 AM	0	0	1	0
1:45 AM	0	0	1	0
2:00 AM	0	0	0	0
TOTAL VOLUMES	NB	SB	EB	WB
	0	0	2	0
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-025

Day: Sunday

City: Carson

Date: 2/12/2017

NOON

NS/EW Streets:	Tamcliff Ave			Tamcliff Ave			Victoria St			Victoria St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1.5	0.5	1	0	1	0	1	2	1	1	2	0	
12:00 PM	6	0	5	2	0	7	6	32	5	5	38	2	108
12:15 PM	3	0	1	3	0	4	1	44	2	4	44	7	113
12:30 PM	8	0	4	1	0	5	7	40	5	3	36	6	115
12:45 PM	5	1	3	2	0	8	10	39	7	1	41	6	123
1:00 PM	14	0	8	3	0	6	7	41	6	4	47	2	138
1:15 PM	11	0	5	4	0	5	6	41	6	2	40	2	122
1:30 PM	17	0	7	4	0	4	10	45	5	5	49	4	150
1:45 PM	9	0	4	7	0	5	4	50	2	3	61	6	151
TOTAL VOLUMES :	NL 73	NT 1	NR 37	SL 26	ST 0	SR 44	EL 51	ET 332	ER 38	WL 27	WT 356	WR 35	TOTAL 1020
APPROACH %'s :	65.77%	0.90%	33.33%	37.14%	0.00%	62.86%	12.11%	78.86%	9.03%	6.46%	85.17%	8.37%	
PEAK HR START TIME :	100 PM												TOTAL
PEAK HR VOL :	51	0	24	18	0	20	27	177	19	14	197	14	561
PEAK HR FACTOR :	0.781			0.792			0.929			0.804			0.929

CONTROL : Signalized

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	1
1:00 AM	0	0	0	0
1:00 PM	0	0	0	0
1:15 PM	0	0	0	0
1:30 PM	0	0	0	0
1:45 PM	0	0	0	0
TOTAL VOLUMES	NB 0	SB 0	EB 0	WB 1
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-025

Day: Sunday

City: Carson

Date: 2/12/2017

PM

NS/EW Streets:	Tamcliff Ave		Tamcliff Ave			Victoria St			Victoria St			TOTAL	
	NORTHBOUND		SOUTHBOUND			EASTBOUND			WESTBOUND				
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1.5	0.5	1	0	1	0	1	2	1	1	2	0	
4:00 PM	5	0	1	1	0	2	4	53	2	4	47	2	121
4:15 PM	0	0	3	0	0	6	4	50	3	1	40	4	111
4:30 PM	1	0	3	4	1	8	5	53	1	2	38	2	118
4:45 PM	7	0	3	1	0	3	6	41	3	1	41	3	109
5:00 PM	3	0	4	4	0	7	7	42	0	2	41	7	117
5:15 PM	2	0	1	3	0	8	8	47	2	2	42	2	117
5:30 PM	4	0	1	4	0	5	8	37	1	2	40	1	103
5:45 PM	2	0	0	0	0	2	3	46	0	4	39	4	100
TOTAL VOLUMES :	NL 24	NT 0	NR 16	SL 17	ST 1	SR 41	EL 45	ET 369	ER 12	WL 18	WT 328	WR 25	TOTAL 896
APPROACH %'s :	60.00%	0.00%	40.00%	28.81%	1.69%	69.49%	10.56%	86.62%	2.82%	4.85%	88.41%	6.74%	
PEAK HR START TIME :	430 PM												TOTAL
PEAK HR VOL :	13	0	11	12	1	26	26	183	6	7	162	14	461
PEAK HR FACTOR :	0.600		0.750			0.911			0.915			0.977	

CONTROL : Signalized

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	0	0	0	1
12:30 AM	0	0	0	0
12:45 AM	0	0	0	1
1:00 AM	0	0	0	0
1:15 AM	0	0	1	0
1:30 AM	0	0	0	0
1:45 AM	0	0	0	0
2:00 AM	0	0	0	1
TOTAL VOLUMES	NB 0	SB 0	EB 1	WB 3
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-026

Day: Sunday

City: Carson

Date: 2/12/2017

NOON

NS/EW Streets:	Birchknoll Dr			Birchknoll Dr			Victoria St			Victoria St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1.5	0.5	1	0	1	0	1	2	0	1	2	0	
12:00 PM	14	0	5	2	0	2	3	24	8	9	14	4	85
12:15 PM	5	0	6	4	0	5	7	29	5	2	39	4	106
12:30 PM	4	0	17	2	0	1	7	27	2	8	27	5	100
12:45 PM	7	2	13	3	0	1	5	24	3	9	37	7	111
1:00 PM	3	0	6	1	0	4	2	35	5	1	36	14	107
1:15 PM	5	0	0	3	0	3	6	26	4	6	24	6	83
1:30 PM	14	0	28	1	0	3	10	31	4	3	27	4	125
1:45 PM	6	0	3	3	0	4	6	39	7	7	40	9	124
TOTAL VOLUMES :	58	2	78	19	0	23	46	235	38	45	244	53	841
APPROACH %'s :	42.03%	1.45%	56.52%	45.24%	0.00%	54.76%	14.42%	73.67%	11.91%	13.16%	71.35%	15.50%	
PEAK HR START TIME :	100 PM												TOTAL
PEAK HR VOL :	28	0	37	8	0	14	24	131	20	17	127	33	439
PEAK HR FACTOR :	0.387			0.786			0.841			0.790			0.878

CONTROL : [Signalized](#)

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	0	1	0	1
12:30 AM	0	3	2	0
12:45 AM	0	1	1	1
1:00 AM	0	1	0	2
1:00 PM	0	0	0	0
1:15 PM	0	0	0	1
1:30 PM	0	1	0	2
1:45 PM	0	0	0	1
TOTAL VOLUMES	0	7	3	8
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-026

Day: Sunday

City: Carson

Date: 2/12/2017

PM

NS/EW Streets:	Birchknoll Dr		Birchknoll Dr			Victoria St			Victoria St			TOTAL	
	NORTHBOUND		SOUTHBOUND			EASTBOUND			WESTBOUND				
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1.5	0.5	1	0	1	0	1	2	0	1	2	0	
4:00 PM	7	0	10	1	0	5	8	32	5	4	29	9	110
4:15 PM	9	0	6	3	0	3	6	36	1	4	31	5	104
4:30 PM	8	0	12	1	1	3	5	35	8	3	18	7	101
4:45 PM	7	0	7	6	0	7	3	25	8	7	19	10	99
5:00 PM	1	0	8	2	0	3	5	31	6	2	27	4	89
5:15 PM	2	0	4	4	0	4	7	33	2	6	25	7	94
5:30 PM	6	0	2	2	0	3	4	28	3	2	26	8	84
5:45 PM	6	0	7	3	0	3	5	24	13	4	29	4	98
TOTAL VOLUMES :	46	0	56	22	1	31	43	244	46	32	204	54	779
APPROACH %'s :	45.10%	0.00%	54.90%	40.74%	1.85%	57.41%	12.91%	73.27%	13.81%	11.03%	70.34%	18.62%	
PEAK HR START TIME :	400 PM												TOTAL
PEAK HR VOL :	31	0	35	11	1	18	22	128	22	18	97	31	414
PEAK HR FACTOR :	0.825		0.577			0.896			0.869			0.941	

CONTROL : Signalized

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	0	0	1	1
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:15 AM	0	0	0	0
1:30 AM	0	0	0	1
1:45 AM	0	0	0	0
2:00 AM	0	1	0	0
TOTAL VOLUMES	NB 0	SB 1	EB 1	WB 2
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-027

Day: Sunday

City: Carson

Date: 2/12/2017

NOON

NS/EW Streets:	Perimeter Rd			Perimeter Rd			University Dr			University Dr			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	0	0	1	0	1	1	2	0	0	2	0	
12:00 PM	0	0	0	0	0	7	9	42	0	0	41	4	103
12:15 PM	0	0	0	0	0	11	7	32	0	0	42	4	96
12:30 PM	0	0	0	1	0	3	10	50	0	0	39	1	104
12:45 PM	0	0	0	2	0	7	19	48	0	0	40	1	117
1:00 PM	0	0	0	3	0	15	14	48	0	0	48	5	133
1:15 PM	0	0	0	8	0	13	6	46	0	0	57	1	131
1:30 PM	0	0	0	4	0	5	10	56	0	0	52	6	133
1:45 PM	0	0	0	4	0	5	7	71	0	0	48	2	137
TOTAL VOLUMES :	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	0	0	22	0	66	82	393	0	0	367	24	954
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	25.00%	0.00%	75.00%	17.26%	82.74%	0.00%	0.00%	93.86%	6.14%	
PEAK HR START TIME :	100 PM												TOTAL
PEAK HR VOL :	0	0	0	19	0	38	37	221	0	0	205	14	534
PEAK HR FACTOR :	0.000			0.679			0.827			0.944			0.974

CONTROL : 1-Way Stop(SB)

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	0	0	0	0
12:30 AM	0	0	0	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:00 PM	0	0	1	0
1:15 PM	0	0	0	0
1:30 PM	0	0	0	0
1:45 PM	0	0	0	0
TOTAL VOLUMES	NB	SB	EB	WB
	0	0	1	0
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-027

Day: Sunday

City: Carson

Date: 2/12/2017

PM

NS/EW Streets:	Perimeter Rd			Perimeter Rd			University Dr			University Dr			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	0	0	0	1	0	1	1	2	0	0	2	0	
4:00 PM	0	0	0	7	0	15	1	54	0	0	57	0	134
4:15 PM	0	0	0	0	0	7	5	49	0	0	37	0	98
4:30 PM	0	0	0	2	0	10	5	46	0	0	37	3	103
4:45 PM	0	0	0	2	0	6	4	45	0	0	43	0	100
5:00 PM	0	0	0	1	0	12	4	51	0	0	36	0	104
5:15 PM	0	0	0	0	0	4	0	43	0	0	32	2	81
5:30 PM	0	0	0	1	0	1	2	46	0	0	67	0	117
5:45 PM	0	0	0	1	0	6	1	45	0	0	50	1	104
TOTAL VOLUMES :	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL
	0	0	0	14	0	61	22	379	0	0	359	6	841
APPROACH %'s :	#DIV/0!	#DIV/0!	#DIV/0!	18.67%	0.00%	81.33%	5.49%	94.51%	0.00%	0.00%	98.36%	1.64%	

PEAK HR START TIME :	400 PM												TOTAL
PEAK HR VOL :	0	0	0	11	0	38	15	194	0	0	174	3	435
PEAK HR FACTOR :	0.000			0.557			0.950			0.776			0.812

CONTROL : 1-Way Stop(SB)

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	0	0	0	0
12:30 AM	0	0	1	0
12:45 AM	0	0	0	0
1:00 AM	0	0	0	0
1:15 AM	0	0	0	0
1:30 AM	0	0	0	0
1:45 AM	0	0	0	0
2:00 AM	0	0	0	0
TOTAL VOLUMES	NB	SB	EB	WB
APPROACH %'s	0	0	1	0

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-028

Day: Sunday

City: Carson

Date: 2/12/2017

NOON

NS/EW Streets:	Avalon Blvd			Avalon Blvd			Harbor Village/Colony Cove			Harbor Village/Colony Cove			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	3	1	1	3	0	0	1	0	0	1	0	
12:00 PM	8	146	4	6	189	9	8	0	10	3	0	9	392
12:15 PM	12	169	9	6	212	9	16	0	9	6	0	8	456
12:30 PM	17	129	10	17	181	8	13	0	5	7	0	6	393
12:45 PM	8	172	7	2	166	5	10	0	4	1	0	10	385
1:00 PM	12	180	4	8	170	10	7	1	4	8	0	10	414
1:15 PM	12	183	11	11	195	6	5	0	3	5	0	3	434
1:30 PM	7	217	8	14	216	16	7	0	8	7	0	9	509
1:45 PM	15	214	4	11	181	8	5	0	7	5	0	9	459
TOTAL VOLUMES :	91	1410	57	75	1510	71	71	1	50	42	0	64	3442
APPROACH %'s :	5.84%	90.50%	3.66%	4.53%	91.18%	4.29%	58.20%	0.82%	40.98%	39.62%	0.00%	60.38%	

PEAK HR START TIME :	100 PM												TOTAL
PEAK HR VOL :	46	794	27	44	762	40	24	1	22	25	0	31	1816
PEAK HR FACTOR :	0.930			0.860			0.783			0.778			0.892

CONTROL : [Signalized](#)

UTURNS

LANES:	NB	SB	EB	WB
	12:15 AM	1	0	0
12:30 AM	4	1	0	0
12:45 AM	5	1	0	0
1:00 AM	4	0	0	0
1:00 PM	2	2	0	0
1:15 PM	5	1	0	0
1:30 PM	2	2	0	1
1:45 PM	5	1	0	0
TOTAL VOLUMES	28	8	0	1
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-028

Day: Sunday

City: Carson

Date: 2/12/2017

PM

NS/EW Streets:	Avalon Blvd		Avalon Blvd			Harbor Village/Colony Cove			Harbor Village/Colony Cove			TOTAL	
	NORTHBOUND		SOUTHBOUND			EASTBOUND			WESTBOUND				
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	3	1	1	3	0	0	1	0	0	1	0	
4:00 PM	6	214	7	10	171	6	3	1	6	0	0	10	434
4:15 PM	8	202	12	10	177	4	2	0	3	4	1	3	426
4:30 PM	13	153	8	19	159	11	4	0	1	8	0	17	393
4:45 PM	6	170	8	15	135	8	6	0	2	4	0	8	362
5:00 PM	14	178	8	8	136	5	7	0	5	6	0	10	377
5:15 PM	11	192	9	10	121	7	2	0	7	8	2	7	376
5:30 PM	10	189	10	9	144	15	7	1	11	3	1	5	405
5:45 PM	10	164	7	5	142	9	6	0	6	1	0	5	355
TOTAL VOLUMES :	NL 78	NT 1462	NR 69	SL 86	ST 1185	SR 65	EL 37	ET 2	ER 41	WL 34	WT 4	WR 65	TOTAL 3128
APPROACH %'s :	4.85%	90.86%	4.29%	6.44%	88.70%	4.87%	46.25%	2.50%	51.25%	33.01%	3.88%	63.11%	

PEAK HR START TIME :	400 PM												TOTAL
PEAK HR VOL :	33	739	35	54	642	29	15	1	12	16	1	38	1615
PEAK HR FACTOR :	0.889		0.949			0.700			0.550			0.930	

CONTROL : [Signalized](#)

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	4	1	0	0
12:30 AM	2	1	0	0
12:45 AM	5	4	0	0
1:00 AM	0	2	0	0
1:15 AM	5	0	0	0
1:30 AM	3	1	0	0
1:45 AM	2	0	0	0
2:00 AM	4	1	0	0
TOTAL VOLUMES	NB 25	SB 10	EB 0	WB 0
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-029

Day: Sunday

City: Carson

Date: 2/12/2017

NOON

NS/EW Streets:	Wilmington Ave			Wilmington Ave			Carson St			Carson St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	0	1	2	0	1	2	0	1	2	0	
12:00 PM	17	40	7	8	32	8	18	45	13	7	33	11	239
12:15 PM	18	36	7	12	37	18	31	40	18	8	33	8	266
12:30 PM	11	37	9	12	27	13	13	45	18	8	35	5	233
12:45 PM	9	58	4	5	32	11	10	41	8	8	42	2	230
1:00 PM	15	44	6	9	33	13	11	26	10	1	42	5	215
1:15 PM	15	30	5	9	40	12	14	34	8	5	47	4	223
1:30 PM	14	33	10	7	32	14	11	44	8	4	34	6	217
1:45 PM	7	42	6	20	34	14	14	35	6	4	32	11	225
TOTAL VOLUMES :	106	320	54	82	267	103	122	310	89	45	298	52	1848
APPROACH %'s :	22.08%	66.67%	11.25%	18.14%	59.07%	22.79%	23.42%	59.50%	17.08%	11.39%	75.44%	13.16%	

PEAK HR START TIME :	1200 PM												TOTAL
PEAK HR VOL :	55	171	27	37	128	50	72	171	57	31	143	26	968
PEAK HR FACTOR :	0.891			0.802			0.843			0.962			0.910

CONTROL : Signalized

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	0	2	1	0
12:30 AM	0	1	1	1
12:45 AM	0	2	0	1
1:00 AM	0	0	1	0
1:00 PM	0	0	1	0
1:15 PM	0	2	1	1
1:30 PM	0	1	1	0
1:45 PM	0	5	2	0
TOTAL VOLUMES	0	13	8	3
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-029

Day: Sunday

City: Carson

Date: 2/12/2017

PM

NS/EW Streets:	Wilmington Ave		Wilmington Ave			Carson St			Carson St			TOTAL	
	NORTHBOUND		SOUTHBOUND			EASTBOUND			WESTBOUND				
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	2	0	1	2	0	1	2	0	1	2	0	
4:00 PM	14	28	6	9	25	16	22	40	9	3	34	7	213
4:15 PM	16	28	7	9	42	21	14	30	12	5	31	5	220
4:30 PM	15	38	6	14	42	18	10	32	9	9	35	5	233
4:45 PM	15	28	8	8	28	6	16	35	7	8	39	11	209
5:00 PM	6	29	9	11	40	14	10	43	11	7	28	8	216
5:15 PM	15	34	6	11	26	15	7	36	6	9	34	9	208
5:30 PM	13	23	7	13	41	22	17	32	7	4	30	11	220
5:45 PM	16	32	4	15	40	10	21	36	10	5	35	4	228
TOTAL VOLUMES :	110	240	53	90	284	122	117	284	71	50	266	60	1747
APPROACH %'s :	27.30%	59.55%	13.15%	18.15%	57.26%	24.60%	24.79%	60.17%	15.04%	13.30%	70.74%	15.96%	

PEAK HR START TIME :	415 PM												TOTAL
PEAK HR VOL :	52	123	30	42	152	59	50	140	39	29	133	29	878
PEAK HR FACTOR :	0.869			0.855			0.895			0.823			0.942

CONTROL : Signalized

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	0	0	0	0
12:30 AM	0	1	0	0
12:45 AM	0	2	1	2
1:00 AM	0	1	1	0
1:15 AM	0	1	0	0
1:30 AM	0	1	0	0
1:45 AM	0	3	1	0
2:00 AM	1	2	1	0
TOTAL VOLUMES	NB 1	SB 11	EB 4	WB 2
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-030

Day: Sunday

City: Carson

Date: 2/12/2017

NOON

NS/EW Streets:	Avalon Blvd			Avalon Blvd			184th St			184th St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	3	1	1	3	0	0.5	0	0.5	1.5	0	1.5	
12:00 PM	4	139	5	14	187	6	13	1	3	6	0	6	384
12:15 PM	6	179	10	6	195	10	20	0	9	4	0	5	444
12:30 PM	10	129	3	20	172	8	9	1	7	10	0	6	375
12:45 PM	1	167	6	17	193	6	11	0	7	7	0	2	417
1:00 PM	5	186	4	7	201	6	11	1	8	11	0	5	445
1:15 PM	11	168	2	9	211	14	24	0	5	3	0	5	452
1:30 PM	6	202	7	11	238	11	11	1	7	3	0	13	510
1:45 PM	11	199	6	10	198	12	14	0	9	11	0	32	502
TOTAL VOLUMES :	54	1369	43	94	1595	73	113	4	55	55	0	74	3529
APPROACH %'s :	3.68%	93.38%	2.93%	5.33%	90.52%	4.14%	65.70%	2.33%	31.98%	42.64%	0.00%	57.36%	

PEAK HR START TIME :	100 PM												TOTAL
PEAK HR VOL :	33	755	19	37	848	43	60	2	29	28	0	55	1909
PEAK HR FACTOR :	0.934			0.892			0.784			0.483			0.936

CONTROL : [Signalized](#)

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	3	1	0	0
12:30 AM	0	0	0	0
12:45 AM	3	1	0	0
1:00 AM	1	1	0	0
1:00 PM	1	0	0	0
1:15 PM	2	1	0	0
1:30 PM	3	1	0	0
1:45 PM	2	0	0	0
TOTAL VOLUMES	15	5	0	0
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-030

Day: Sunday

City: Carson

Date: 2/12/2017

PM

NS/EW Streets:	Avalon Blvd		Avalon Blvd				184th St			184th St			TOTAL
	NORTHBOUND		SOUTHBOUND				EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	3	1	1	3	0	0.5	0	0.5	1.5	0	1.5	
4:00 PM	5	206	2	1	179	9	16	0	12	9	0	13	452
4:15 PM	6	202	2	4	185	8	11	0	6	2	0	10	436
4:30 PM	7	177	1	2	185	4	15	0	7	1	0	6	405
4:45 PM	1	174	1	0	151	5	7	0	8	2	0	0	349
5:00 PM	4	177	1	2	161	5	10	0	7	4	0	1	372
5:15 PM	12	201	1	2	148	5	15	0	8	2	0	0	394
5:30 PM	8	196	1	0	170	7	12	0	8	1	0	0	403
5:45 PM	10	173	1	1	146	7	9	0	5	2	0	2	356
TOTAL VOLUMES :	53	1506	10	12	1325	50	95	0	61	23	0	32	3167
APPROACH %'s :	3.38%	95.98%	0.64%	0.87%	95.53%	3.60%	60.90%	0.00%	39.10%	41.82%	0.00%	58.18%	
PEAK HR START TIME :	400 PM												TOTAL
PEAK HR VOL :	19	759	6	7	700	26	49	0	33	14	0	29	1642
PEAK HR FACTOR :	0.920		0.930				0.732			0.489			0.908

CONTROL : Signalized

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	2	0	0	0
12:30 AM	3	1	0	0
12:45 AM	2	0	0	0
1:00 AM	1	0	0	0
1:15 AM	2	0	1	0
1:30 AM	8	1	0	0
1:45 AM	2	0	0	0
2:00 AM	5	0	0	0
TOTAL VOLUMES	NB 25	SB 2	EB 1	WB 0
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-031

Day: Sunday

City: Carson

Date: 2/12/2017

NOON

NS/EW Streets:	Avalon Blvd			Avalon Blvd			182nd St			182nd St			TOTAL
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	3	1	2	3	0	0	1	0	1	0	1	
12:00 PM	2	171	0	2	193	7	1	0	0	0	0	0	376
12:15 PM	4	172	0	4	201	4	5	0	4	0	0	0	394
12:30 PM	4	164	0	2	219	2	2	0	8	0	0	0	401
12:45 PM	3	164	0	1	202	6	3	0	7	0	0	0	386
1:00 PM	10	187	0	4	181	3	5	0	10	0	0	0	400
1:15 PM	7	204	0	4	236	7	2	0	6	0	0	0	466
1:30 PM	5	229	0	3	229	5	2	0	8	0	0	0	481
1:45 PM	7	216	0	2	236	3	5	0	5	0	0	0	474
TOTAL VOLUMES :	42	1507	0	22	1697	37	25	0	48	0	0	0	3378
APPROACH %'s :	2.71%	97.29%	0.00%	1.25%	96.64%	2.11%	34.25%	0.00%	65.75%	#DIV/0!	#DIV/0!	#DIV/0!	

PEAK HR START TIME :	100 PM												TOTAL
PEAK HR VOL :	29	836	0	13	882	18	14	0	29	0	0	0	1821
PEAK HR FACTOR :	0.924			0.924			0.717			0.000			0.946

CONTROL : 1-Way Stop(EB)

UTURNS

LANES:	NB	SB	EB	WB
12:15 AM	1	2	0	0
12:30 AM	0	4	0	0
12:45 AM	0	2	1	0
1:00 AM	2	1	0	0
1:00 PM	2	4	1	0
1:15 PM	4	4	0	0
1:30 PM	1	3	0	0
1:45 PM	0	2	0	0
TOTAL VOLUMES	NB 10	SB 22	EB 2	WB 0
APPROACH %'s				

Intersection Turning Movement

Prepared by:

National Data & Surveying Services

Project ID: 17-5084-031

Day: Sunday

City: Carson

Date: 2/12/2017

PM

NS/EW Streets:	Avalon Blvd		Avalon Blvd			182nd St			182nd St			TOTAL	
	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
	1	3	1	2	3	0	0	1	0	1	0	1	
4:00 PM	9	216	0	1	181	4	0	0	2	0	0	0	413
4:15 PM	5	234	0	1	177	5	3	0	4	0	0	0	429
4:30 PM	6	186	0	0	195	2	0	0	6	0	0	0	395
4:45 PM	2	187	0	1	165	3	1	0	5	0	0	0	364
5:00 PM	3	181	0	1	155	5	1	0	7	0	0	0	353
5:15 PM	5	211	0	6	156	2	4	0	8	0	0	0	392
5:30 PM	4	205	0	4	152	4	1	0	3	0	0	0	373
5:45 PM	5	182	0	4	171	5	6	0	3	0	0	0	376
TOTAL VOLUMES :	NL 39	NT 1602	NR 0	SL 18	ST 1352	SR 30	EL 16	ET 0	ER 38	WL 0	WT 0	WR 0	TOTAL 3095
APPROACH %'s :	2.38%	97.62%	0.00%	1.29%	96.57%	2.14%	29.63%	0.00%	70.37%	#DIV/0!	#DIV/0!	#DIV/0!	

PEAK HR START TIME :	400 PM												TOTAL
PEAK HR VOL :	22	823	0	3	718	14	4	0	17	0	0	0	1601
PEAK HR FACTOR :	0.884			0.933			0.750			0.000			0.933

CONTROL : 1-Way Stop(EB)

UTURNS

LANES:	NB	SB	EB	WB
	12:15 AM	2	1	0	0
12:30 AM	1	1	0	0
12:45 AM	0	0	0	0
1:00 AM	0	1	0	0
1:15 AM	1	1	0	0
1:30 AM	0	6	0	0
1:45 AM	1	4	0	0
2:00 AM	0	4	0	0
TOTAL VOLUMES	NB 5	SB 18	EB 0	WB 0
APPROACH %'s				

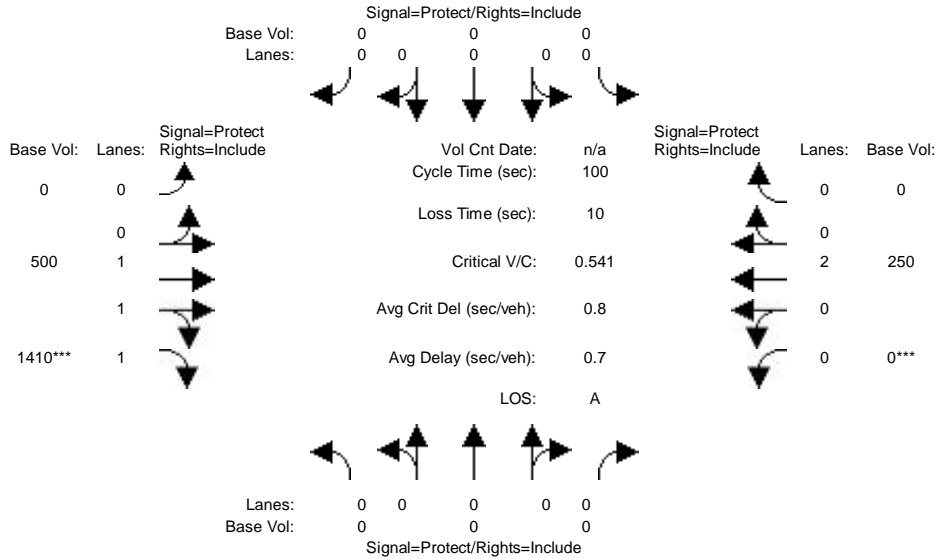
Appendix E

Intersection LOS Worksheets for Existing Sunday (27,000-Seats) Conditions

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Pre-Game

Intersection #1: Victoria St. & Drive D

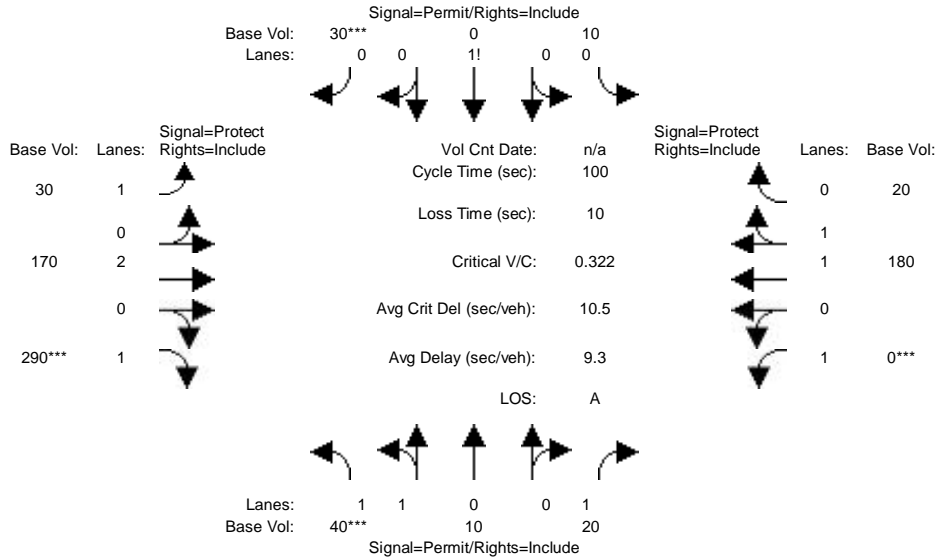


Street Name:	Drive D						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	500	1410	0	250	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	500	1410	0	250	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	0	500	1410	0	250	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	0	500	1410	0	250	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	0	500	1410	0	250	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	2.00	0.00	2.00	0.00
Final Sat.:	0	0	0	0	0	0	0	1600	3200	0	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.44	0.00	0.08	0.00
Crit Moves:							****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Pre-Game

Intersection #2: Victoria St & Tamcliff Ave

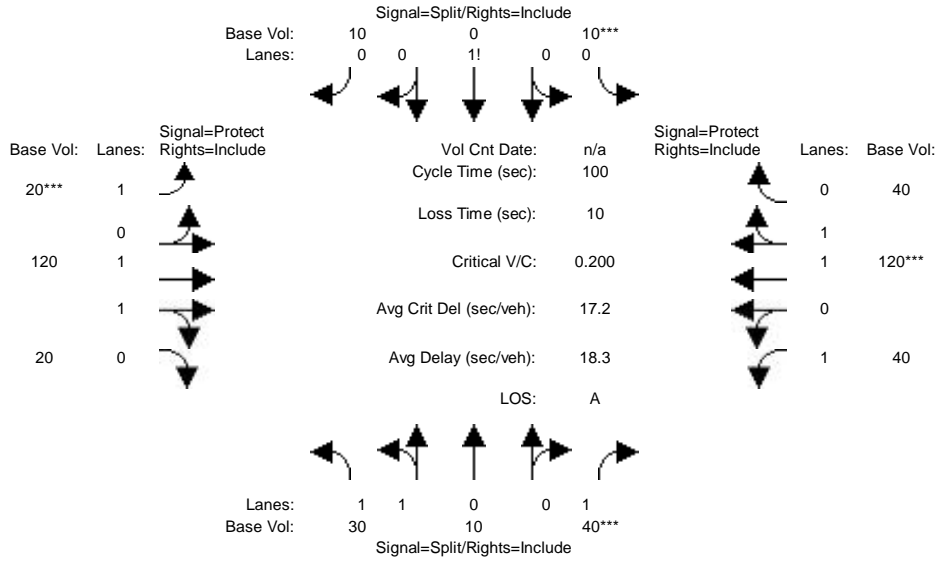


Street Name:	Victoria St						Tamcliff Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	40	10	20	10	0	30	30	170	290	0	180	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	10	20	10	0	30	30	170	290	0	180	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	10	20	10	0	30	30	170	290	0	180	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	10	20	10	0	30	30	170	290	0	180	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	10	20	10	0	30	30	170	290	0	180	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.60	0.40	1.00	0.25	0.00	0.75	1.00	2.00	1.00	1.00	1.80	0.20
Final Sat.:	2560	640	1600	400	0	1200	1600	3200	1600	1600	2880	320
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.01	0.01	0.00	0.03	0.02	0.05	0.18	0.00	0.06	0.06
Crit Moves:	****					****	****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Pre-Game

Intersection #3: Victoria St. & Birchknoll Dr.

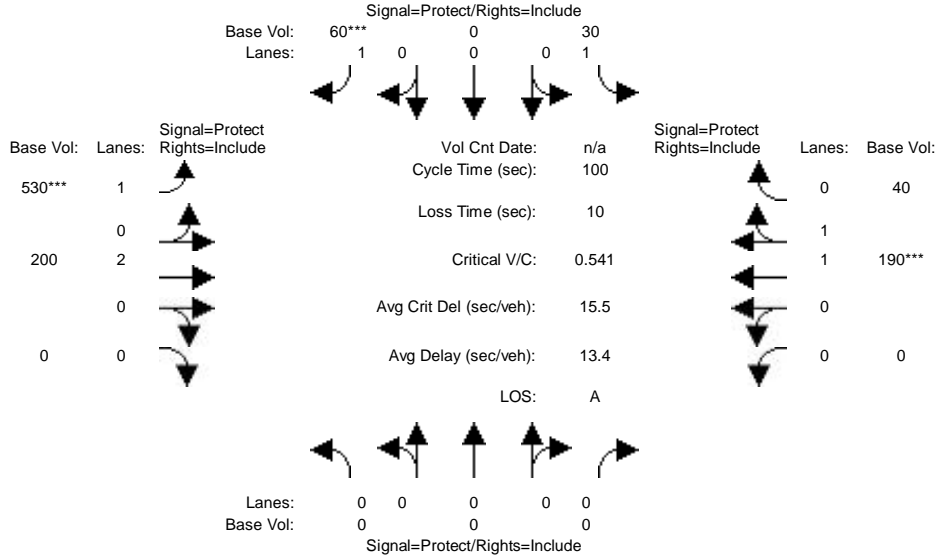


Street Name:	Victoria St.						Birchknoll Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	30	10	40	10	0	10	20	120	20	40	120	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	10	40	10	0	10	20	120	20	40	120	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	10	40	10	0	10	20	120	20	40	120	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	10	40	10	0	10	20	120	20	40	120	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	10	40	10	0	10	20	120	20	40	120	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.50	0.50	1.00	0.50	0.00	0.50	1.00	1.71	0.29	1.00	1.50	0.50
Final Sat.:	2400	800	1600	800	0	800	1600	2743	457	1600	2400	800
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.03	0.01	0.00	0.01	0.01	0.04	0.04	0.03	0.05	0.05
Crit Moves:			****	****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Pre-Game

Intersection #9: University Dr. & Toro Center Dr.

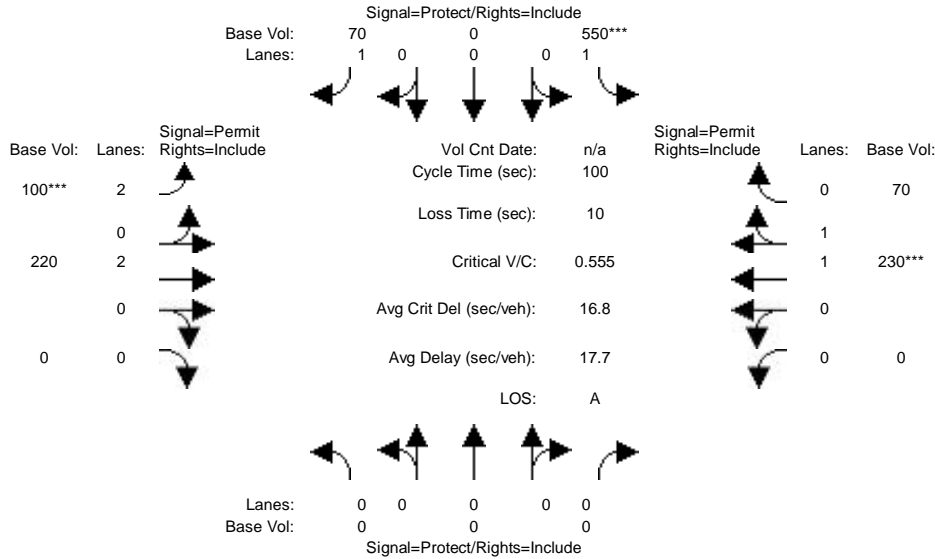


Street Name:	University Dr.						Toro Center Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	30	0	60	530	200	0	0	190	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	30	0	60	530	200	0	0	190	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	30	0	60	530	200	0	0	190	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	30	0	60	530	200	0	0	190	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	30	0	60	530	200	0	0	190	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.65	0.35
Final Sat.:	0	0	0	1600	0	1600	1600	3200	0	0	2643	557
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.00	0.04	0.33	0.06	0.00	0.00	0.07	0.07
Crit Moves:				****		****				****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Pre-Game

Intersection #10: Albertoni St. & SR 91 EB Ramps [Moved from Main St & Albertoni St]

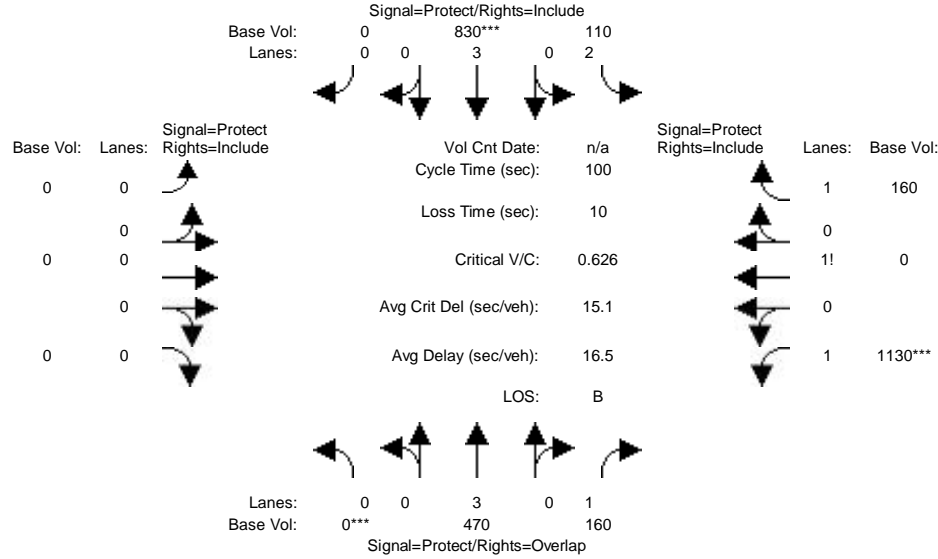


Street Name:	Sr 91 EB Ramps						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	550	0	70	100	220	0	0	230	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	550	0	70	100	220	0	0	230	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	550	0	70	100	220	0	0	230	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	550	0	70	100	220	0	0	230	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	550	0	70	100	220	0	0	230	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.53	0.47
Final Sat.:	0	0	0	1600	0	1600	5760	3200	0	0	2453	747
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.34	0.00	0.04	0.02	0.07	0.00	0.00	0.09	0.09
Crit Moves:				****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Pre-Game

Intersection #11: Avalon Blvd. & SR 91 WB On-Ramp

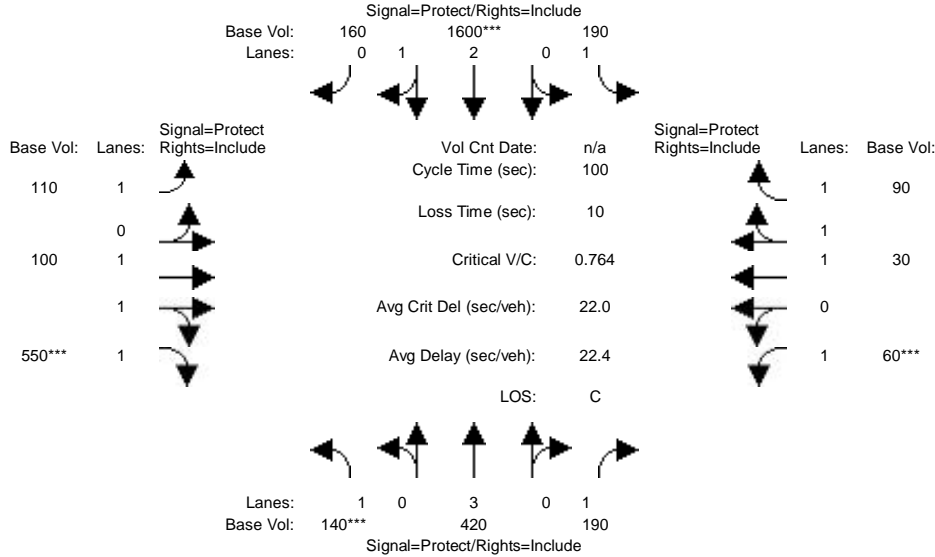


Street Name:	Avalon Blvd.						SR 91 WB On-Ramp						
Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Volume Module:													
Base Vol:	0	470	160	110	830	0	0	0	0	0	1130	0	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	0	470	160	110	830	0	0	0	0	0	1130	0	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:	0	470	160	110	830	0	0	0	0	0	1130	0	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	0	470	160	110	830	0	0	0	0	0	1130	0	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Final Volume:	0	470	160	110	830	0	0	0	0	0	1130	0	
OvlAdjVol:	0												
Saturation Flow Module:													
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	0	3200	0	
Capacity Analysis Module:													
Vol/Sat:	0.00	0.10	0.10	0.02	0.17	0.00	0.00	0.00	0.00	0.00	0.35	0.00	
OvlAdjV/S:	0.00												
Crit Moves:	****	****						****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Pre-Game

Intersection #12: Avalon Blvd. & Albertoni St.

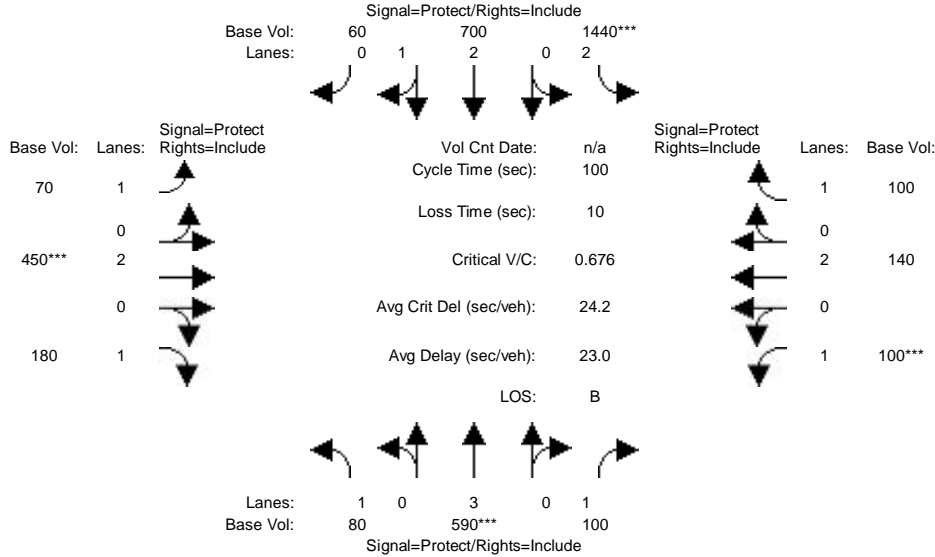


Street Name:	Avalon Blvd.						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	140	420	190	190	1600	160	110	100	550	60	30	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	420	190	190	1600	160	110	100	550	60	30	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	140	420	190	190	1600	160	110	100	550	60	30	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	420	190	190	1600	160	110	100	550	60	30	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	140	420	190	190	1600	160	110	100	550	60	30	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.73	0.27	1.00	1.00	2.00	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	4364	436	1600	1600	3200	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.12	0.12	0.37	0.37	0.07	0.06	0.17	0.04	0.02	0.03
Crit Moves:	****			****			****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Pre-Game

Intersection #13: Avalon Blvd. & Victoria St.

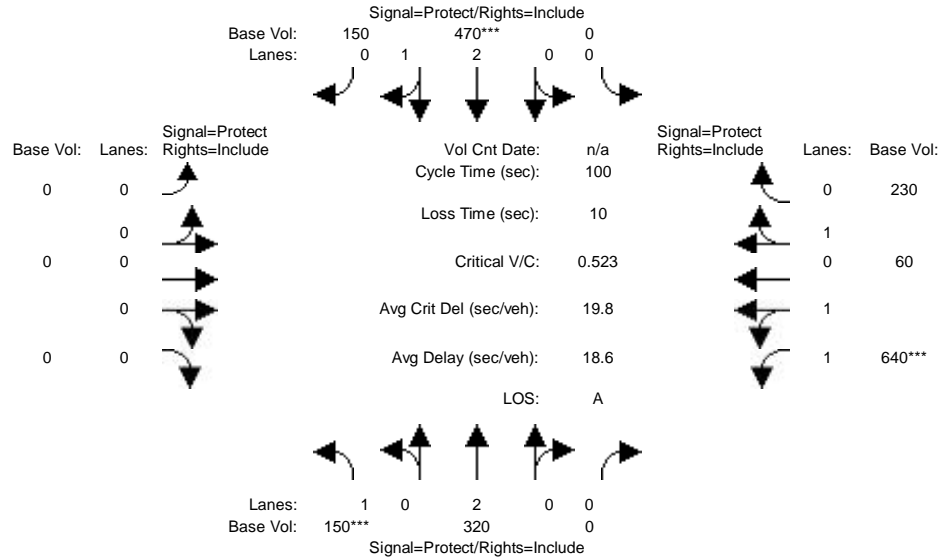


Street Name:	Avalon Blvd.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	80	590	100	1440	700	60	70	450	180	100	140	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	590	100	1440	700	60	70	450	180	100	140	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	590	100	1440	700	60	70	450	180	100	140	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	590	100	1440	700	60	70	450	180	100	140	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	590	100	1440	700	60	70	450	180	100	140	100
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.76	0.24	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4421	379	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.12	0.06	0.25	0.16	0.16	0.04	0.14	0.11	0.06	0.04	0.06
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Pre-Game

Intersection #14: Central Ave. & Artesia Blvd.

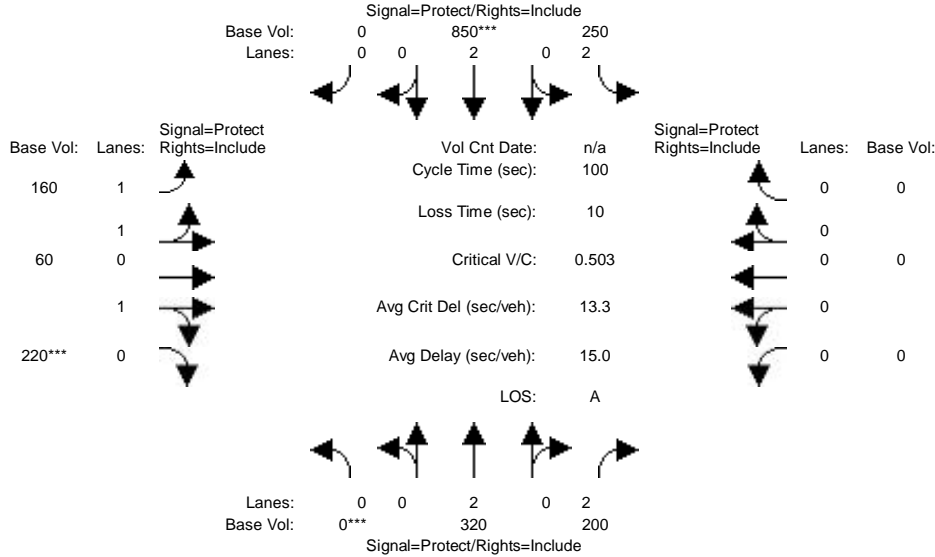


Street Name:	Central Ave.						Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	150	320	0	0	470	150	0	0	0	640	60	230
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	320	0	0	470	150	0	0	0	640	60	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	320	0	0	470	150	0	0	0	640	60	230
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	320	0	0	470	150	0	0	0	640	60	230
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	320	0	0	470	150	0	0	0	640	60	230
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.27	0.73	0.00	0.00	0.00	2.00	0.21	0.79
Final Sat.:	1600	3200	0	0	3639	1161	0	0	0	3200	331	1269
Capacity Analysis Module:												
Vol/Sat:	0.09	0.10	0.00	0.00	0.13	0.13	0.00	0.00	0.00	0.20	0.18	0.18
Crit Moves:	****				****					****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Pre-Game

Intersection #15: Central Ave. & Albertoni St.

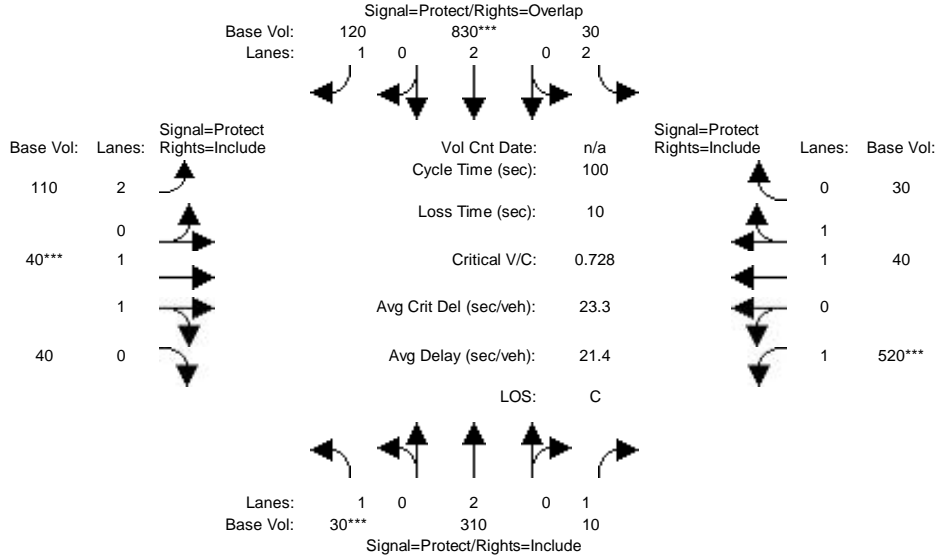


Street Name:	Central Ave.						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	320	200	250	850	0	160	60	220	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	320	200	250	850	0	160	60	220	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	320	200	250	850	0	160	60	220	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	320	200	250	850	0	160	60	220	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	320	200	250	850	0	160	60	220	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.45	0.55	1.00	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	2327	873	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.10	0.06	0.04	0.27	0.00	0.07	0.07	0.14	0.00	0.00	0.00
Crit Moves:	****				****			****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Pre-Game

Intersection #16: Central Ave. & Victoria St.

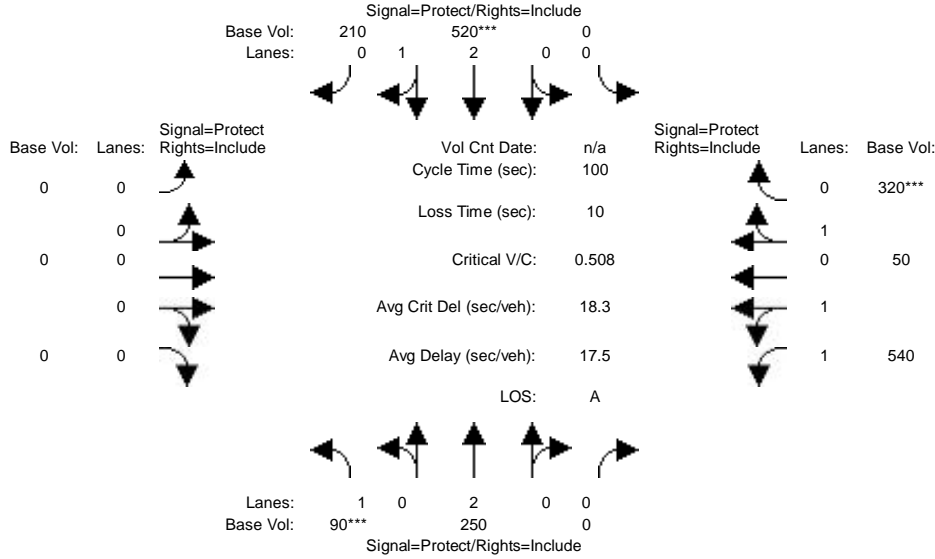


Street Name:	Central Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	30	310	10	30	830	120	110	40	40	520	40	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	310	10	30	830	120	110	40	40	520	40	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	310	10	30	830	120	110	40	40	520	40	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	310	10	30	830	120	110	40	40	520	40	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	310	10	30	830	120	110	40	40	520	40	30
OvlAdjVol:	89											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.00	1.00	1.00	1.14	0.86
Final Sat.:	1600	3200	1600	5760	3200	1600	5760	1600	1600	1600	1829	1371
Capacity Analysis Module:												
Vol/Sat:	0.02	0.10	0.01	0.01	0.26	0.08	0.02	0.03	0.03	0.33	0.02	0.02
OvlAdjV/S:	0.06											
Crit Moves:	****	****			****	****	****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Pre-Game

Intersection #17: Wilmington Ave. & Artesia Blvd. WB

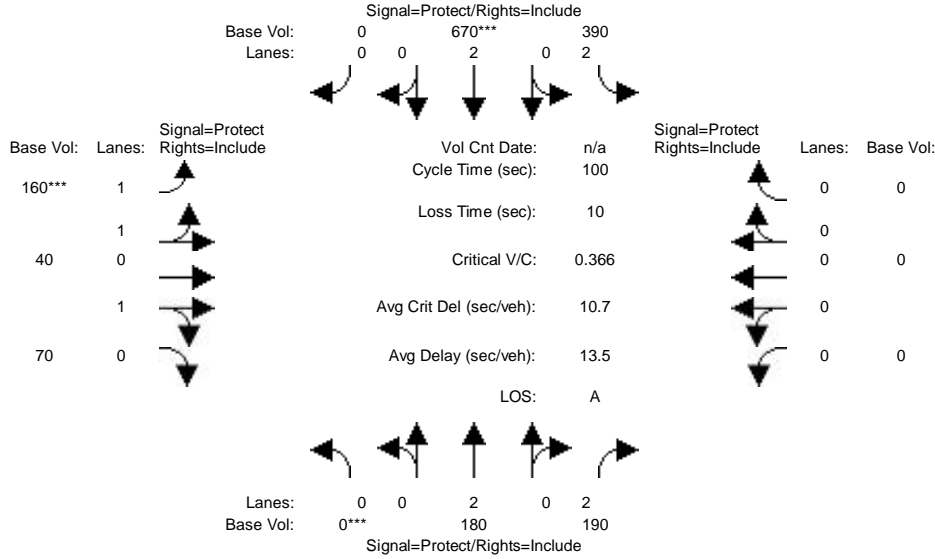


Street Name:	Wilmington Ave.						Artesia Blvd. WB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	90	250	0	0	520	210	0	0	0	540	50	320
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	250	0	0	520	210	0	0	0	540	50	320
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	250	0	0	520	210	0	0	0	540	50	320
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	250	0	0	520	210	0	0	0	540	50	320
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	250	0	0	520	210	0	0	0	540	50	320
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.14	0.86	0.00	0.00	0.00	1.83	0.17	1.00
Final Sat.:	1600	3200	0	0	3419	1381	0	0	0	2929	271	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.08	0.00	0.00	0.15	0.15	0.00	0.00	0.00	0.18	0.18	0.20
Crit Moves:	****				****					****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Pre-Game

Intersection #18: Wilmington Ave. & Artesia Blvd. EB

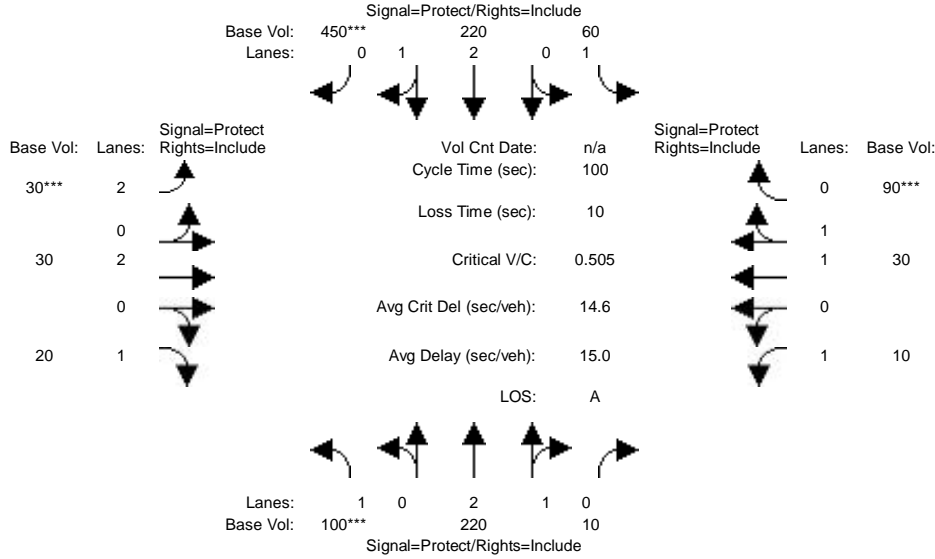


Street Name:	Wilmington Ave.				Artesia Blvd. EB							
Approach:	North Bound		South Bound		East Bound		West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	180	190	390	670	0	160	40	70	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	180	190	390	670	0	160	40	70	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	180	190	390	670	0	160	40	70	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	180	190	390	670	0	160	40	70	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	180	190	390	670	0	160	40	70	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.78	0.44	0.78	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	2844	711	1244	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.06	0.06	0.07	0.21	0.00	0.06	0.06	0.06	0.00	0.00	0.00
Crit Moves:	****			****		****						

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Pre-Game

Intersection #19: Wilmington Ave. & Victoria St.

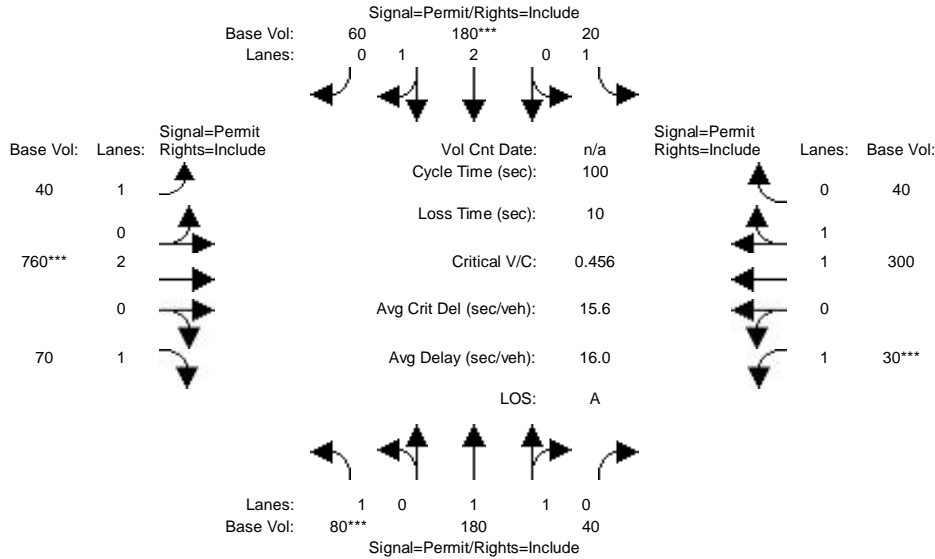


Street Name:	Wilmington Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	100	220	10	60	220	450	30	30	20	10	30	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	100	220	10	60	220	450	30	30	20	10	30	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	100	220	10	60	220	450	30	30	20	10	30	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	100	220	10	60	220	450	30	30	20	10	30	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	100	220	10	60	220	450	30	30	20	10	30	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.87	0.13	1.00	2.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	4591	209	1600	3200	1600	5760	3200	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.05	0.05	0.04	0.07	0.28	0.01	0.01	0.01	0.01	0.02	0.06
Crit Moves:	****				****	****					****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Pre-Game

Intersection #22: Figueroa St. & 190th St./Victoria St.

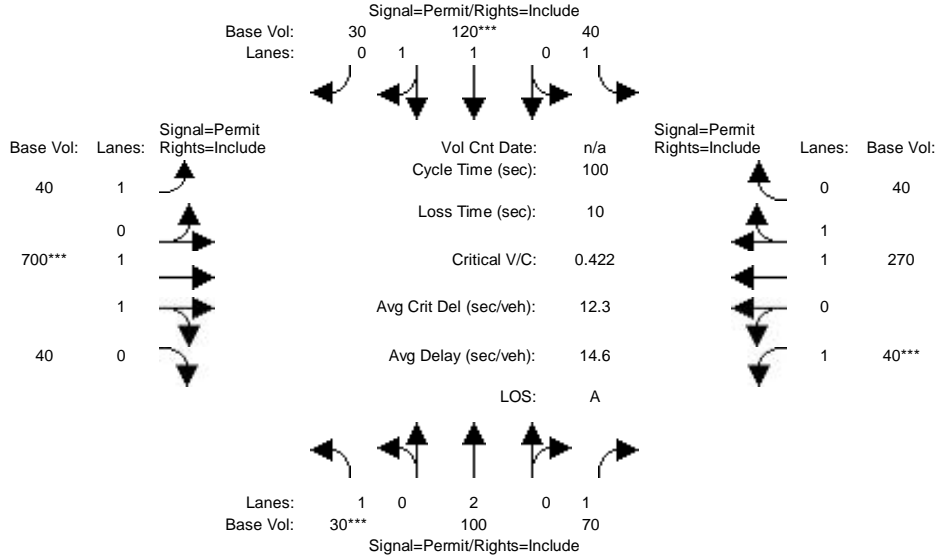


Street Name:	Figueroa St.						190th St./Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	80	180	40	20	180	60	40	760	70	30	300	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	180	40	20	180	60	40	760	70	30	300	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	180	40	20	180	60	40	760	70	30	300	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	180	40	20	180	60	40	760	70	30	300	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	180	40	20	180	60	40	760	70	30	300	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.64	0.36	1.00	2.25	0.75	1.00	2.00	1.00	1.00	1.76	0.24
Final Sat.:	1600	2618	582	1600	3600	1200	1600	3200	1600	1600	2824	376
Capacity Analysis Module:												
Vol/Sat:	0.05	0.07	0.07	0.01	0.05	0.05	0.03	0.24	0.04	0.02	0.11	0.11
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Pre-Game

Intersection #24: Main St. & Victoria St.

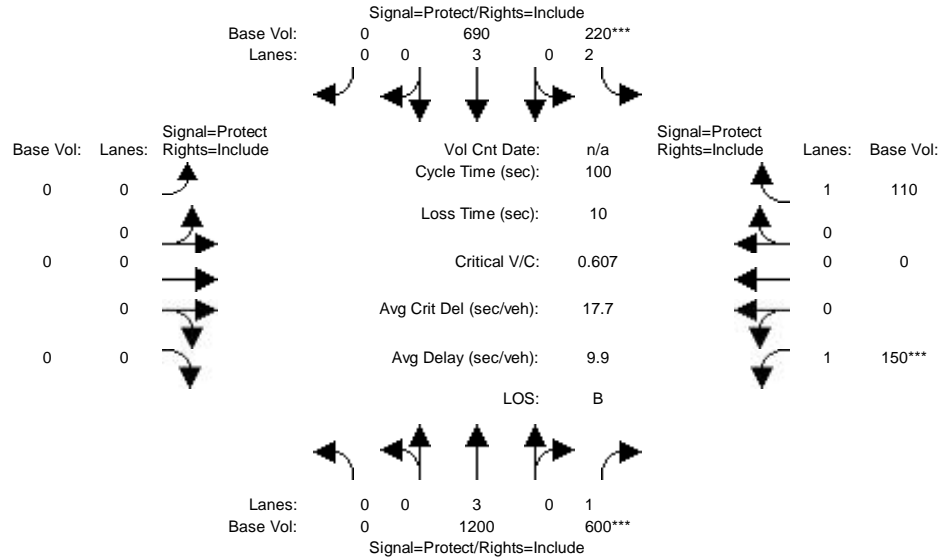


Street Name:	Main St.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	30	100	70	40	120	30	40	700	40	40	270	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	100	70	40	120	30	40	700	40	40	270	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	100	70	40	120	30	40	700	40	40	270	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	100	70	40	120	30	40	700	40	40	270	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	100	70	40	120	30	40	700	40	40	270	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.60	0.40	1.00	1.89	0.11	1.00	1.74	0.26
Final Sat.:	1600	3200	1600	1600	2560	640	1600	3027	173	1600	2787	413
Capacity Analysis Module:												
Vol/Sat:	0.02	0.03	0.04	0.03	0.05	0.05	0.03	0.23	0.23	0.03	0.10	0.10
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Pre-Game

Intersection #25: Avalon Blvd. & University Dr.

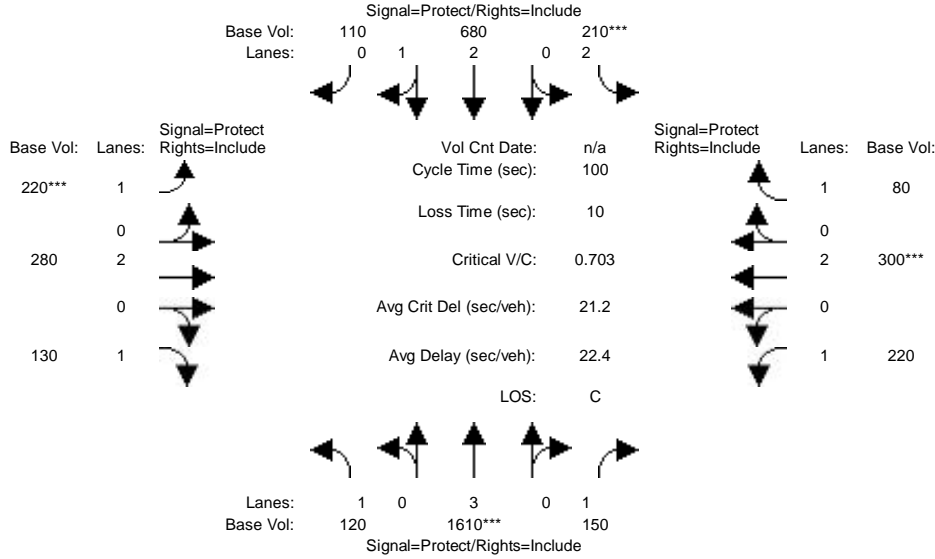


Street Name:	Avalon Blvd.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1200	600	220	690	0	0	0	0	150	0	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1200	600	220	690	0	0	0	0	150	0	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1200	600	220	690	0	0	0	0	150	0	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1200	600	220	690	0	0	0	0	150	0	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1200	600	220	690	0	0	0	0	150	0	110
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.38	0.04	0.14	0.00	0.00	0.00	0.00	0.00	0.09	0.00
Crit Moves:		****	****							****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Pre-Game

Intersection #26: Avalon Blvd. & Del Amo Blvd.

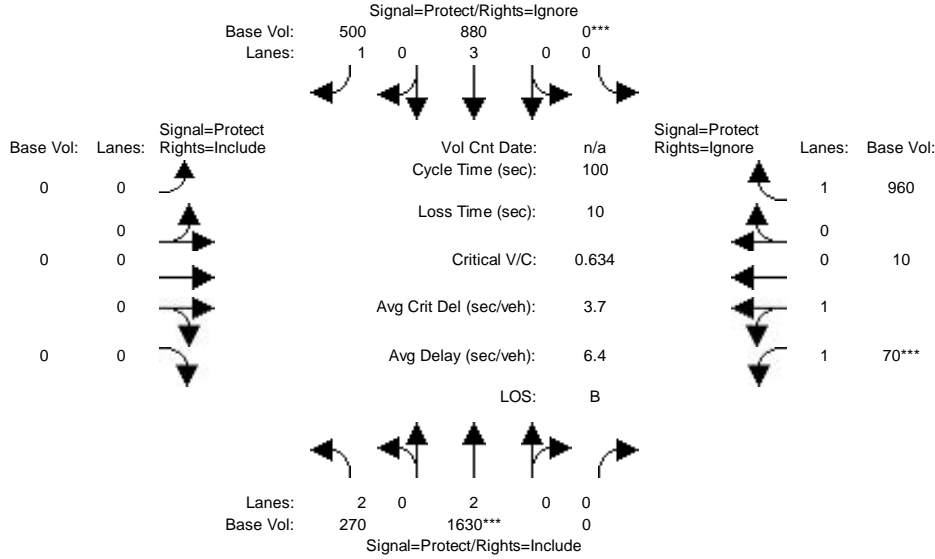


Street Name:	Avalon Blvd.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	120	1610	150	210	680	110	220	280	130	220	300	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	120	1610	150	210	680	110	220	280	130	220	300	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	120	1610	150	210	680	110	220	280	130	220	300	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	1610	150	210	680	110	220	280	130	220	300	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	120	1610	150	210	680	110	220	280	130	220	300	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.58	0.42	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4132	668	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.34	0.09	0.04	0.16	0.16	0.14	0.09	0.08	0.14	0.09	0.05
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Pre-Game

Intersection #27: Avalon Blvd. & I-405 NB Ramps

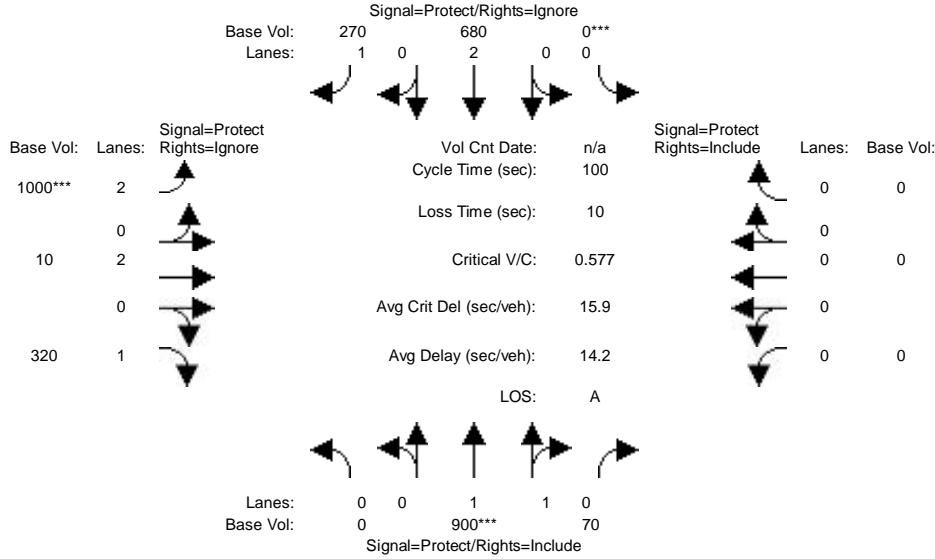


Street Name:	Avalon Blvd.						I-405 NB Ramps						
Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Volume Module:													
Base Vol:	270	1630	0	0	0	880	500	0	0	0	70	10	960
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	270	1630	0	0	0	880	500	0	0	0	70	10	960
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	270	1630	0	0	0	880	0	0	0	0	70	10	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	270	1630	0	0	0	880	0	0	0	0	70	10	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Volume:	270	1630	0	0	0	880	0	0	0	0	70	10	0
Saturation Flow Module:													
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.75	0.25	1.00	
Final Sat.:	5760	3200	0	0	4800	1600	0	0	0	2800	400	1600	
Capacity Analysis Module:													
Vol/Sat:	0.05	0.51	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.00
Crit Moves:	****			****						****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Pre-Game

Intersection #28: Avalon Blvd. & I-405 SB Ramps

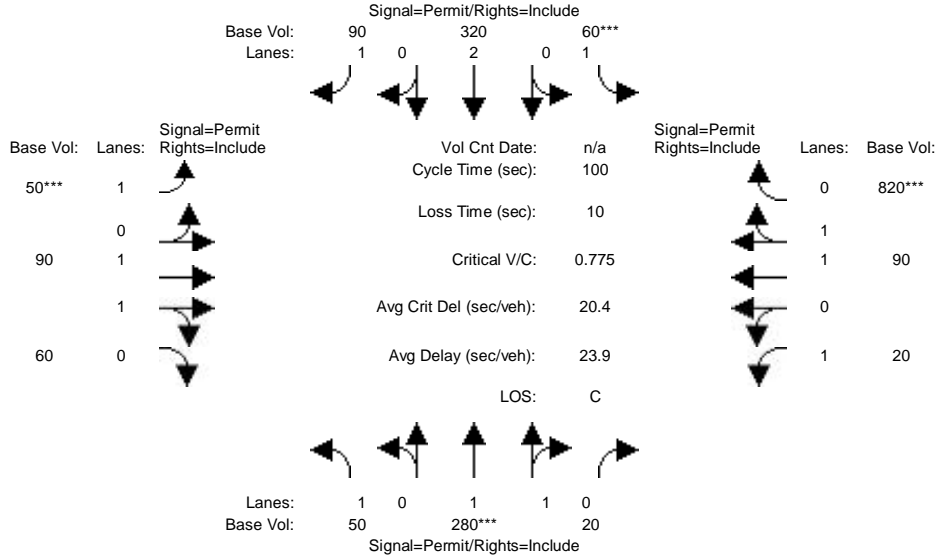


Street Name:	Avalon Blvd.						I-405 SB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	900	70	0	680	270	1000	10	320	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	900	70	0	680	270	1000	10	320	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	900	70	0	680	0	1000	10	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	900	70	0	680	0	1000	10	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	0	900	70	0	680	0	1000	10	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.86	0.14	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	0	2969	231	0	3200	1600	5760	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.30	0.30	0.00	0.21	0.00	0.17	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Pre-Game

Intersection #29: Central Ave. & University Dr.

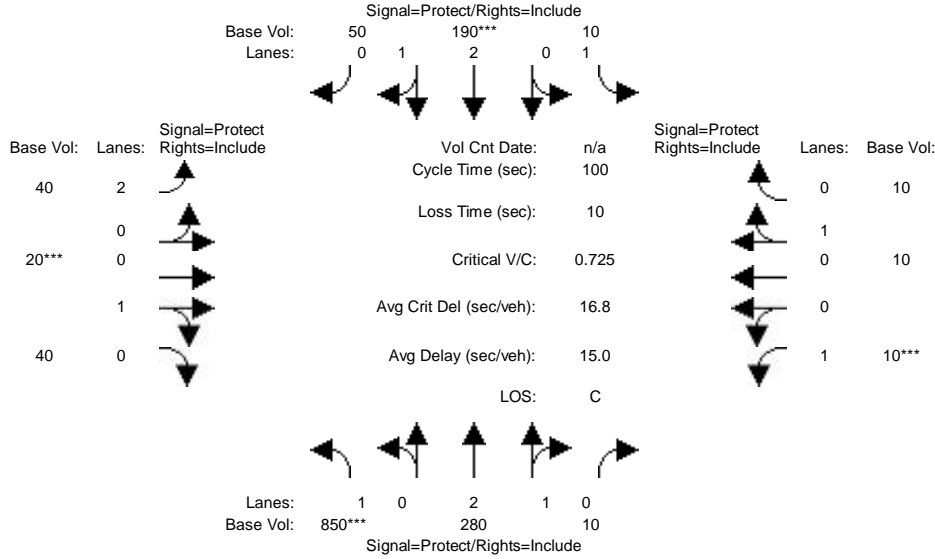


Street Name:	Central Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	50	280	20	60	320	90	50	90	60	20	90	820
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	280	20	60	320	90	50	90	60	20	90	820
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	280	20	60	320	90	50	90	60	20	90	820
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	280	20	60	320	90	50	90	60	20	90	820
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	280	20	60	320	90	50	90	60	20	90	820
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.87	0.13	1.00	2.00	1.00	1.00	1.20	0.80	1.00	1.00	1.00
Final Sat.:	1600	2987	213	1600	3200	1600	1600	1920	1280	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.09	0.09	0.04	0.10	0.06	0.03	0.05	0.05	0.01	0.06	0.51
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Pre-Game

Intersection #30: Wilmington Ave. & University Dr.

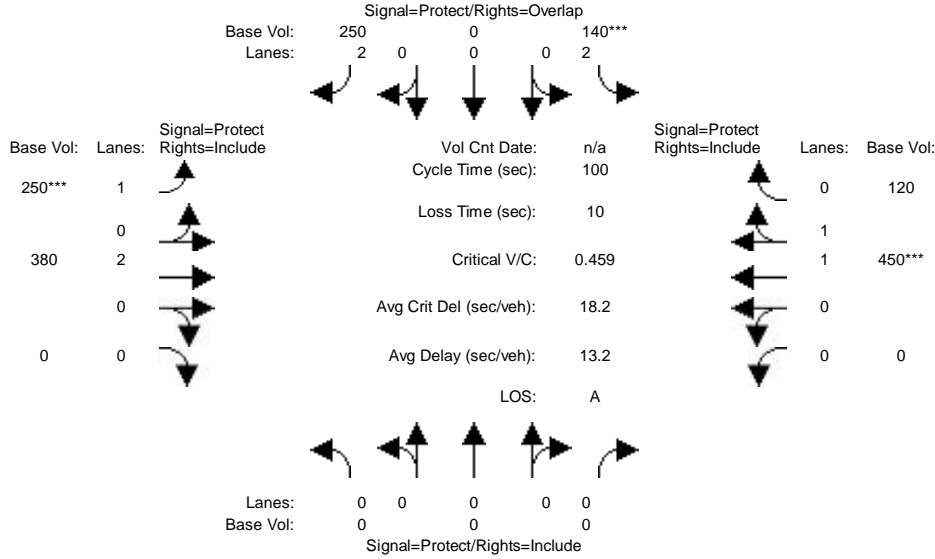


Street Name:	Wilmington Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	850	280	10	10	190	50	40	20	40	10	10	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	850	280	10	10	190	50	40	20	40	10	10	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	850	280	10	10	190	50	40	20	40	10	10	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	850	280	10	10	190	50	40	20	40	10	10	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	850	280	10	10	190	50	40	20	40	10	10	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.90	0.10	1.00	2.38	0.62	2.00	0.33	0.67	1.00	0.50	0.50
Final Sat.:	1600	4634	166	1600	3800	1000	5760	533	1067	1600	800	800
Capacity Analysis Module:												
Vol/Sat:	0.53	0.06	0.06	0.01	0.05	0.05	0.01	0.04	0.04	0.01	0.01	0.01
Crit Moves:	****				****		****		****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Pre-Game

Intersection #31: Central Ave. & Del Amo Blvd.

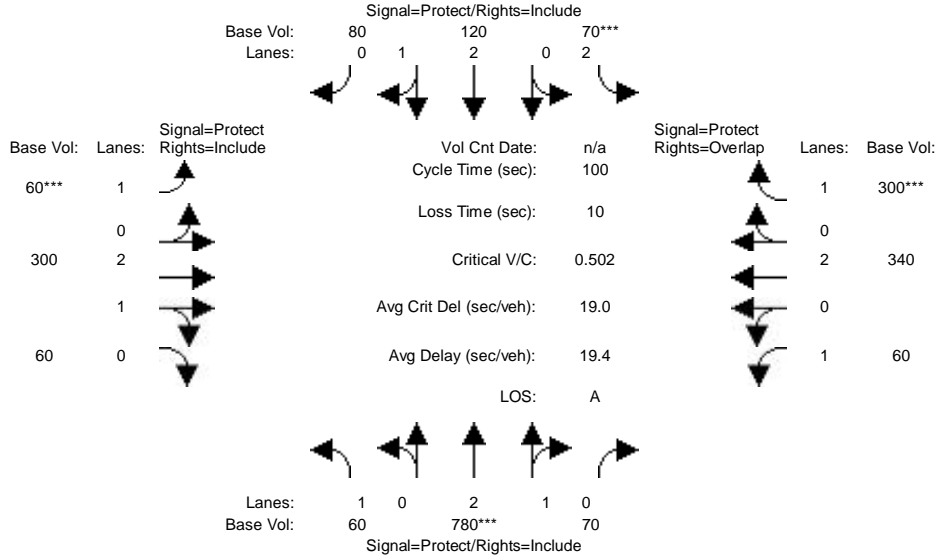


Street Name:	Central Ave.				Del Amo Blvd							
Approach:	North Bound		South Bound		East Bound		West Bound					
Movement:	L	T	R	L	T	R	L	T	R			
Min. Green:	0	0	0	0	0	0	0	0	0			
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0			
Volume Module:												
Base Vol:	0	0	0	140	0	250	250	380	0	0	450	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	140	0	250	250	380	0	0	450	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	140	0	250	250	380	0	0	450	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	140	0	250	250	380	0	0	450	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	140	0	250	250	380	0	0	450	120
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	2.00	1.00	2.00	0.00	0.00	1.58	0.42
Final Sat.:	0	0	0	5760	0	3200	1600	3200	0	0	2526	674
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.00	0.08	0.16	0.12	0.00	0.00	0.18	0.18
OvlAdjV/S:	0.00											
Crit Moves:	****			****				****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Pre-Game

Intersection #32: Wilmington Ave. & Del Amo Blvd.

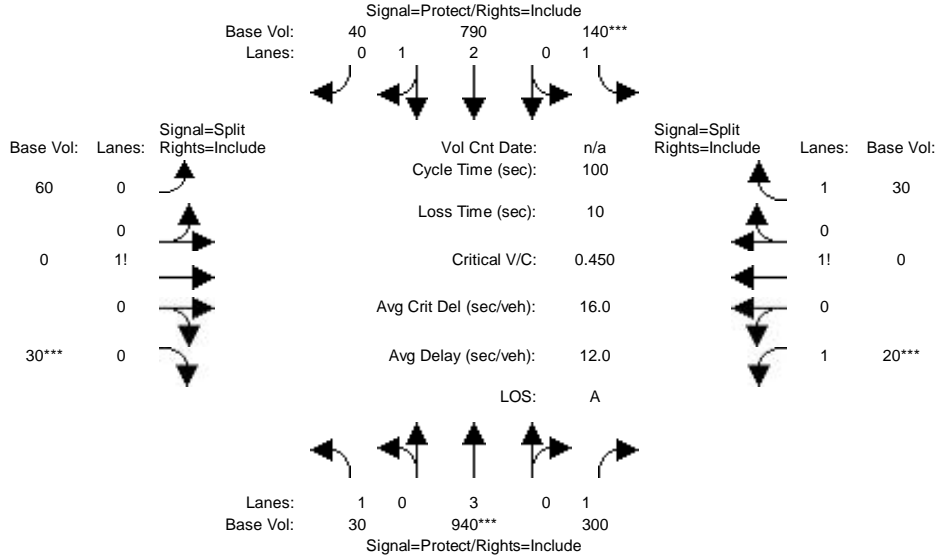


Street Name:	Wilmington Ave.					Del Amo Blvd.						
Approach:	North Bound			South Bound		East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	60	780	70	70	120	80	60	300	60	60	340	300
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	780	70	70	120	80	60	300	60	60	340	300
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	780	70	70	120	80	60	300	60	60	340	300
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	780	70	70	120	80	60	300	60	60	340	300
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	60	780	70	70	120	80	60	300	60	60	340	300
OvlAdjVol:												281
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.75	0.25	2.00	2.00	1.00	1.00	2.50	0.50	1.00	2.00	1.00
Final Sat.:	1600	4405	395	5760	3200	1600	1600	4000	800	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.18	0.18	0.01	0.04	0.05	0.04	0.08	0.08	0.04	0.11	0.19
OvlAdjV/S:												0.18
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Pre-Game

Intersection #38: Avalon Blvd. & 184th St. - Drive A

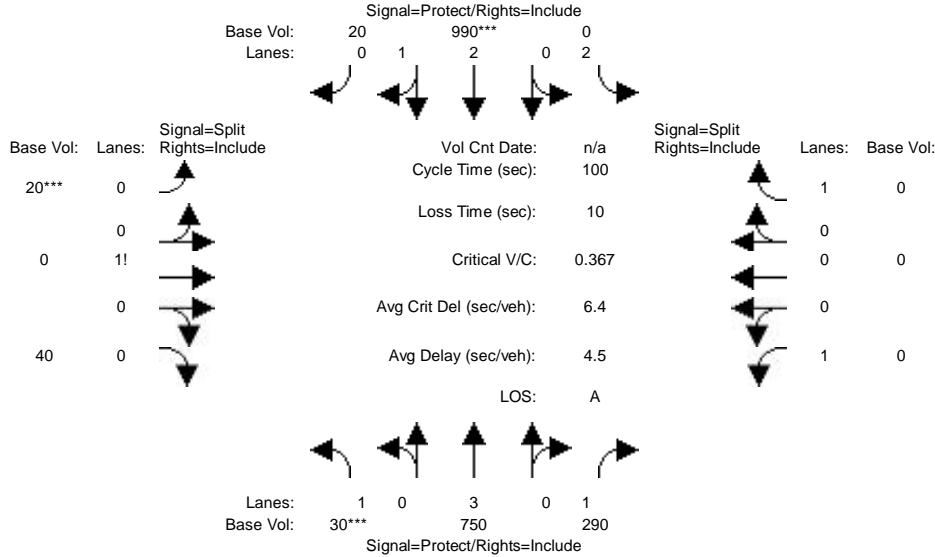


Street Name:	S. Avolon Blvd.						184th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	30	940	300	140	790	40	60	0	30	20	0	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	940	300	140	790	40	60	0	30	20	0	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	940	300	140	790	40	60	0	30	20	0	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	940	300	140	790	40	60	0	30	20	0	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	940	300	140	790	40	60	0	30	20	0	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.86	0.14	0.67	0.00	0.33	1.20	0.01	1.79
Final Sat.:	1600	4800	1600	1600	4569	231	1067	0	533	1920	0	2880
Capacity Analysis Module:												
Vol/Sat:	0.02	0.20	0.19	0.09	0.17	0.17	0.06	0.00	0.06	0.01	0.00	0.01
Crit Moves:	****			****			****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Pre-Game

Intersection #39: Avalon Blvd. & 182nd St. - Drive B

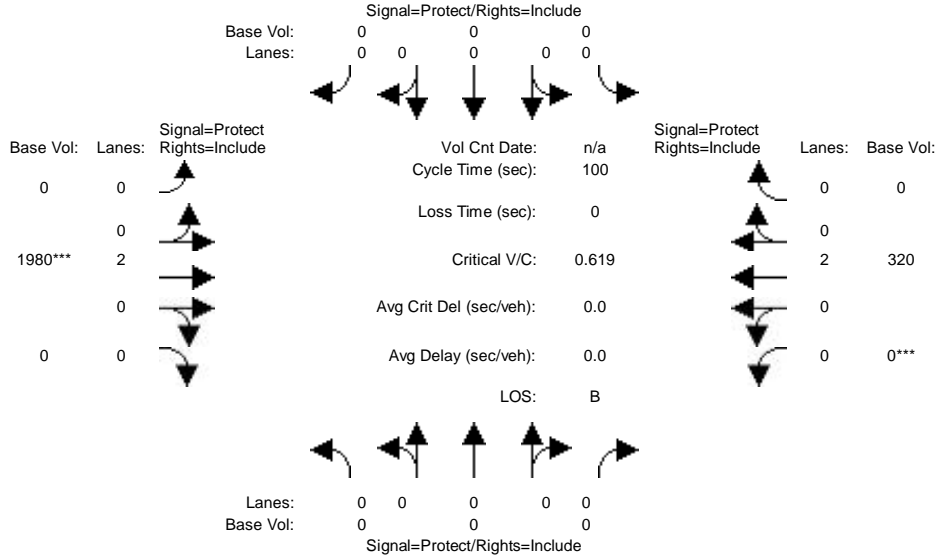


Street Name:	S. Avalon Blvd.						182nd St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	30	750	290	0	990	20	20	0	40	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	750	290	0	990	20	20	0	40	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	750	290	0	990	20	20	0	40	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	750	290	0	990	20	20	0	40	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	750	290	0	990	20	20	0	40	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.94	0.06	0.33	0.00	0.67	1.00	0.00	1.00
Final Sat.:	1600	4800	1600	5760	4705	95	533	0	1067	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.16	0.18	0.00	0.21	0.21	0.04	0.00	0.04	0.00	0.00	0.00
Crit Moves:	****			****		****	****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Pre-Game

Intersection #40: Victoria St. & Drive C

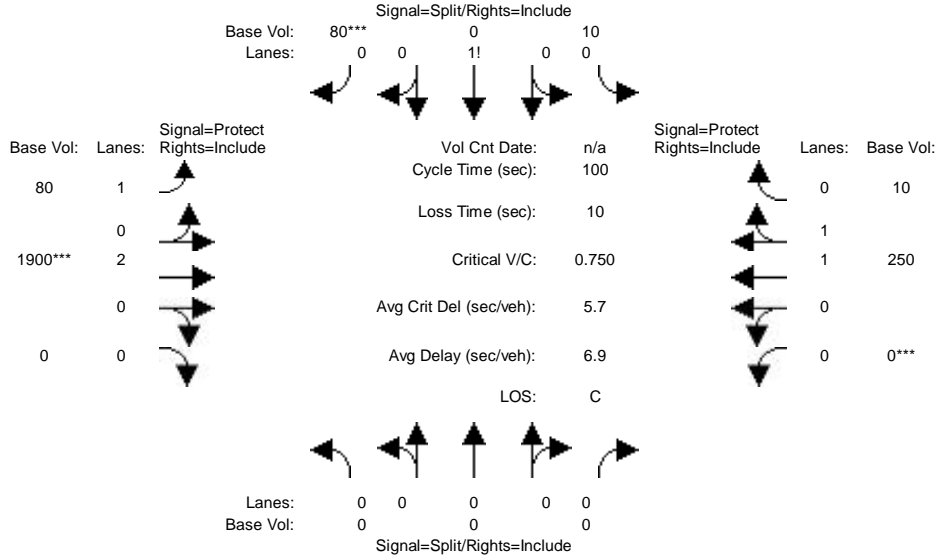


Street Name:	Drive C						E. Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	1980	0	0	0	320
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	1980	0	0	0	320
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	0	1980	0	0	0	320
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	0	1980	0	0	0	320
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	0	1980	0	0	0	320
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00
Final Sat.:	0	0	0	0	0	0	0	3200	0	0	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62	0.00	0.00	0.10	0.00
Crit Moves:							****		****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Pre-Game

Intersection #41: Victoria St. & Rainsbury Ave.

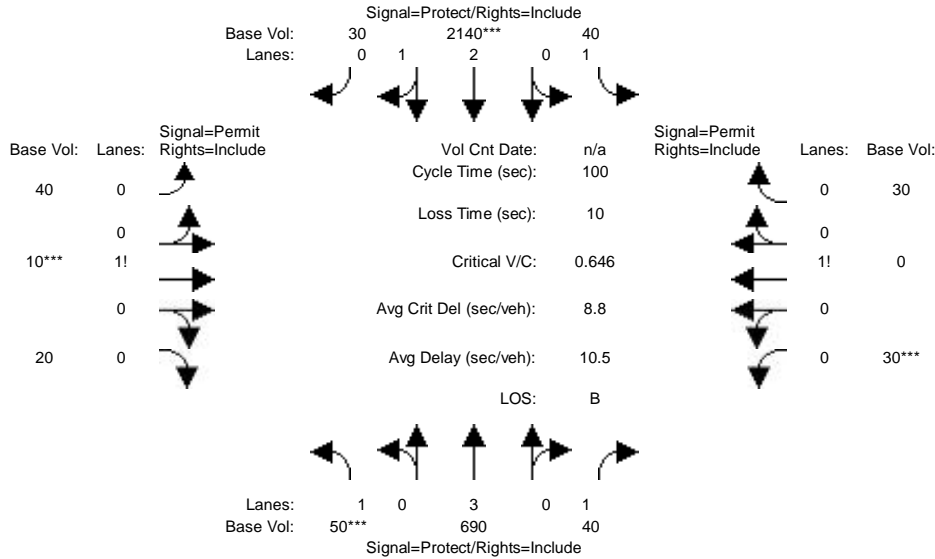


Street Name:	E. Victoria St.				Rainsbury Ave.							
Approach:	North Bound			South Bound			East Bound		West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	10	0	80	80	1900	0	0	250	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	10	0	80	80	1900	0	0	250	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	10	0	80	80	1900	0	0	250	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	10	0	80	80	1900	0	0	250	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	10	0	80	80	1900	0	0	250	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.11	0.00	0.89	1.00	2.00	0.00	0.00	1.92	0.08
Final Sat.:	0	0	0	178	0	1422	1600	3200	0	0	3077	123
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.06	0.00	0.06	0.05	0.59	0.00	0.00	0.08	0.08
Crit Moves:				****			****		****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Pre-Game

Intersection #42: Avalon Blvd. & Harbor Village / Colony Cove

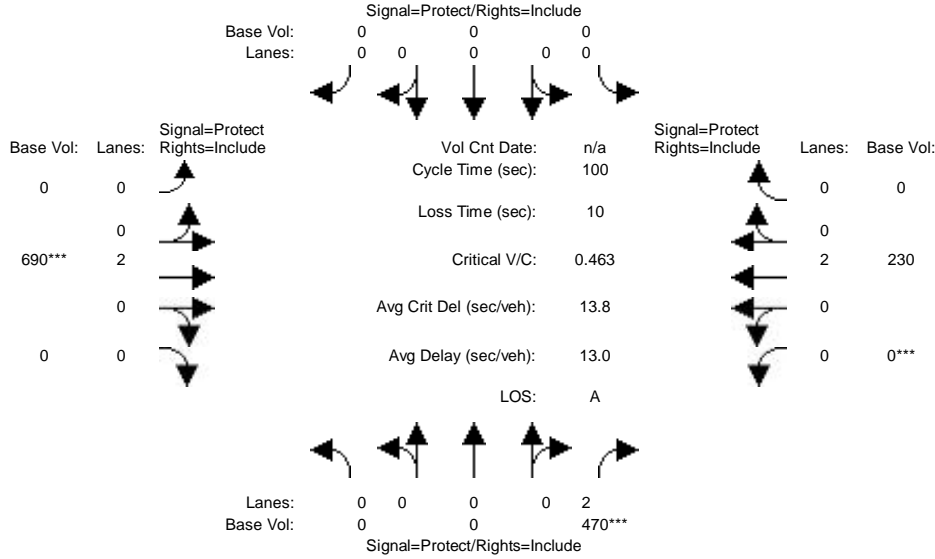


Street Name:	Avalon Blvd.						Harbor Village / Colony Cove					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	50	690	40	40	2140	30	40	10	20	30	0	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	690	40	40	2140	30	40	10	20	30	0	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	690	40	40	2140	30	40	10	20	30	0	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	690	40	40	2140	30	40	10	20	30	0	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	690	40	40	2140	30	40	10	20	30	0	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.96	0.04	0.57	0.14	0.29	0.50	0.00	0.50
Final Sat.:	1600	4800	1600	1600	4734	66	914	229	457	800	0	800
Capacity Analysis Module:												
Vol/Sat:	0.03	0.14	0.03	0.03	0.45	0.45	0.03	0.04	0.04	0.02	0.00	0.04
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Post-Game

Intersection #1: Victoria St. & Drive D

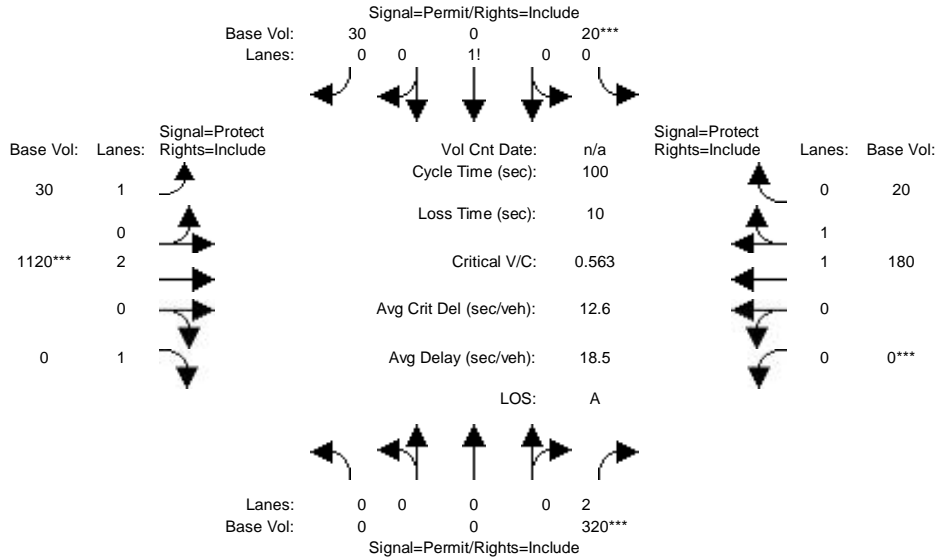


Street Name:	Drive D						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	470	0	0	0	0	690	0	0	230	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	470	0	0	0	0	690	0	0	230	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	470	0	0	0	0	690	0	0	230	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	470	0	0	0	0	690	0	0	230	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	470	0	0	0	0	690	0	0	230	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00
Final Sat.:	0	0	3200	0	0	0	0	3200	0	0	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.07	0.00
Crit Moves:			****				****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Post-Game

Intersection #2: Victoria St & Tamcliff Ave

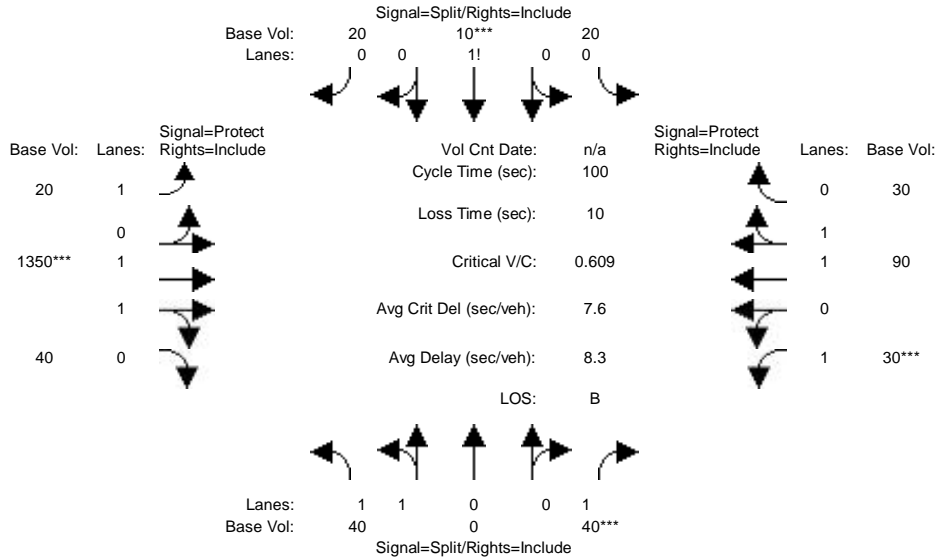


Street Name:	Victoria St						Tamcliff Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	320	20	0	30	30	1120	0	0	180	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	320	20	0	30	30	1120	0	0	180	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	320	20	0	30	30	1120	0	0	180	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	320	20	0	30	30	1120	0	0	180	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	320	20	0	30	30	1120	0	0	180	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	2.00	0.40	0.00	0.60	1.00	2.00	1.00	0.00	1.80	0.20
Final Sat.:	0	0	3200	640	0	960	1600	3200	1600	0	2880	320
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.10	0.01	0.00	0.03	0.02	0.35	0.00	0.00	0.06	0.06
Crit Moves:			****	****			****		****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Post-Game

Intersection #3: Victoria St. & Birchknoll Dr.

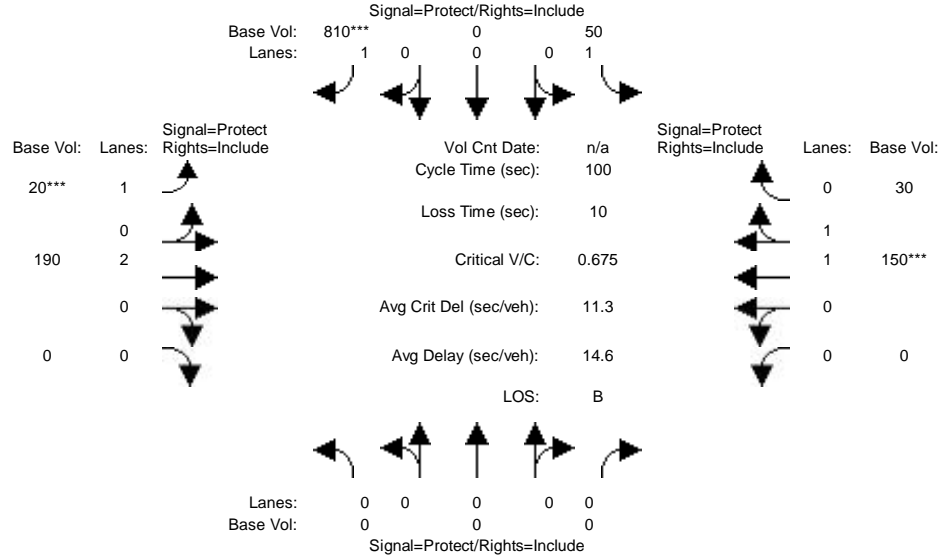


Street Name:	Victoria St.						Birchknoll Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	40	0	40	20	10	20	20	1350	40	30	90	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	0	40	20	10	20	20	1350	40	30	90	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	0	40	20	10	20	20	1350	40	30	90	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	0	40	20	10	20	20	1350	40	30	90	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	0	40	20	10	20	20	1350	40	30	90	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.40	0.20	0.40	1.00	1.94	0.06	1.00	1.50	0.50
Final Sat.:	3200	0	1600	640	320	640	1600	3108	92	1600	2400	800
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.03	0.03	0.03	0.03	0.01	0.43	0.43	0.02	0.04	0.04
Crit Moves:			****	****			****		****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Post-Game

Intersection #9: University Dr. & Toro Center Dr.

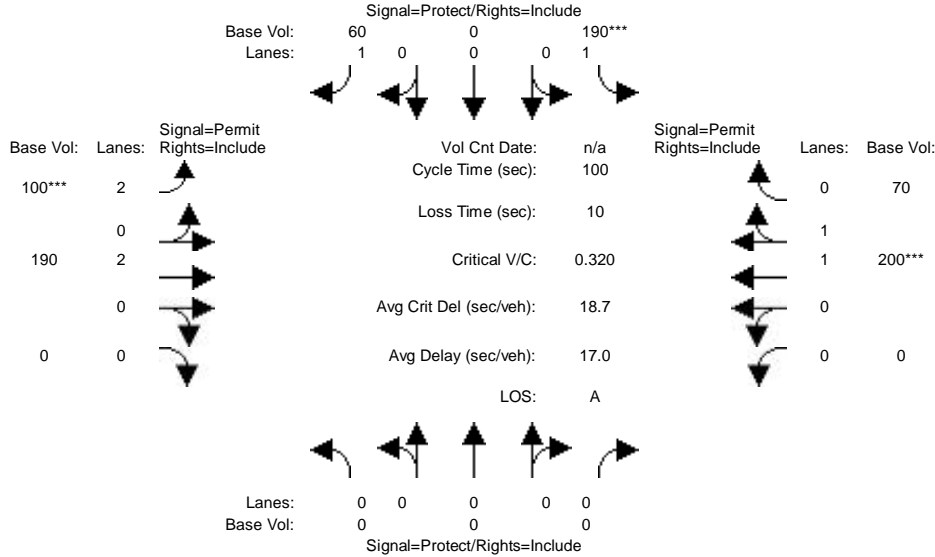


Street Name:	University Dr.						Toro Center Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	50	0	810	20	190	0	0	150	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	50	0	810	20	190	0	0	150	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	50	0	810	20	190	0	0	150	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	50	0	810	20	190	0	0	150	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	50	0	810	20	190	0	0	150	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.67	0.33
Final Sat.:	0	0	0	1600	0	1600	1600	3200	0	0	2667	533
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.03	0.00	0.51	0.01	0.06	0.00	0.00	0.06	0.06
Crit Moves:				****		****				****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Post-Game

Intersection #10: Albertoni St. & SR 91 EB Ramps [Moved from Main St & Albertoni St]

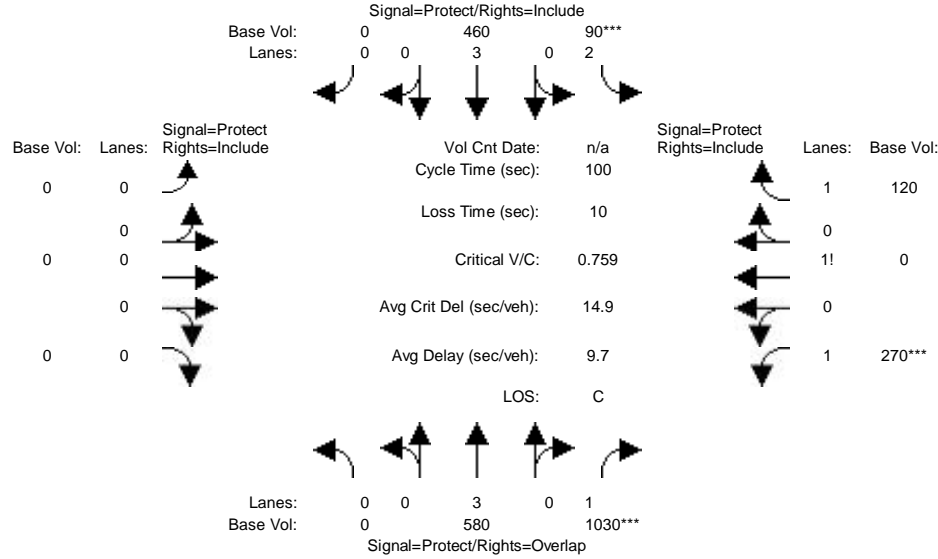


Street Name:	Sr 91 EB Ramps						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	190	0	60	100	190	0	0	0	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	190	0	60	100	190	0	0	0	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	190	0	60	100	190	0	0	0	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	190	0	60	100	190	0	0	0	200
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	190	0	60	100	190	0	0	0	200
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.48	0.52
Final Sat.:	0	0	0	1600	0	1600	5760	3200	0	0	2370	830
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.12	0.00	0.04	0.02	0.06	0.00	0.00	0.08	0.08
Crit Moves:				****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Post-Game

Intersection #11: Avalon Blvd. & SR 91 WB On-Ramp

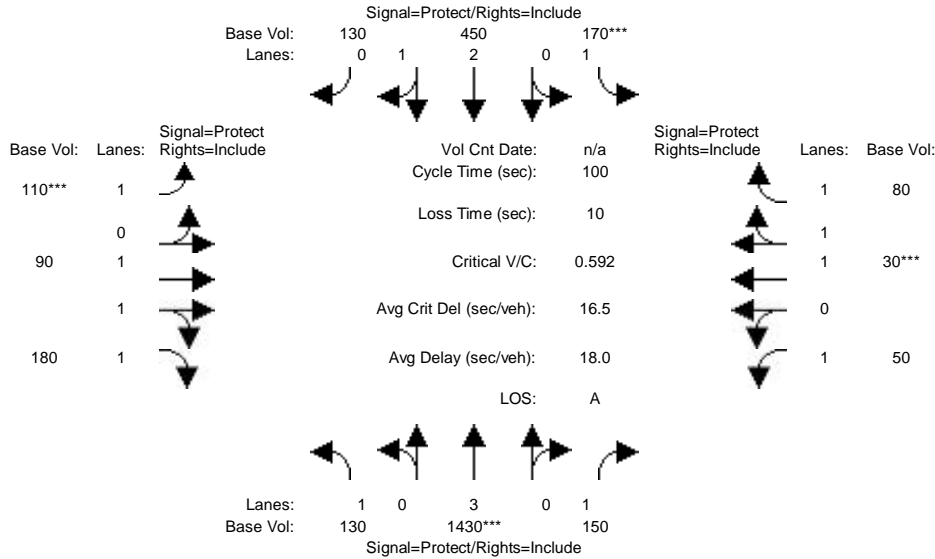


Street Name:	Avalon Blvd.						SR 91 WB On-Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	580	1030	90	460	0	0	0	0	0	270	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	580	1030	90	460	0	0	0	0	270	0	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	580	1030	90	460	0	0	0	0	270	0	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	580	1030	90	460	0	0	0	0	270	0	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	580	1030	90	460	0	0	0	0	270	0	120
OvlAdjVol:	895											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.12	0.64	0.02	0.10	0.00	0.00	0.00	0.00	0.00	0.08	0.00
OvlAdjV/S:	0.56											
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Post-Game

Intersection #12: Avalon Blvd. & Albertoni St.

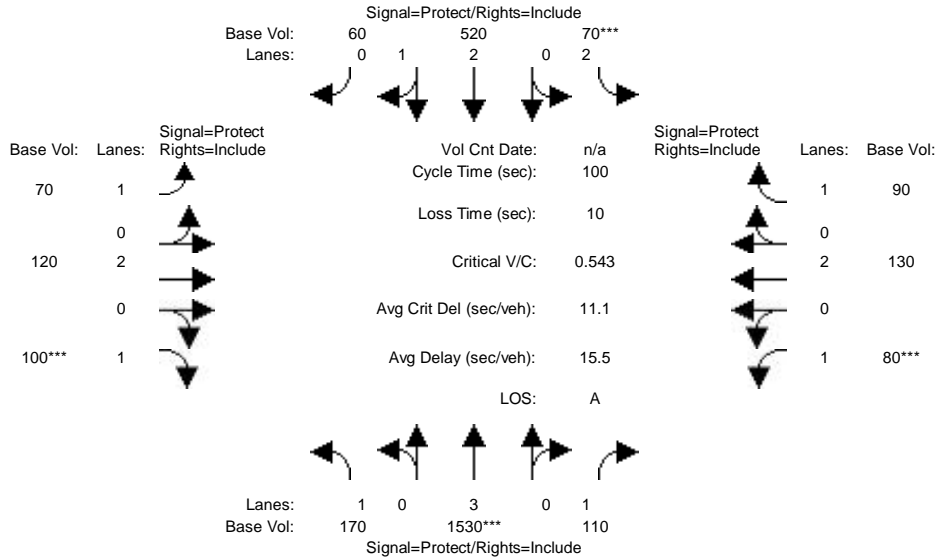


Street Name:	Avalon Blvd.						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	130	1430	150	170	450	130	110	90	180	50	30	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	1430	150	170	450	130	110	90	180	50	30	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	1430	150	170	450	130	110	90	180	50	30	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	1430	150	170	450	130	110	90	180	50	30	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	1430	150	170	450	130	110	90	180	50	30	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.33	0.67	1.00	1.00	2.00	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3724	1076	1600	1600	3200	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.08	0.30	0.09	0.11	0.12	0.12	0.07	0.06	0.06	0.03	0.02	0.03
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Post-Game

Intersection #13: Avalon Blvd. & Victoria St.

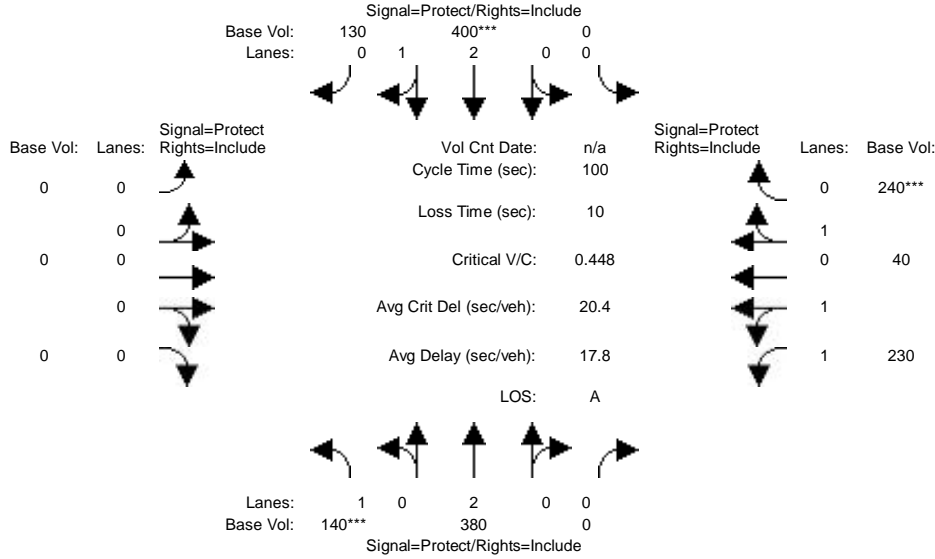


Street Name:	Avalon Blvd.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	170	1530	110	70	520	60	70	120	100	80	130	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	170	1530	110	70	520	60	70	120	100	80	130	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	170	1530	110	70	520	60	70	120	100	80	130	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	170	1530	110	70	520	60	70	120	100	80	130	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	170	1530	110	70	520	60	70	120	100	80	130	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.69	0.31	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4303	497	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.32	0.07	0.01	0.12	0.12	0.04	0.04	0.06	0.05	0.04	0.06
Crit Moves:	****			****			****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Post-Game

Intersection #14: Central Ave. & Artesia Blvd.

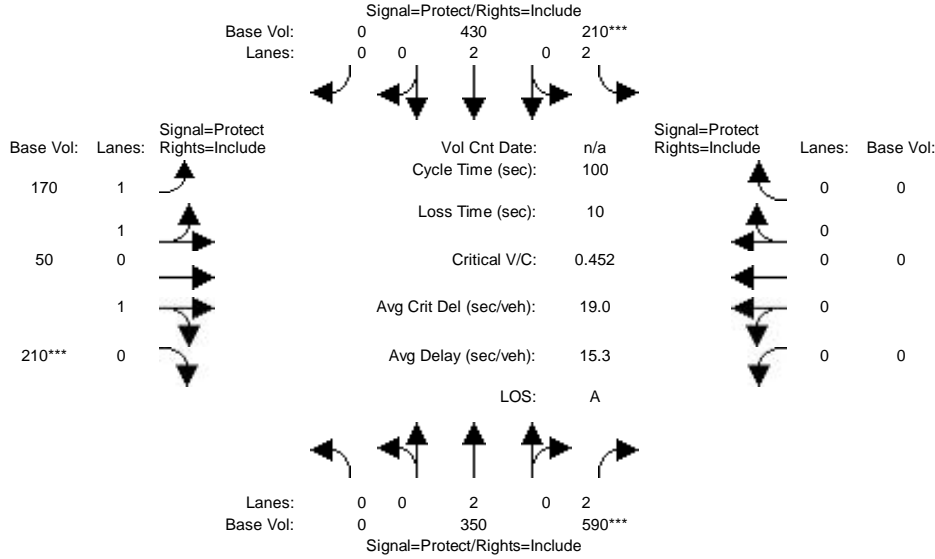


Street Name:	Central Ave.						Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	140	380	0	0	400	130	0	0	0	230	40	240
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	380	0	0	400	130	0	0	0	230	40	240
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	140	380	0	0	400	130	0	0	0	230	40	240
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	380	0	0	400	130	0	0	0	230	40	240
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	140	380	0	0	400	130	0	0	0	230	40	240
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.26	0.74	0.00	0.00	0.00	1.70	0.30	1.00
Final Sat.:	1600	3200	0	0	3623	1177	0	0	0	2726	474	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.12	0.00	0.00	0.11	0.11	0.00	0.00	0.00	0.08	0.08	0.15
Crit Moves:	****				****					****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Post-Game

Intersection #15: Central Ave. & Albertoni St.

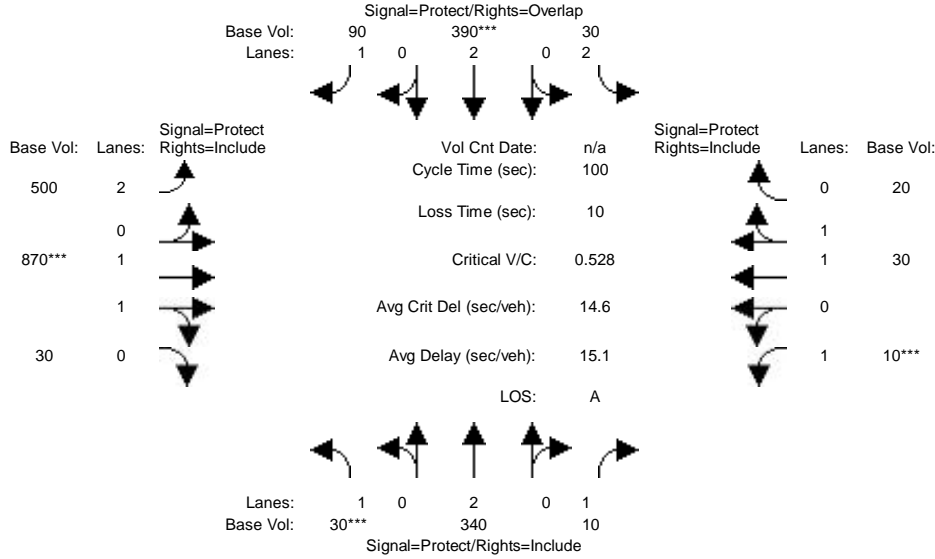


Street Name:	Central Ave.						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	350	590	210	430	0	170	50	210	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	350	590	210	430	0	170	50	210	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	350	590	210	430	0	170	50	210	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	350	590	210	430	0	170	50	210	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	350	590	210	430	0	170	50	210	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.55	0.45	1.00	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	2473	727	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.11	0.18	0.04	0.13	0.00	0.07	0.07	0.13	0.00	0.00	0.00
Crit Moves:		****	****				****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Post-Game

Intersection #16: Central Ave. & Victoria St.

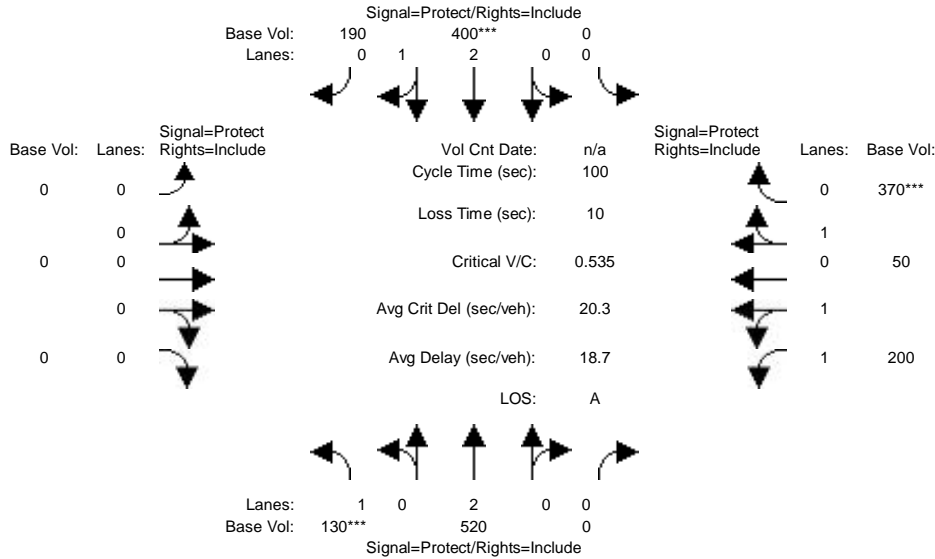


Street Name:	Central Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	30	340	10	30	390	90	500	870	30	10	30	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	340	10	30	390	90	500	870	30	10	30	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	340	10	30	390	90	500	870	30	10	30	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	340	10	30	390	90	500	870	30	10	30	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	30	340	10	30	390	90	500	870	30	10	30	20
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.93	0.07	1.00	1.20	0.80
Final Sat.:	1600	3200	1600	5760	3200	1600	5760	3093	107	1600	1920	1280
Capacity Analysis Module:												
Vol/Sat:	0.02	0.11	0.01	0.01	0.12	0.06	0.09	0.28	0.28	0.01	0.02	0.02
OvlAdjV/S:	0.00											
Crit Moves:	****	****			****	****	****	****			****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Post-Game

Intersection #17: Wilmington Ave. & Artesia Blvd. WB

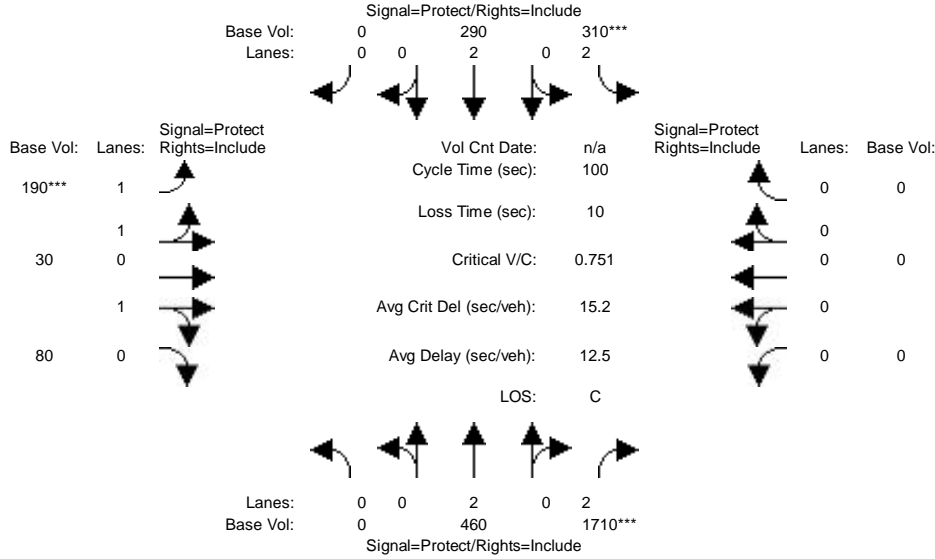


Street Name:	Wilmington Ave.						Artesia Blvd. WB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	130	520	0	0	400	190	0	0	0	200	50	370
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	520	0	0	400	190	0	0	0	200	50	370
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	520	0	0	400	190	0	0	0	200	50	370
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	520	0	0	400	190	0	0	0	200	50	370
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	130	520	0	0	400	190	0	0	0	200	50	370
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.03	0.97	0.00	0.00	0.00	1.60	0.40	1.00
Final Sat.:	1600	3200	0	0	3254	1546	0	0	0	2560	640	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.16	0.00	0.00	0.12	0.12	0.00	0.00	0.00	0.08	0.08	0.23
Crit Moves:	****				****					****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Post-Game

Intersection #18: Wilmington Ave. & Artesia Blvd. EB

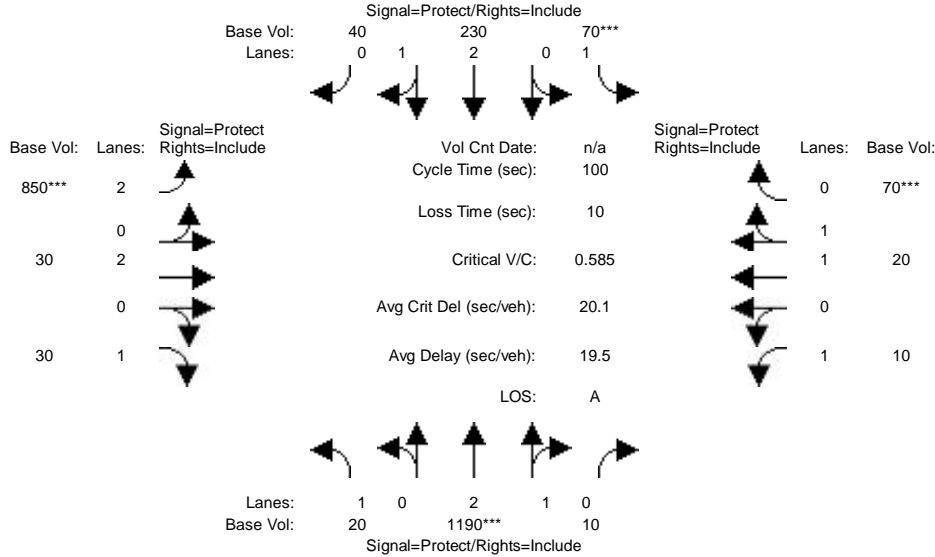


Street Name:	Wilmington Ave.				Artesia Blvd. EB							
Approach:	North Bound		South Bound		East Bound		West Bound					
Movement:	L - T - R	L - T - R	L - T - R	L - T - R	L - T - R	L - T - R	L - T - R					
Min. Green:	0	0	0	0	0	0	0					
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0					
Volume Module:												
Base Vol:	0	460	1710	310	290	0	190	30	80	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	460	1710	310	290	0	190	30	80	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	460	1710	310	290	0	190	30	80	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	460	1710	310	290	0	190	30	80	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	460	1710	310	290	0	190	30	80	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.90	0.30	0.80	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	3046	479	1275	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.14	0.53	0.05	0.09	0.00	0.06	0.06	0.06	0.00	0.00	0.00
Crit Moves:		****	****				****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Post-Game

Intersection #19: Wilmington Ave. & Victoria St.

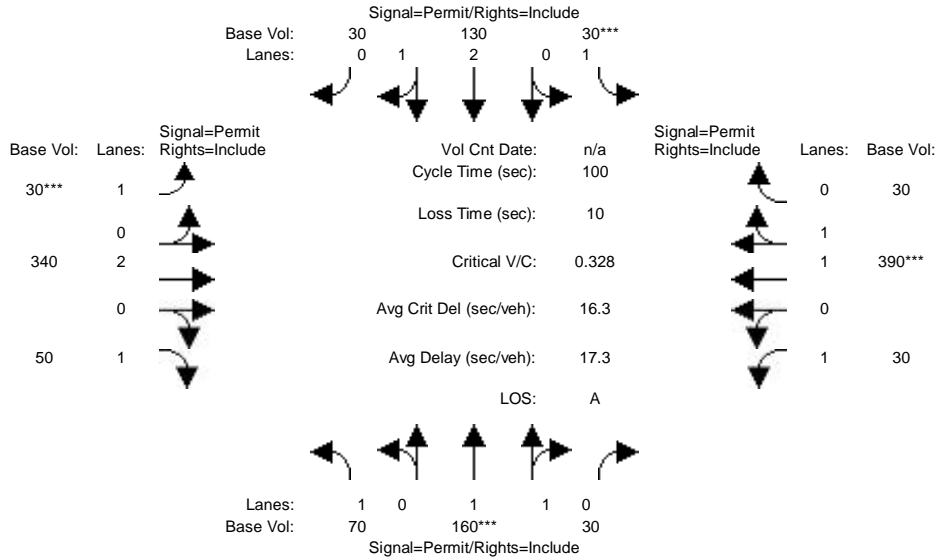


Street Name:	Wilmington Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	20	1190	10	70	230	40	850	30	30	10	20	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	1190	10	70	230	40	850	30	30	10	20	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	1190	10	70	230	40	850	30	30	10	20	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	1190	10	70	230	40	850	30	30	10	20	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	1190	10	70	230	40	850	30	30	10	20	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.98	0.02	1.00	2.56	0.44	2.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	4760	40	1600	4089	711	5760	3200	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.25	0.25	0.04	0.06	0.06	0.15	0.01	0.02	0.01	0.01	0.04
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Post-Game

Intersection #22: Figueroa St. & 190th St./Victoria St.

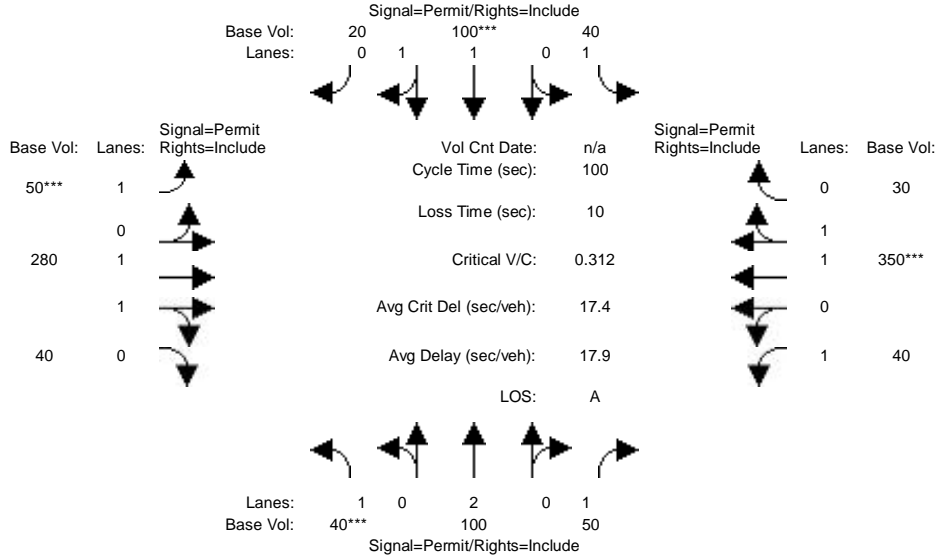


Street Name:	Figueroa St.						190th St./Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	70	160	30	30	130	30	30	340	50	30	390	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	160	30	30	130	30	30	340	50	30	390	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	160	30	30	130	30	30	340	50	30	390	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	160	30	30	130	30	30	340	50	30	390	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	70	160	30	30	130	30	30	340	50	30	390	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.68	0.32	1.00	2.44	0.56	1.00	2.00	1.00	1.00	1.86	0.14
Final Sat.:	1600	2695	505	1600	3900	900	1600	3200	1600	1600	2971	229
Capacity Analysis Module:												
Vol/Sat:	0.04	0.06	0.06	0.02	0.03	0.03	0.02	0.11	0.03	0.02	0.13	0.13
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Post-Game

Intersection #24: Main St. & Victoria St.

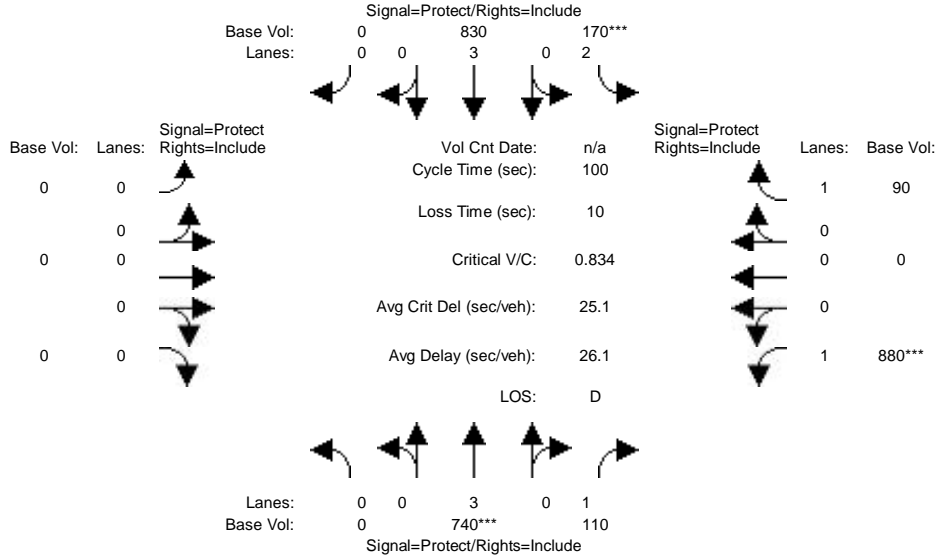


Street Name:	Main St.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	40	100	50	40	100	20	50	280	40	40	350	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	100	50	40	100	20	50	280	40	40	350	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	100	50	40	100	20	50	280	40	40	350	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	100	50	40	100	20	50	280	40	40	350	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	100	50	40	100	20	50	280	40	40	350	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.67	0.33	1.00	1.75	0.25	1.00	1.84	0.16
Final Sat.:	1600	3200	1600	1600	2667	533	1600	2800	400	1600	2947	253
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.03	0.03	0.04	0.04	0.03	0.10	0.10	0.03	0.12	0.12
Crit Moves:	****			****		****	****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Post-Game

Intersection #25: Avalon Blvd. & University Dr.

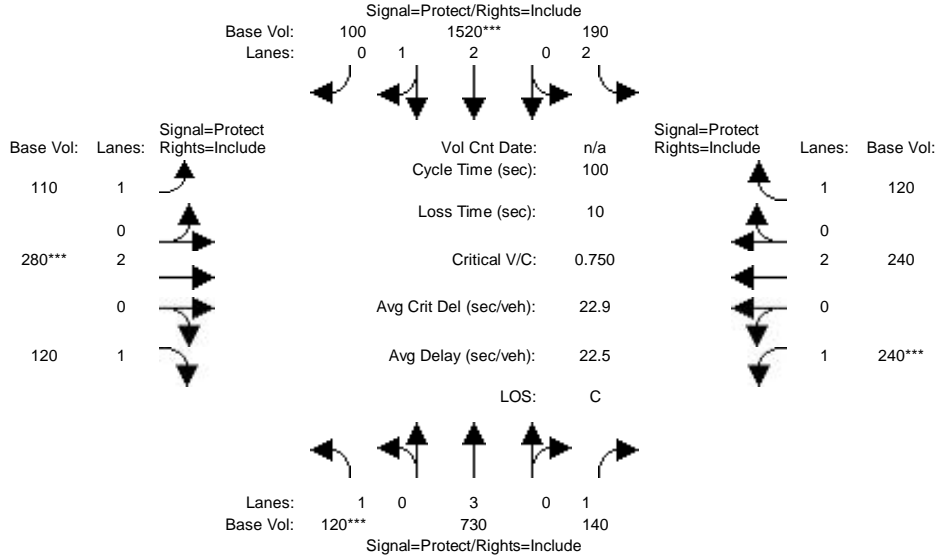


Street Name:	Avalon Blvd.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	740	110	170	830	0	0	0	0	0	880	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	740	110	170	830	0	0	0	0	880	0	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	740	110	170	830	0	0	0	0	880	0	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	740	110	170	830	0	0	0	0	880	0	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	740	110	170	830	0	0	0	0	880	0	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.15	0.07	0.03	0.17	0.00	0.00	0.00	0.00	0.00	0.55	0.00
Crit Moves:	****			****						****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Post-Game

Intersection #26: Avalon Blvd. & Del Amo Blvd.

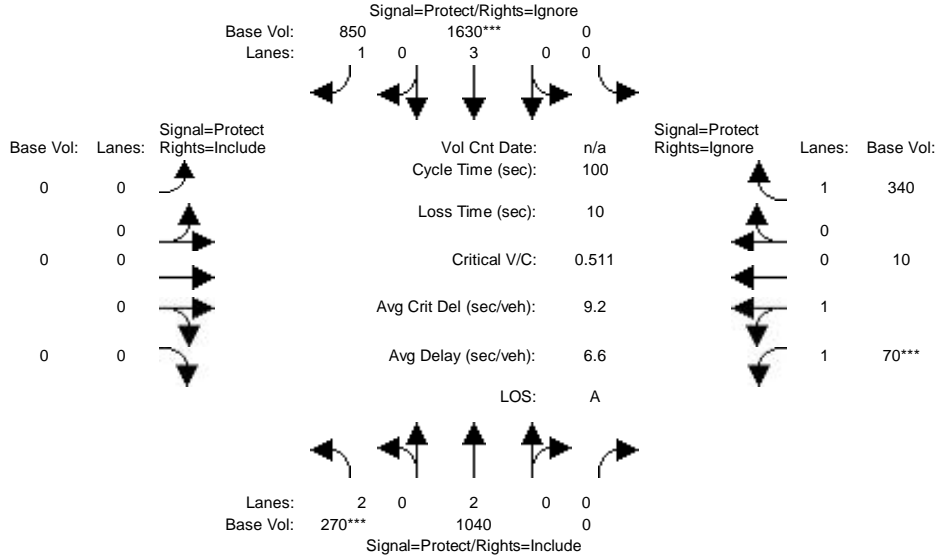


Street Name:	Avalon Blvd.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	120	730	140	190	1520	100	110	280	120	240	240	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	120	730	140	190	1520	100	110	280	120	240	240	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	120	730	140	190	1520	100	110	280	120	240	240	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	730	140	190	1520	100	110	280	120	240	240	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	120	730	140	190	1520	100	110	280	120	240	240	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.81	0.19	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4504	296	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.15	0.09	0.03	0.34	0.34	0.07	0.09	0.08	0.15	0.08	0.08
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Post-Game

Intersection #27: Avalon Blvd. & I-405 NB Ramps

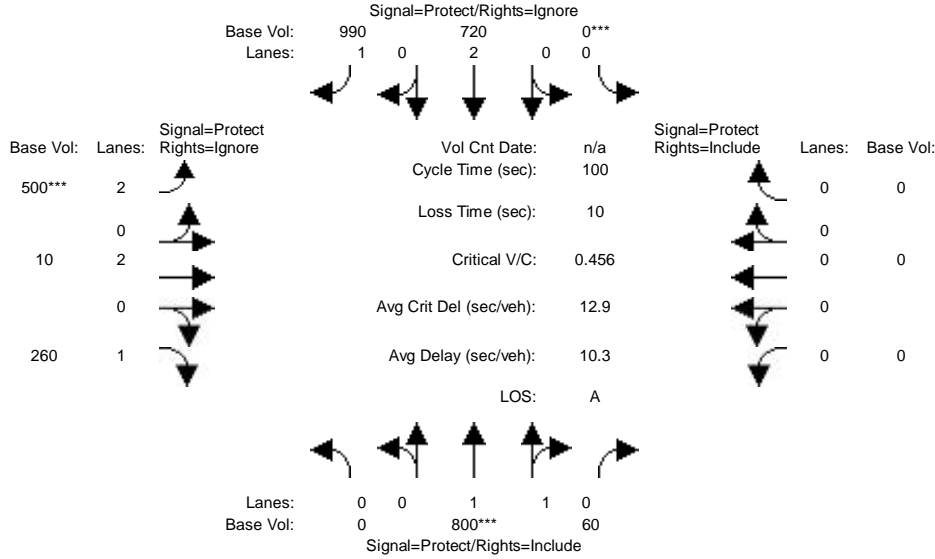


Street Name:	Avalon Blvd.						I-405 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	270	1040	0	0	1630	850	0	0	0	70	10	340
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	270	1040	0	0	1630	850	0	0	0	70	10	340
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	270	1040	0	0	1630	0	0	0	0	70	10	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	270	1040	0	0	1630	0	0	0	0	70	10	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	270	1040	0	0	1630	0	0	0	0	70	10	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.75	0.25	1.00
Final Sat.:	5760	3200	0	0	4800	1600	0	0	0	2800	400	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.33	0.00	0.00	0.34	0.00	0.00	0.00	0.00	0.00	0.03	0.03
Crit Moves:	****				****				****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Post-Game

Intersection #28: Avalon Blvd. & I-405 SB Ramps

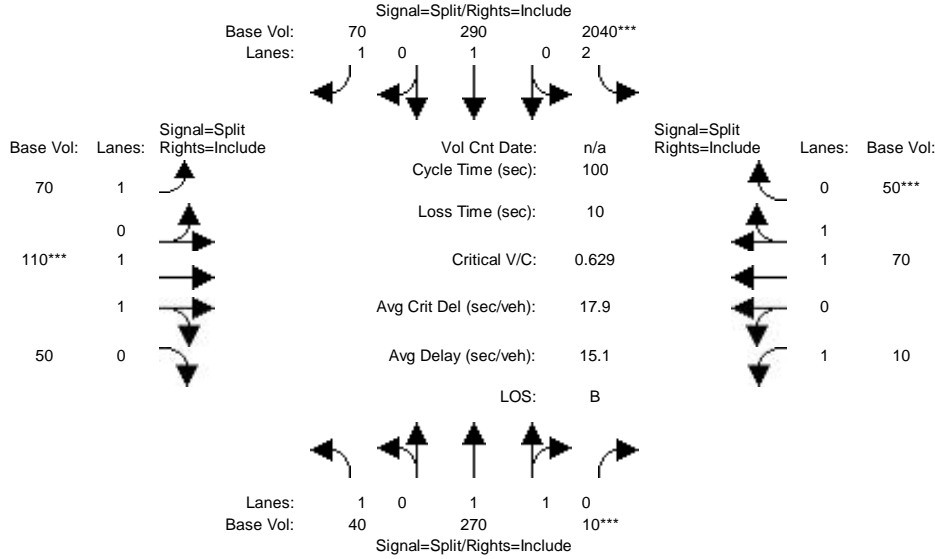


Street Name:	Avalon Blvd.						I-405 SB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	800	60	0	720	990	500	10	260	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	800	60	0	720	990	500	10	260	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	800	60	0	720	0	500	10	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	800	60	0	720	0	500	10	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	0	800	60	0	720	0	500	10	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.86	0.14	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	0	2977	223	0	3200	1600	5760	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.27	0.27	0.00	0.23	0.00	0.09	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Post-Game

Intersection #29: Central Ave. & University Dr.

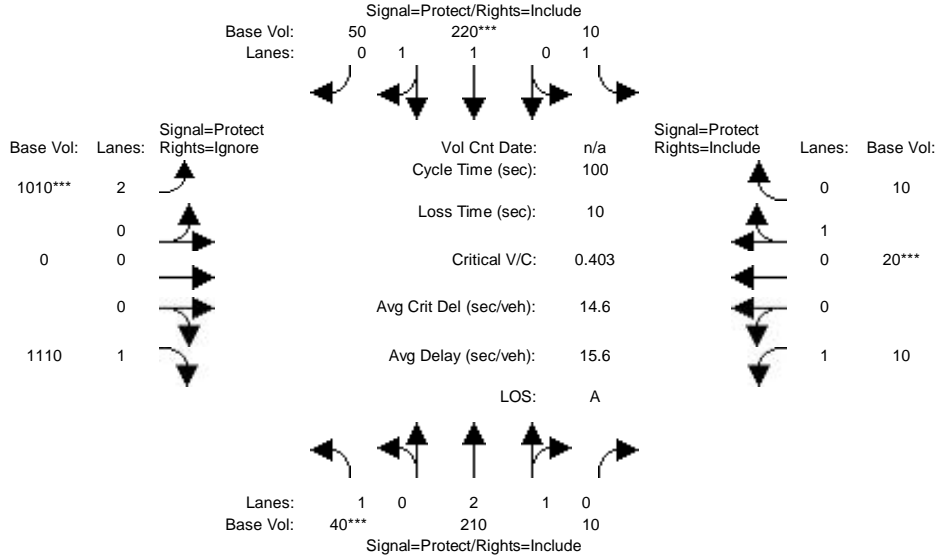


Street Name:	Central Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	40	270	10	2040	290	70	70	110	50	10	70	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	270	10	2040	290	70	70	110	50	10	70	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	270	10	2040	290	70	70	110	50	10	70	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	270	10	2040	290	70	70	110	50	10	70	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	270	10	2040	290	70	70	110	50	10	70	50
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.93	0.07	2.00	1.00	1.00	1.00	1.38	0.62	1.00	1.17	0.83
Final Sat.:	1600	3086	114	5760	1600	1600	1600	2200	1000	1600	1867	1333
Capacity Analysis Module:												
Vol/Sat:	0.03	0.09	0.09	0.35	0.18	0.04	0.04	0.05	0.05	0.01	0.04	0.04
Crit Moves:			****	****			****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Post-Game

Intersection #30: Wilmington Ave. & University Dr.

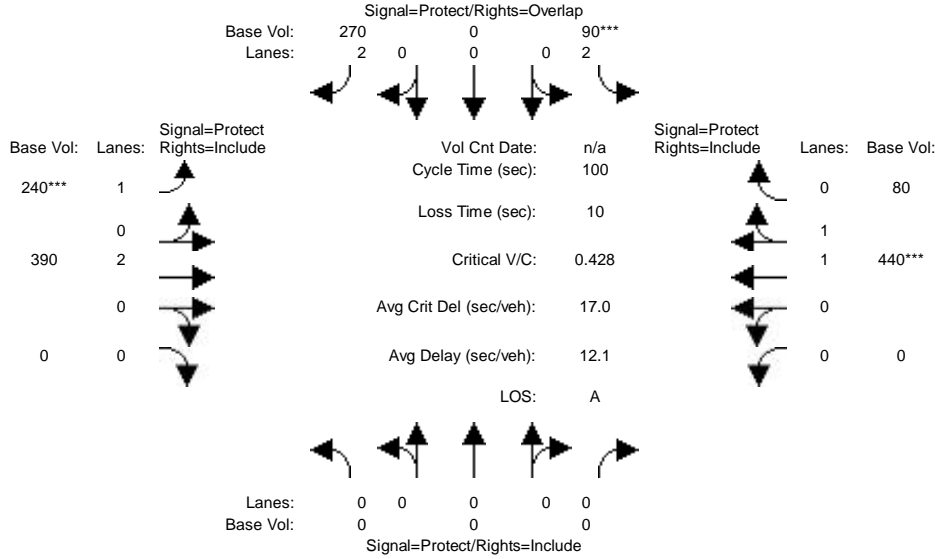


Street Name:	Wilmington Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	40	210	10	10	220	50	1010	0	1110	10	20	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	210	10	10	220	50	1010	0	1110	10	20	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
PHF Volume:	40	210	10	10	220	50	1010	0	0	10	20	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	210	10	10	220	50	1010	0	0	10	20	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
Final Volume:	40	210	10	10	220	50	1010	0	0	10	20	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.86	0.14	1.00	1.63	0.37	2.00	0.00	1.00	1.00	0.67	0.33
Final Sat.:	1600	4582	218	1600	2607	593	5760	0	1600	1600	1067	533
Capacity Analysis Module:												
Vol/Sat:	0.03	0.05	0.05	0.01	0.08	0.08	0.18	0.00	0.00	0.01	0.02	0.02
Crit Moves:	****			****		****	****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Post-Game

Intersection #31: Central Ave. & Del Amo Blvd.

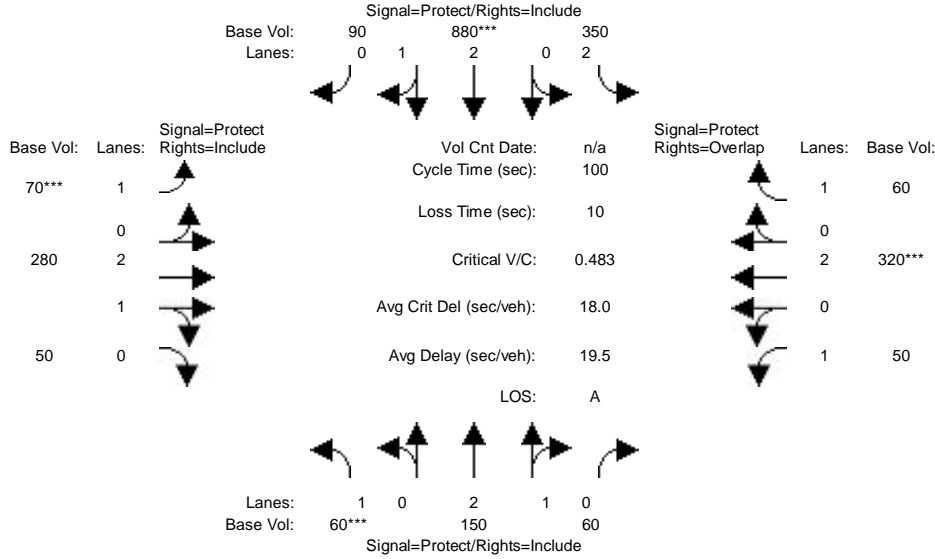


Street Name:	Central Ave.						Del Amo Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	90	0	270	240	390	0	0	440	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	90	0	270	240	390	0	0	440	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	90	0	270	240	390	0	0	440	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	90	0	270	240	390	0	0	440	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	90	0	270	240	390	0	0	440	80
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	2.00	1.00	2.00	0.00	0.00	1.69	0.31
Final Sat.:	0	0	0	5760	0	3200	1600	3200	0	0	2708	492
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.00	0.08	0.15	0.12	0.00	0.00	0.16	0.16
OvlAdjV/S:	0.00											
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Post-Game

Intersection #32: Wilmington Ave. & Del Amo Blvd.

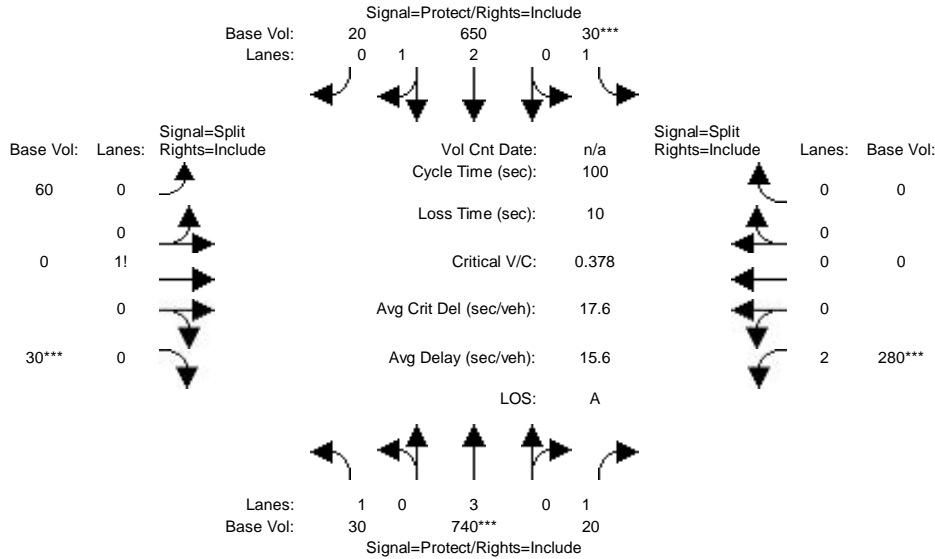


Street Name:	Wilmington Ave.				Del Amo Blvd.							
Approach:	North Bound		South Bound		East Bound		West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	60	150	60	350	880	90	70	280	50	50	320	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	150	60	350	880	90	70	280	50	50	320	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	150	60	350	880	90	70	280	50	50	320	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	150	60	350	880	90	70	280	50	50	320	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	60	150	60	350	880	90	70	280	50	50	320	60
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.14	0.86	2.00	2.72	0.28	1.00	2.55	0.45	1.00	2.00	1.00
Final Sat.:	1600	3429	1371	5760	4355	445	1600	4073	727	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.04	0.04	0.06	0.20	0.20	0.04	0.07	0.07	0.03	0.10	0.04
OvlAdjV/S:	0.00											
Crit Moves:	****			****		****	****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Post-Game

Intersection #38: Avalon Blvd. & 184th St. - Drive A

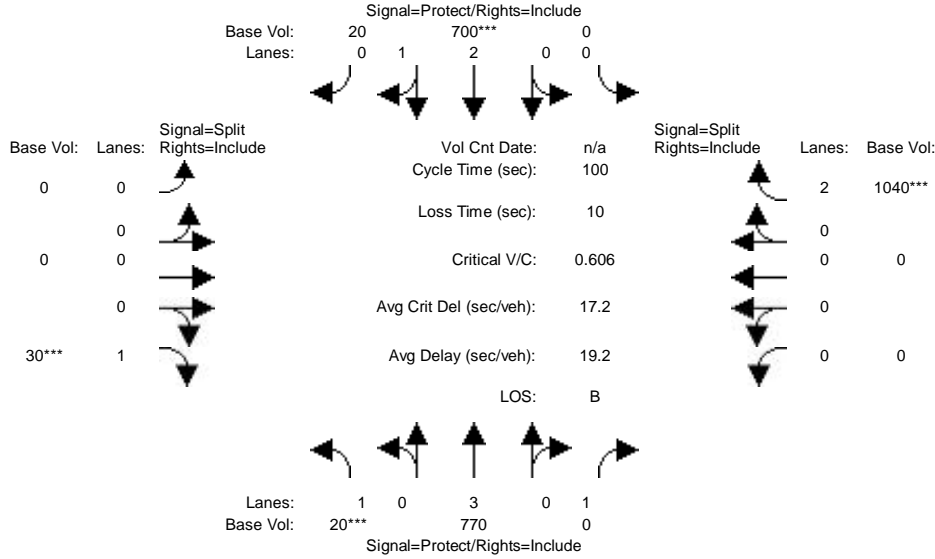


Street Name:	S. Avolon Blvd.						184th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	30	740	20	30	650	20	60	0	30	280	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	740	20	30	650	20	60	0	30	280	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	740	20	30	650	20	60	0	30	280	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	740	20	30	650	20	60	0	30	280	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	740	20	30	650	20	60	0	30	280	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.91	0.09	0.67	0.00	0.33	2.00	0.00	0.00
Final Sat.:	1600	4800	1600	1600	4657	143	1067	0	533	5760	0	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.15	0.01	0.02	0.14	0.14	0.06	0.00	0.06	0.05	0.00	0.00
Crit Moves:	****			****			****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Post-Game

Intersection #39: Avalon Blvd. & 182nd St. - Drive B

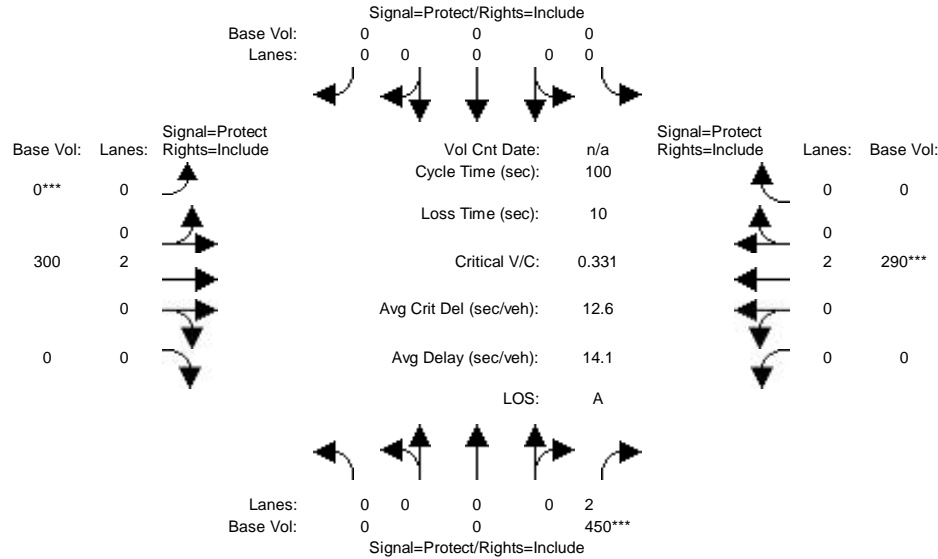


Street Name:	S. Avalon Blvd.				182nd St.							
Approach:	North Bound		South Bound		East Bound		West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	20	770	0	0	700	20	0	0	30	0	0	1040
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	770	0	0	700	20	0	0	30	0	0	1040
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	770	0	0	700	20	0	0	30	0	0	1040
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	770	0	0	700	20	0	0	30	0	0	1040
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	770	0	0	700	20	0	0	30	0	0	1040
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	0.00	2.92	0.08	0.00	0.00	1.00	0.00	0.00	2.00
Final Sat.:	1600	4800	1600	0	4667	133	0	0	1600	0	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.01	0.16	0.00	0.00	0.15	0.15	0.00	0.00	0.02	0.00	0.00	0.33
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Post-Game

Intersection #40: Victoria St. & Drive C

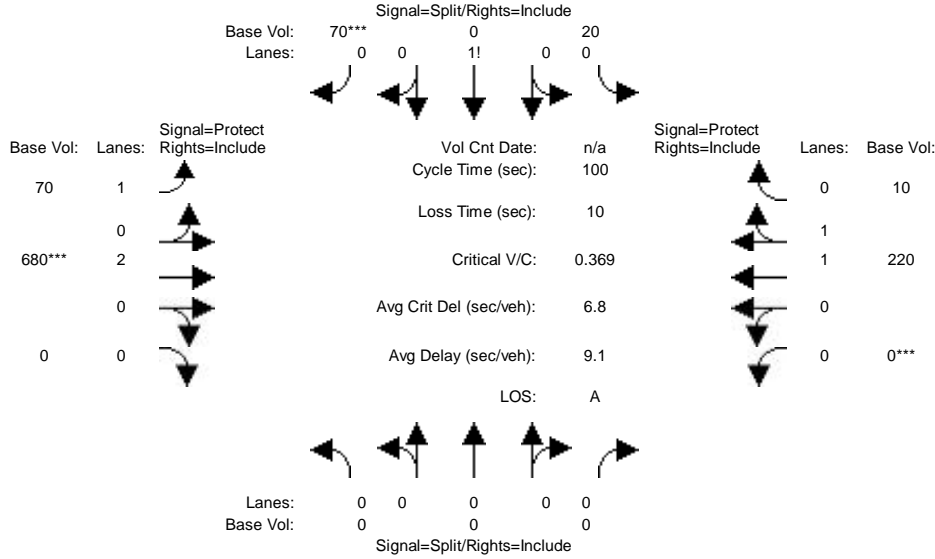


Street Name:	Drive C						E. Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	450	0	0	0	0	300	0	0	290	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	450	0	0	0	0	300	0	0	290	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	450	0	0	0	0	300	0	0	290	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	450	0	0	0	0	300	0	0	290	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	450	0	0	0	0	300	0	0	290	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00
Final Sat.:	0	0	3200	0	0	0	0	3200	0	0	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.09	0.00
Crit Moves:			****			****			****			****

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Post-Game

Intersection #41: Victoria St. & Rainsbury Ave.

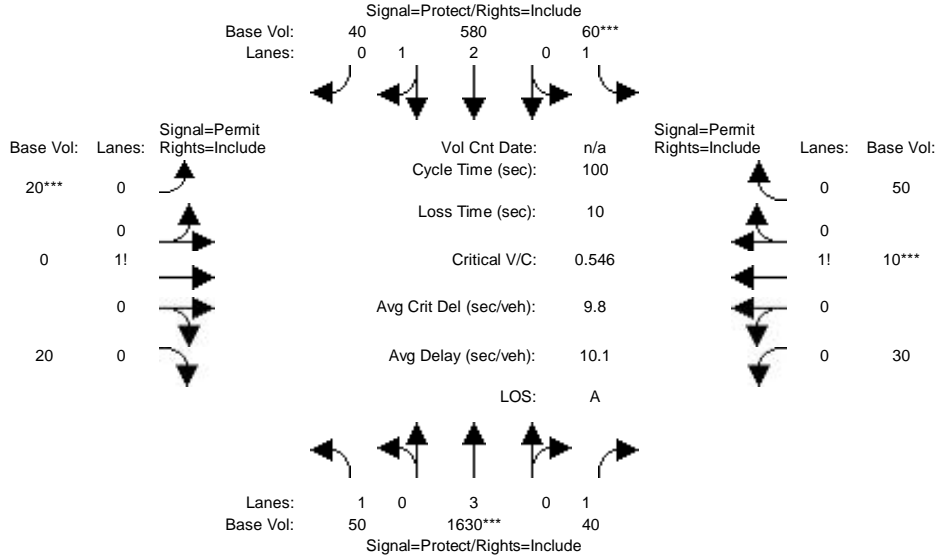


Street Name:	E. Victoria St.						Rainsbury Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	20	0	70	70	680	0	0	220	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	20	0	70	70	680	0	0	220	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	20	0	70	70	680	0	0	220	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	20	0	70	70	680	0	0	220	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	20	0	70	70	680	0	0	220	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.22	0.00	0.78	1.00	2.00	0.00	0.00	1.91	0.09
Final Sat.:	0	0	0	356	0	1244	1600	3200	0	0	3061	139
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.06	0.00	0.06	0.04	0.21	0.00	0.00	0.07	0.07
Crit Moves:				****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 27k-Seat Sunday Post-Game

Intersection #42: Avalon Blvd. & Harbor Village / Colony Cove



Street Name:	Avalon Blvd.						Harbor Village / Colony Cove					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	50	1630	40	60	580	40	20	0	20	30	10	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	1630	40	60	580	40	20	0	20	30	10	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	1630	40	60	580	40	20	0	20	30	10	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	1630	40	60	580	40	20	0	20	30	10	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	1630	40	60	580	40	20	0	20	30	10	50
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.81	0.19	0.50	0.00	0.50	0.33	0.11	0.56
Final Sat.:	1600	4800	1600	1600	4490	310	800	0	800	533	178	889
Capacity Analysis Module:												
Vol/Sat:	0.03	0.34	0.03	0.04	0.13	0.13	0.01	0.00	0.03	0.02	0.06	0.06
Crit Moves:	****			****			****			****		

Appendix F

Trip Generation Rates for On-Campus Students from Similar Facilities

Trip Generation Rates for On-Campus Students from Similar Facilities

Source 1: Trip generation rates for on-campus students from *Traffic Impact Study for Proposed Resident Halls A and B* for Sacramento State University, dated April 2014. The number of students in existing resident halls were 1,600.

Time Period	Direction	West Driveway (Int #3)		Main Driveway (Int #4)		East Driveway (Int #5)		Total All Sites	VT per Existing Resident	% To/From West	% To/From East
		To/From West	To/From East	To/From West	To/From East	To/From West	To/From East				
AM Peak Hour	Inbound	20	6	1	0	15	10	52	0.0325	69.2%	30.8%
	Outbound	4	0	5	8	6	4	27	0.0169	55.6%	44.4%
PM Peak Hour	Inbound	25	2	24	13	14	18	96	0.0600	65.6%	34.4%
	Outbound	17	6	25	27	17	15	107	0.0669	55.1%	44.9%

Exhibit 1: Computation of Vehicular Trip Generation Rate

Source 2: Trip generation survey data from *Transportation Impact Study for the 2017 Campus Master Plan Cal Poly San Luis Obispo* was obtained. The survey was performed in November 9, 2016 which includes trip generation rate survey for on-campus student housing, called Poly Canyon Village with 2,700 students.

Based on two trip generation rate surveys above, weighted average trip generation rates were calculated and summarized in the following table:

Source	On-Campus Students		AM		PM	
			In	Out	In	Out
Sacramento State University	1,600	Trips	52	27	96	107
		Rates	0.0325	0.0169	0.0600	0.0669
Cal Poly	2,700	Trips	25	37	92	104
		Rates	0.0093	0.0137	0.0341	0.0385
CSUDH (Average)	4,300	Trips	77	64	188	211
		Rates	0.0179	0.0149	0.0437	0.0491

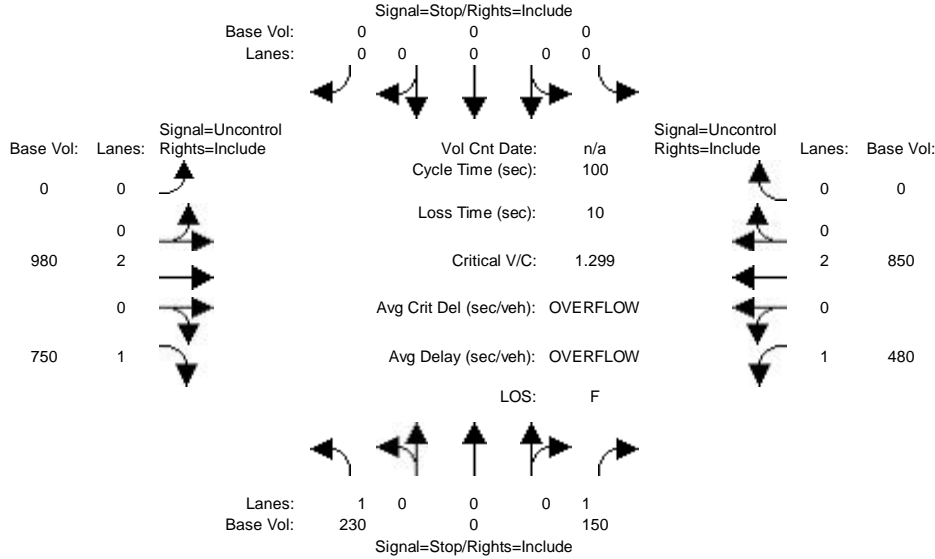
Appendix G

Intersection LOS Worksheets for Existing Plus Project Alternative 1 Weekday
Conditions

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
Existing With Project Weekday AM

Intersection #1: Victoria St. & Drive D



Street Name:	Drive D				Victoria St..							
Approach:	North Bound		South Bound		East Bound		West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	230	0	150	0	0	0	0	980	750	480	850	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	230	0	150	0	0	0	0	980	750	480	850	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	230	0	150	0	0	0	0	980	750	480	850	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	230	0	150	0	0	0	0	980	750	480	850	0
Critical Gap Module:												
Critical Gp:	6.8	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	2365	xxxx	490	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1730	xxxx	xxxxx
Potent Cap.:	30	xxxx	529	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	370	xxxx	xxxxx
Move Cap.:	0	xxxx	529	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	370	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.28	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	1.30	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	1.2	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	22.0	xxxx	xxxxx
Control Del:	xxxxx	xxxx	14.5	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	183.0	xxxx	xxxxx
LOS by Move:	*	*	B	*	*	*	*	*	*	F	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	+Inf			xxxxxxx			xxxxxxx			xxxxxxx		

ApproachLOS: F * * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #1 Victoria St. & Drive D

Base Volume Alternative: Peak Hour Warrant Met

-----|-----|-----|-----|

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

-----|-----|-----|-----|

Control: Stop Sign Stop Sign Uncontrolled Uncontrolled

Lanes: 1 0 0 0 1 0 0 0 0 0 0 2 0 1 1 0 2 0 0

Initial Vol: 230 0 150 0 0 0 0 0 980 750 480 850 0

ApproachDel: +Inf xxxxxx xxxxxx xxxxxx

-----|-----|-----|-----|

Approach[northbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=OVERFLOW]

SUCCEED - Vehicle-hours >= 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=380]

SUCCEED - Approach volume >= 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=3440]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #1 Victoria St. & Drive D

Base Volume Alternative: Peak Hour Warrant Met

-----|-----|-----|-----|

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

-----|-----|-----|-----|

Control: Stop Sign Stop Sign Uncontrolled Uncontrolled

Lanes: 1 0 0 0 1 0 0 0 0 0 0 2 0 1 1 0 2 0 0

Initial Vol: 230 0 150 0 0 0 0 0 980 750 480 850 0

-----|-----|-----|-----|

Major Street Volume: 3060

Minor Approach Volume: 380

Minor Approach Volume Threshold: -107 [less than minimum of 150]

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

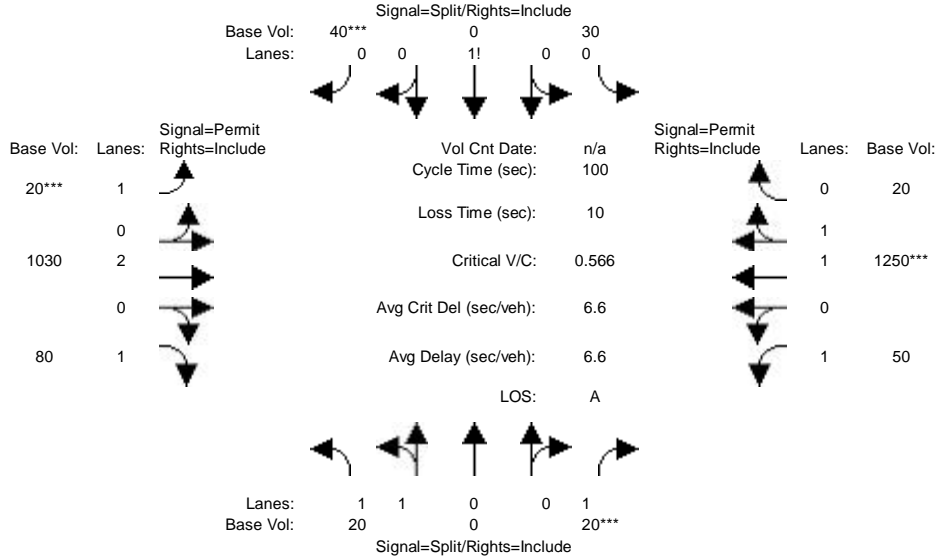
The peak hour warrant analysis in this report is not intended to replace

a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday AM

Intersection #2: Victoria St. & Tamcliff Ave.

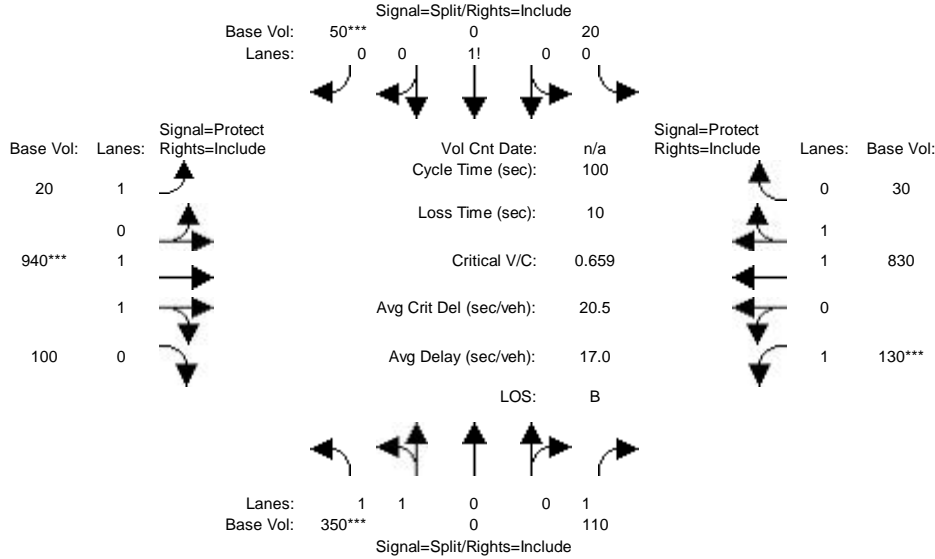


Street Name:	Victoria St.						Tamcliff Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	20	0	20	30	0	40	20	1030	80	50	1250	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	0	20	30	0	40	20	1030	80	50	1250	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	0	20	30	0	40	20	1030	80	50	1250	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	0	20	30	0	40	20	1030	80	50	1250	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	0	20	30	0	40	20	1030	80	50	1250	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.43	0.00	0.57	1.00	2.00	1.00	1.00	1.97	0.03
Final Sat.:	3200	0	1600	686	0	914	1600	3200	1600	1600	3150	50
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.01	0.04	0.00	0.04	0.01	0.32	0.05	0.03	0.40	0.40
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday AM

Intersection #3: Victoria St. & Birchknoll Dr.

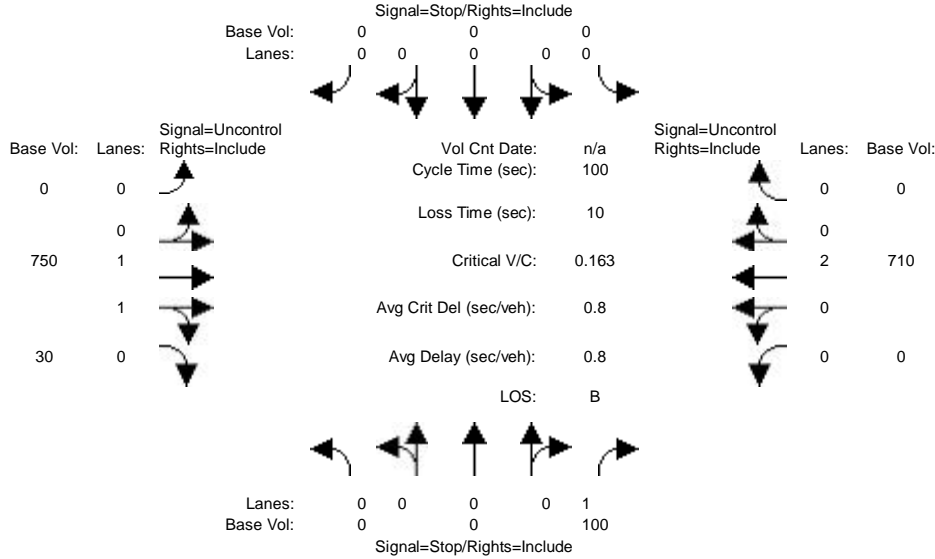


Street Name:	Victoria St.						Birchknoll Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	350	0	110	20	0	50	20	940	100	130	830	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	350	0	110	20	0	50	20	940	100	130	830	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	350	0	110	20	0	50	20	940	100	130	830	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	350	0	110	20	0	50	20	940	100	130	830	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	350	0	110	20	0	50	20	940	100	130	830	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.29	0.00	0.71	1.00	1.81	0.19	1.00	1.93	0.07
Final Sat.:	3200	0	1600	457	0	1143	1600	2892	308	1600	3088	112
Capacity Analysis Module:												
Vol/Sat:	0.11	0.00	0.07	0.04	0.00	0.04	0.01	0.33	0.32	0.08	0.27	0.27
Crit Moves:	****				****		****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 Existing With Project Weekday AM

Intersection #4: Victoria St. & Project Service Rd.



Street Name:	Project Service Rd.				Victoria St.							
Approach:	North Bound		South Bound		East Bound		West Bound					
Movement:	L	T	R	L	T	R	L	T	R			
Volume Module:												
Base Vol:	0	0	100	0	0	0	0	750	30	0	710	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	100	0	0	0	0	750	30	0	710	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	100	0	0	0	0	750	30	0	710	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	100	0	0	0	0	750	30	0	710	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxxx	xxxxx	xxxx	xxxxxx	xxxxx	xxxx	xxxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxxx	xxxxx	xxxx	xxxxxx	xxxxx	xxxx	xxxxxx
Capacity Module:												
Cnflct Vol:	xxxx	xxxx	390	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Potent Cap.:	xxxx	xxxx	614	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Move Cap.:	xxxx	xxxx	614	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Volume/Cap:	xxxx	xxxx	0.16	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	0.6	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Control Del:	xxxxxx	xxxx	12.0	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
LOS by Move:	*	*	B	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
SharedQueue:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	12.0			xxxxxx			xxxxxx			xxxxxx		

ApproachLOS: B * * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #4 Victoria St. & Project Service Rd.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 1	0 0 0 0 0	0 0 1 1 0	0 0 2 0 0
Initial Vol:	0 0 100	0 0 0	0 750 30	0 710 0
ApproachDel:	12.0	xxxxxx	xxxxxx	xxxxxx

Approach[northbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.3]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=100]

SUCCEED - Approach volume greater than or equal to 100 for one lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=1590]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #4 Victoria St. & Project Service Rd.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 1	0 0 0 0 0	0 0 1 1 0	0 0 2 0 0
Initial Vol:	0 0 100	0 0 0	0 750 30	0 710 0

Major Street Volume: 1490

Minor Approach Volume: 100

Minor Approach Volume Threshold: 147

SIGNAL WARRANT DISCLAIMER

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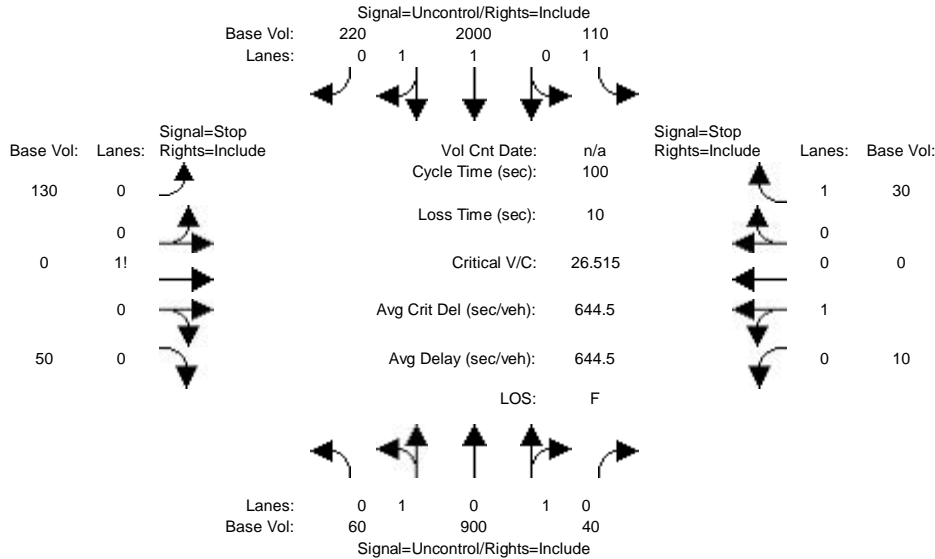
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 Existing With Project Weekday AM

Intersection #5: Central Ave. & Charles Willard St.



Street Name:	Central Ave.					Charles Willard St.									
Approach:	North Bound		South Bound			East Bound		West Bound							
Movement:	L	T	R	L	T	R	L	T	R	L	T	R			
Volume Module:	60	900	40	110	2000	220	130	0	50	10	0	30			
Base Vol:	60	900	40	110	2000	220	130	0	50	10	0	30			
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Initial Bse:	60	900	40	110	2000	220	130	0	50	10	0	30			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Volume:	60	900	40	110	2000	220	130	0	50	10	0	30			
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0			
Final Volume:	60	900	40	110	2000	220	130	0	50	10	0	30			
Critical Gap Module:	4.1	xxxx	xxxxxx	4.1	xxxx	xxxxxx	7.5	6.5	6.9	7.5	6.5	6.9			
FollowUpTim:	2.2	xxxx	xxxxxx	2.2	xxxx	xxxxxx	3.5	4.0	3.3	3.5	4.0	3.3			
Capacity Module:	2220	xxxx	xxxxxx	940	xxxx	xxxxxx	2900	3390	1110	2260	3480	470			
Cnflct Vol:	239	xxxx	xxxxxx	737	xxxx	xxxxxx	7	8	207	23	7	545			
Potent Cap.:	239	xxxx	xxxxxx	737	xxxx	xxxxxx	5	5	207	12	4	545			
Move Cap.:	0.25	xxxx	xxxx	0.15	xxxx	xxxx	26.51	0.00	0.24	0.81	0.00	0.05			
Volume/Cap:	Level Of Service Module:	2Way95thQ:	1.0	xxxx	xxxxxx	0.5	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	0.2	
Control Del:	25.1	xxxx	xxxxxx	10.7	xxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	12.0
LOS by Move:	D	*	*	B	*	*	*	*	*	*	*	*	B	*	
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	7	xxxxxx	12	xxxx	xxxxxx	xxxx	xxxxxx	
Shared Queue:	1.0	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	24.4	xxxxxx	1.8	xxxx	xxxxxx	xxxxxx	xxxxxx	
Shrd ConDel:	25.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	584.9	xxxx	xxxxxx	xxxxxx	xxxxxx	
Shared LOS:	D	*	*	*	*	*	*	F	*	F	*	*	*	*	
ApproachDel:	xxxxxxx	xxxxxxx	xxxxxxx	xxxxxxx	xxxxxxx	xxxxxxx	xxxxxxx	155.2	xxxxxxx	xxxxxxx	xxxxxxx	xxxxxxx	xxxxxxx	xxxxxxx	

ApproachLOS: * * F F

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #5 Central Ave. & Charles Willard St.

Base Volume Alternative: Peak Hour Warrant Met

-----|-----|-----|-----|-----|

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

-----|-----|-----|-----|-----|

Control: Uncontrolled Uncontrolled Stop Sign Stop Sign

Lanes: 0 1 0 1 0 1 0 1 1 0 0 0 1! 0 0 0 1 0 0 1

Initial Vol: 60 900 40 110 2000 220 130 0 50 10 0 30

ApproachDel: xxxxxx xxxxxx xxxxxx 155.2

-----|-----|-----|-----|-----|

Approach[eastbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=633.1]

SUCCEED - Vehicle-hours greater than or equal to 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=180]

SUCCEED - Approach volume greater than or equal to 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=3550]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

-----|-----|-----|-----|-----|

Approach[westbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=1.7]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=40]

FAIL - Approach volume less than 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=3550]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #5 Central Ave. & Charles Willard St.

Base Volume Alternative: Peak Hour Warrant Met

-----|-----|-----|-----|-----|

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

-----|-----|-----|-----|-----|

Control: Uncontrolled Uncontrolled Stop Sign Stop Sign

Lanes: 0 1 0 1 0 1 0 1 1 0 0 0 1! 0 0 0 1 0 0 1

Initial Vol: 60 900 40 110 2000 220 130 0 50 10 0 30

-----|-----|-----|-----|-----|

Major Street Volume: 3330

Minor Approach Volume: 180

Minor Approach Volume Threshold: -130 [less than minimum of 100]

SIGNAL WARRANT DISCLAIMER

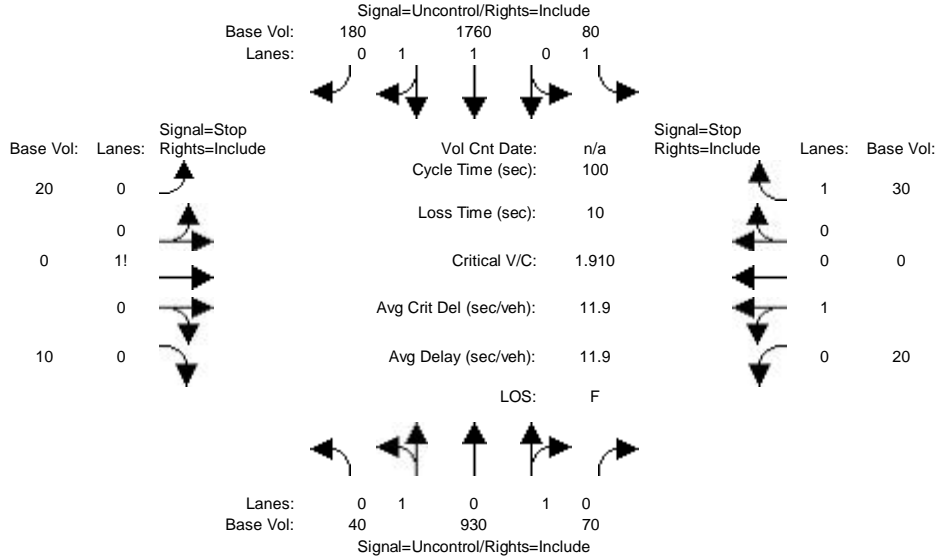
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 Existing With Project Weekday AM

Intersection #6: Central Ave. & Project Driveway/Beachey Pl.



Street Name:	Central Ave.					Beachey Pl.						
Approach:	North Bound			South Bound		East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	40	930	70	80	1760	180	20	0	10	20	0	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	930	70	80	1760	180	20	0	10	20	0	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	930	70	80	1760	180	20	0	10	20	0	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	40	930	70	80	1760	180	20	0	10	20	0	30
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	4.1	xxxx	xxxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxxx	2.2	xxxx	xxxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflct Vol:	1940	xxxx	xxxxxx	1000	xxxx	xxxxxx	2555	3090	970	2085	3145	500
Potent Cap.:	307	xxxx	xxxxxx	700	xxxx	xxxxxx	14	12	257	31	11	522
Move Cap.:	307	xxxx	xxxxxx	700	xxxx	xxxxxx	10	9	257	24	8	522
Volume/Cap:	0.13	xxxx	xxxx	0.11	xxxx	xxxx	1.91	0.00	0.04	0.82	0.00	0.06
Level Of Service Module:												
2Way95thQ:	0.4	xxxx	xxxxxx	0.4	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	0.2
Control Del:	18.5	xxxx	xxxxxx	10.8	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	12.3
LOS by Move:	C	*	*	B	*	*	*	*	*	*	*	B
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	15	xxxxxx	24	xxxx	xxxxxx
SharedQueue:	0.4	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	4.4	xxxxxx	2.5	xxxx	xxxxxx
Shrd ConDel:	18.5	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	953	xxxxxx	346.8	xxxx	xxxxxx
Shared LOS:	C	*	*	*	*	*	*	F	*	F	*	*
ApproachDel:	xxxxxxx	xxxxxxx	xxxxxxx	xxxxxxx	xxxxxxx	xxxxxxx	953.0	xxxxxxx	xxxxxxx	146.1	xxxxxxx	xxxxxxx

ApproachLOS: * * F F

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #6 Centrral Ave. & Project Driveway/Beachey Pl.

Base Volume Alternative: Peak Hour Warrant NOT Met

-----|-----|-----|-----|-----|

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

-----|-----|-----|-----|-----|

Control: Uncontrolled Uncontrolled Stop Sign Stop Sign

Lanes: 0 1 0 1 0 1 0 1 1 0 0 0 1! 0 0 0 1 0 0 1

Initial Vol: 40 930 70 80 1760 180 20 0 10 20 0 30

ApproachDel: xxxxxx xxxxxx 953.0 146.1

-----|-----|-----|-----|-----|

Approach[eastbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=7.9]

SUCCEED - Vehicle-hours greater than or equal to 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=30]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=3140]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

-----|-----|-----|-----|-----|

Approach[westbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=2.0]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=50]

FAIL - Approach volume less than 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=3140]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #6 Centrral Ave. & Project Driveway/Beachey Pl.

Base Volume Alternative: Peak Hour Warrant NOT Met

-----|-----|-----|-----|-----|

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

-----|-----|-----|-----|-----|

Control: Uncontrolled Uncontrolled Stop Sign Stop Sign

Lanes: 0 1 0 1 0 1 0 1 1 0 0 0 1! 0 0 0 1 0 0 1

Initial Vol: 40 930 70 80 1760 180 20 0 10 20 0 30

-----|-----|-----|-----|-----|

Major Street Volume: 3060

Minor Approach Volume: 50

Minor Approach Volume Threshold: -107 [less than minimum of 150]

SIGNAL WARRANT DISCLAIMER

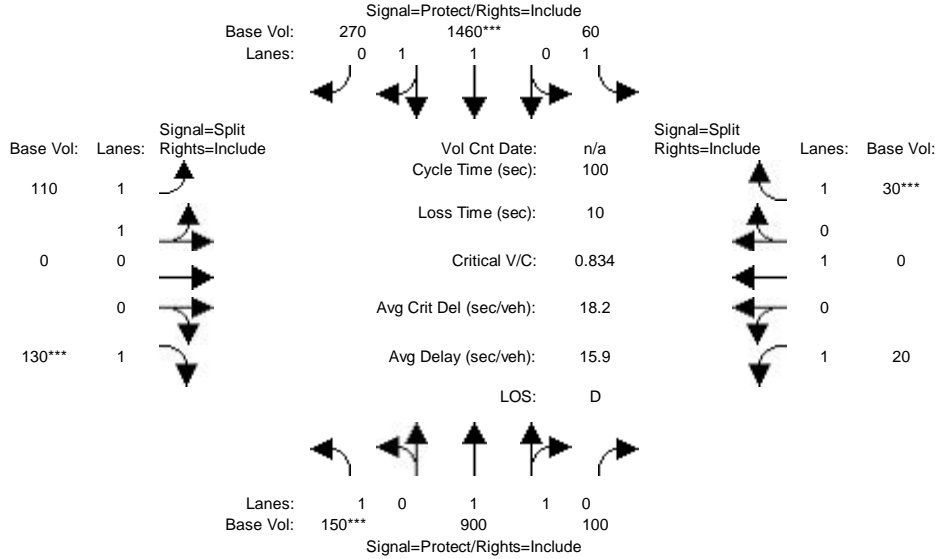
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday AM

Intersection #7: Central Ave. & Glenn Curtiss St.

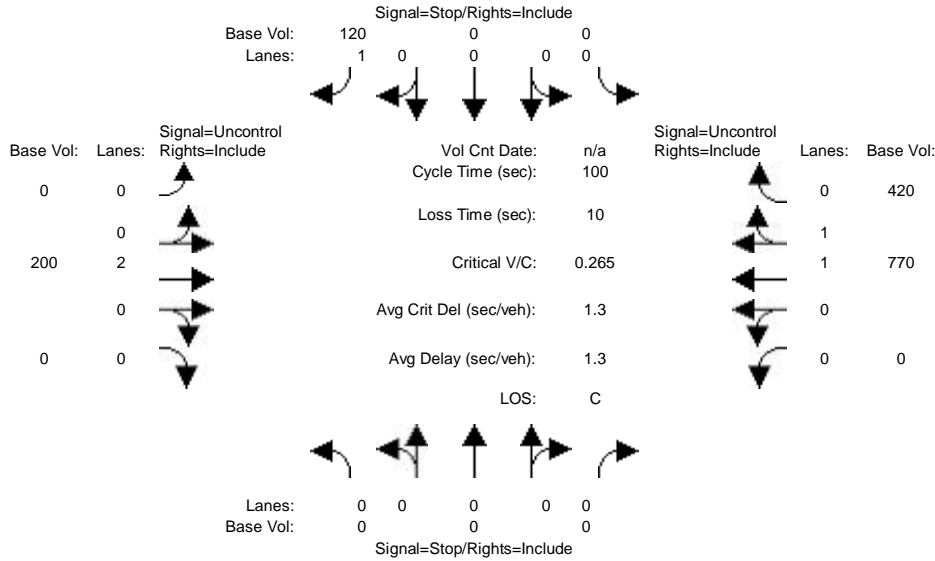


Street Name:	Central Ave.						Glenn Curtiss St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	150	900	100	60	1460	270	110	0	130	20	0	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	900	100	60	1460	270	110	0	130	20	0	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	900	100	60	1460	270	110	0	130	20	0	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	900	100	60	1460	270	110	0	130	20	0	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	900	100	60	1460	270	110	0	130	20	0	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.80	0.20	1.00	1.69	0.31	2.00	0.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	2880	320	1600	2701	499	3200	0	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.31	0.31	0.04	0.54	0.54	0.03	0.00	0.08	0.01	0.00	0.02
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
Existing With Project Weekday AM

Intersection #8: University Dr./Birchknoll Dr. Ext.



Street Name:	Birchknoll Dr. Ext.					University Dr.						
Approach:	North Bound		South Bound			East Bound		West Bound				
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	0	0	120	0	200	0	0	770	420
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	120	0	200	0	0	770	420
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	120	0	200	0	0	770	420
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	120	0	200	0	0	770	420
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	595	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	452	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	452	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	0.27	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	1.1	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	15.8	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	C	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			15.8			xxxxxx			xxxxxx		

ApproachLOS: * C * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #8 University Dr./Birchknoll Dr. Ext.

Base Volume Alternative: Peak Hour Warrant NOT Met

-----|-----|-----|-----|

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

-----|-----|-----|-----|

Control: Stop Sign Stop Sign Uncontrolled Uncontrolled

Lanes: 0 0 0 0 0 0 0 0 1 0 0 2 0 0 0 0 1 1 0

Initial Vol: 0 0 0 0 0 0 120 0 200 0 0 770 420

ApproachDel: xxxxxx 15.8 xxxxxx xxxxxx

-----|-----|-----|-----|

Approach[southbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.5]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=120]

SUCCEED - Approach volume greater than or equal to 100 for one lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=1510]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #8 University Dr./Birchknoll Dr. Ext.

Base Volume Alternative: Peak Hour Warrant NOT Met

-----|-----|-----|-----|

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

-----|-----|-----|-----|

Control: Stop Sign Stop Sign Uncontrolled Uncontrolled

Lanes: 0 0 0 0 0 0 0 0 1 0 0 2 0 0 0 0 1 1 0

Initial Vol: 0 0 0 0 0 0 120 0 200 0 0 770 420

-----|-----|-----|-----|

Major Street Volume: 1390

Minor Approach Volume: 120

Minor Approach Volume Threshold: 171

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

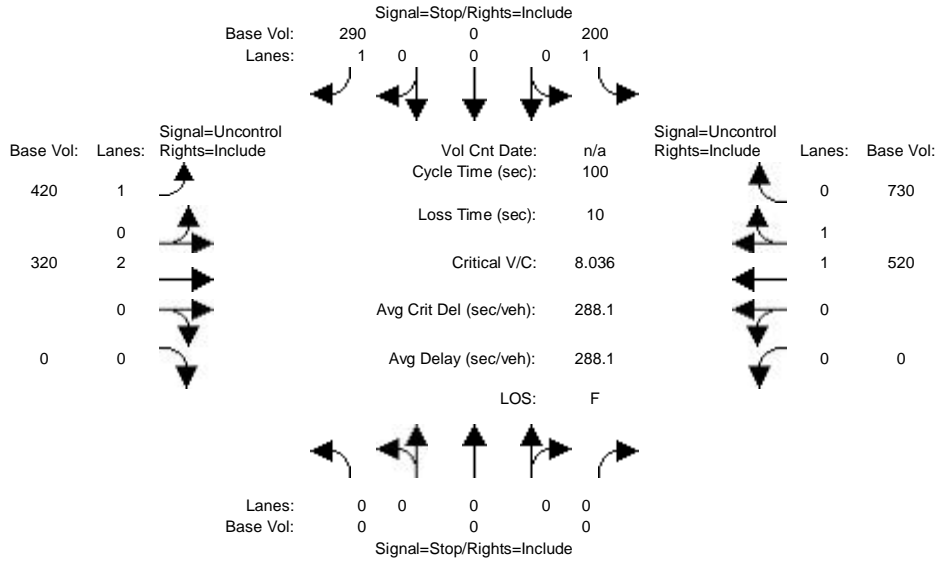
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 Existing With Project Weekday AM

Intersection #9: University Dr. & Toro Center Dr.



Street Name:	University Dr.				Toro Center Dr.							
Approach:	North Bound		South Bound		East Bound		West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	200	0	290	420	320	0	0	520	730
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	200	0	290	420	320	0	0	520	730
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	200	0	290	420	320	0	0	520	730
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	200	0	290	420	320	0	0	520	730
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.8	xxxx	6.9	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	xxxx	xxxx	xxxxx	1885	xxxx	625	1250	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	64	xxxx	433	564	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	25	xxxx	433	564	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	8.04	xxxx	0.67	0.75	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	24.9	xxxx	4.8	6.5	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	3473	xxxx	28.7	27.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	F	*	D	D	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			1434.6			xxxxxx			xxxxxx		

ApproachLOS: * F * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #9 University Dr. & Toro Center Dr.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 0	1 0 0 0 1	1 0 2 0 0	0 0 1 1 0
Initial Vol:	0 0 0	200 0 290	420 320 0	0 520 730
ApproachDel:	xxxxxx	1434.6	xxxxxx	xxxxxx

Approach[southbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=195.3]

SUCCEED - Vehicle-hours >= 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=490]

SUCCEED - Approach volume >= 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=2480]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #9 University Dr. & Toro Center Dr.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 0	1 0 0 0 1	1 0 2 0 0	0 0 1 1 0
Initial Vol:	0 0 0	200 0 290	420 320 0	0 520 730

Major Street Volume: 1990

Minor Approach Volume: 490

Minor Approach Volume Threshold: 78 [less than minimum of 150]

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

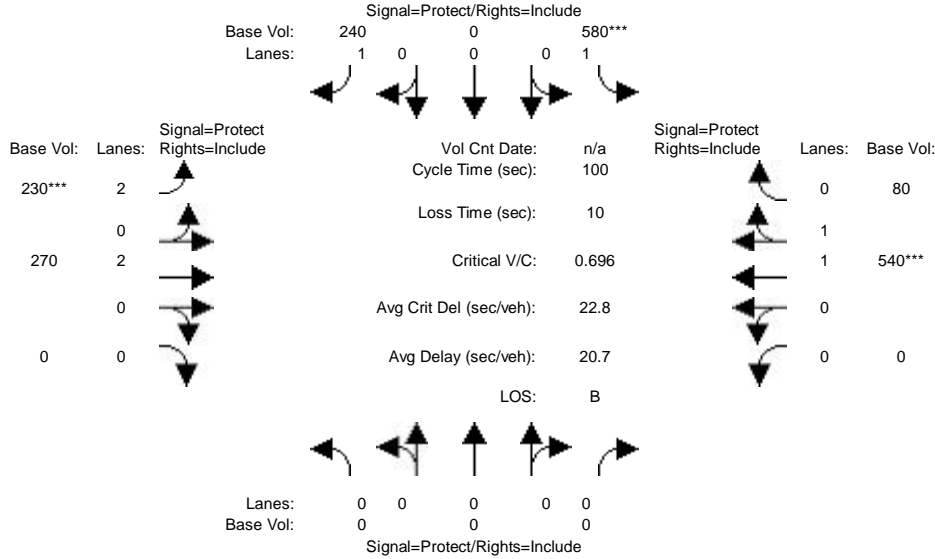
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday AM

Intersection #10: Albertoni St. & SR 91 EB Ramps

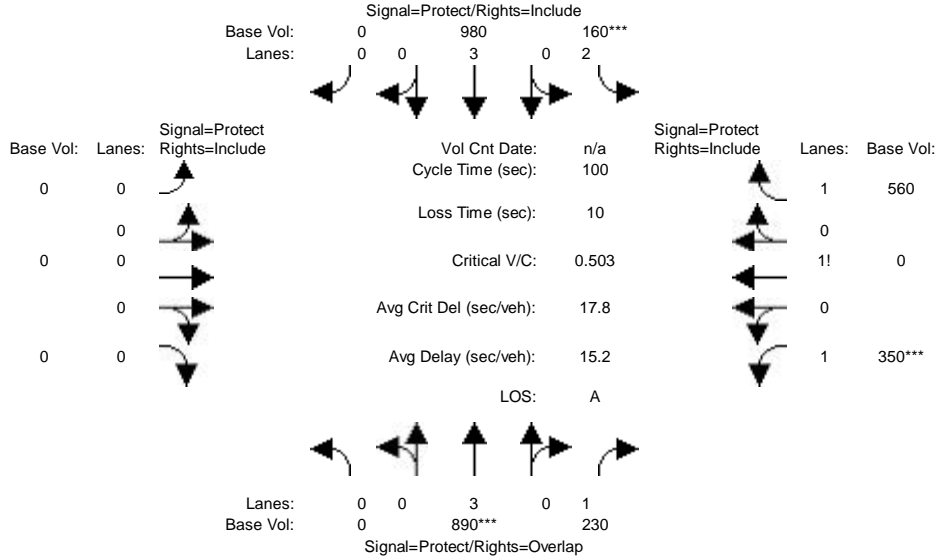


Street Name:	Albertoni St.						SR 91 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	580	0	240	230	270	0	0	540	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	580	0	240	230	270	0	0	540	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	580	0	240	230	270	0	0	540	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	580	0	240	230	270	0	0	540	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	580	0	240	230	270	0	0	540	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.74	0.26
Final Sat.:	0	0	0	1600	0	1600	5760	3200	0	0	2787	413
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.36	0.00	0.15	0.04	0.08	0.00	0.00	0.19	0.19
Crit Moves:				****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday AM

Intersection #11: Avalon Blvd. & SR 91 WB On-Ramp

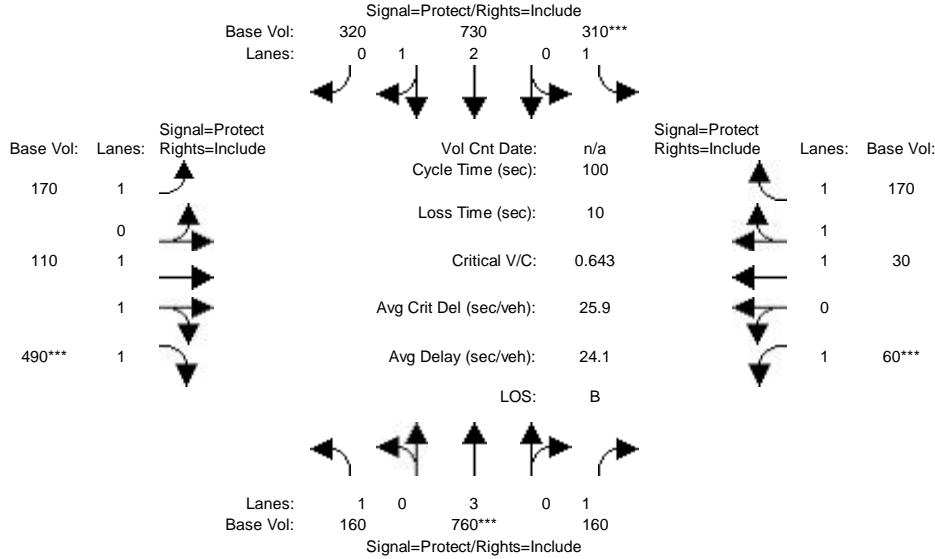


Street Name:	Avalon Blvd.						SR 91 WB On-Ramp						
Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Volume Module:													
Base Vol:	0	890	230	160	980	0	0	0	0	0	350	0	560
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	890	230	160	980	0	0	0	0	0	350	0	560
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	890	230	160	980	0	0	0	0	0	350	0	560
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	890	230	160	980	0	0	0	0	0	350	0	560
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	890	230	160	980	0	0	0	0	0	350	0	560
OvlAdjVol:	0												
Saturation Flow Module:													
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	0.00	1.15	xxxx	1.85
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	0	1846	0	2954
Capacity Analysis Module:													
Vol/Sat:	0.00	0.19	0.14	0.03	0.20	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.19
OvlAdjV/S:	0.00												
Crit Moves:	****				****				****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday AM

Intersection #12: Avalon Blvd. & Albertoni St.

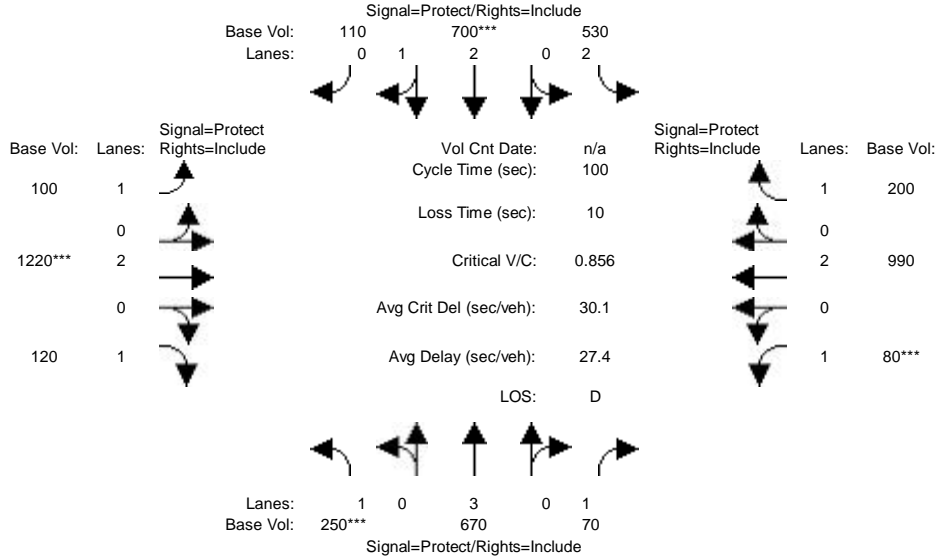


Street Name:	Avalon Blvd.						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	160	760	160	310	730	320	170	110	490	60	30	170
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	160	760	160	310	730	320	170	110	490	60	30	170
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	160	760	160	310	730	320	170	110	490	60	30	170
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	760	160	310	730	320	170	110	490	60	30	170
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	160	760	160	310	730	320	170	110	490	60	30	170
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.09	0.91	1.00	1.00	2.00	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3337	1463	1600	1600	3200	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.10	0.16	0.10	0.19	0.22	0.22	0.11	0.07	0.15	0.04	0.02	0.05
Crit Moves:	****			****			****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday AM

Intersection #13: Avalon Blvd. & Victoria St.

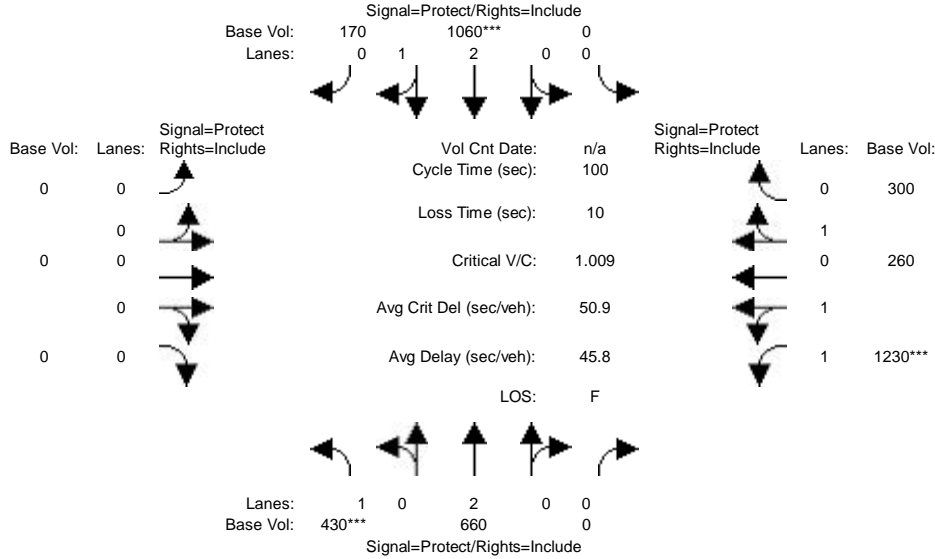


Street Name:	Avalon Blvd.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	250	670	70	530	700	110	100	1220	120	80	990	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	250	670	70	530	700	110	100	1220	120	80	990	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	250	670	70	530	700	110	100	1220	120	80	990	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	250	670	70	530	700	110	100	1220	120	80	990	200
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	250	670	70	530	700	110	100	1220	120	80	990	200
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.59	0.41	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4148	652	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.16	0.14	0.04	0.09	0.17	0.17	0.06	0.38	0.08	0.05	0.31	0.13
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday AM

Intersection #14: Central Ave. & Artesia Blvd.

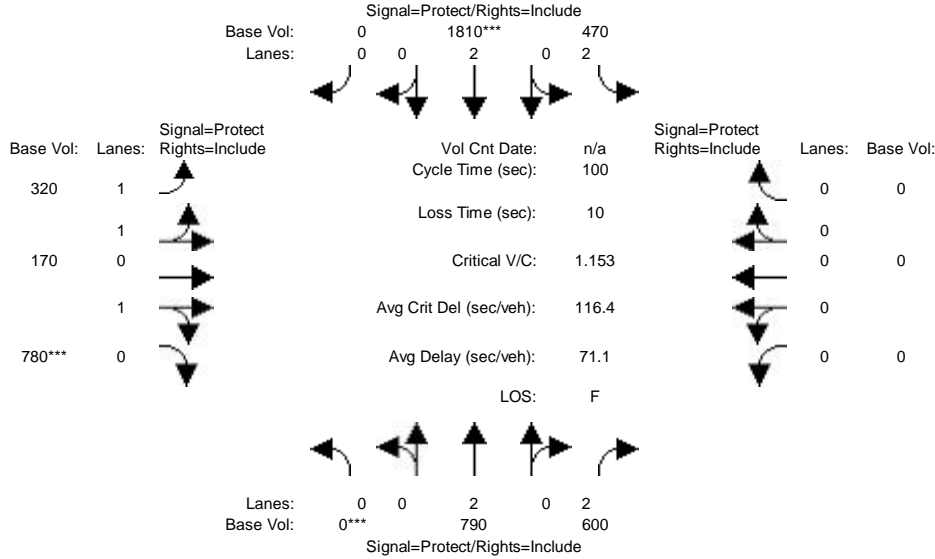


Street Name:	Central Ave.						Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	430	660	0	0	1060	170	0	0	0	1230	260	300
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	430	660	0	0	1060	170	0	0	0	1230	260	300
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	430	660	0	0	1060	170	0	0	0	1230	260	300
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	430	660	0	0	1060	170	0	0	0	1230	260	300
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	430	660	0	0	1060	170	0	0	0	1230	260	300
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.59	0.41	0.00	0.00	0.00	2.00	0.46	0.54
Final Sat.:	1600	3200	0	0	4137	663	0	0	0	3200	743	857
Capacity Analysis Module:												
Vol/Sat:	0.27	0.21	0.00	0.00	0.26	0.26	0.00	0.00	0.00	0.38	0.35	0.35
Crit Moves:	****				****					****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday AM

Intersection #15: Central Ave. & Albertoni St./Artesia Blvd. EB

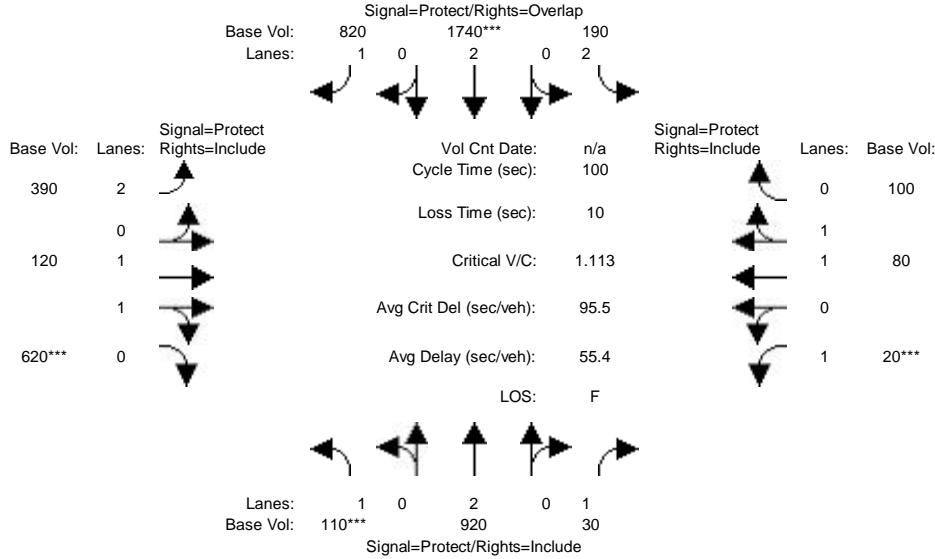


Street Name:	Central Ave.						Albertoni St./Artesia Blvd. EB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	790	600	470	1810	0	320	170	780	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	790	600	470	1810	0	320	170	780	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	790	600	470	1810	0	320	170	780	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	790	600	470	1810	0	320	170	780	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	790	600	470	1810	0	320	170	780	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.31	0.69	1.00	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	2090	1110	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.19	0.08	0.57	0.00	0.15	0.15	0.49	0.00	0.00	0.00
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday AM

Intersection #16: Central Ave. & Victoria St.

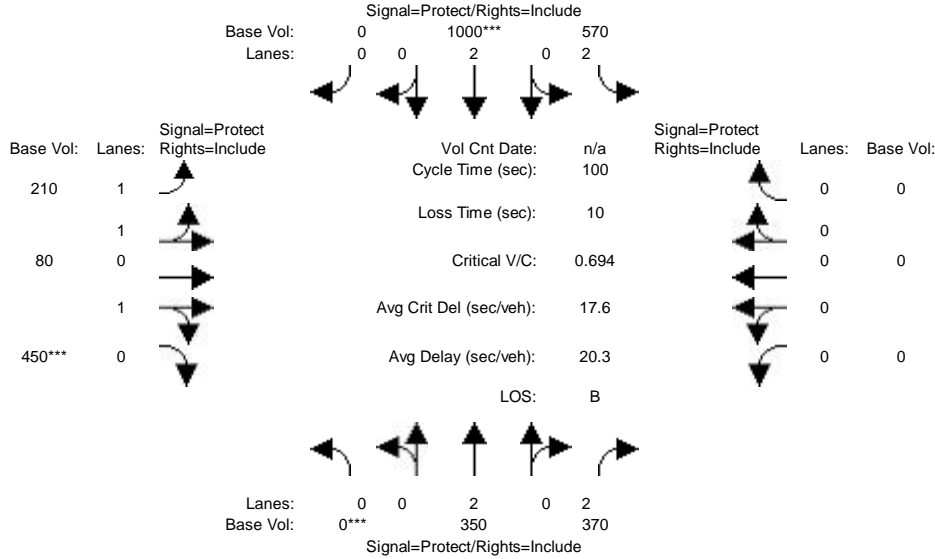


Street Name:	Central Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	110	920	30	190	1740	820	390	120	620	20	80	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	920	30	190	1740	820	390	120	620	20	80	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	110	920	30	190	1740	820	390	120	620	20	80	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	920	30	190	1740	820	390	120	620	20	80	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	110	920	30	190	1740	820	390	120	620	20	80	100
OvlAdjVol:	712											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	5760	3200	1600	5760	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.29	0.02	0.03	0.54	0.51	0.07	0.08	0.39	0.01	0.05	0.06
OvlAdjV/S:	0.44											
Crit Moves:	****			****			****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday AM

Intersection #18: Wilmington Ave. & Artesia Blvd. EB

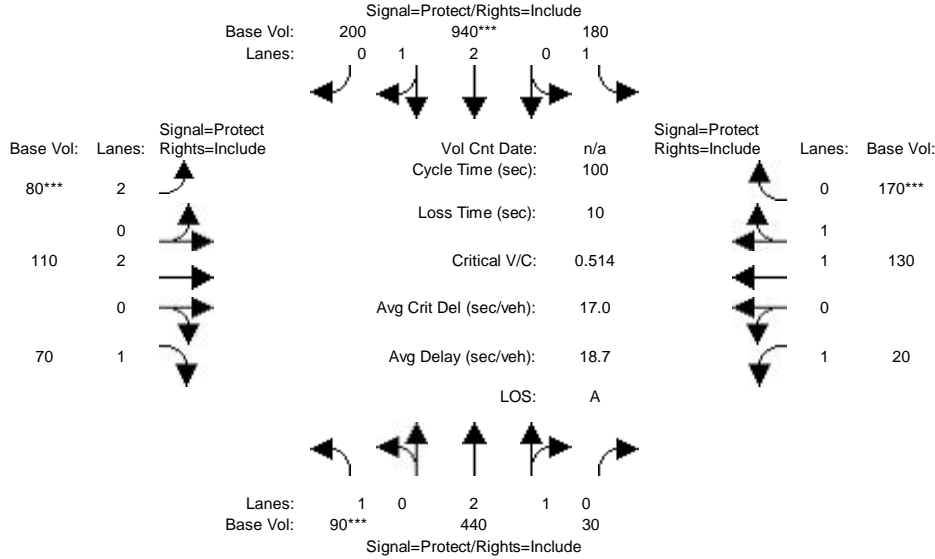


Street Name:	Wilmington Ave.						Artesia Blvd. EB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	350	370	570	1000	0	210	80	450	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	350	370	570	1000	0	210	80	450	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	350	370	570	1000	0	210	80	450	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	350	370	570	1000	0	210	80	450	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	350	370	570	1000	0	210	80	450	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.45	0.55	1.00	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	2317	883	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.11	0.12	0.10	0.31	0.00	0.09	0.09	0.28	0.00	0.00	0.00
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday AM

Intersection #19: Wilmington Ave. & Victoria St.

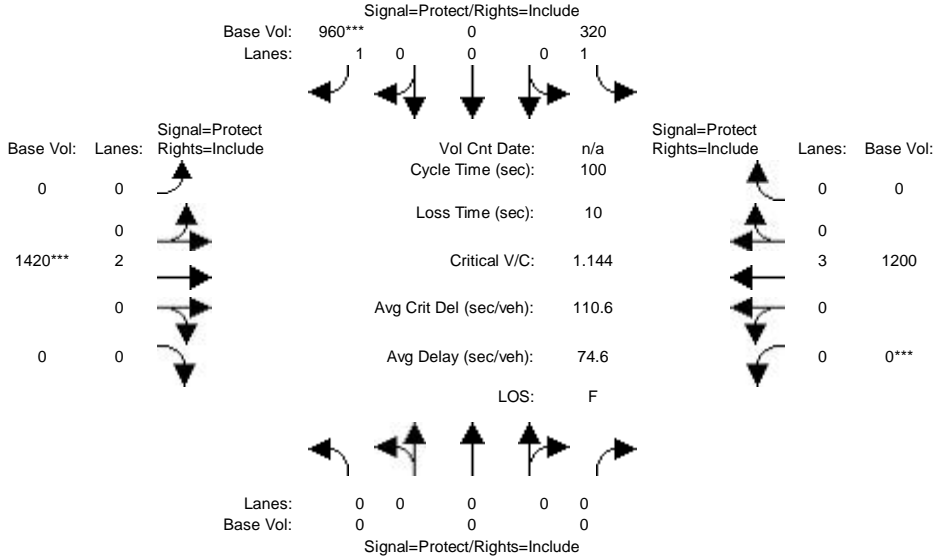


Street Name:	Wilmington Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	90	440	30	180	940	200	80	110	70	20	130	170
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	440	30	180	940	200	80	110	70	20	130	170
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	440	30	180	940	200	80	110	70	20	130	170
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	440	30	180	940	200	80	110	70	20	130	170
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	440	30	180	940	200	80	110	70	20	130	170
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.81	0.19	1.00	2.47	0.53	2.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	4494	306	1600	3958	842	5760	3200	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.10	0.10	0.11	0.24	0.24	0.01	0.03	0.04	0.01	0.08	0.11
Crit Moves:	****			****		****	****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday AM

Intersection #20: I-110 SB Off-Ramp & 190th St.

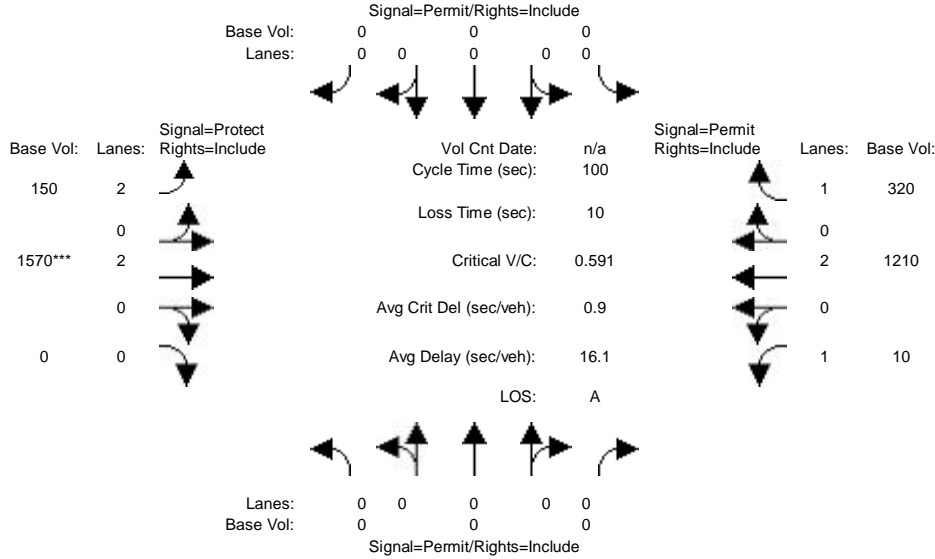


Street Name:	I-110 SB Off-Ramp						190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	320	0	960	0	1420	0	0	1200	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	320	0	960	0	1420	0	0	1200	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	320	0	960	0	1420	0	0	1200	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	320	0	960	0	1420	0	0	1200	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	320	0	960	0	1420	0	0	1200	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.20	0.00	0.60	0.00	0.44	0.00	0.00	0.25	0.00
Crit Moves:				****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday AM

Intersection #21: I-110 NB On-Ramp & 190th St.

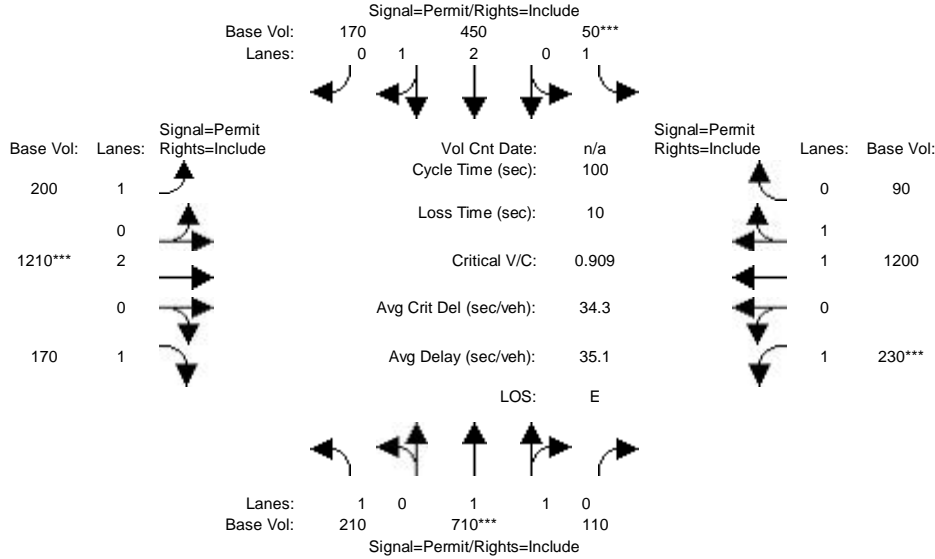


Street Name:	I-110 NB On-Ramp						190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	0	0	0	150	1570	0	10	1210	320
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	150	1570	0	10	1210	320
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	150	1570	0	10	1210	320
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	150	1570	0	10	1210	320
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	150	1570	0	10	1210	320
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	0	0	0	0	0	5760	3200	0	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.49	0.00	0.01	0.38	0.20
Crit Moves:							****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday AM

Intersection #22: Figueroa St. & 190th St./Victoria St.

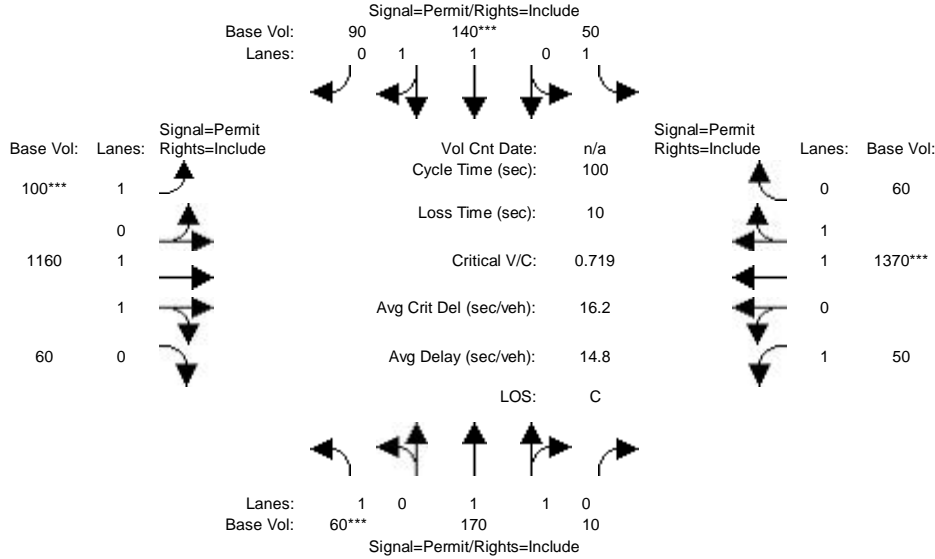


Street Name:	Figueroa St.						190th St./Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	210	710	110	50	450	170	200	1210	170	230	1200	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	210	710	110	50	450	170	200	1210	170	230	1200	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	210	710	110	50	450	170	200	1210	170	230	1200	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	210	710	110	50	450	170	200	1210	170	230	1200	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	210	710	110	50	450	170	200	1210	170	230	1200	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.73	0.27	1.00	2.18	0.82	1.00	2.00	1.00	1.00	1.86	0.14
Final Sat.:	1600	2771	429	1600	3484	1316	1600	3200	1600	1600	2977	223
Capacity Analysis Module:												
Vol/Sat:	0.13	0.26	0.26	0.03	0.13	0.13	0.13	0.38	0.11	0.14	0.40	0.40
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday AM

Intersection #23: Broadway & Victoria St.

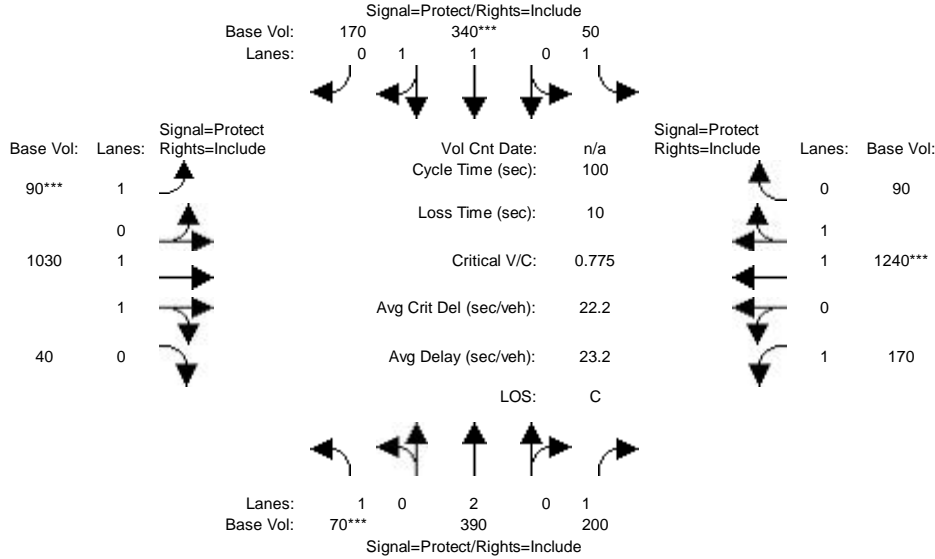


Street Name:	Broadway						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	60	170	10	50	140	90	100	1160	60	50	1370	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	170	10	50	140	90	100	1160	60	50	1370	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	170	10	50	140	90	100	1160	60	50	1370	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	170	10	50	140	90	100	1160	60	50	1370	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	60	170	10	50	140	90	100	1160	60	50	1370	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.89	0.11	1.00	1.22	0.78	1.00	1.90	0.10	1.00	1.92	0.08
Final Sat.:	1600	3022	178	1600	1948	1252	1600	3043	157	1600	3066	134
Capacity Analysis Module:												
Vol/Sat:	0.04	0.06	0.06	0.03	0.07	0.07	0.06	0.38	0.38	0.03	0.45	0.45
Crit Moves:	****			****		****	****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday AM

Intersection #24: Main St. & Victoria St.

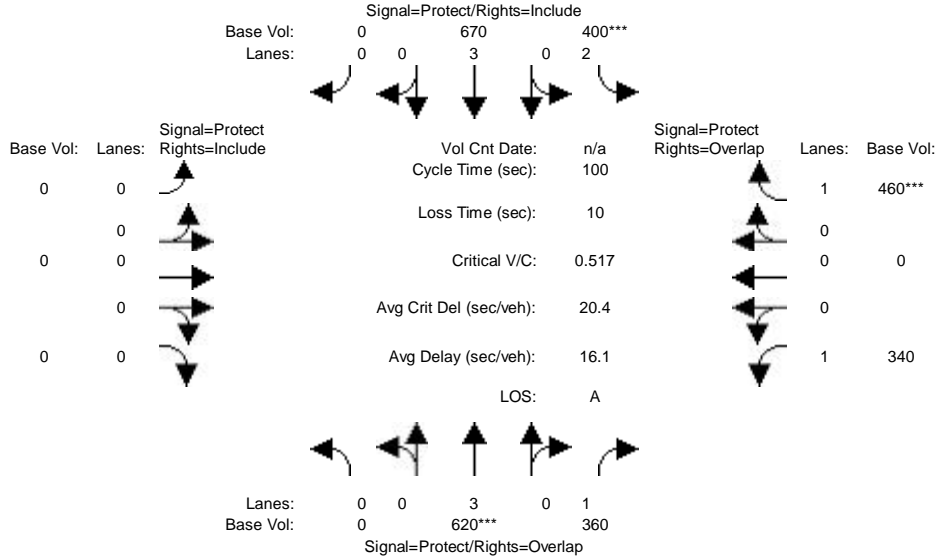


Street Name:	Main St.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	70	390	200	50	340	170	90	1030	40	170	1240	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	390	200	50	340	170	90	1030	40	170	1240	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	390	200	50	340	170	90	1030	40	170	1240	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	390	200	50	340	170	90	1030	40	170	1240	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	70	390	200	50	340	170	90	1030	40	170	1240	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.33	0.67	1.00	1.93	0.07	1.00	1.86	0.14
Final Sat.:	1600	3200	1600	1600	2133	1067	1600	3080	120	1600	2983	217
Capacity Analysis Module:												
Vol/Sat:	0.04	0.12	0.13	0.03	0.16	0.16	0.06	0.33	0.33	0.11	0.42	0.42
Crit Moves:	****			****		****	****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday AM

Intersection #25: Avalon Blvd. & University Dr.

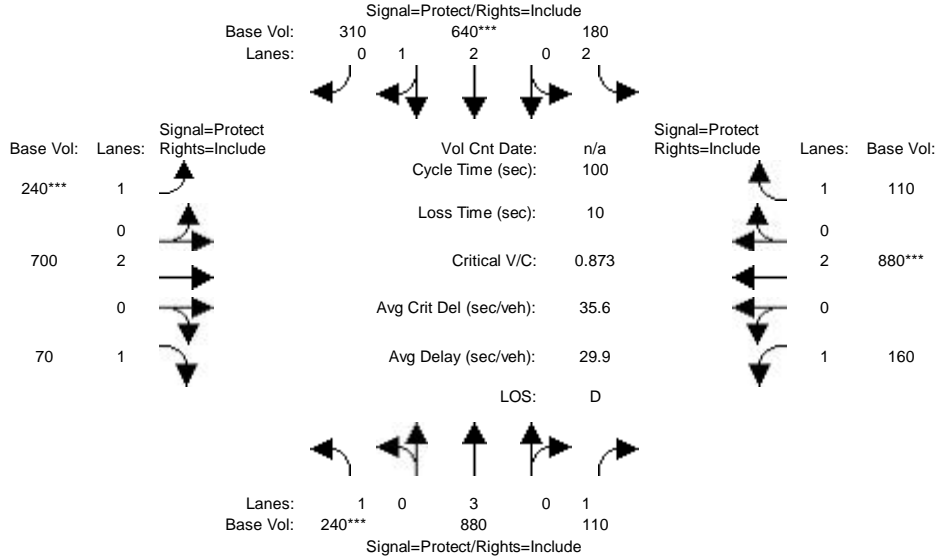


Street Name:	Avalon Blvd.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	620	360	400	670	0	0	0	0	0	340	460
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	620	360	400	670	0	0	0	0	340	0	460
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	620	360	400	670	0	0	0	0	340	0	460
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	620	360	400	670	0	0	0	0	340	0	460
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	620	360	400	670	0	0	0	0	340	0	460
OvlAdjVol:										349		
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.13	0.23	0.07	0.14	0.00	0.00	0.00	0.00	0.21	0.00	0.29
OvlAdjV/S:										0.22		
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday AM

Intersection #26: Avalon Blvd. & Del Amo Blvd.

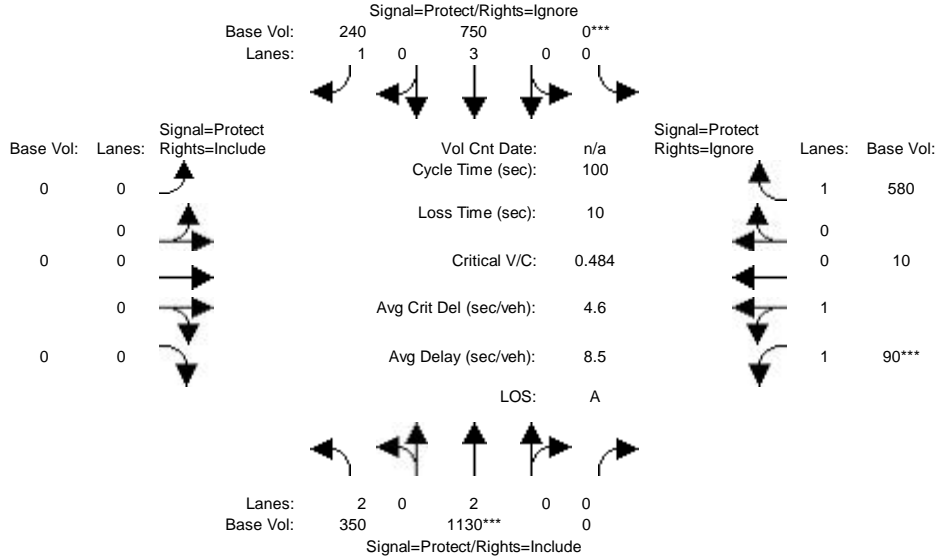


Street Name:	Avalon Blvd.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	240	880	110	180	640	310	240	700	70	160	880	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	240	880	110	180	640	310	240	700	70	160	880	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	240	880	110	180	640	310	240	700	70	160	880	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	240	880	110	180	640	310	240	700	70	160	880	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	240	880	110	180	640	310	240	700	70	160	880	110
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.02	0.98	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	3234	1566	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.15	0.18	0.07	0.03	0.20	0.20	0.15	0.22	0.04	0.10	0.28	0.07
Crit Moves:	****			****		****	****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday AM

Intersection #27: Avalon Blvd. & I-405 NB Ramps

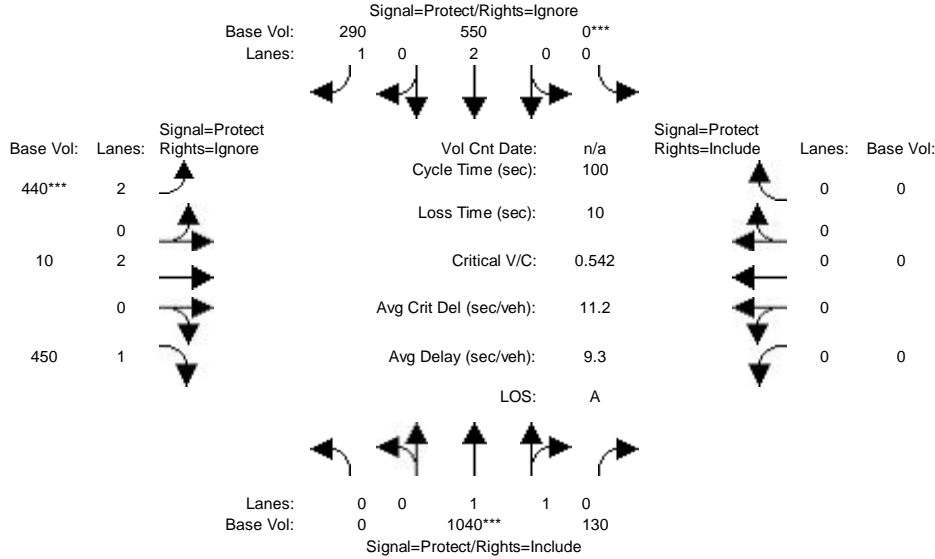


Street Name:	Avalon Blvd.						I-405 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	350	1130	0	0	750	240	0	0	0	90	10	580
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	350	1130	0	0	750	240	0	0	0	90	10	580
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	350	1130	0	0	750	0	0	0	0	90	10	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	350	1130	0	0	750	0	0	0	0	90	10	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Volume:	350	1130	0	0	750	0	0	0	0	90	10	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.80	0.20	1.00
Final Sat.:	5760	3200	0	0	4800	1600	0	0	0	2880	320	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.35	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.03	0.03
Crit Moves:	****			****						****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday AM

Intersection #28: Avalon Blvd. & I-405 SB Ramps

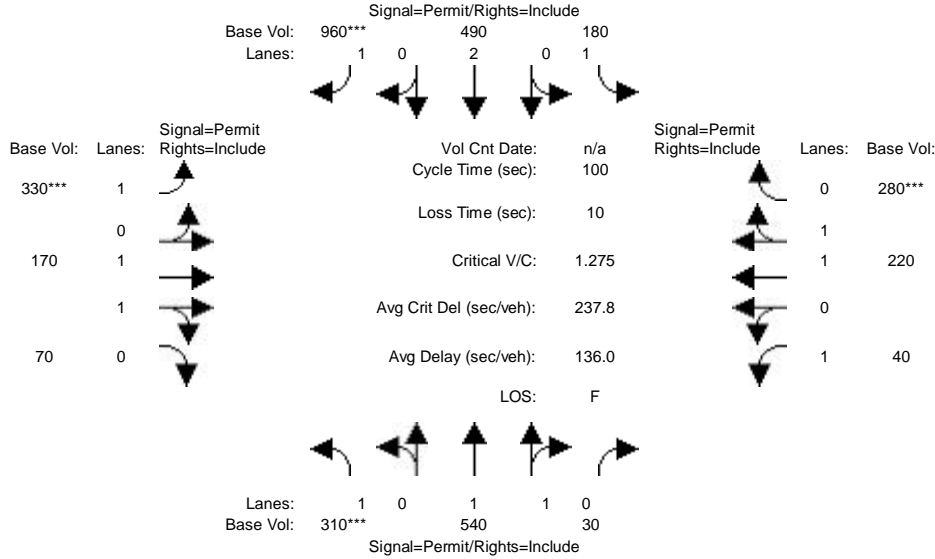


Street Name:	Avalon Blvd.						I-405 SB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1040	130	0	550	290	440	10	450	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1040	130	0	550	290	440	10	450	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	1040	130	0	550	0	440	10	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1040	130	0	550	0	440	10	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Volume:	0	1040	130	0	550	0	440	10	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.78	0.22	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	0	2844	356	0	3200	1600	5760	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.37	0.37	0.00	0.17	0.00	0.08	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday AM

Intersection #29: Central Ave. & University Dr.

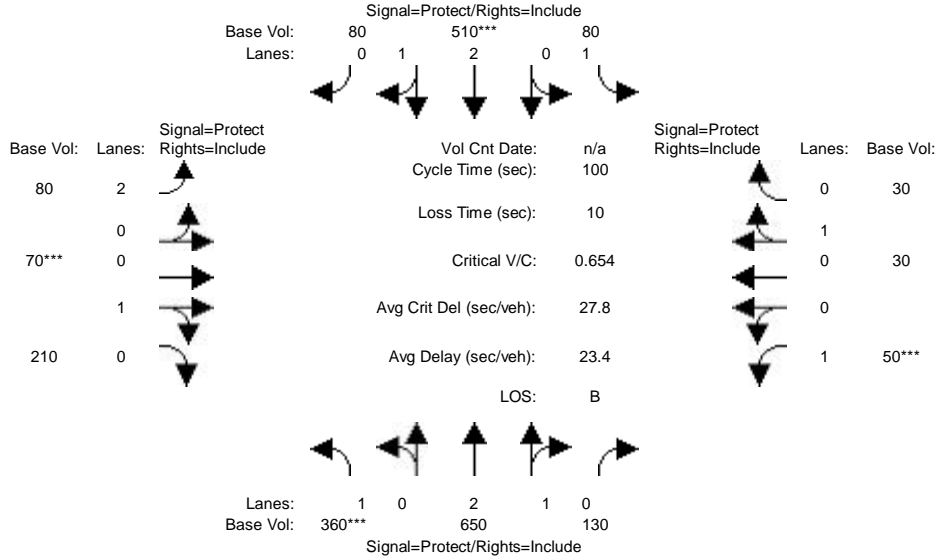


Street Name:	Central Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	310	540	30	180	490	960	330	170	70	40	220	280
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	310	540	30	180	490	960	330	170	70	40	220	280
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	310	540	30	180	490	960	330	170	70	40	220	280
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	310	540	30	180	490	960	330	170	70	40	220	280
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	310	540	30	180	490	960	330	170	70	40	220	280
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.89	0.11	1.00	2.00	1.00	1.00	1.42	0.58	1.00	1.00	1.00
Final Sat.:	1600	3032	168	1600	3200	1600	1600	2267	933	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.19	0.18	0.18	0.11	0.15	0.60	0.21	0.07	0.08	0.03	0.14	0.17
Crit Moves:	****				****	****					****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday AM

Intersection #30: Wilmington Ave. & University Dr.

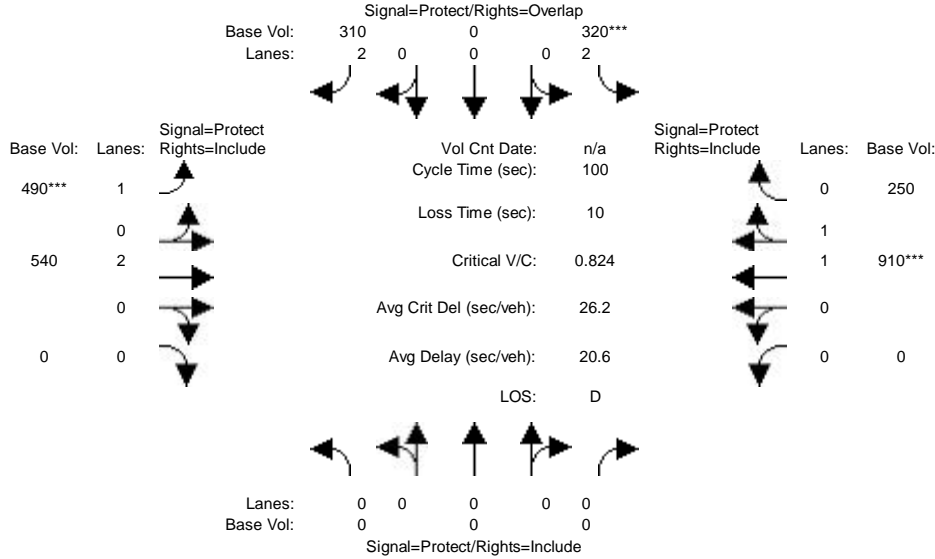


Street Name:	Wilmington Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	360	650	130	80	510	80	80	70	210	50	30	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	360	650	130	80	510	80	80	70	210	50	30	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	360	650	130	80	510	80	80	70	210	50	30	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	360	650	130	80	510	80	80	70	210	50	30	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	360	650	130	80	510	80	80	70	210	50	30	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.50	0.50	1.00	2.59	0.41	2.00	0.25	0.75	1.00	0.50	0.50
Final Sat.:	1600	4000	800	1600	4149	651	5760	400	1200	1600	800	800
Capacity Analysis Module:												
Vol/Sat:	0.23	0.16	0.16	0.05	0.12	0.12	0.01	0.17	0.17	0.03	0.04	0.04
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday AM

Intersection #31: Central Ave. & Del Amo Blvd.

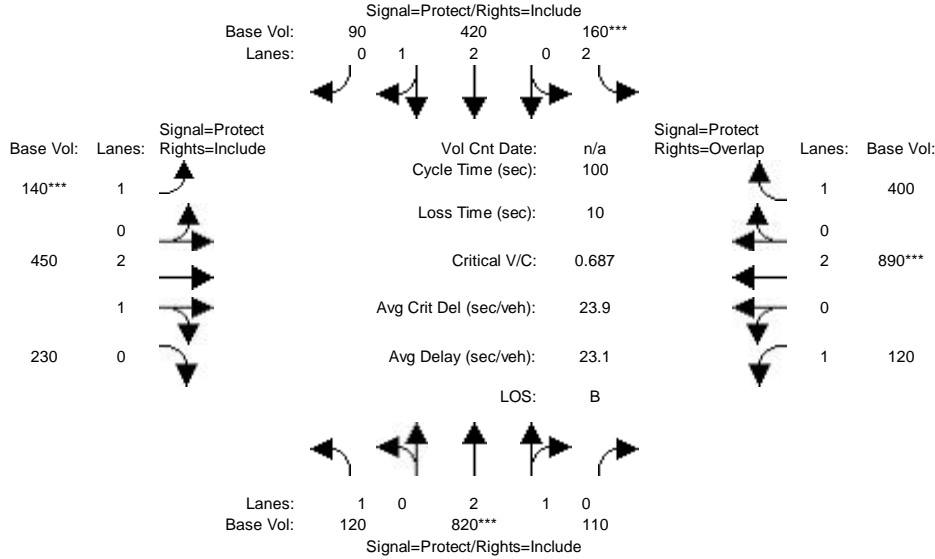


Street Name:	Central Ave.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	320	0	310	490	540	0	0	910	250
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	320	0	310	490	540	0	0	910	250
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	320	0	310	490	540	0	0	910	250
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	320	0	310	490	540	0	0	910	250
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	320	0	310	490	540	0	0	910	250
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	2.00	1.00	2.00	0.00	0.00	1.57	0.43
Final Sat.:	0	0	0	5760	0	3200	1600	3200	0	0	2510	690
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.06	0.00	0.10	0.31	0.17	0.00	0.00	0.36	0.36
OvlAdjV/S:	0.00											
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday AM

Intersection #32: Wilmington Ave. & Del Amo Blvd.

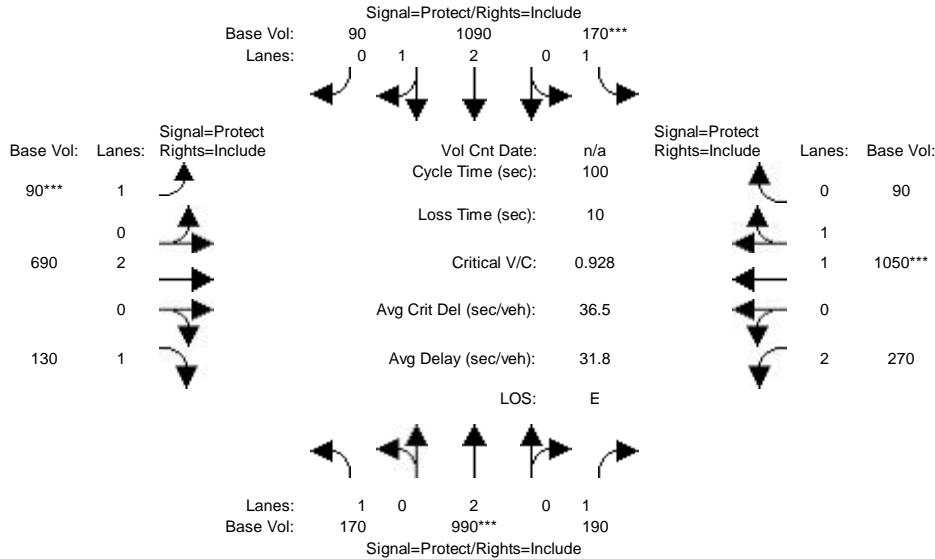


Street Name:	Wilmington Ave.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	120	820	110	160	420	90	140	450	230	120	890	400
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	120	820	110	160	420	90	140	450	230	120	890	400
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	120	820	110	160	420	90	140	450	230	120	890	400
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	820	110	160	420	90	140	450	230	120	890	400
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	120	820	110	160	420	90	140	450	230	120	890	400
OvlAdjVol:												356
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.65	0.35	2.00	2.47	0.53	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4232	568	5760	3953	847	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.19	0.19	0.03	0.11	0.11	0.09	0.14	0.14	0.08	0.28	0.25
OvlAdjV/S:												0.22
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday AM

Intersection #33: W. Artesia Blvd. & Crenshaw Blvd.

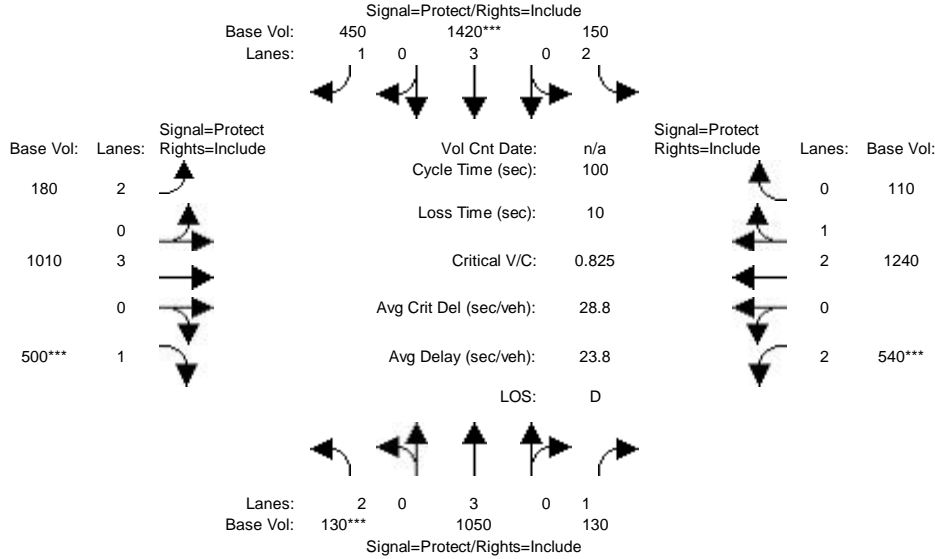


Street Name:	Crenshaw Blvd.						W. Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	170	990	190	170	1090	90	90	690	130	270	1050	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	170	990	190	170	1090	90	90	690	130	270	1050	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	170	990	190	170	1090	90	90	690	130	270	1050	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	170	990	190	170	1090	90	90	690	130	270	1050	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	170	990	190	170	1090	90	90	690	130	270	1050	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.77	0.23	1.00	2.00	1.00	2.00	1.84	0.16
Final Sat.:	1600	3200	1600	1600	4434	366	1600	3200	1600	5760	2947	253
Capacity Analysis Module:												
Vol/Sat:	0.11	0.31	0.12	0.11	0.25	0.25	0.06	0.22	0.08	0.05	0.36	0.36
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday AM

Intersection #34: W 190th St. & South Western Ave.

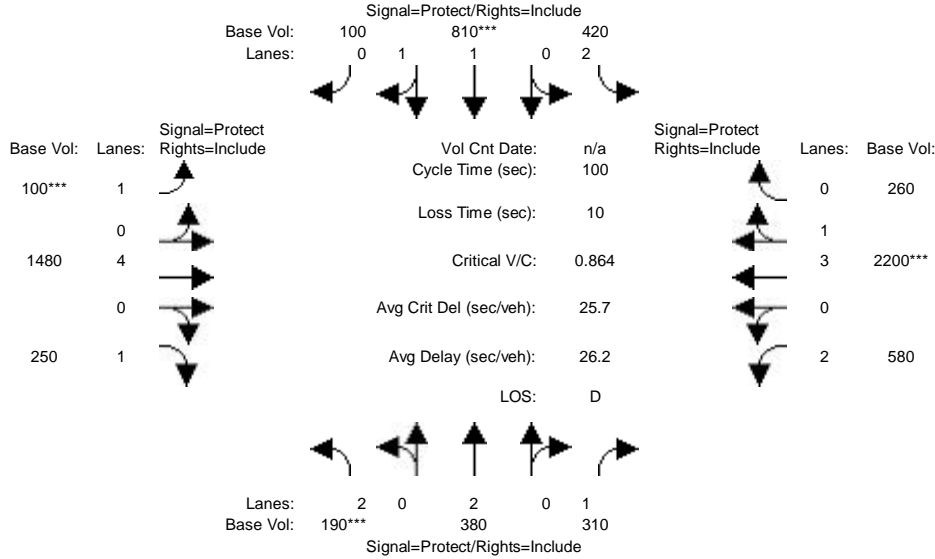


Street Name:	S. Western Ave.						W. 190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	130	1050	130	150	1420	450	180	1010	500	540	1240	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	1050	130	150	1420	450	180	1010	500	540	1240	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	1050	130	150	1420	450	180	1010	500	540	1240	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	1050	130	150	1420	450	180	1010	500	540	1240	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	1050	130	150	1420	450	180	1010	500	540	1240	110
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.76	0.24
Final Sat.:	5760	4800	1600	5760	4800	1600	5760	4800	1600	5760	4409	391
Capacity Analysis Module:												
Vol/Sat:	0.02	0.22	0.08	0.03	0.30	0.28	0.03	0.21	0.31	0.09	0.28	0.28
Crit Moves:	****			****			****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday AM

Intersection #35: W. Artesia Blvd. & Vermont Av.e

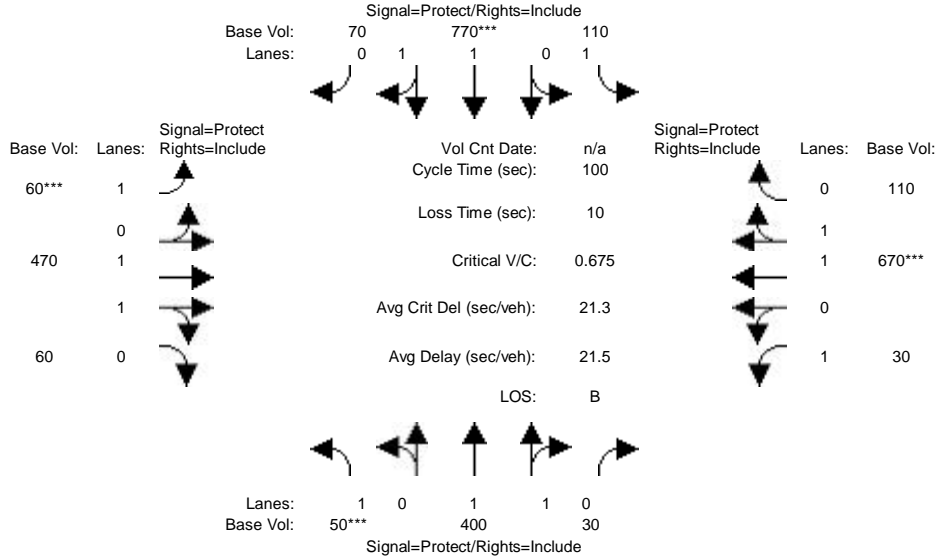


Street Name:	Vermont Ave.						W. Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	190	380	310	420	810	100	100	1480	250	580	2200	260
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	190	380	310	420	810	100	100	1480	250	580	2200	260
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	190	380	310	420	810	100	100	1480	250	580	2200	260
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	190	380	310	420	810	100	100	1480	250	580	2200	260
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	190	380	310	420	810	100	100	1480	250	580	2200	260
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	1.78	0.22	1.00	4.00	1.00	2.00	3.58	0.42
Final Sat.:	5760	3200	1600	5760	2848	352	1600	6400	1600	5760	5724	676
Capacity Analysis Module:												
Vol/Sat:	0.03	0.12	0.19	0.07	0.28	0.28	0.06	0.23	0.16	0.10	0.38	0.38
Crit Moves:	****			****		****	****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday AM

Intersection #36: Alameda St. & Compton Blvd.

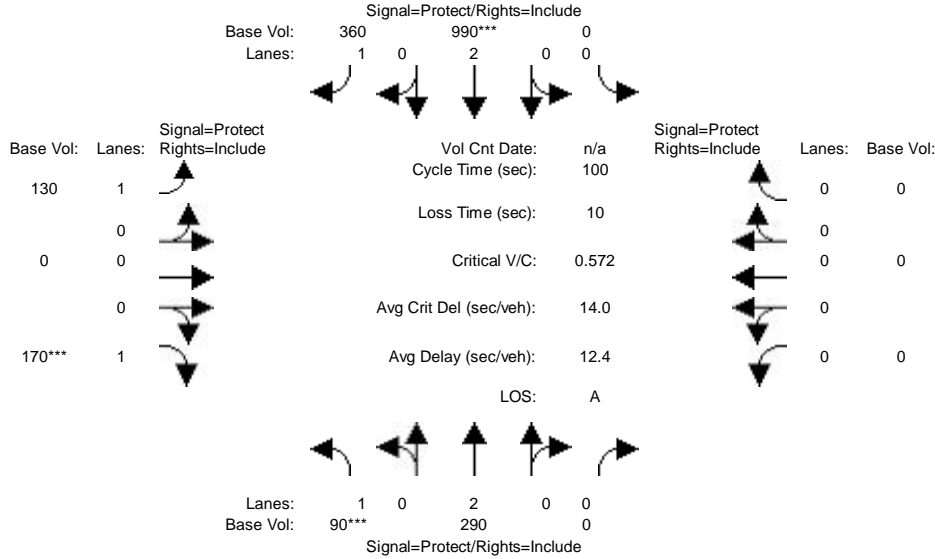


Street Name:	Alameda St.						Compton Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	50	400	30	110	770	70	60	470	60	30	670	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	400	30	110	770	70	60	470	60	30	670	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	400	30	110	770	70	60	470	60	30	670	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	400	30	110	770	70	60	470	60	30	670	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	400	30	110	770	70	60	470	60	30	670	110
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.86	0.14	1.00	1.83	0.17	1.00	1.77	0.23	1.00	1.72	0.28
Final Sat.:	1600	2977	223	1600	2933	267	1600	2838	362	1600	2749	451
Capacity Analysis Module:												
Vol/Sat:	0.03	0.13	0.13	0.07	0.26	0.26	0.04	0.17	0.17	0.02	0.24	0.24
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday AM

Intersection #37: Alameda St. & SR 91 EB Ramps

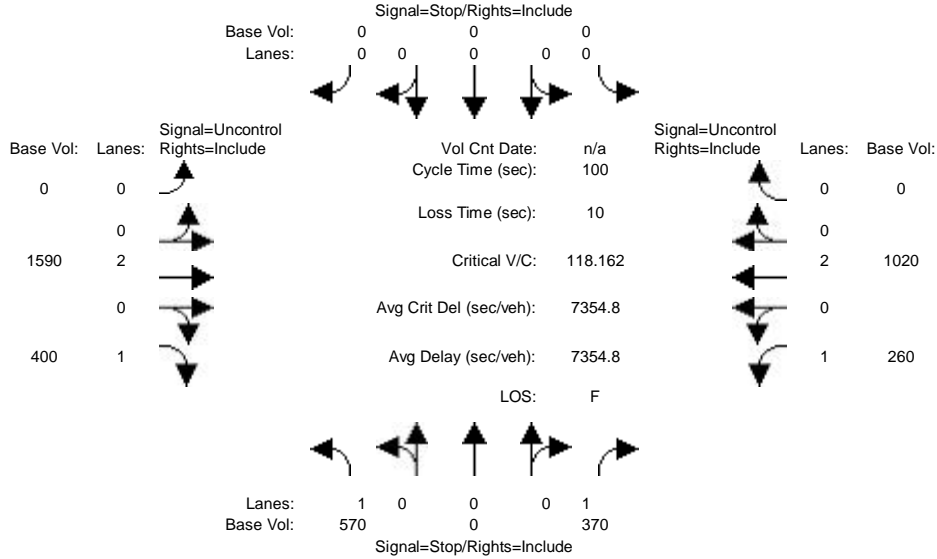


Street Name:	Alameda St.						SR 91 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	90	290	0	0	990	360	130	0	170	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	290	0	0	990	360	130	0	170	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	290	0	0	990	360	130	0	170	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	290	0	0	990	360	130	0	170	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	290	0	0	990	360	130	0	170	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	3200	0	0	3200	1600	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.09	0.00	0.00	0.31	0.23	0.08	0.00	0.11	0.00	0.00	0.00
Crit Moves:	****				****			****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
Existing With Project Weekday PM

Intersection #1: Victoria St. & Drive D



Street Name:	Drive D				Victoria St..							
Approach:	North Bound		South Bound		East Bound		West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	570	0	370	0	0	0	0	1590	400	260	1020	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	570	0	370	0	0	0	0	1590	400	260	1020	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	570	0	370	0	0	0	0	1590	400	260	1020	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	570	0	370	0	0	0	0	1590	400	260	1020	0
Critical Gap Module:												
Critical Gp:	6.8	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	2620	xxxx	795	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1990	xxxx	xxxxx
Potent Cap.:	20	xxxx	335	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	293	xxxx	xxxxx
Move Cap.:	5	xxxx	335	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	293	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	1.11	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.89	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	73.6	xxxx	14.2	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	8.0	xxxx	xxxxx
Control Del:	54216	xxxx	116.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	66.3	xxxx	xxxxx
LOS by Move:	F	*	F	*	*	*	*	*	*	F	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx		xxxxxx			xxxxxx			xxxxxx	xxxxxx		xxxxxx

ApproachLOS: F * * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #1 Victoria St. & Drive D

Base Volume Alternative: Peak Hour Warrant Met

-----|-----|-----|-----|

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

-----|-----|-----|-----|

Control: Stop Sign Stop Sign Uncontrolled Uncontrolled

Lanes: 1 0 0 0 1 0 0 0 0 0 0 2 0 1 1 0 2 0 0

Initial Vol: 570 0 370 0 0 0 0 0 1590 400 260 1020 0

ApproachDel: xxxxxx xxxxxx xxxxxx xxxxxx

-----|-----|-----|-----|

Approach[northbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=8596.2]

SUCCEED - Vehicle-hours >= 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=940]

SUCCEED - Approach volume >= 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=4210]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #1 Victoria St. & Drive D

Base Volume Alternative: Peak Hour Warrant Met

-----|-----|-----|-----|

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

-----|-----|-----|-----|

Control: Stop Sign Stop Sign Uncontrolled Uncontrolled

Lanes: 1 0 0 0 1 0 0 0 0 0 0 2 0 1 1 0 2 0 0

Initial Vol: 570 0 370 0 0 0 0 0 1590 400 260 1020 0

-----|-----|-----|-----|

Major Street Volume: 3270

Minor Approach Volume: 940

Minor Approach Volume Threshold: -135 [less than minimum of 150]

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

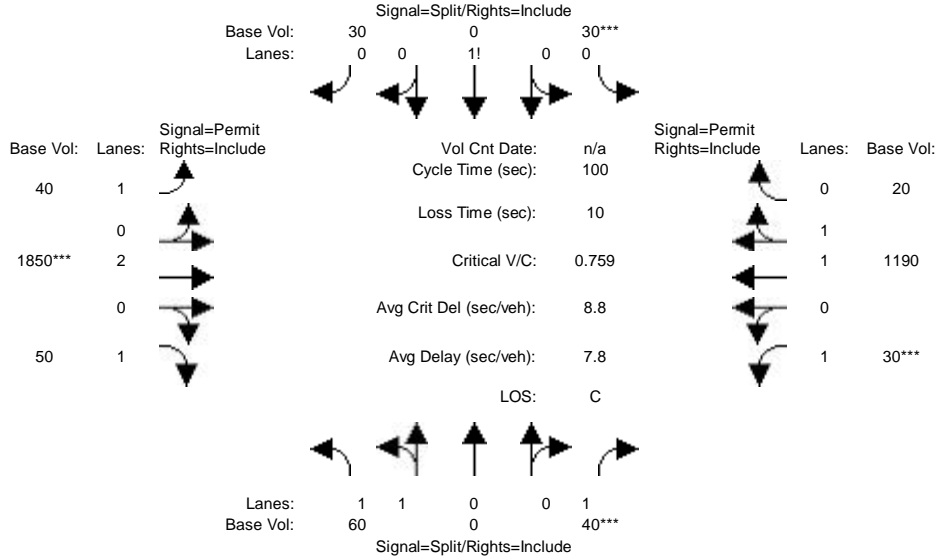
The peak hour warrant analysis in this report is not intended to replace

a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday PM

Intersection #2: Victoria St. & Tamcliff Ave.

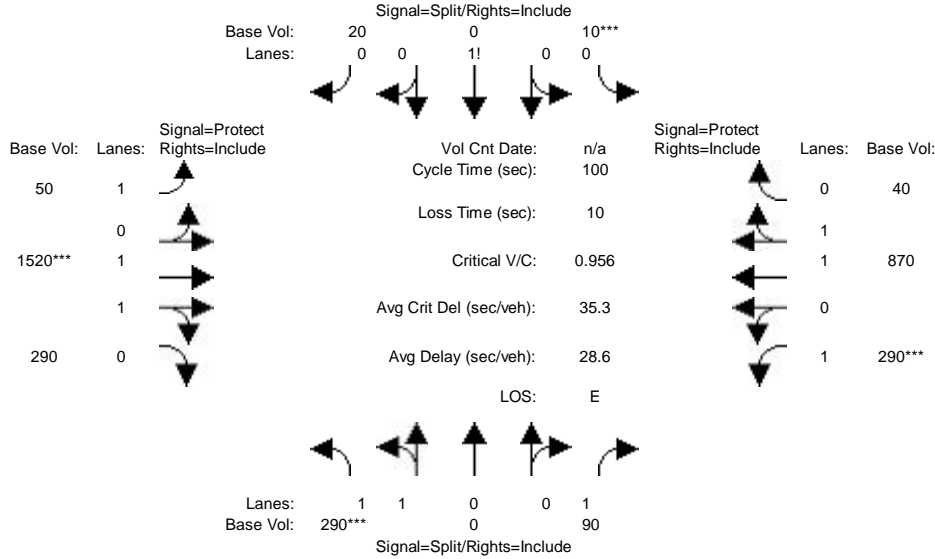


Street Name:	Victoria St.						Tamcliff Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	60	0	40	30	0	30	40	1850	50	30	1190	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	0	40	30	0	30	40	1850	50	30	1190	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	0	40	30	0	30	40	1850	50	30	1190	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	0	40	30	0	30	40	1850	50	30	1190	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	0	40	30	0	30	40	1850	50	30	1190	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.50	0.00	0.50	1.00	2.00	1.00	1.00	1.97	0.03
Final Sat.:	3200	0	1600	800	0	800	1600	3200	1600	1600	3147	53
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.03	0.04	0.00	0.04	0.03	0.58	0.03	0.02	0.38	0.38
Crit Moves:			****	****			****		****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday PM

Intersection #3: Victoria St. & Birchknoll Dr.

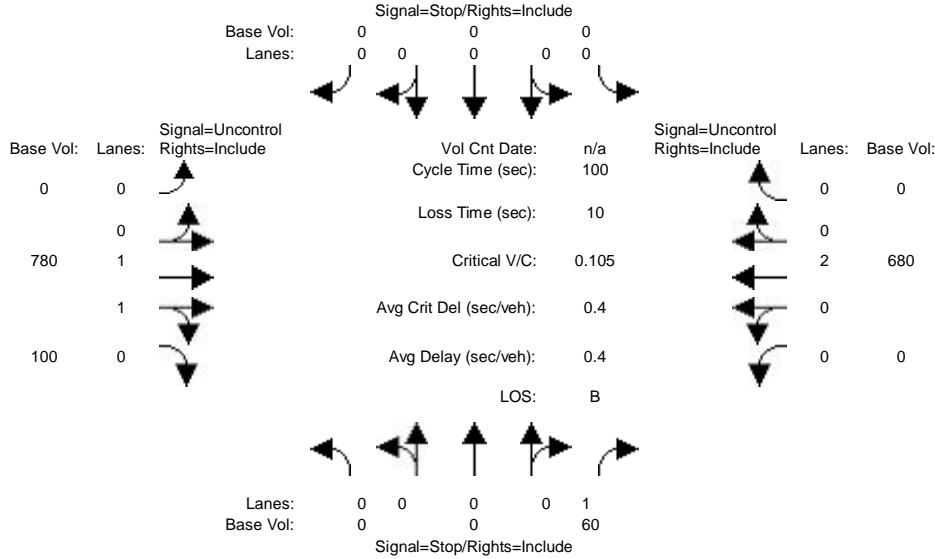


Street Name:	Victoria St.						Birchknoll Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	290	0	90	10	0	20	50	1520	290	290	870	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	290	0	90	10	0	20	50	1520	290	290	870	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	290	0	90	10	0	20	50	1520	290	290	870	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	290	0	90	10	0	20	50	1520	290	290	870	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	290	0	90	10	0	20	50	1520	290	290	870	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.33	0.00	0.67	1.00	1.68	0.32	1.00	1.91	0.09
Final Sat.:	3200	0	1600	533	0	1067	1600	2687	513	1600	3059	141
Capacity Analysis Module:												
Vol/Sat:	0.09	0.00	0.06	0.02	0.00	0.02	0.03	0.57	0.57	0.18	0.28	0.28
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
Existing With Project Weekday PM

Intersection #4: Victoria St. & Project Service Rd.



Street Name:	Project Service Rd.				Victoria St.							
Approach:	North Bound		South Bound		East Bound		West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	60	0	0	0	0	780	100	0	680	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	60	0	0	0	0	780	100	0	680	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	60	0	0	0	0	780	100	0	680	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	0	0	60	0	0	0	0	780	100	0	680	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	xxxxx	xxxx	440	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Potent Cap.:	xxxxx	xxxx	570	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Move Cap.:	xxxxx	xxxx	570	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Volume/Cap:	xxxxx	xxxx	0.11	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Level Of Service Module:												
2Way95thQ:	xxxxx	xxxx	0.4	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Control Del:	xxxxxx	xxxx	12.1	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
LOS by Move:	*	*	B	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxxx	xxxx	xxxxxx	xxxxx	xxxx	xxxxxx	xxxxx	xxxx	xxxxxx	xxxxx	xxxx	xxxxxx
Shared Queue:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
Approach Del:	12.1			xxxxxxx			xxxxxxx			xxxxxxx		

ApproachLOS: B * * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #4 Victoria St. & Project Service Rd.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 1	0 0 0 0 0	0 0 1 1 0	0 0 2 0 0
Initial Vol:	0 0 60	0 0 0	0 780 100	0 680 0
ApproachDel:	12.1	xxxxxx	xxxxxx	xxxxxx

Approach[northbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.2]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=60]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=1620]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

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The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #4 Victoria St. & Project Service Rd.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 1	0 0 0 0 0	0 0 1 1 0	0 0 2 0 0
Initial Vol:	0 0 60	0 0 0	0 780 100	0 680 0

Major Street Volume: 1560

Minor Approach Volume: 60

Minor Approach Volume Threshold: 132

SIGNAL WARRANT DISCLAIMER

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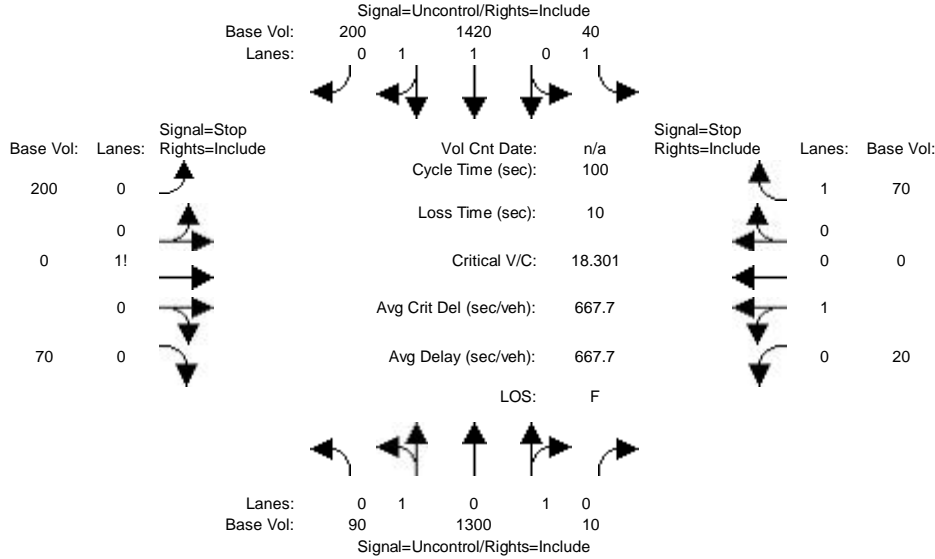
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 Existing With Project Weekday PM

Intersection #5: Central Ave. & Charles Willard St.



Street Name:	Central Ave.				Charles Willard St.							
Approach:	North Bound		South Bound		East Bound		West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:	90	1300	10	40	1420	200	200	0	70	20	0	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	1300	10	40	1420	200	200	0	70	20	0	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	1300	10	40	1420	200	200	0	70	20	0	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	90	1300	10	40	1420	200	200	0	70	20	0	70
Critical Gap Module:	4.1	xxxx	xxxxxx	4.1	xxxx	xxxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxxx	2.2	xxxx	xxxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:	1620	xxxx	xxxxxx	1310	xxxx	xxxxxx	2430	3090	810	2275	3185	655
Potent Cap.:	407	xxxx	xxxxxx	535	xxxx	xxxxxx	17	12	327	22	10	413
Move Cap.:	407	xxxx	xxxxxx	535	xxxx	xxxxxx	11	9	327	14	7	413
Volume/Cap:	0.22	xxxx	xxxx	0.07	xxxx	xxxx	18.30	0.00	0.21	1.47	0.00	0.17
Level Of Service Module:	0.8	xxxx	xxxxxx	0.2	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	0.6
Control Del:	16.3	xxxx	xxxxxx	12.3	xxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	15.5
LOS by Move:	C	*	*	B	*	*	*	*	*	*	*	C
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	15	xxxxxx	14	xxxx	xxxxxx
SharedQueue:	0.8	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	34.8	xxxxxx	3.2	xxxx	xxxxxx
Shrd ConDel:	16.3	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	8387	xxxxxx	807.2	xxxx	xxxxxx
Shared LOS:	C	*	*	*	*	*	*	F	*	F	*	*
ApproachDel:	xxxxxxx			xxxxxxx			8386.6			191.4		

ApproachLOS: * * F F

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #5 Central Ave. & Charles Willard St.

Base Volume Alternative: Peak Hour Warrant Met

-----|-----|-----|-----|-----|

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

-----|-----|-----|-----|-----|

Control: Uncontrolled Uncontrolled Stop Sign Stop Sign

Lanes: 0 1 0 1 0 1 0 1 1 0 0 0 1! 0 0 0 1 0 0 1

Initial Vol: 90 1300 10 40 1420 200 200 0 70 20 0 70

ApproachDel: xxxxxx xxxxxx 8386.6 191.4

-----|-----|-----|-----|-----|

Approach[eastbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=629.0]

SUCCEED - Vehicle-hours greater than or equal to 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=270]

SUCCEED - Approach volume greater than or equal to 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=3420]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

-----|-----|-----|-----|-----|

Approach[westbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=4.8]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=90]

FAIL - Approach volume less than 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=3420]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #5 Central Ave. & Charles Willard St.

Base Volume Alternative: Peak Hour Warrant Met

-----|-----|-----|-----|-----|

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

-----|-----|-----|-----|-----|

Control: Uncontrolled Uncontrolled Stop Sign Stop Sign

Lanes: 0 1 0 1 0 1 0 1 1 0 0 0 1! 0 0 0 1 0 0 1

Initial Vol: 90 1300 10 40 1420 200 200 0 70 20 0 70

-----|-----|-----|-----|-----|

Major Street Volume: 3060

Minor Approach Volume: 270

Minor Approach Volume Threshold: -100 [less than minimum of 100]

SIGNAL WARRANT DISCLAIMER

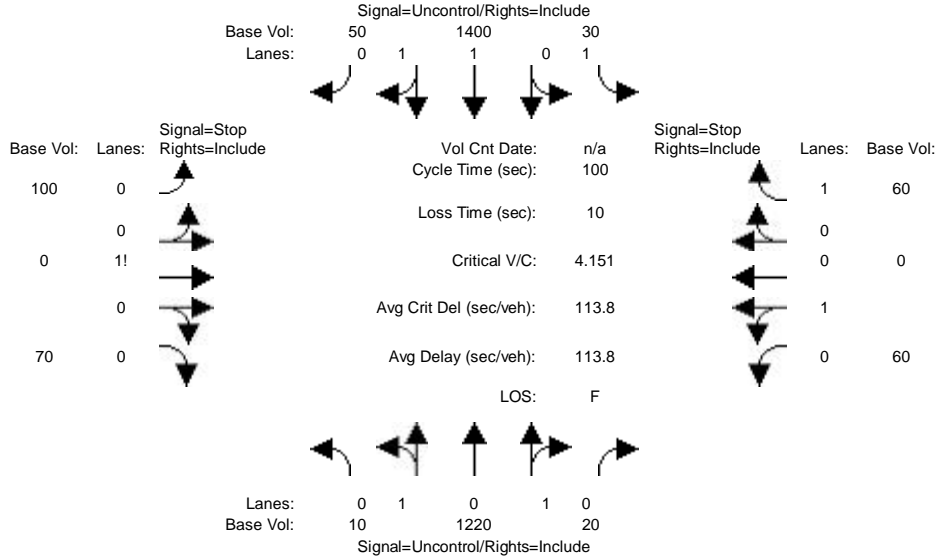
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 Existing With Project Weekday PM

Intersection #6: Central Ave. & Project Driveway/Beachey Pl.



Street Name:	Central Ave.				Beachey Pl.							
Approach:	North Bound		South Bound		East Bound		West Bound					
Movement:	L - T - R	L - T - R	L - T - R	L - T - R	L - T - R	L - T - R	L - T - R					
Volume Module:												
Base Vol:	10	1220	20	30	1400	50	100	0	70	60	0	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	1220	20	30	1400	50	100	0	70	60	0	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	10	1220	20	30	1400	50	100	0	70	60	0	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	10	1220	20	30	1400	50	100	0	70	60	0	60
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	4.1	xxxx	xxxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxxx	2.2	xxxx	xxxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflct Vol:	1450	xxxx	xxxxxx	1240	xxxx	xxxxxx	2115	2745	725	2010	2760	620
Potent Cap.:	473	xxxx	xxxxxx	569	xxxx	xxxxxx	30	20	372	36	20	436
Move Cap.:	473	xxxx	xxxxxx	569	xxxx	xxxxxx	24	19	372	27	18	436
Volume/Cap:	0.02	xxxx	xxxx	0.05	xxxx	xxxx	4.15	0.00	0.19	2.20	0.00	0.14
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxxx	0.2	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	0.5
Control Del:	12.8	xxxx	xxxxxx	11.7	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	14.6
LOS by Move:	B	*	*	B	*	*	*	*	*	*	*	B
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	39	xxxxxx	27	xxxx	xxxxxx
SharedQueue:	0.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	19.6	xxxxxx	7.2	xxxx	xxxxxx
Shrd ConDel:	12.8	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	1711	xxxxxx	859.0	xxxx	xxxxxx
Shared LOS:	B	*	*	*	*	*	F	*	F	*	*	*
ApproachDel:	xxxxxx			xxxxxx			1710.8			436.8		

ApproachLOS: * * F F

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #6 Central Ave. & Project Driveway/Beachey Pl.

Base Volume Alternative: Peak Hour Warrant Met

-----|-----|-----|-----|-----|

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

-----|-----|-----|-----|-----|

Control: Uncontrolled Uncontrolled Stop Sign Stop Sign

Lanes: 0 1 0 1 0 1 0 1 1 0 0 0 1 0 0 0 1

Initial Vol: 10 1220 20 30 1400 50 100 0 70 60 0 60

ApproachDel: xxxxxx xxxxxx 1710.8 436.8

-----|-----|-----|-----|-----|

Approach[eastbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=80.8]

SUCCEED - Vehicle-hours greater than or equal to 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=170]

SUCCEED - Approach volume greater than or equal to 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=3020]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

-----|-----|-----|-----|-----|

Approach[westbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=14.6]

SUCCEED - Vehicle-hours >= 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=120]

FAIL - Approach volume less than 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=3020]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

-----|-----|-----|-----|-----|

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #6 Central Ave. & Project Driveway/Beachey Pl.

Base Volume Alternative: Peak Hour Warrant Met

-----|-----|-----|-----|-----|

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

-----|-----|-----|-----|-----|

Control: Uncontrolled Uncontrolled Stop Sign Stop Sign

Lanes: 0 1 0 1 0 1 0 1 1 0 0 0 1 0 0 1

Initial Vol: 10 1220 20 30 1400 50 100 0 70 60 0 60

-----|-----|-----|-----|-----|

Major Street Volume: 2730

Minor Approach Volume: 170

Minor Approach Volume Threshold: -61 [less than minimum of 100]

SIGNAL WARRANT DISCLAIMER

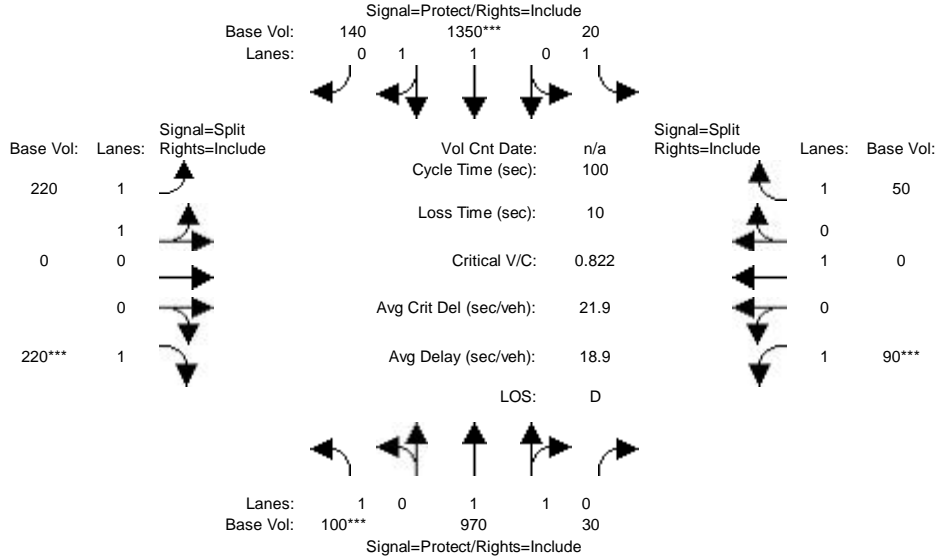
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday PM

Intersection #7: Central Ave. & Glenn Curtiss St.

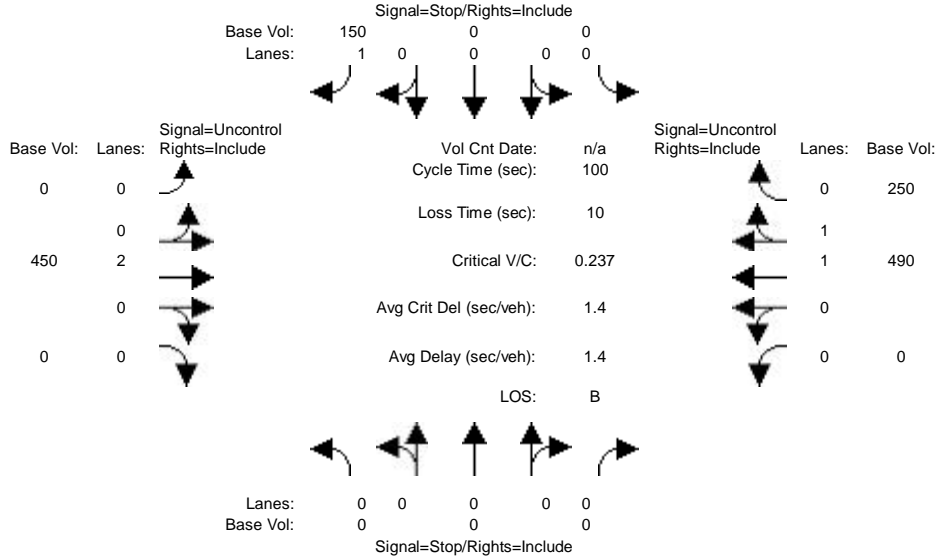


Street Name:	Central Ave.						Glenn Curtiss St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	100	970	30	20	1350	140	220	0	220	90	0	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	100	970	30	20	1350	140	220	0	220	90	0	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	100	970	30	20	1350	140	220	0	220	90	0	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	100	970	30	20	1350	140	220	0	220	90	0	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	100	970	30	20	1350	140	220	0	220	90	0	50
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.94	0.06	1.00	1.81	0.19	2.00	0.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	3104	96	1600	2899	301	3200	0	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.31	0.31	0.01	0.47	0.47	0.07	0.00	0.14	0.06	0.00	0.03
Crit Moves:	****			****			****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
Existing With Project Weekday PM

Intersection #8: University Dr./Birchknoll Dr. Ext.



Street Name:	Birchknoll Dr. Ext.				University Dr.								
Approach:	North Bound		South Bound		East Bound		West Bound						
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Volume Module:													
Base Vol:	0	0	0	0	0	150	0	450	0	0	490	250	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	0	0	0	0	0	150	0	450	0	0	490	250	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:	0	0	0	0	0	150	0	450	0	0	490	250	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
FinalVolume:	0	0	0	0	0	150	0	450	0	0	490	250	
Critical Gap Module:													
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
Capacity Module:													
Cnflct Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	370	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	633	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	633	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	0.24	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	
Level Of Service Module:													
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	0.9	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	12.4	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
LOS by Move:	*	*	*	*	*	B	*	*	*	*	*	*	
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*	
ApproachDel:	xxxxxx			12.4			xxxxxx			xxxxxx			

ApproachLOS: * B * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #8 University Dr./Birchknoll Dr. Ext.

Base Volume Alternative: Peak Hour Warrant NOT Met

-----|-----|-----|-----|

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

-----|-----|-----|-----|

Control: Stop Sign Stop Sign Uncontrolled Uncontrolled

Lanes: 0 0 0 0 0 0 0 0 1 0 0 2 0 0 0 0 1 1 0

Initial Vol: 0 0 0 0 0 0 150 0 450 0 0 490 250

ApproachDel: xxxxxx 12.4 xxxxxx xxxxxx

-----|-----|-----|-----|

Approach[southbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.5]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=150]

SUCCEED - Approach volume greater than or equal to 100 for one lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=1340]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #8 University Dr./Birchknoll Dr. Ext.

Base Volume Alternative: Peak Hour Warrant NOT Met

-----|-----|-----|-----|

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

-----|-----|-----|-----|

Control: Stop Sign Stop Sign Uncontrolled Uncontrolled

Lanes: 0 0 0 0 0 0 0 0 1 0 0 2 0 0 0 0 1 1 0

Initial Vol: 0 0 0 0 0 0 150 0 450 0 0 490 250

-----|-----|-----|-----|

Major Street Volume: 1190

Minor Approach Volume: 150

Minor Approach Volume Threshold: 225

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

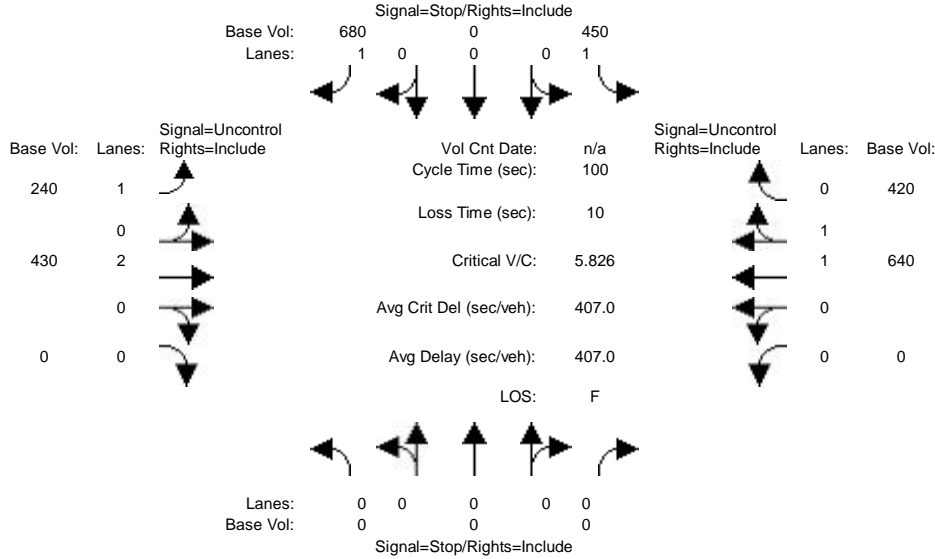
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 Existing With Project Weekday PM

Intersection #9: University Dr. & Toro Center Dr.



Street Name:	University Dr.				Toro Center Dr.							
Approach:	North Bound		South Bound		East Bound		West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	450	0	680	240	430	0	0	640	420
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	450	0	680	240	430	0	0	640	420
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	450	0	680	240	430	0	0	640	420
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	450	0	680	240	430	0	0	640	420
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.8	xxxx	6.9	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	xxxx	xxxx	xxxxx	1545	xxxx	530	1060	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	107	xxxx	499	665	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	77	xxxx	499	665	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	5.83	xxxx	1.36	0.36	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	50.0	xxxx	30.9	1.6	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	2278	xxxx	199.5	13.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	F	*	F	B	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			1027.2			xxxxxx			xxxxxx		

ApproachLOS: * F * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #9 University Dr. & Toro Center Dr.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 0	1 0 0 0 1	1 0 2 0 0	0 0 1 1 0
Initial Vol:	0 0 0	450 0 680	240 430 0	0 640 420
ApproachDel:	xxxxxx	1027.2	xxxxxx	xxxxxx

Approach[southbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=322.4]

SUCCEED - Vehicle-hours >= 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=1130]

SUCCEED - Approach volume >= 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=2860]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #9 University Dr. & Toro Center Dr.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 0	1 0 0 0 1	1 0 2 0 0	0 0 1 1 0
Initial Vol:	0 0 0	450 0 680	240 430 0	0 640 420

Major Street Volume: 1730

Minor Approach Volume: 1130

Minor Approach Volume Threshold: 138 [less than minimum of 150]

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

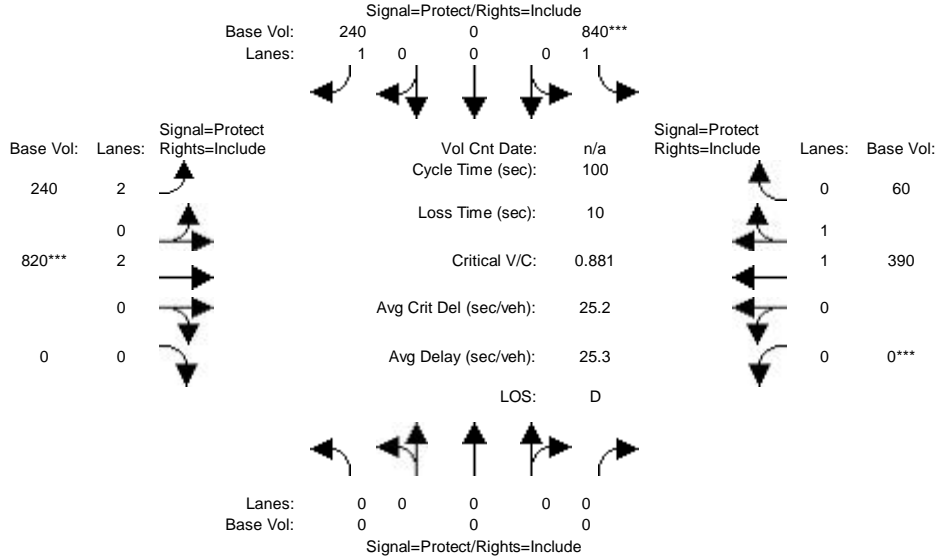
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday PM

Intersection #10: Albertoni St. & SR 91 EB Ramps

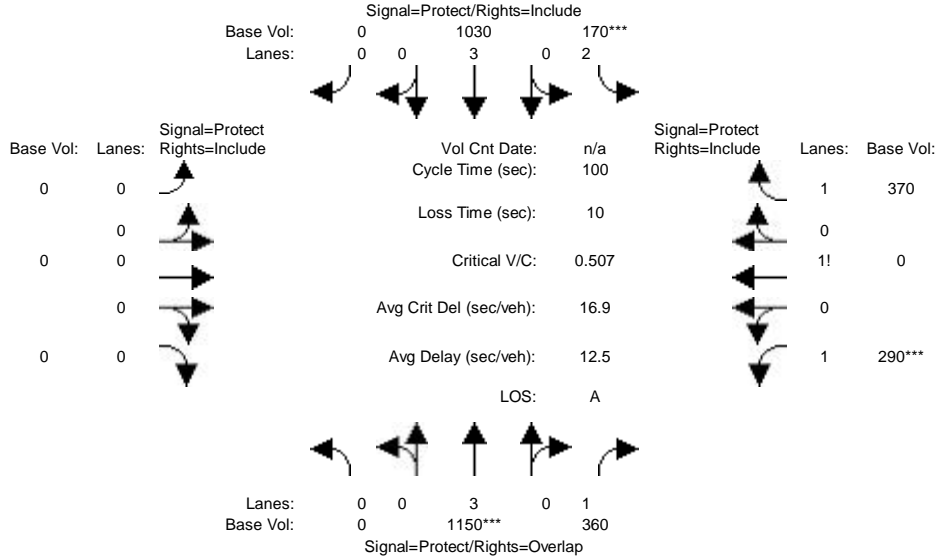


Street Name:	Albertoni St.						SR 91 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	840	0	240	240	820	0	0	390	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	840	0	240	240	820	0	0	390	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	840	0	240	240	820	0	0	390	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	840	0	240	240	820	0	0	390	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	840	0	240	240	820	0	0	390	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.73	0.27
Final Sat.:	0	0	0	1600	0	1600	5760	3200	0	0	2773	427
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.53	0.00	0.15	0.04	0.26	0.00	0.00	0.14	0.14
Crit Moves:				****			****		****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday PM

Intersection #11: Avalon Blvd. & SR 91 WB On-Ramp

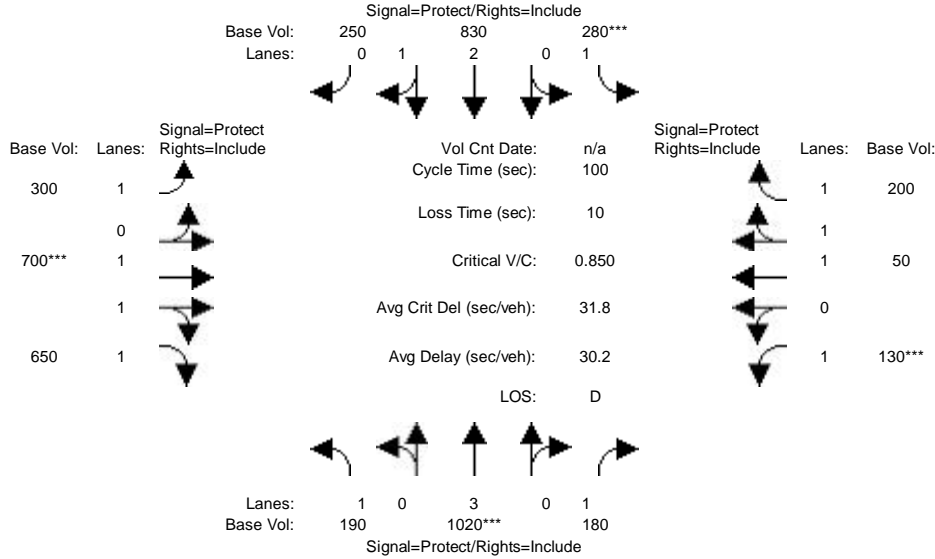


Street Name:	Avalon Blvd.						SR 91 WB On-Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1150	360	170	1030	0	0	0	0	290	0	370
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1150	360	170	1030	0	0	0	0	290	0	370
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1150	360	170	1030	0	0	0	0	290	0	370
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1150	360	170	1030	0	0	0	0	290	0	370
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	1150	360	170	1030	0	0	0	0	290	0	370
OvlAdjVol:	140											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	2109	0	2691
Capacity Analysis Module:												
Vol/Sat:	0.00	0.24	0.23	0.03	0.21	0.00	0.00	0.00	0.00	0.00	0.14	0.00
OvlAdjV/S:	0.09											
Crit Moves:	****	****			****							

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday PM

Intersection #12: Avalon Blvd. & Albertoni St.

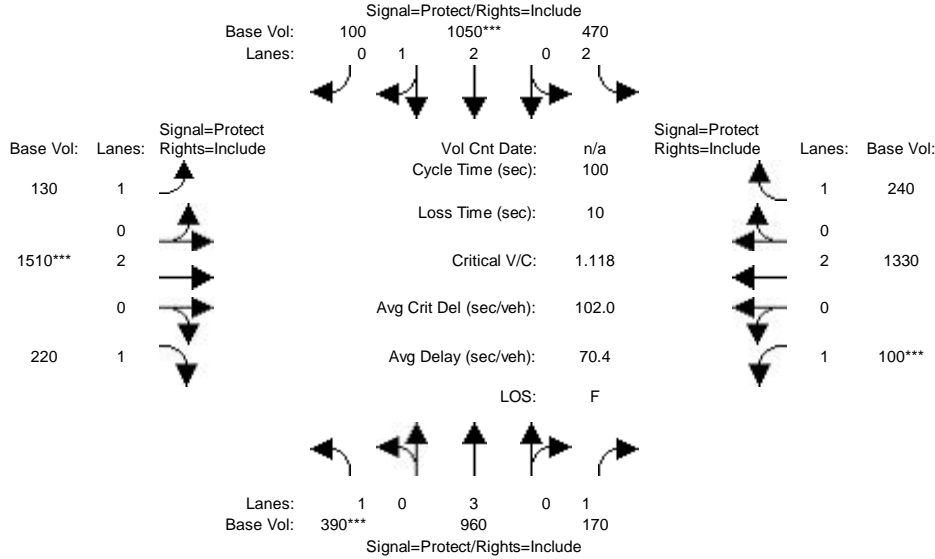


Street Name:	Avalon Blvd.						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	190	1020	180	280	830	250	300	700	650	130	50	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	190	1020	180	280	830	250	300	700	650	130	50	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	190	1020	180	280	830	250	300	700	650	130	50	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	190	1020	180	280	830	250	300	700	650	130	50	200
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	190	1020	180	280	830	250	300	700	650	130	50	200
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.31	0.69	1.00	1.56	1.44	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3689	1111	1600	2489	2311	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.12	0.21	0.11	0.17	0.22	0.23	0.19	0.28	0.28	0.08	0.03	0.06
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday PM

Intersection #13: Avalon Blvd. & Victoria St.

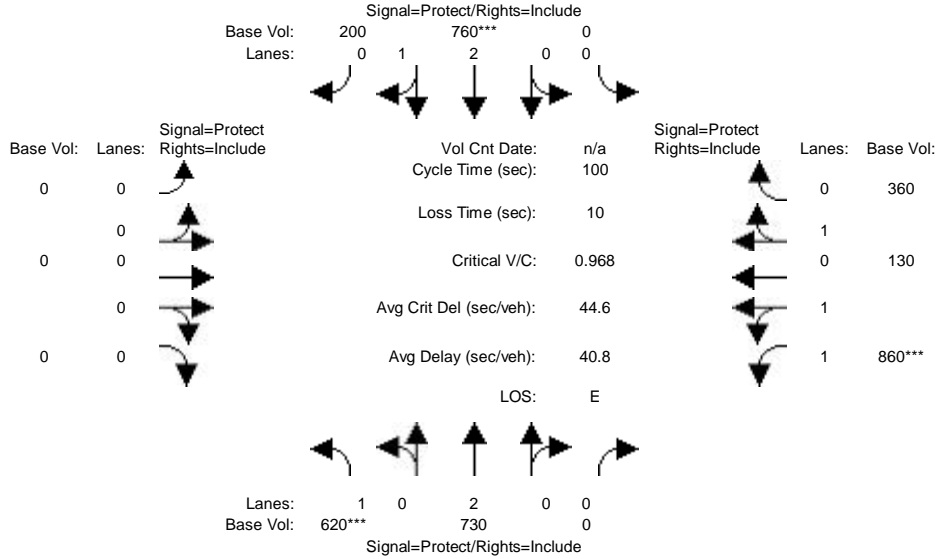


Street Name:	Avalon Blvd.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	390	960	170	470	1050	100	130	1510	220	100	1330	240
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	390	960	170	470	1050	100	130	1510	220	100	1330	240
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	390	960	170	470	1050	100	130	1510	220	100	1330	240
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	390	960	170	470	1050	100	130	1510	220	100	1330	240
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	390	960	170	470	1050	100	130	1510	220	100	1330	240
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.74	0.26	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4383	417	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.24	0.20	0.11	0.08	0.24	0.24	0.08	0.47	0.14	0.06	0.42	0.15
Crit Moves:	****			****			****		****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday PM

Intersection #14: Central Ave. & Artesia Blvd.

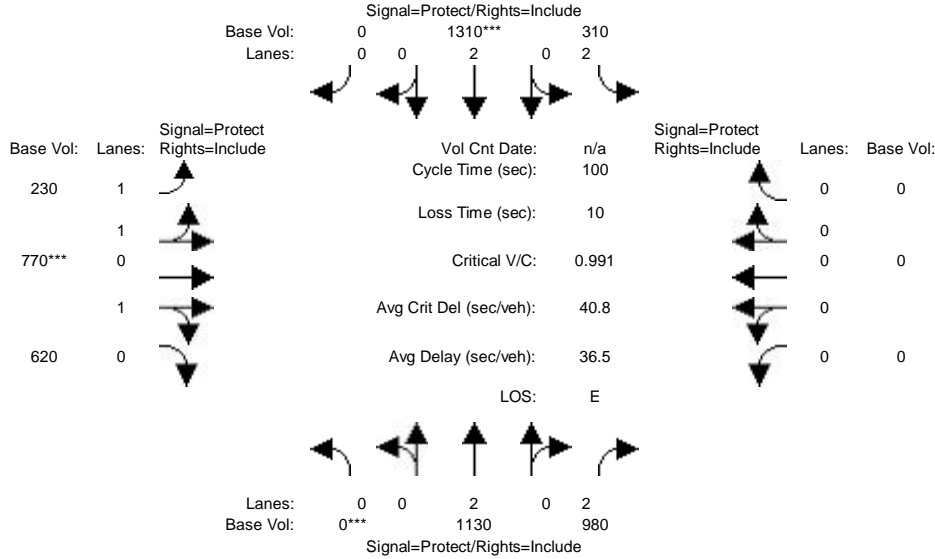


Street Name:	Central Ave.						Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	620	730	0	0	760	200	0	0	0	860	130	360
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	620	730	0	0	760	200	0	0	0	860	130	360
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	620	730	0	0	760	200	0	0	0	860	130	360
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	620	730	0	0	760	200	0	0	0	860	130	360
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	620	730	0	0	760	200	0	0	0	860	130	360
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.38	0.62	0.00	0.00	0.00	1.91	0.29	0.80
Final Sat.:	1600	3200	0	0	3800	1000	0	0	0	3061	462	1277
Capacity Analysis Module:												
Vol/Sat:	0.39	0.23	0.00	0.00	0.20	0.20	0.00	0.00	0.00	0.28	0.28	0.28
Crit Moves:	****				****					****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday PM

Intersection #15: Central Ave. & Albertoni St./Artesia Blvd. EB

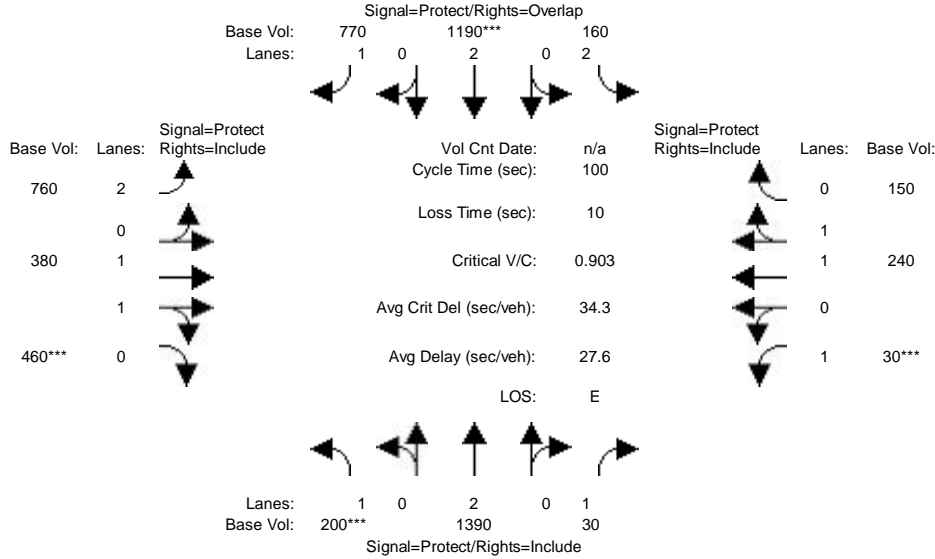


Street Name:	Central Ave.						Albertoni St./Artesia Blvd. EB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1130	980	310	1310	0	230	770	620	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1130	980	310	1310	0	230	770	620	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1130	980	310	1310	0	230	770	620	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1130	980	310	1310	0	230	770	620	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	1130	980	310	1310	0	230	770	620	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	1600	1600	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.35	0.31	0.05	0.41	0.00	0.14	0.48	0.39	0.00	0.00	0.00
Crit Moves:	****				****		****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday PM

Intersection #16: Central Ave. & Victoria St.

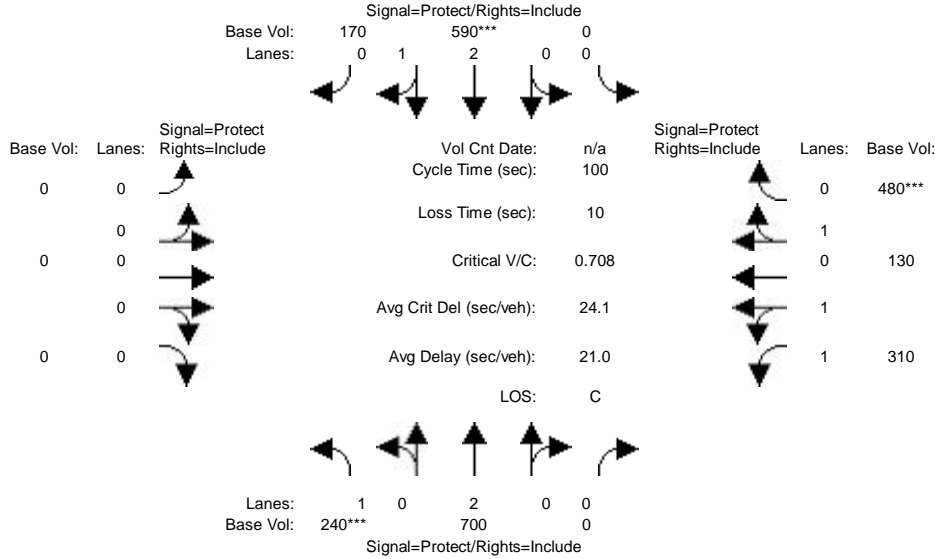


Street Name:	Central Ave.			Victoria St.		
Approach:	North Bound		South Bound		West Bound	
Movement:	L - T - R	L - T - R	L - T - R	L - T - R	L - T - R	L - T - R
Min. Green:	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:	200	1390	30	160	1190	770
Base Vol:	760	380	460	30	240	150
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	200	1390	30	160	1190	770
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	200	1390	30	160	1190	770
Reduct Vol:	0	0	0	0	0	0
Reduced Vol:	200	1390	30	160	1190	770
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	200	1390	30	160	1190	770
OvlAdjVol:	559					
Saturation Flow Module:	1600	1600	1600	1600	1600	1600
Sat/Lane:	1.00	1.00	1.00	1.80	1.00	1.00
Adjustment:	1.00	2.00	1.00	2.00	2.00	1.00
Lanes:	1600	3200	1600	5760	3200	1600
Final Sat.:	1600	1600	1600	1600	1600	1600
Capacity Analysis Module:	0.13	0.43	0.02	0.03	0.37	0.48
Vol/Sat:	0.35					
OvlAdjV/S:	****	****	****	****	****	****
Crit Moves:						

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday PM

Intersection #17: Wilmington Ave. & Artesia Blvd. WB

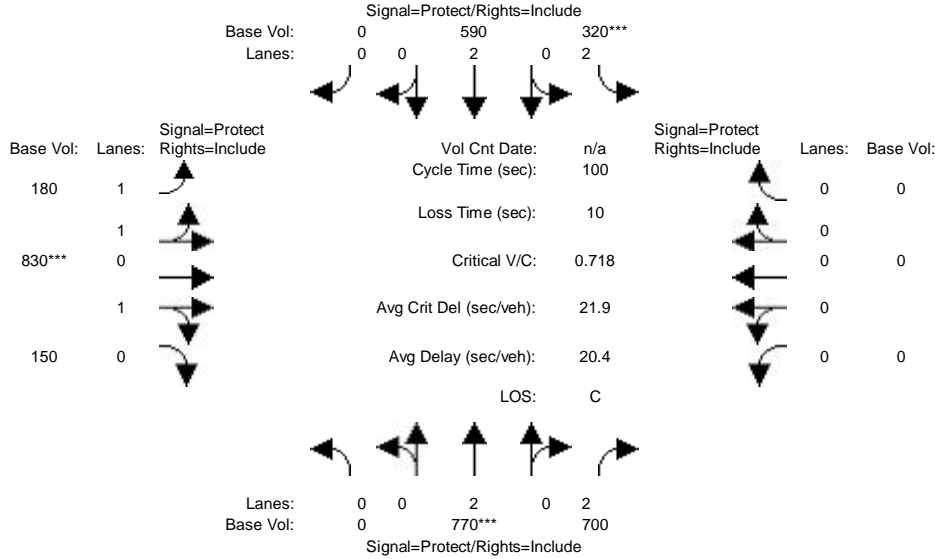


Street Name:	Wilmington Ave.						Artesia Blvd. WB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	240	700	0	0	590	170	0	0	0	310	130	480
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	240	700	0	0	590	170	0	0	0	310	130	480
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	240	700	0	0	590	170	0	0	0	310	130	480
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	240	700	0	0	590	170	0	0	0	310	130	480
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	240	700	0	0	590	170	0	0	0	310	130	480
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.33	0.67	0.00	0.00	0.00	1.41	0.59	1.00
Final Sat.:	1600	3200	0	0	3726	1074	0	0	0	2255	945	1600
Capacity Analysis Module:												
Vol/Sat:	0.15	0.22	0.00	0.00	0.16	0.16	0.00	0.00	0.00	0.14	0.14	0.30
Crit Moves:	****				****					****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday PM

Intersection #18: Wilmington Ave. & Artesia Blvd. EB

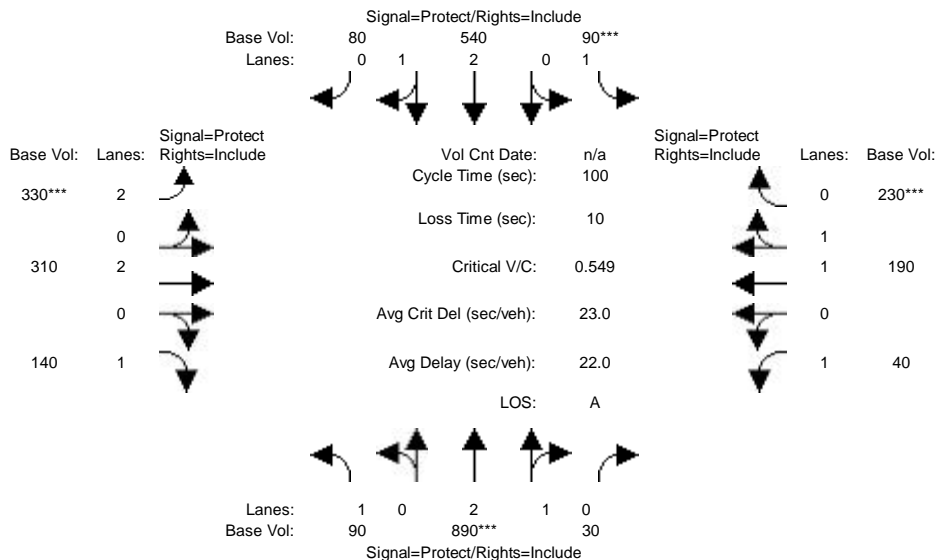


Street Name:	Wilmington Ave.				Artesia Blvd. EB							
Approach:	North Bound			South Bound			East Bound		West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	770	700	320	590	0	180	830	150	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	770	700	320	590	0	180	830	150	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	770	700	320	590	0	180	830	150	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	770	700	320	590	0	180	830	150	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	770	700	320	590	0	180	830	150	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.00	1.61	0.39	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	1600	2583	617	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.24	0.22	0.06	0.18	0.00	0.11	0.32	0.24	0.00	0.00	0.00
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday PM

Intersection #19: Wilmington Ave. & Victoria St.

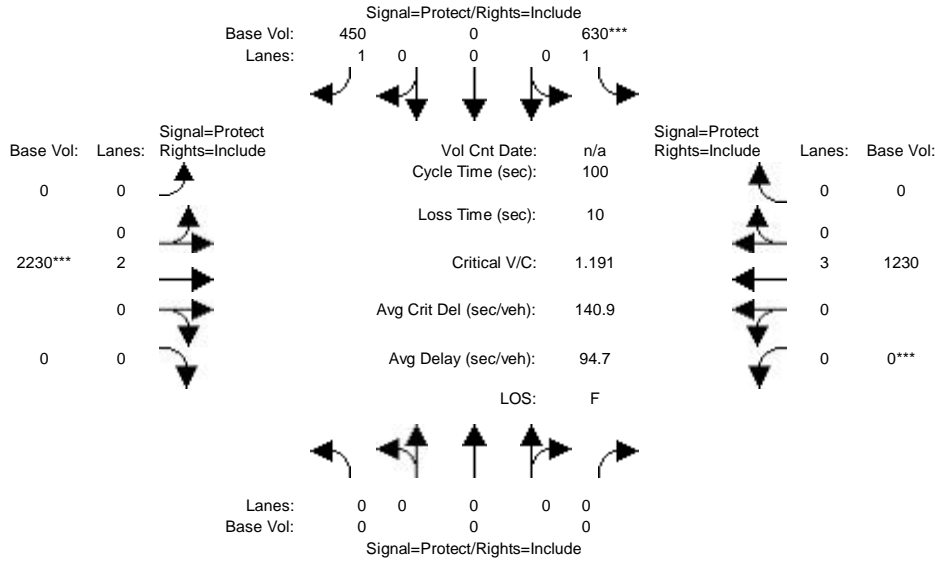


Street Name:	Wilmington Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	90	890	30	90	540	80	330	310	140	40	190	230
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	890	30	90	540	80	330	310	140	40	190	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	890	30	90	540	80	330	310	140	40	190	230
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	890	30	90	540	80	330	310	140	40	190	230
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	90	890	30	90	540	80	330	310	140	40	190	230
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.90	0.10	1.00	2.61	0.39	2.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	4643	157	1600	4181	619	5760	3200	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.19	0.19	0.06	0.13	0.13	0.06	0.10	0.09	0.03	0.12	0.14
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday PM

Intersection #20: I-110 SB Off-Ramp & 190th St.

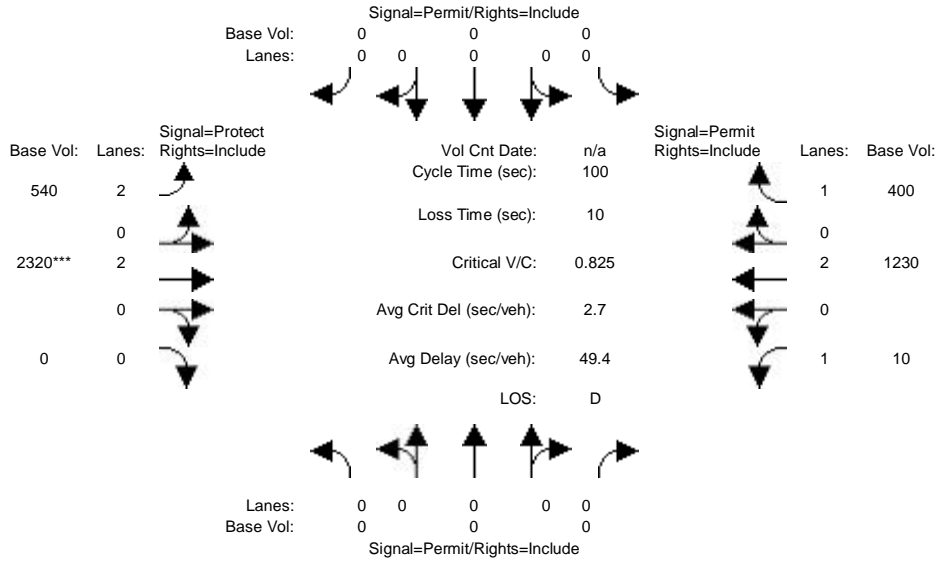


Street Name:	I-110 SB Off-Ramp						190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	630	0	450	0	2230	0	0	1230	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	630	0	450	0	2230	0	0	1230	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	630	0	450	0	2230	0	0	1230	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	630	0	450	0	2230	0	0	1230	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	630	0	450	0	2230	0	0	1230	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.39	0.00	0.28	0.00	0.70	0.00	0.00	0.26	0.00
Crit Moves:				***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday PM

Intersection #21: I-110 NB On-Ramp & 190th St.

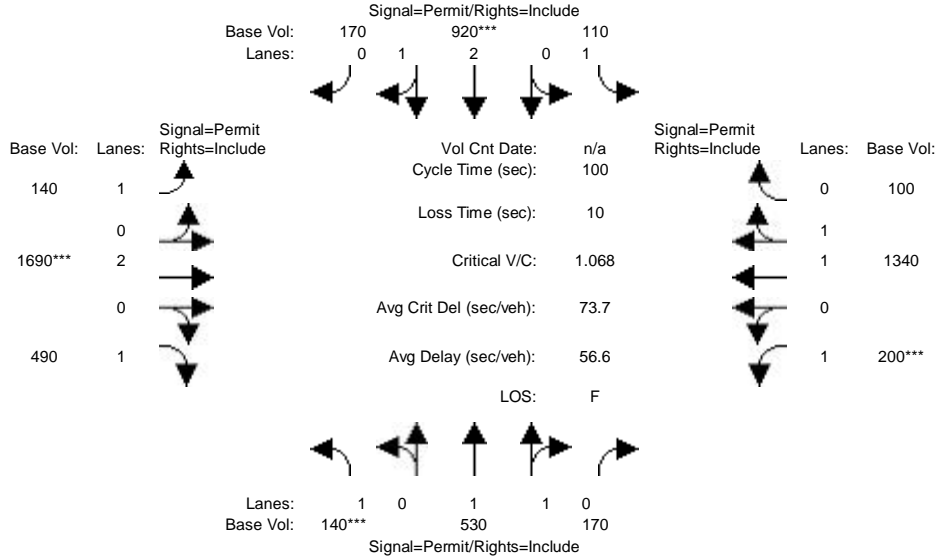


Street Name:	I-110 NB On-Ramp						190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	0	0	0	540	2320	0	10	1230	400
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	540	2320	0	10	1230	400
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	540	2320	0	10	1230	400
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	540	2320	0	10	1230	400
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	540	2320	0	10	1230	400
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	0	0	0	0	0	5760	3200	0	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.73	0.00	0.01	0.38	0.25
Crit Moves:							****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday PM

Intersection #22: Figueroa St. & 190th St./Victoria St.

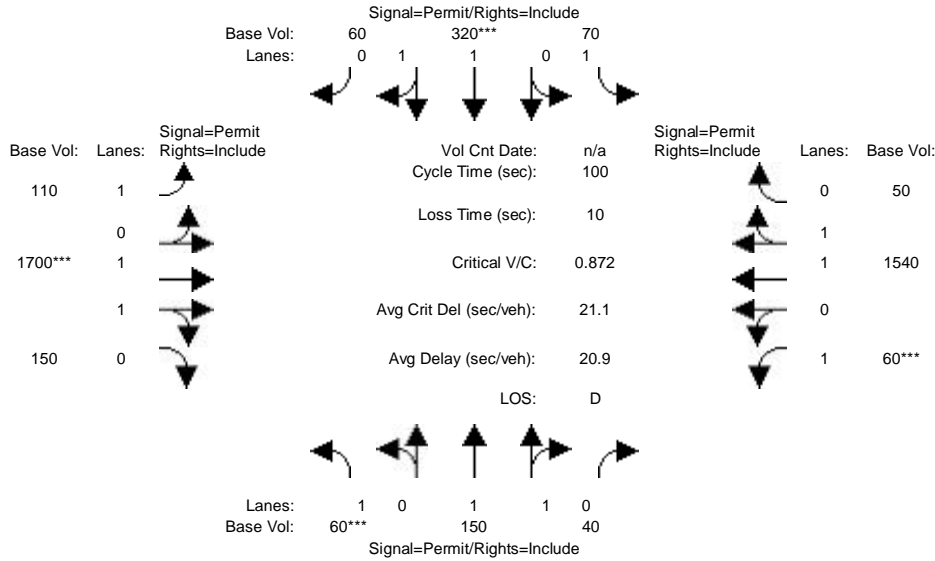


Street Name:	Figueroa St.						190th St./Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	140	530	170	110	920	170	140	1690	490	200	1340	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	530	170	110	920	170	140	1690	490	200	1340	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	140	530	170	110	920	170	140	1690	490	200	1340	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	530	170	110	920	170	140	1690	490	200	1340	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	140	530	170	110	920	170	140	1690	490	200	1340	100
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.51	0.49	1.00	2.53	0.47	1.00	2.00	1.00	1.00	1.86	0.14
Final Sat.:	1600	2423	777	1600	4051	749	1600	3200	1600	1600	2978	222
Capacity Analysis Module:												
Vol/Sat:	0.09	0.22	0.22	0.07	0.23	0.23	0.09	0.53	0.31	0.13	0.45	0.45
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday PM

Intersection #23: Broadway & Victoria St.

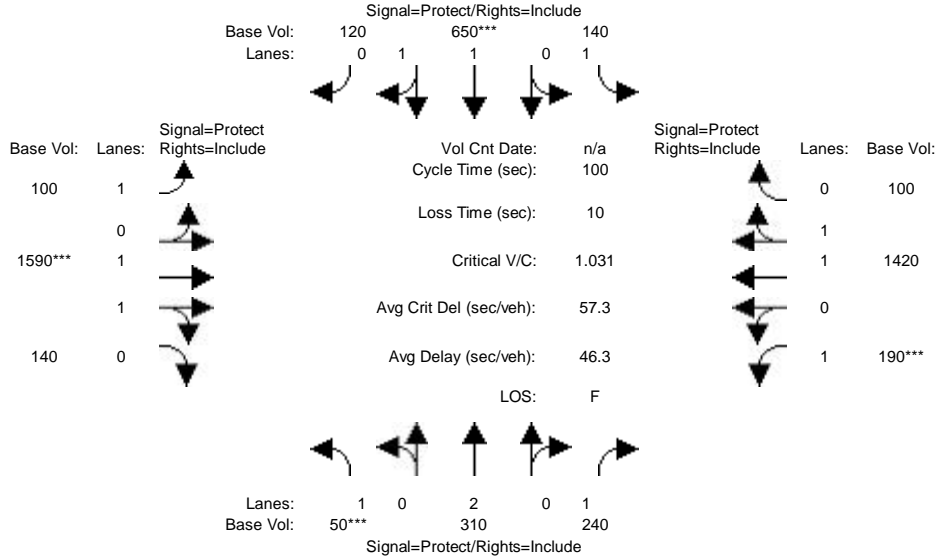


Street Name:	Broadway						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	60	150	40	70	320	60	110	1700	150	60	1540	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	150	40	70	320	60	110	1700	150	60	1540	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	150	40	70	320	60	110	1700	150	60	1540	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	150	40	70	320	60	110	1700	150	60	1540	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	150	40	70	320	60	110	1700	150	60	1540	50
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.58	0.42	1.00	1.68	0.32	1.00	1.84	0.16	1.00	1.94	0.06
Final Sat.:	1600	2526	674	1600	2695	505	1600	2941	259	1600	3099	101
Capacity Analysis Module:												
Vol/Sat:	0.04	0.06	0.06	0.04	0.12	0.12	0.07	0.58	0.58	0.04	0.50	0.50
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday PM

Intersection #24: Main St. & Victoria St.

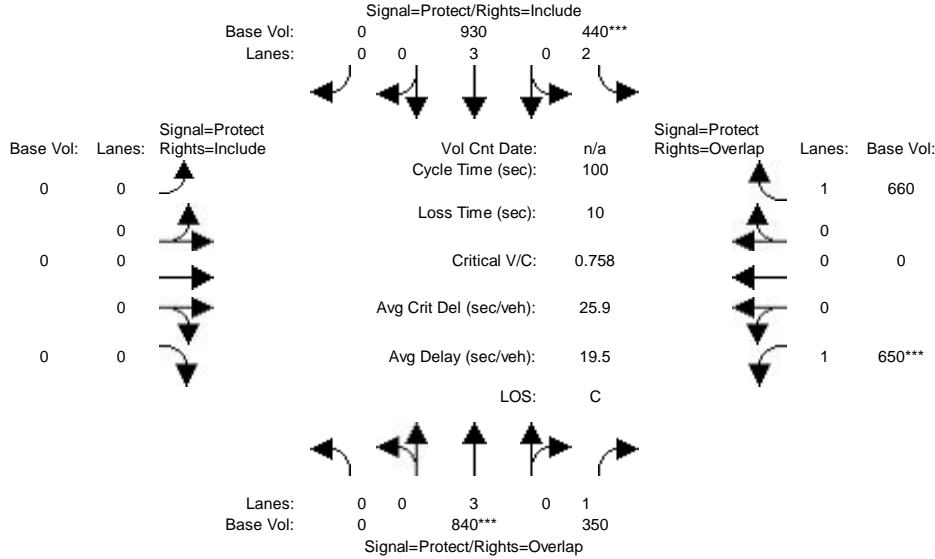


Street Name:	Main St.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	50	310	240	140	650	120	100	1590	140	190	1420	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	310	240	140	650	120	100	1590	140	190	1420	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	310	240	140	650	120	100	1590	140	190	1420	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	310	240	140	650	120	100	1590	140	190	1420	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	50	310	240	140	650	120	100	1590	140	190	1420	100
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.69	0.31	1.00	1.84	0.16	1.00	1.87	0.13
Final Sat.:	1600	3200	1600	1600	2701	499	1600	2941	259	1600	2989	211
Capacity Analysis Module:												
Vol/Sat:	0.03	0.10	0.15	0.09	0.24	0.24	0.06	0.54	0.54	0.12	0.48	0.47
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday PM

Intersection #25: Avalon Blvd. & University Dr.

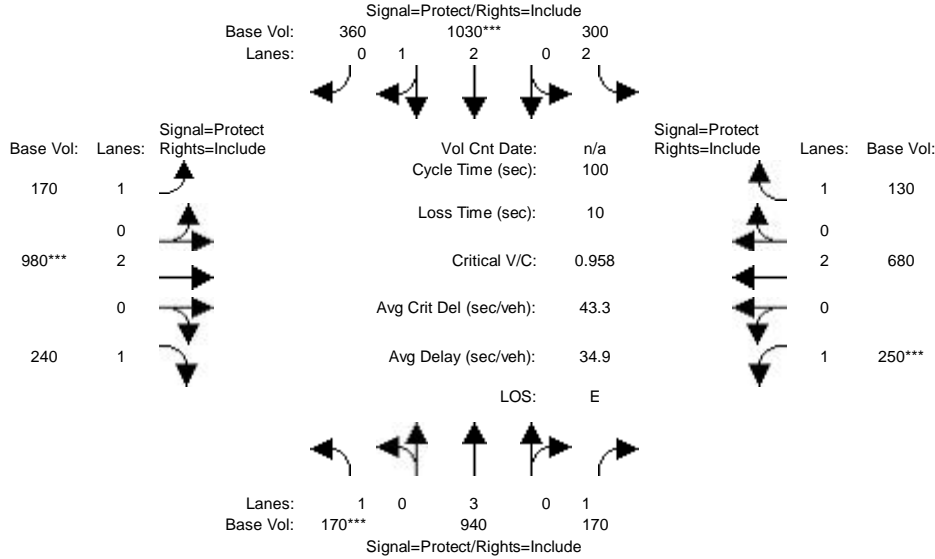


Street Name:	Avalon Blvd.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	840	350	440	930	0	0	0	0	650	0	660
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	840	350	440	930	0	0	0	0	650	0	660
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	840	350	440	930	0	0	0	0	650	0	660
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	840	350	440	930	0	0	0	0	650	0	660
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	840	350	440	930	0	0	0	0	650	0	660
OvlAdjVol:	0											538
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.17	0.22	0.08	0.19	0.00	0.00	0.00	0.00	0.00	0.41	0.00
OvlAdjV/S:	0.00											0.34
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday PM

Intersection #26: Avalon Blvd. & Del Amo Blvd.

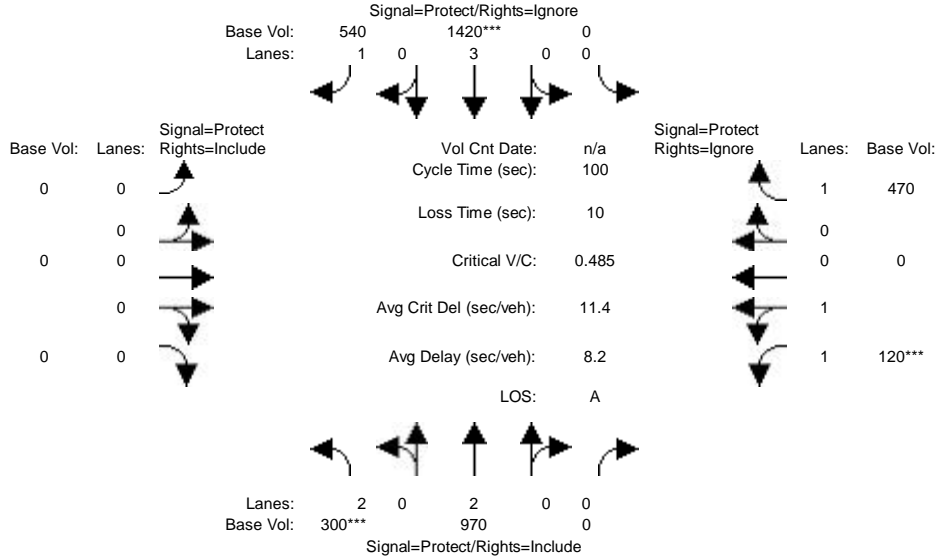


Street Name:	Avalon Blvd.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	170	940	170	300	1030	360	170	980	240	250	680	130
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	170	940	170	300	1030	360	170	980	240	250	680	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	170	940	170	300	1030	360	170	980	240	250	680	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	170	940	170	300	1030	360	170	980	240	250	680	130
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	170	940	170	300	1030	360	170	980	240	250	680	130
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.22	0.78	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	3557	1243	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.20	0.11	0.05	0.29	0.29	0.11	0.31	0.15	0.16	0.21	0.08
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday PM

Intersection #27: Avalon Blvd. & I-405 NB Ramps

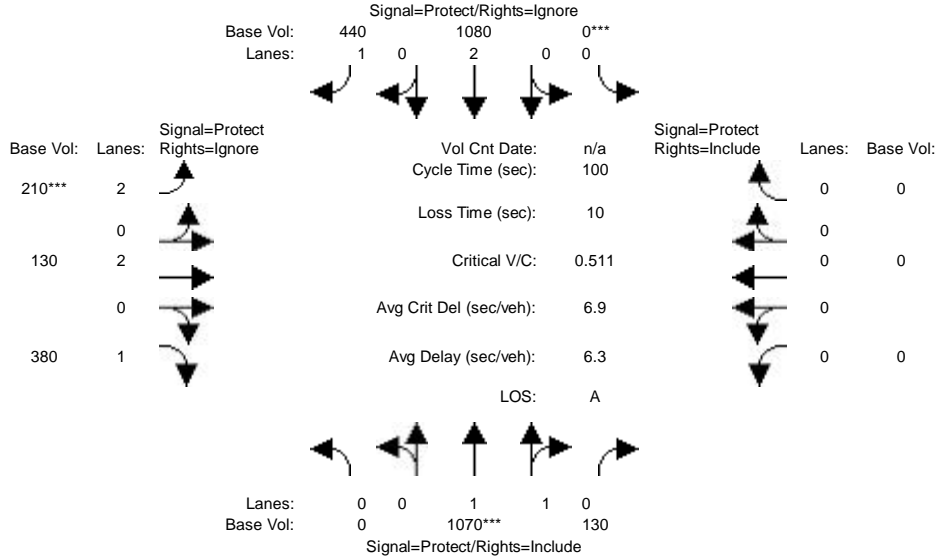


Street Name:	Avalon Blvd.						I-405 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	300	970	0	0	1420	540	0	0	0	120	0	470
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	300	970	0	0	1420	540	0	0	0	120	0	470
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	300	970	0	0	1420	0	0	0	0	120	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	300	970	0	0	1420	0	0	0	0	120	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	300	970	0	0	1420	0	0	0	0	120	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	5760	3200	0	0	4800	1600	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.30	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.00	0.04	0.00
Crit Moves:	****				****					****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday PM

Intersection #28: Avalon Blvd. & I-405 SB Ramps

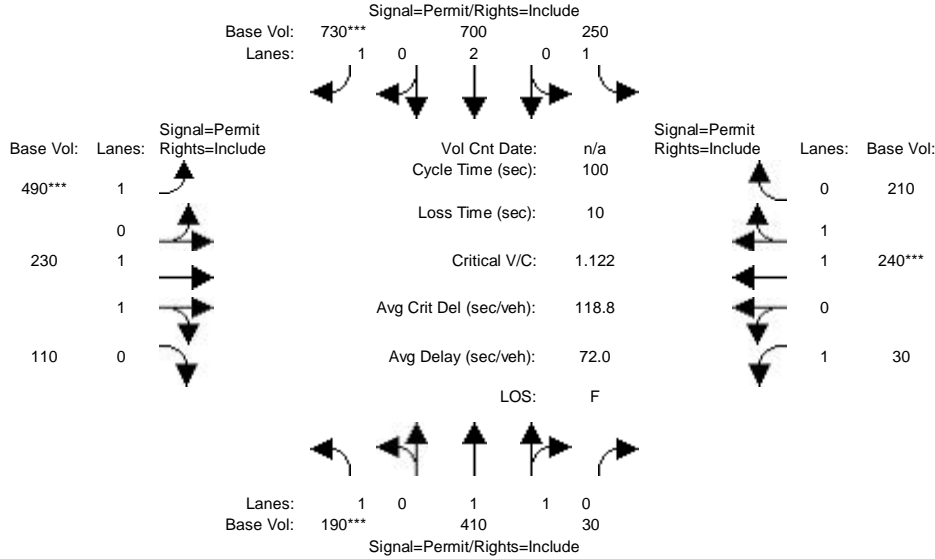


Street Name:	Avalon Blvd.						I-405 SB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1070	130	0	1080	440	210	130	380	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1070	130	0	1080	440	210	130	380	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	1070	130	0	1080	0	210	130	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1070	130	0	1080	0	210	130	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Volume:	0	1070	130	0	1080	0	210	130	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.78	0.22	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	0	2853	347	0	3200	1600	5760	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.38	0.37	0.00	0.34	0.00	0.04	0.04	0.00	0.00	0.00	0.00
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday PM

Intersection #29: Central Ave. & University Dr.

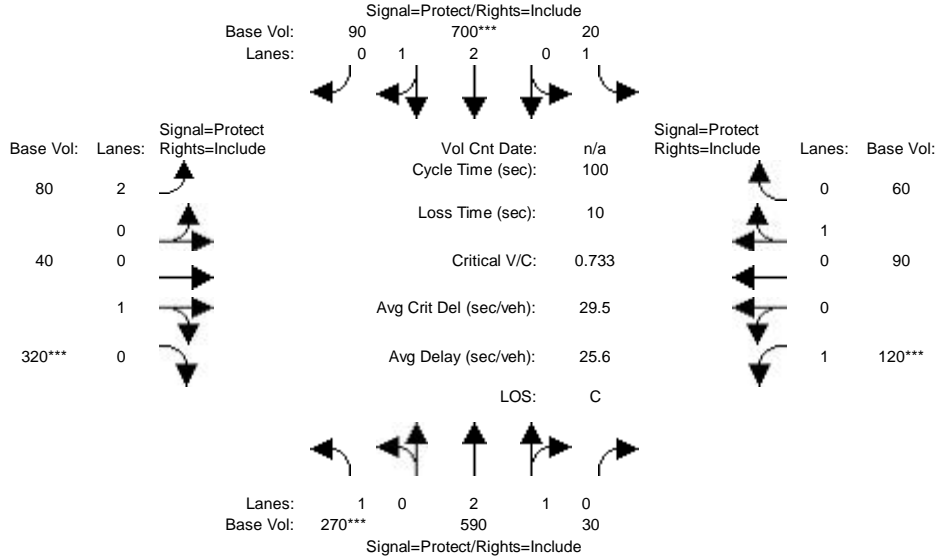


Street Name:	Central Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	190	410	30	250	700	730	490	230	110	30	240	210
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	190	410	30	250	700	730	490	230	110	30	240	210
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	190	410	30	250	700	730	490	230	110	30	240	210
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	190	410	30	250	700	730	490	230	110	30	240	210
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	190	410	30	250	700	730	490	230	110	30	240	210
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.86	0.14	1.00	2.00	1.00	1.00	1.35	0.65	1.00	1.07	0.93
Final Sat.:	1600	2982	218	1600	3200	1600	1600	2165	1035	1600	1707	1493
Capacity Analysis Module:												
Vol/Sat:	0.12	0.14	0.14	0.16	0.22	0.46	0.31	0.11	0.11	0.02	0.14	0.14
Crit Moves:	****				****	****				****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday PM

Intersection #30: Wilmington Ave. & University Dr.

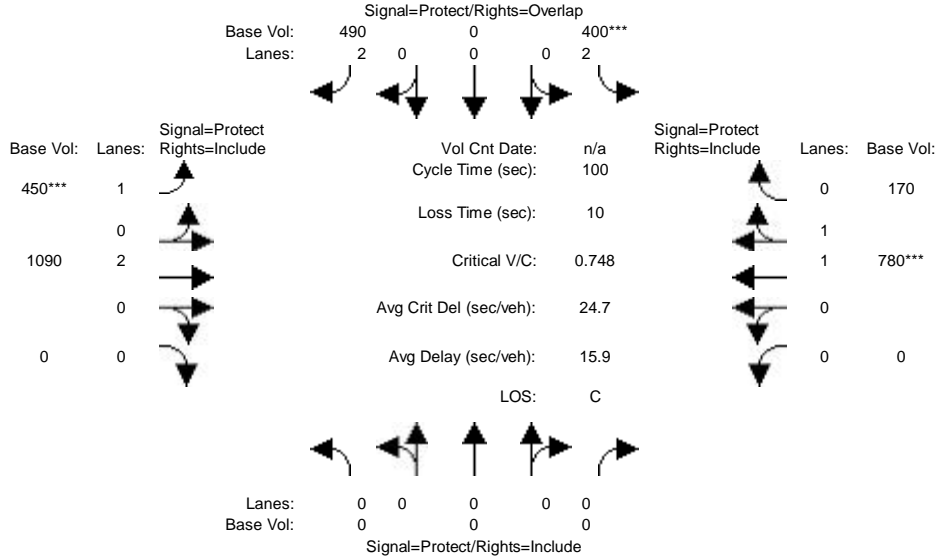


Street Name:	Wilmington Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	270	590	30	20	700	90	80	40	320	120	90	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	270	590	30	20	700	90	80	40	320	120	90	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	270	590	30	20	700	90	80	40	320	120	90	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	270	590	30	20	700	90	80	40	320	120	90	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	270	590	30	20	700	90	80	40	320	120	90	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.85	0.15	1.00	2.66	0.34	2.00	0.11	0.89	1.00	0.60	0.40
Final Sat.:	1600	4568	232	1600	4253	547	5760	178	1422	1600	960	640
Capacity Analysis Module:												
Vol/Sat:	0.17	0.13	0.13	0.01	0.16	0.16	0.01	0.22	0.23	0.08	0.09	0.09
Crit Moves:	****			****			****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday PM

Intersection #31: Central Ave. & Del Amo Blvd.

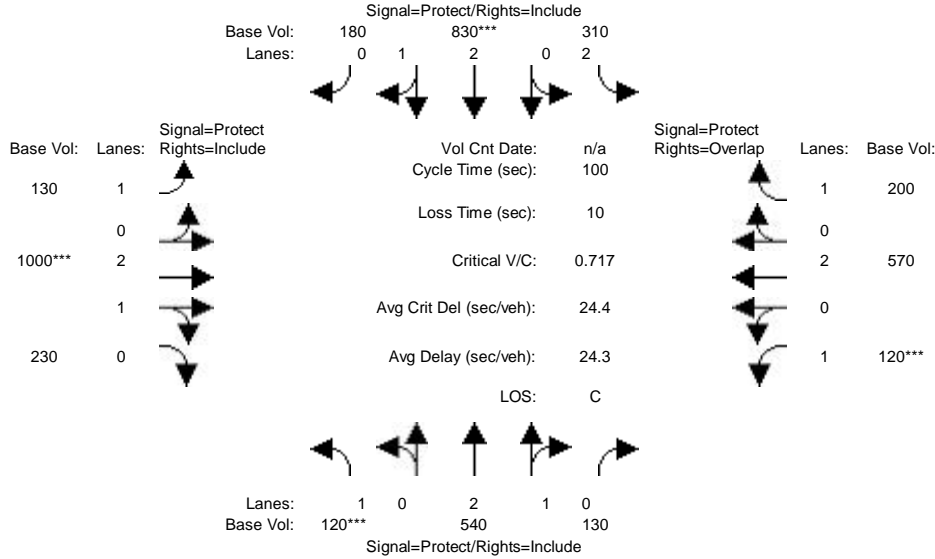


Street Name:	Central Ave.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	400	0	490	450	1090	0	0	780	170
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	400	0	490	450	1090	0	0	780	170
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	400	0	490	450	1090	0	0	780	170
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	400	0	490	450	1090	0	0	780	170
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	400	0	490	450	1090	0	0	780	170
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	2.00	1.00	2.00	0.00	0.00	1.64	0.36
Final Sat.:	0	0	0	5760	0	3200	1600	3200	0	0	2627	573
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.07	0.00	0.15	0.28	0.34	0.00	0.00	0.30	0.30
OvlAdjV/S:	0.00											
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday PM

Intersection #32: Wilmington Ave. & Del Amo Blvd.

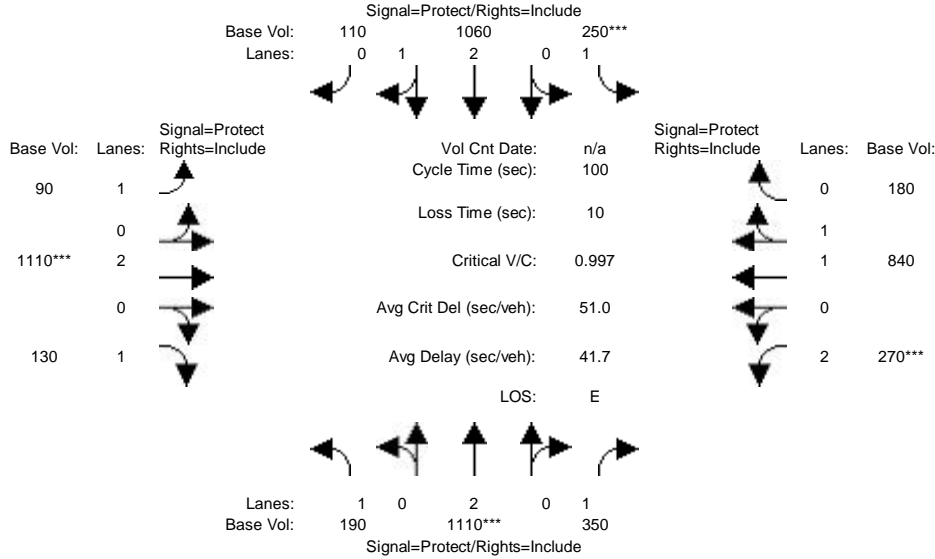


Street Name:	Wilmington Ave.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	120	540	130	310	830	180	130	1000	230	120	570	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	120	540	130	310	830	180	130	1000	230	120	570	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	120	540	130	310	830	180	130	1000	230	120	570	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	540	130	310	830	180	130	1000	230	120	570	200
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	120	540	130	310	830	180	130	1000	230	120	570	200
OvlAdjVol:												114
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.42	0.58	2.00	2.47	0.53	1.00	2.44	0.56	1.00	2.00	1.00
Final Sat.:	1600	3869	931	5760	3945	855	1600	3902	898	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.14	0.14	0.05	0.21	0.21	0.08	0.26	0.26	0.08	0.18	0.13
OvlAdjV/S:												0.07
Crit Moves:	****	****					****	****	****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday PM

Intersection #33: W. Artesia Blvd. & Crenshaw Blvd.

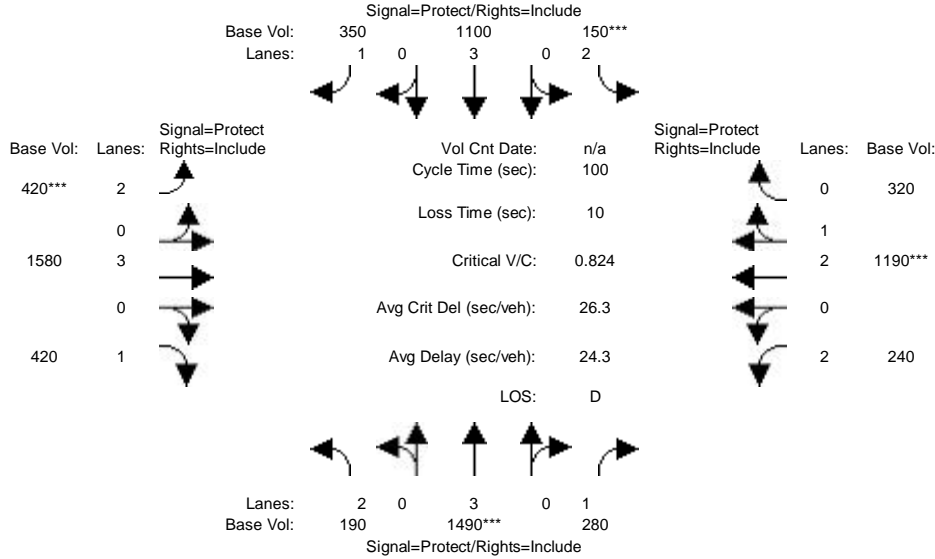


Street Name:	Crenshaw Blvd.						W. Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	190	1110	350	250	1060	110	90	1110	130	270	840	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	190	1110	350	250	1060	110	90	1110	130	270	840	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	190	1110	350	250	1060	110	90	1110	130	270	840	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	190	1110	350	250	1060	110	90	1110	130	270	840	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	190	1110	350	250	1060	110	90	1110	130	270	840	180
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.72	0.28	1.00	2.00	1.00	2.00	1.65	0.35
Final Sat.:	1600	3200	1600	1600	4349	451	1600	3200	1600	5760	2635	565
Capacity Analysis Module:												
Vol/Sat:	0.12	0.35	0.22	0.16	0.24	0.24	0.06	0.35	0.08	0.05	0.32	0.32
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
Existing With Project Weekday PM

Intersection #34: W 190th St. & South Western Ave.

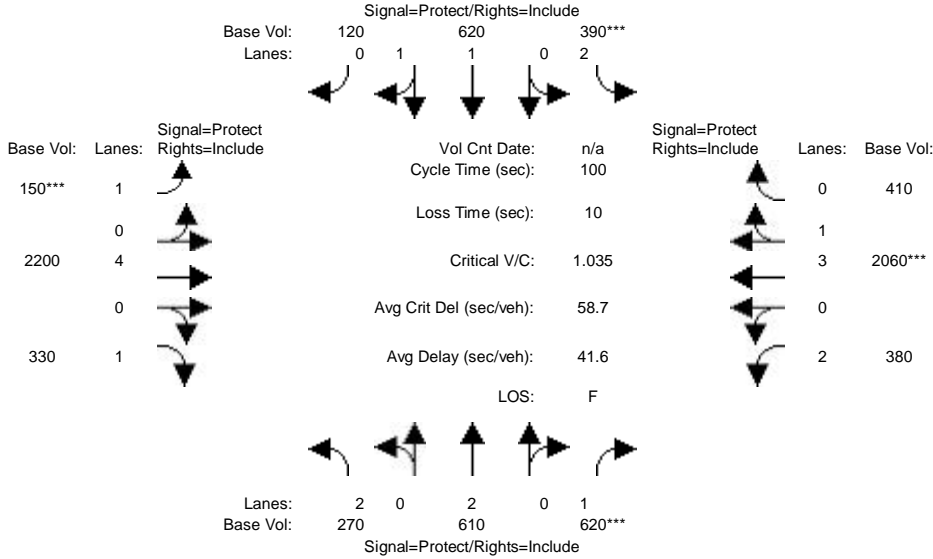


Street Name:	S. Western Ave.						W. 190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	190	1490	280	150	1100	350	420	1580	420	240	1190	320
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	190	1490	280	150	1100	350	420	1580	420	240	1190	320
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	190	1490	280	150	1100	350	420	1580	420	240	1190	320
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	190	1490	280	150	1100	350	420	1580	420	240	1190	320
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	190	1490	280	150	1100	350	420	1580	420	240	1190	320
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.36	0.64
Final Sat.:	5760	4800	1600	5760	4800	1600	5760	4800	1600	5760	3783	1017
Capacity Analysis Module:												
Vol/Sat:	0.03	0.31	0.17	0.03	0.23	0.22	0.07	0.33	0.26	0.04	0.31	0.31
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday PM

Intersection #35: W. Artesia Blvd. & Vermont Av.e

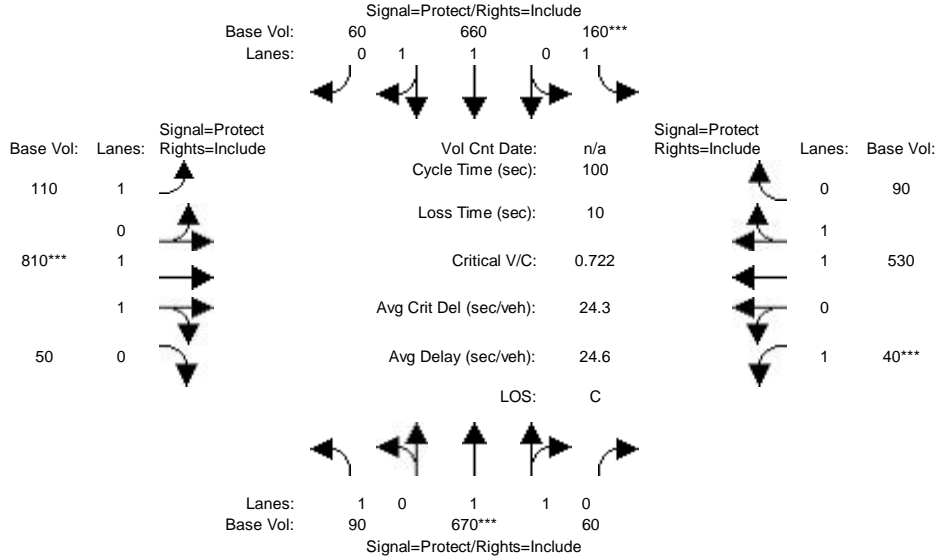


Street Name:	Vermont Ave.						W. Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	270	610	620	390	620	120	150	2200	330	380	2060	410
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	270	610	620	390	620	120	150	2200	330	380	2060	410
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	270	610	620	390	620	120	150	2200	330	380	2060	410
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	270	610	620	390	620	120	150	2200	330	380	2060	410
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	270	610	620	390	620	120	150	2200	330	380	2060	410
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	1.68	0.32	1.00	4.00	1.00	2.00	3.34	0.66
Final Sat.:	5760	3200	1600	5760	2681	519	1600	6400	1600	5760	5338	1062
Capacity Analysis Module:												
Vol/Sat:	0.05	0.19	0.39	0.07	0.23	0.23	0.09	0.34	0.21	0.07	0.39	0.39
Crit Moves:			****	****		****			****			****

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday PM

Intersection #36: Alameda St. & Compton Blvd.

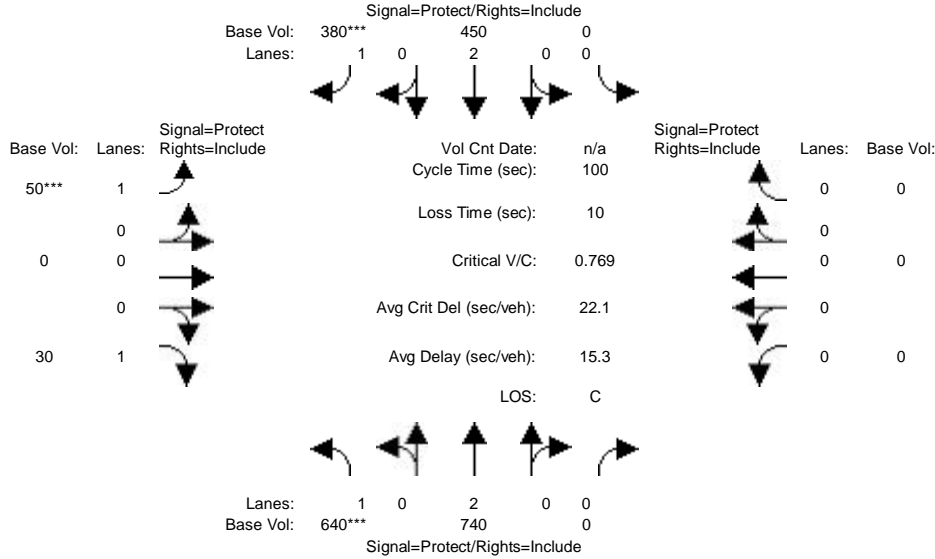


Street Name:	Alameda St.						Compton Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	90	670	60	160	660	60	110	810	50	40	530	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	670	60	160	660	60	110	810	50	40	530	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	670	60	160	660	60	110	810	50	40	530	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	670	60	160	660	60	110	810	50	40	530	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	670	60	160	660	60	110	810	50	40	530	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.84	0.16	1.00	1.83	0.17	1.00	1.88	0.12	1.00	1.71	0.29
Final Sat.:	1600	2937	263	1600	2933	267	1600	3014	186	1600	2735	465
Capacity Analysis Module:												
Vol/Sat:	0.06	0.23	0.23	0.10	0.23	0.22	0.07	0.27	0.27	0.03	0.19	0.19
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Weekday PM

Intersection #37: Alameda St. & SR 91 EB Ramps



Street Name:	Alameda St.						SR 91 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	640	740	0	0	450	380	50	0	30	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	640	740	0	0	450	380	50	0	30	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	640	740	0	0	450	380	50	0	30	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	640	740	0	0	450	380	50	0	30	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	640	740	0	0	450	380	50	0	30	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	3200	0	0	3200	1600	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.40	0.23	0.00	0.00	0.14	0.24	0.03	0.00	0.02	0.00	0.00	0.00
Crit Moves:	****				****	****	****					

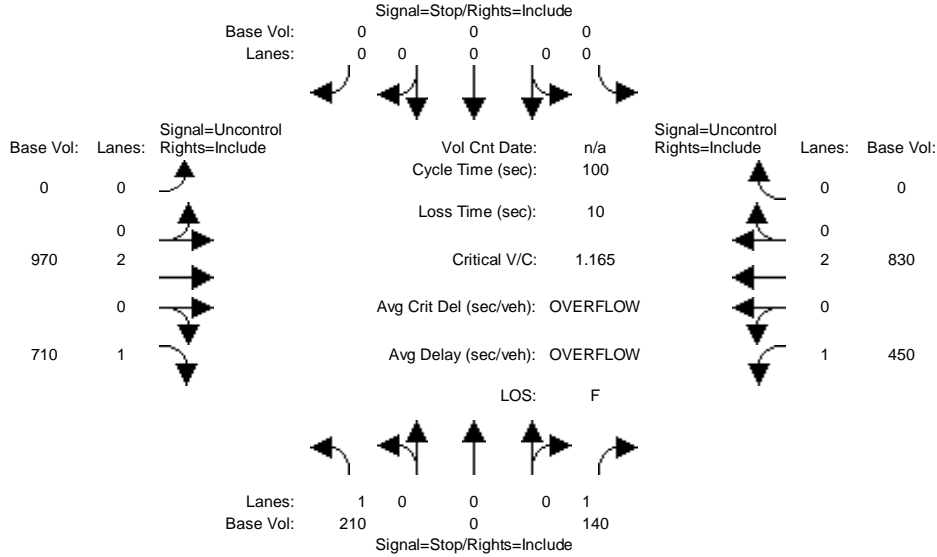
Appendix H

Intersection LOS Worksheets for Existing Plus Project Alternative 2 Weekday
Conditions

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 Existing With Project Alternative 2 Weekday AM

Intersection #1: Victoria St. & Drive D



Street Name:	Drive D						Victoria St..					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	210	0	140	0	0	0	0	970	710	450	830	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	210	0	140	0	0	0	0	970	710	450	830	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	210	0	140	0	0	0	0	970	710	450	830	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	210	0	140	0	0	0	0	970	710	450	830	0
Critical Gap Module:												
Critical Gp:	6.8	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	2285	xxxx	485	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1680	xxxx	xxxxx
Potent Cap.:	34	xxxx	533	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	386	xxxx	xxxxx
Move Cap.:	0	xxxx	533	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	386	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.26	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	1.16	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	1.0	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	17.6	xxxx	xxxxx
Control Del:	xxxxx	xxxx	14.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	130.5	xxxx	xxxxx
LOS by Move:	*	*	B	*	*	*	*	*	*	F	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	+Inf			xxxxxx			xxxxxx			xxxxxx		

ApproachLOS: F * * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #1 Victoria St. & Drive D

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 2 0 1	1 0 2 0 0
Initial Vol:	210 0 140	0 0 0 0	0 970 710	450 830 0
ApproachDel:	+Inf	xxxxxx	xxxxxx	xxxxxx

Approach[northbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=OVERFLOW]

SUCCEED - Vehicle-hours >= 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=350]

SUCCEED - Approach volume >= 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=3310]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #1 Victoria St. & Drive D

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 2 0 1	1 0 2 0 0
Initial Vol:	210 0 140	0 0 0 0	0 970 710	450 830 0

Major Street Volume: 2960

Minor Approach Volume: 350

Minor Approach Volume Threshold: -93 [less than minimum of 150]

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

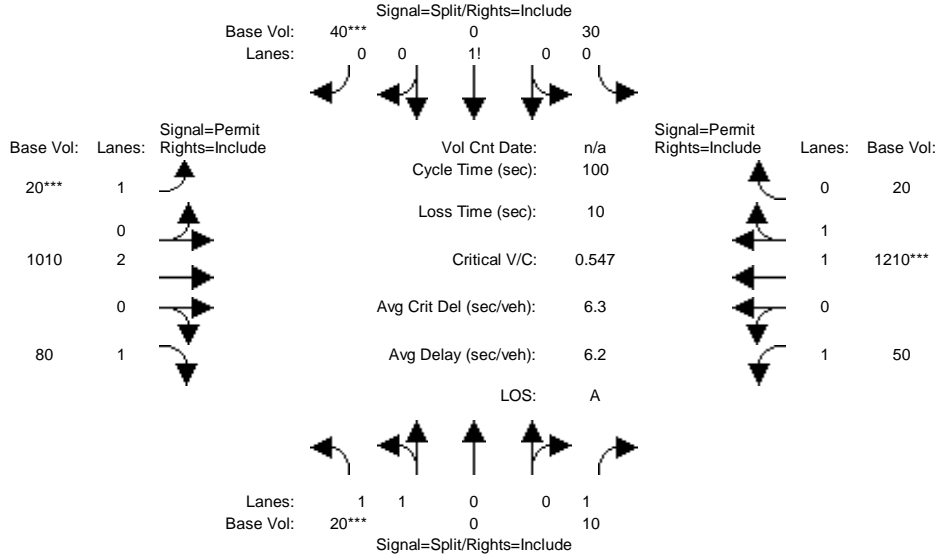
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a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alternative 2 Weekday AM

Intersection #2: Victoria St. & Tamcliff Ave.

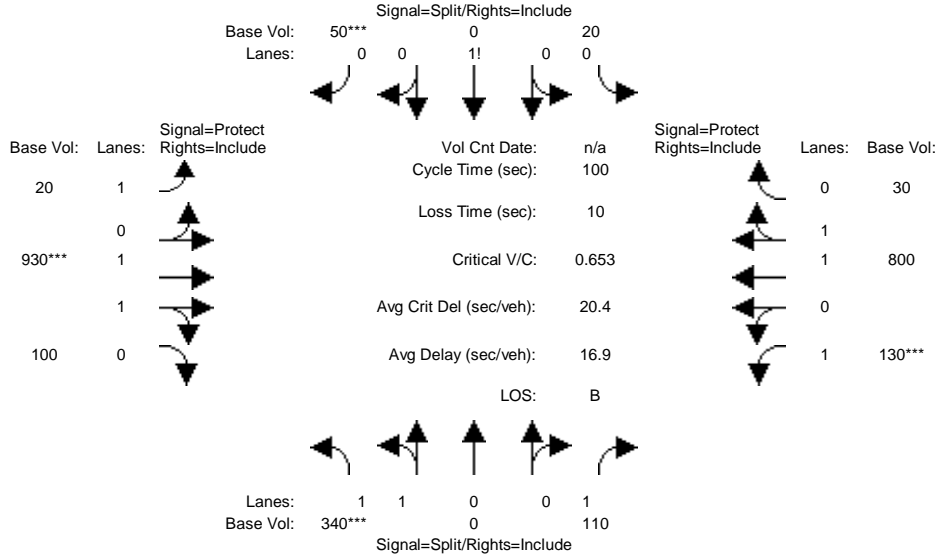


Street Name:	Victoria St.						Tamcliff Ave.													
Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																				
Base Vol:	20	0	10	30	0	40	20	1010	80	50	1210	20								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	0	10	30	0	40	20	1010	80	50	1210	20								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	0	10	30	0	40	20	1010	80	50	1210	20								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	20	0	10	30	0	40	20	1010	80	50	1210	20								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	0	10	30	0	40	20	1010	80	50	1210	20								
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.43	0.00	0.57	1.00	2.00	1.00	1.00	1.97	0.03								
Final Sat.:	3200	0	1600	686	0	914	1600	3200	1600	1600	3148	52								
Capacity Analysis Module:																				
Vol/Sat:	0.01	0.00	0.01	0.04	0.00	0.04	0.01	0.32	0.05	0.03	0.38	0.38								
Crit Moves:	****					****	****				****									

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alternative 2 Weekday AM

Intersection #3: Victoria St. & Birchknoll Dr.

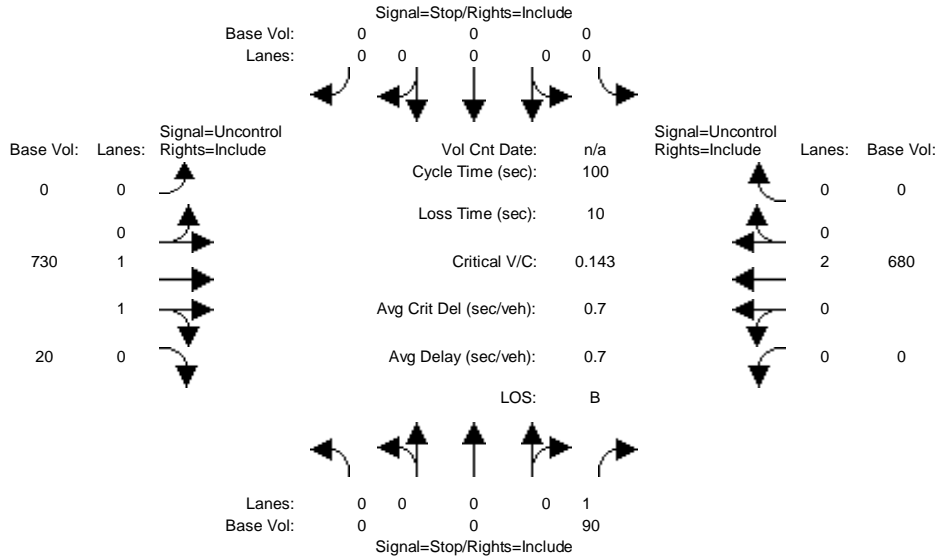


Street Name:	Victoria St.						Birchknoll Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	340	0	110	20	0	50	20	930	100	130	800	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	340	0	110	20	0	50	20	930	100	130	800	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	340	0	110	20	0	50	20	930	100	130	800	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	340	0	110	20	0	50	20	930	100	130	800	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	340	0	110	20	0	50	20	930	100	130	800	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.29	0.00	0.71	1.00	1.81	0.19	1.00	1.93	0.07
Final Sat.:	3200	0	1600	457	0	1143	1600	2889	311	1600	3084	116
Capacity Analysis Module:												
Vol/Sat:	0.11	0.00	0.07	0.04	0.00	0.04	0.01	0.32	0.32	0.08	0.26	0.26
Crit Moves:	****					****	****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 Existing With Project Alternative 2 Weekday AM

Intersection #4: Victoria St. & Project Service Rd.



Street Name:	Project Service Rd.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	90	0	0	0	0	730	20	0	680	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	90	0	0	0	0	730	20	0	680	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	90	0	0	0	0	730	20	0	680	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	90	0	0	0	0	730	20	0	680	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	xxxx	xxxx	375	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	628	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	628	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.14	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	0.5	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	11.7	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	B	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	11.7			xxxxxx			xxxxxx			xxxxxx		

ApproachLOS: B * * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #4 Victoria St. & Project Service Rd.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 1	0 0 0 0 0	0 0 1 1 0	0 0 2 0 0
Initial Vol:	0 0 90	0 0 0	0 730 20	0 680 0
ApproachDel:	11.7	xxxxxx	xxxxxx	xxxxxx

Approach[northbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.3]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=90]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=1520]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #4 Victoria St. & Project Service Rd.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 1	0 0 0 0 0	0 0 1 1 0	0 0 2 0 0
Initial Vol:	0 0 90	0 0 0	0 730 20	0 680 0

Major Street Volume: 1430

Minor Approach Volume: 90

Minor Approach Volume Threshold: 162

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

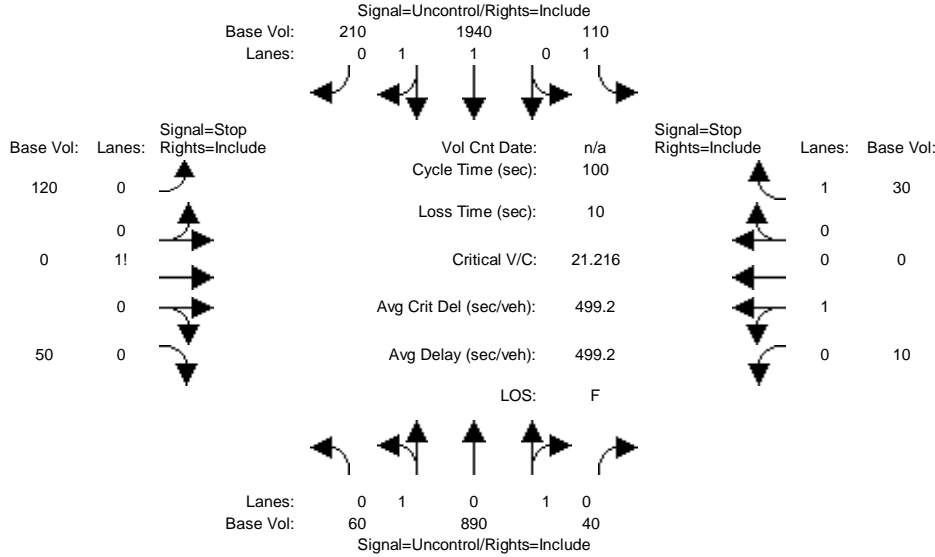
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 Existing With Project Alternative 2 Weekday AM

Intersection #5: Central Ave. & Charles Willard St.



Street Name:	Central Ave.						Charles Willard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	60	890	40	110	1940	210	120	0	50	10	0	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	890	40	110	1940	210	120	0	50	10	0	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	890	40	110	1940	210	120	0	50	10	0	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	60	890	40	110	1940	210	120	0	50	10	0	30
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	4.1	xxxx	xxxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxxx	2.2	xxxx	xxxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflct Vol:	2150	xxxx	xxxxxx	930	xxxx	xxxxxx	2830	3315	1075	2220	3400	465
Potent Cap.:	254	xxxx	xxxxxx	744	xxxx	xxxxxx	8	9	219	25	8	550
Move Cap.:	254	xxxx	xxxxxx	744	xxxx	xxxxxx	6	5	219	14	5	550
Volume/Cap:	0.24	xxxx	xxxx	0.15	xxxx	xxxx	21.22	0.00	0.23	0.73	0.00	0.05
Level Of Service Module:												
2Way95thQ:	0.9	xxxx	xxxxxx	0.5	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	0.2
Control Del:	23.5	xxxx	xxxxxx	10.7	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	11.9
LOS by Move:	C	*	*	B	*	*	*	*	*	*	*	B
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	8	xxxxxx	14	xxxx	xxxxxx
Shared Queue:	0.9	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	23.0	xxxxxx	1.7	xxxx	xxxxxx
Shrd ConDel:	23.5	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	509.4	xxxx	xxxxxx
Shared LOS:	C	*	*	*	*	*	*	F	*	F	*	*
ApproachDel:	xxxxxxx			xxxxxxx			xxxxxxx			136.3		

ApproachLOS: * * F F

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #5 Central Ave. & Charles Willard St.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	0	1	0	1	0	1	0	0	1	0	1	0
Initial Vol:	60	890	40	110	1940	210	120	0	50	10	0	30
ApproachDel:	xxxxxxx			xxxxxxx			xxxxxxx			136.3		

Approach[eastbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=477.6]
SUCCEED - Vehicle-hours greater than or equal to 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=170]
SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=3460]
SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Approach[westbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=1.5]
FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=40]
FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=3460]
SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #5 Central Ave. & Charles Willard St.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	0	1	0	1	0	1	0	0	1	0	1	0
Initial Vol:	60	890	40	110	1940	210	120	0	50	10	0	30

Major Street Volume: 3250
Minor Approach Volume: 170
Minor Approach Volume Threshold: -121 [less than minimum of 100]

SIGNAL WARRANT DISCLAIMER

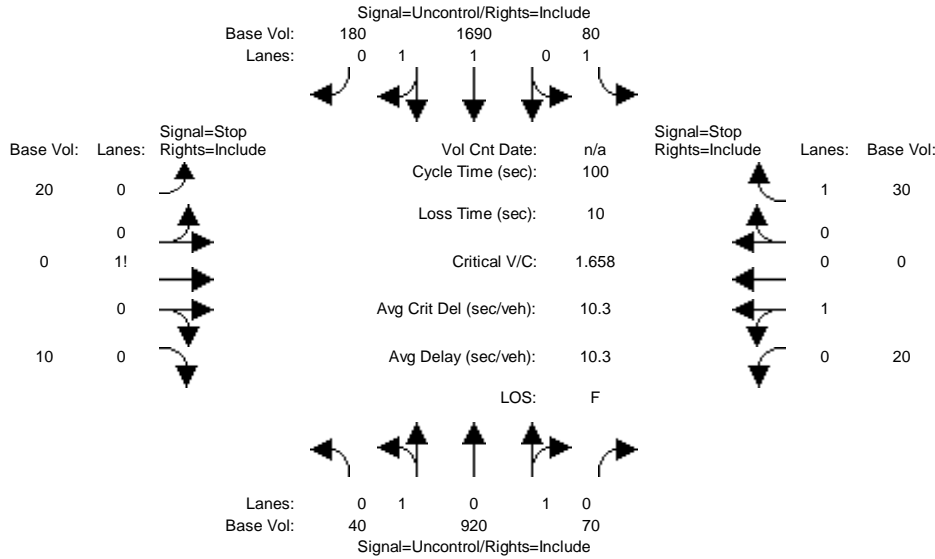
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 Existing With Project Alternative 2 Weekday AM

Intersection #6: Central Ave. & Project Driveway/Beachey Pl.



Street Name:	Central Ave.						Beachey Pl.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	40	920	70	80	1690	180	20	0	10	20	0	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	920	70	80	1690	180	20	0	10	20	0	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	920	70	80	1690	180	20	0	10	20	0	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	40	920	70	80	1690	180	20	0	10	20	0	30
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	4.1	xxxx	xxxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxxx	2.2	xxxx	xxxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflct Vol:	1870	xxxx	xxxxxx	990	xxxx	xxxxxx	2480	3010	935	2040	3065	495
Potent Cap.:	326	xxxx	xxxxxx	706	xxxx	xxxxxx	16	14	271	34	13	525
Move Cap.:	326	xxxx	xxxxxx	706	xxxx	xxxxxx	12	10	271	27	10	525
Volume/Cap:	0.12	xxxx	xxxx	0.11	xxxx	xxxx	1.66	0.00	0.04	0.75	0.00	0.06
Level Of Service Module:												
2Way95thQ:	0.4	xxxx	xxxxxx	0.4	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	0.2
Control Del:	17.6	xxxx	xxxxxx	10.7	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	12.3
LOS by Move:	C	*	*	B	*	*	*	*	*	*	*	B
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	18	xxxxxx	27	xxxx	xxxxxx
Shared Queue:	0.4	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	4.2	xxxxxx	2.3	xxxx	xxxxxx
Shrd ConDel:	17.6	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	788	xxxxxx	302.8	xxxx	xxxxxx
Shared LOS:	C	*	*	*	*	*	*	F	*	F	*	*
ApproachDel:	xxxxxxx	xxxxxxx	xxxxxxx	xxxxxxx	xxxxxxx	xxxxxxx	788.2	xxxxxxx	xxxxxxx	128.5	xxxxxxx	

ApproachLOS: * * F F

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #6 Central Ave. & Project Driveway/Beachey Pl.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	0	1	0	1	0	1	0	0	1	0	1	0
Initial Vol:	40	920	70	80	1690	180	20	0	10	20	0	30
ApproachDel:	xxxxxx			xxxxxx			788.2			128.5		

Approach[eastbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=6.6]

SUCCEED - Vehicle-hours greater than or equal to 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=30]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=3060]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Approach[westbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=1.8]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=50]

FAIL - Approach volume less than 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=3060]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #6 Central Ave. & Project Driveway/Beachey Pl.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	0	1	0	1	0	1	0	0	1	0	1	0
Initial Vol:	40	920	70	80	1690	180	20	0	10	20	0	30

Major Street Volume: 2980

Minor Approach Volume: 50

Minor Approach Volume Threshold: -95 [less than minimum of 150]

SIGNAL WARRANT DISCLAIMER

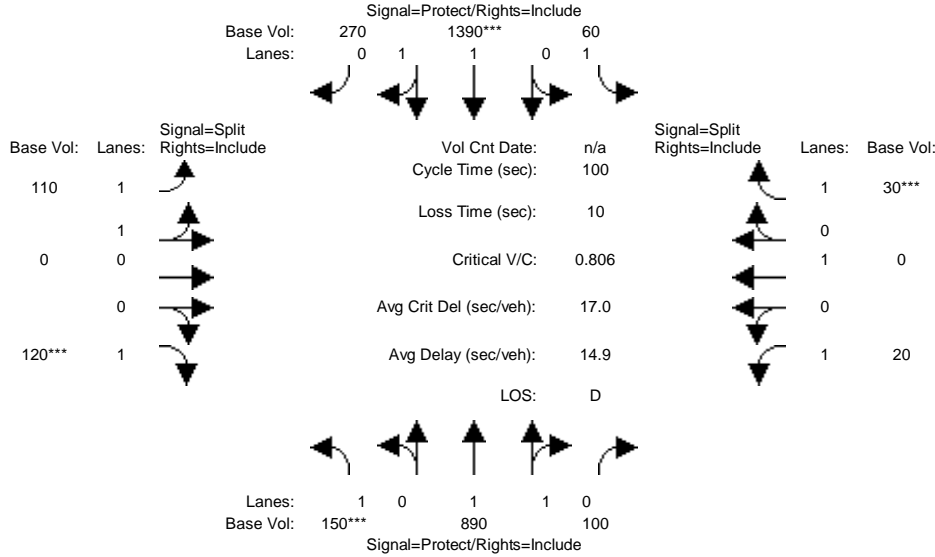
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alternative 2 Weekday AM

Intersection #7: Central Ave. & Glenn Curtiss St.

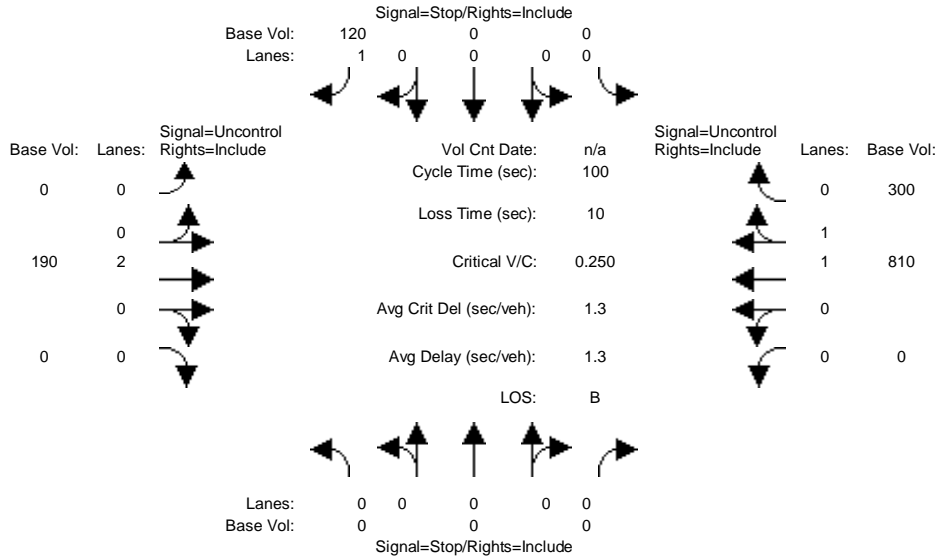


Street Name:	Central Ave.						Glenn Curtiss St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	150	890	100	60	1390	270	110	0	120	20	0	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	890	100	60	1390	270	110	0	120	20	0	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	890	100	60	1390	270	110	0	120	20	0	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	890	100	60	1390	270	110	0	120	20	0	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	890	100	60	1390	270	110	0	120	20	0	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.80	0.20	1.00	1.67	0.33	2.00	0.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	2877	323	1600	2680	520	3200	0	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.31	0.31	0.04	0.52	0.52	0.03	0.00	0.08	0.01	0.00	0.02
Crit Moves:	****				****				****			****

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
Existing With Project Alternative 2 Weekday AM

Intersection #8: University Dr./Birchknoll Dr. Ext.



Vol Cnt Date: n/a
 Cycle Time (sec): 100
 Loss Time (sec): 10
 Critical V/C: 0.250
 Avg Crit Del (sec/veh): 1.3
 Avg Delay (sec/veh): 1.3
 LOS: B

Street Name:	Birchknoll Dr. Ext.					University Dr.						
Approach:	North Bound			South Bound		East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:							0	190	0	0	810	300
Base Vol:	0	0	0	0	0	120	0	190	0	0	810	300
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	120	0	190	0	0	810	300
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	120	0	190	0	0	810	300
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	120	0	190	0	0	810	300
Critical Gap Module:							6.9					
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:							555					
Cnflct Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	555	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	480	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	480	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	0.25	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:							1.0					
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	1.0	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	15.0	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	B	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxxx			15.0			xxxxxxx			xxxxxxx		

ApproachLOS: * B * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #8 University Dr./Birchknoll Dr. Ext.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 0	0 0 0 0 1	0 0 2 0 0	0 0 1 1 0
Initial Vol:	0 0 0	0 0 120	0 190 0	0 810 300
ApproachDel:	xxxxxx	15.0	xxxxxx	xxxxxx

Approach[southbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.5]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=120]

SUCCEED - Approach volume greater than or equal to 100 for one lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=1420]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #8 University Dr./Birchknoll Dr. Ext.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 0	0 0 0 0 1	0 0 2 0 0	0 0 1 1 0
Initial Vol:	0 0 0	0 0 120	0 190 0	0 810 300

Major Street Volume: 1300

Minor Approach Volume: 120

Minor Approach Volume Threshold: 194

SIGNAL WARRANT DISCLAIMER

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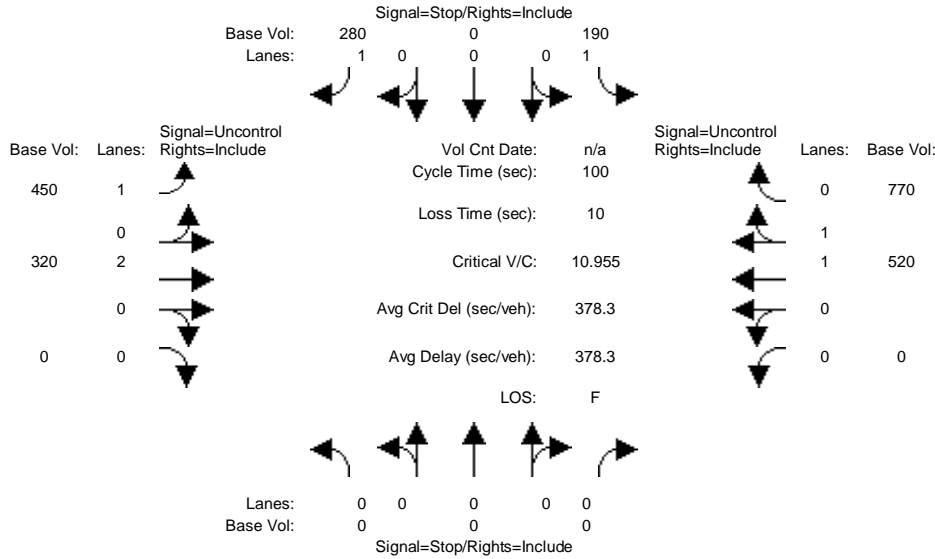
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 Existing With Project Alternative 2 Weekday AM

Intersection #9: University Dr. & Toro Center Dr.



Street Name:	University Dr.						Toro Center Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	190	0	280	450	320	0	0	520	770
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	190	0	280	450	320	0	0	520	770
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	190	0	280	450	320	0	0	520	770
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	190	0	280	450	320	0	0	520	770
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.8	xxxx	6.9	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	xxxx	xxxx	xxxxx	1965	xxxx	645	1290	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	56	xxxx	420	544	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	17	xxxx	420	544	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	10.95	xxxx	0.67	0.83	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	24.5	xxxx	4.7	8.4	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	4910	xxxx	29.1	35.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	F	*	D	E	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxxx			2002.3			xxxxxxx			xxxxxxx		

ApproachLOS: * F * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #9 University Dr. & Toro Center Dr.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0	0	0	0	0	0	1	0	2	0	0	1
Initial Vol:	0	0	0	190	0	280	450	320	0	0	520	770
ApproachDel:	xxxxxxx			2002.3			xxxxxxx			xxxxxxx		

Approach[southbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=261.4]

SUCCEED - Vehicle-hours >= 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=470]

SUCCEED - Approach volume >= 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=2530]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #9 University Dr. & Toro Center Dr.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0	0	0	0	0	0	1	0	2	0	0	1
Initial Vol:	0	0	0	190	0	280	450	320	0	0	520	770

Major Street Volume: 2060

Minor Approach Volume: 470

Minor Approach Volume Threshold: 63 [less than minimum of 150]

SIGNAL WARRANT DISCLAIMER

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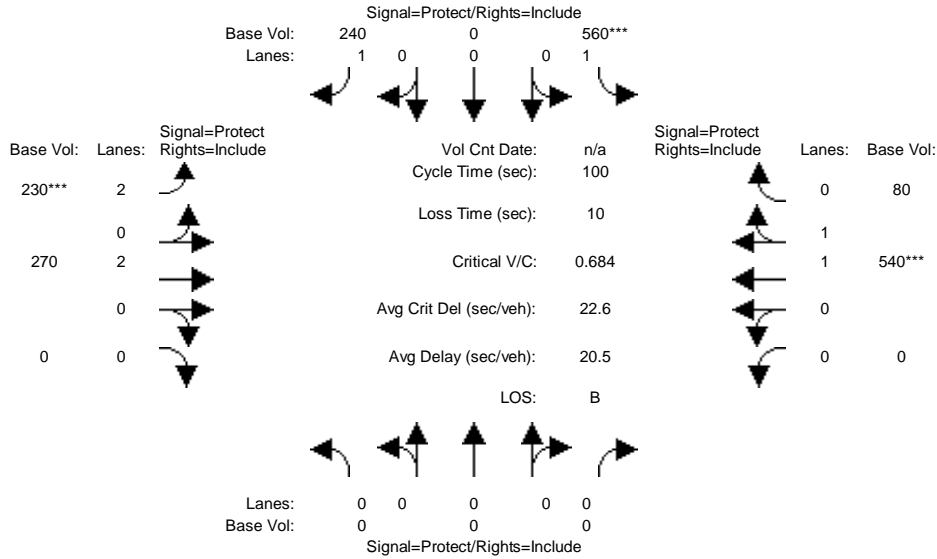
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alternative 2 Weekday AM

Intersection #10: Albertoni St. & SR 91 EB Ramps

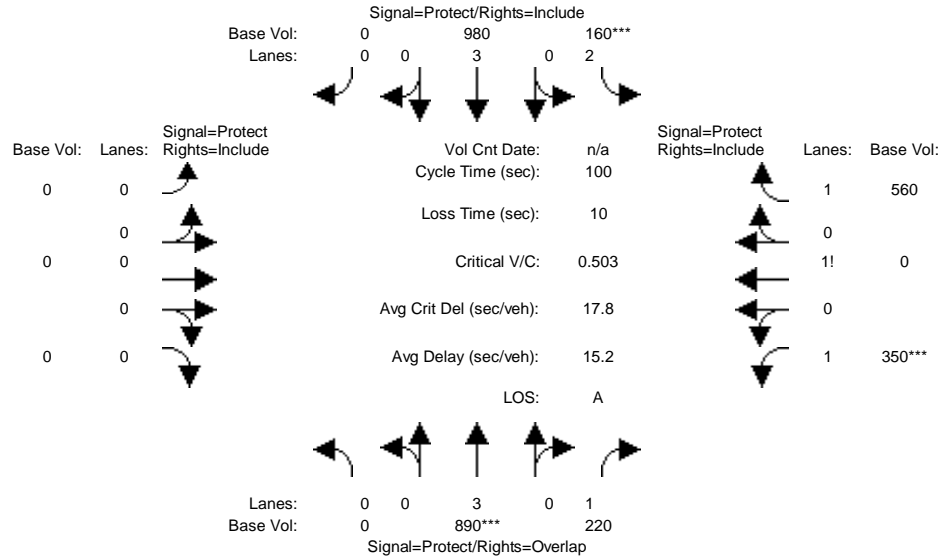


Street Name:	Albertoni St.						SR 91 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	560	0	240	230	270	0	0	540	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	560	0	240	230	270	0	0	540	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	560	0	240	230	270	0	0	540	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	560	0	240	230	270	0	0	540	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	560	0	240	230	270	0	0	540	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.74	0.26
Final Sat.:	0	0	0	1600	0	1600	5760	3200	0	0	2787	413
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.35	0.00	0.15	0.04	0.08	0.00	0.00	0.19	0.19
Crit Moves:				****			****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alternative 2 Weekday AM

Intersection #11: Avalon Blvd. & SR 91 WB On-Ramp

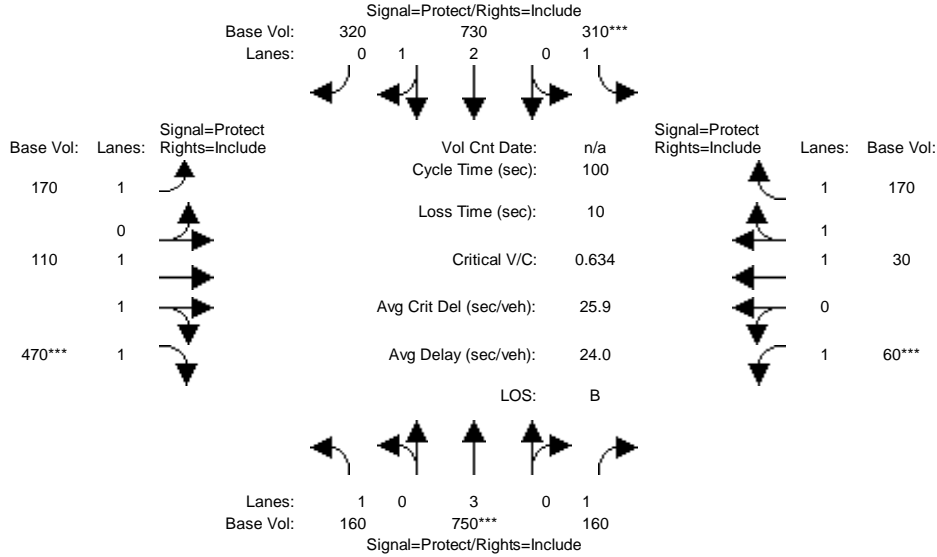


Street Name:	Avalon Blvd.						SR 91 WB On-Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	890	220	160	980	0	0	0	0	350	0	560
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	890	220	160	980	0	0	0	0	350	0	560
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	890	220	160	980	0	0	0	0	350	0	560
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	890	220	160	980	0	0	0	0	350	0	560
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	890	220	160	980	0	0	0	0	350	0	560
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.15	xxxx	1.85
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	1846	0	2954
Capacity Analysis Module:												
Vol/Sat:	0.00	0.19	0.14	0.03	0.20	0.00	0.00	0.00	0.00	0.19	0.00	0.19
OvlAdjV/S:	0.00											
Crit Moves:	****			****						****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alternative 2 Weekday AM

Intersection #12: Avalon Blvd. & Albertoni St.

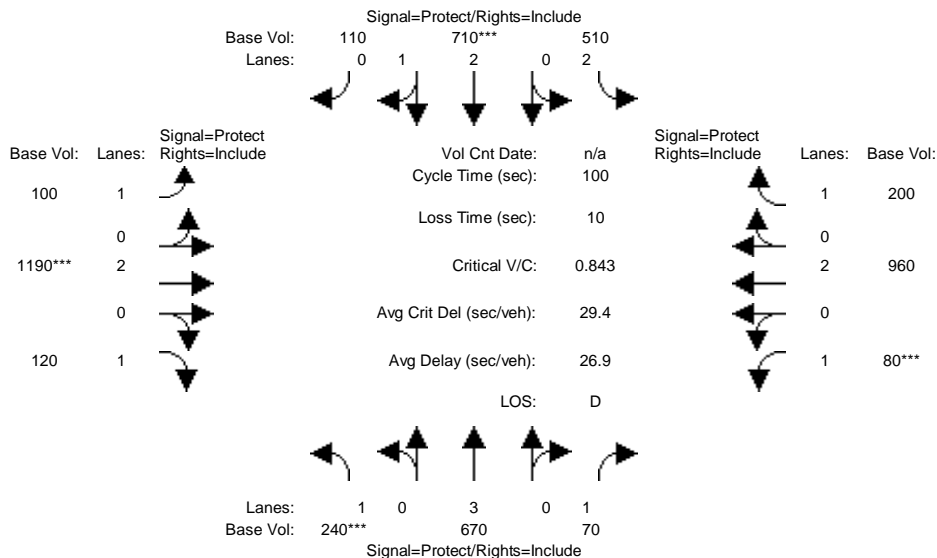


Street Name:	Avalon Blvd.						Albertoni St.														
Approach:	North Bound			South Bound			East Bound			West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																					
Base Vol:	160	750	160	310	730	320	170	110	470	60	30	170									
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
Initial Bse:	160	750	160	310	730	320	170	110	470	60	30	170									
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
PHF Volume:	160	750	160	310	730	320	170	110	470	60	30	170									
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0									
Reduced Vol:	160	750	160	310	730	320	170	110	470	60	30	170									
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
Final Volume:	160	750	160	310	730	320	170	110	470	60	30	170									
Saturation Flow Module:																					
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600									
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
Lanes:	1.00	3.00	1.00	1.00	2.09	0.91	1.00	1.00	2.00	1.00	1.00	2.00									
Final Sat.:	1600	4800	1600	1600	3337	1463	1600	1600	3200	1600	1600	3200									
Capacity Analysis Module:																					
Vol/Sat:	0.10	0.16	0.10	0.19	0.22	0.22	0.11	0.07	0.15	0.04	0.02	0.05									
Crit Moves:	****			****			****			****											

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alternative 2 Weekday AM

Intersection #13: Avalon Blvd. & Victoria St.

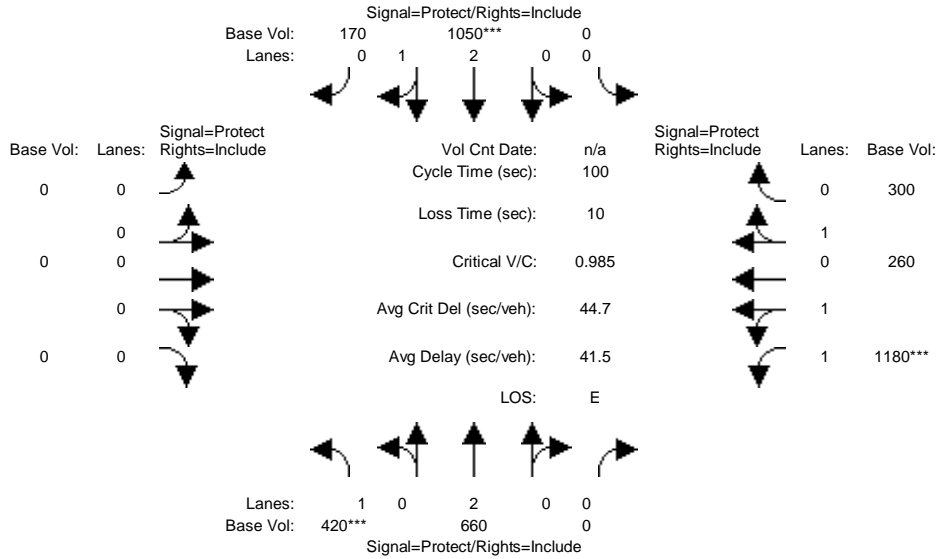


Street Name:	Avalon Blvd.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	240	670	70	510	710	110	100	1190	120	80	960	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	240	670	70	510	710	110	100	1190	120	80	960	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	240	670	70	510	710	110	100	1190	120	80	960	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	240	670	70	510	710	110	100	1190	120	80	960	200
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	240	670	70	510	710	110	100	1190	120	80	960	200
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.60	0.40	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4156	644	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.15	0.14	0.04	0.09	0.17	0.17	0.06	0.37	0.08	0.05	0.30	0.13
Crit Moves:	****				****			****			****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alternative 2 Weekday AM

Intersection #14: Central Ave. & Artesia Blvd.

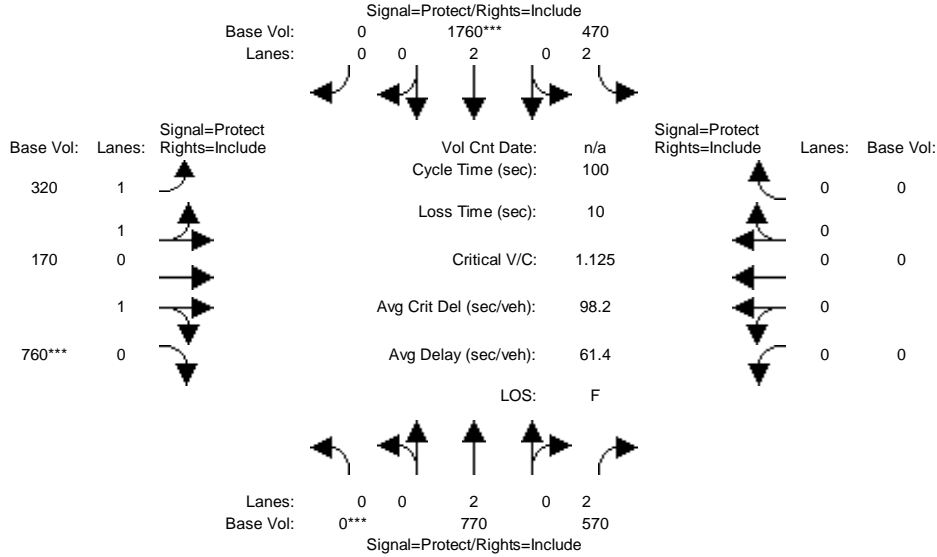


Street Name:	Central Ave.						Artesia Blvd.														
Approach:	North Bound			South Bound			East Bound			West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																					
Base Vol:	420	660	0	0	1050	170	0	0	0	1180	260	300									
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
Initial Bse:	420	660	0	0	1050	170	0	0	0	1180	260	300									
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
PHF Volume:	420	660	0	0	1050	170	0	0	0	1180	260	300									
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0									
Reduced Vol:	420	660	0	0	1050	170	0	0	0	1180	260	300									
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
FinalVolume:	420	660	0	0	1050	170	0	0	0	1180	260	300									
Saturation Flow Module:																					
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600									
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
Lanes:	1.00	2.00	0.00	0.00	2.58	0.42	0.00	0.00	0.00	2.00	0.46	0.54									
Final Sat.:	1600	3200	0	0	4131	669	0	0	0	3200	743	857									
Capacity Analysis Module:																					
Vol/Sat:	0.26	0.21	0.00	0.00	0.25	0.25	0.00	0.00	0.00	0.37	0.35	0.35									
Crit Moves:	****				****					****											

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alternative 2 Weekday AM

Intersection #15: Central Ave. & Albertoni St./Artesia Blvd. EB

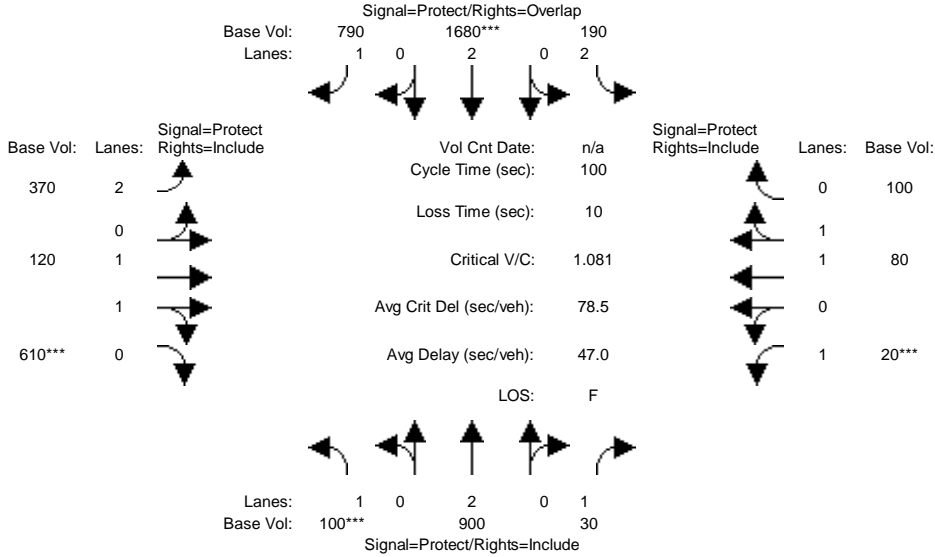


Street Name:	Central Ave.						Albertoni St./Artesia Blvd. EB														
Approach:	North Bound			South Bound			East Bound			West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																					
Base Vol:	0	770	570	470	1760	0	320	170	760	0	0	0	0	0	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	770	570	470	1760	0	320	170	760	0	0	0	0	0	0	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	770	570	470	1760	0	320	170	760	0	0	0	0	0	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	770	570	470	1760	0	320	170	760	0	0	0	0	0	0	0	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	770	570	470	1760	0	320	170	760	0	0	0	0	0	0	0	0	0	0	0	0
Saturation Flow Module:																					
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.31	0.69	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	2090	1110	1600	0	0	0	0	0	0	0	0	0	0	0	0
Capacity Analysis Module:																					
Vol/Sat:	0.00	0.24	0.18	0.08	0.55	0.00	0.15	0.15	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****				****				****												

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alternative 2 Weekday AM

Intersection #16: Central Ave. & Victoria St.

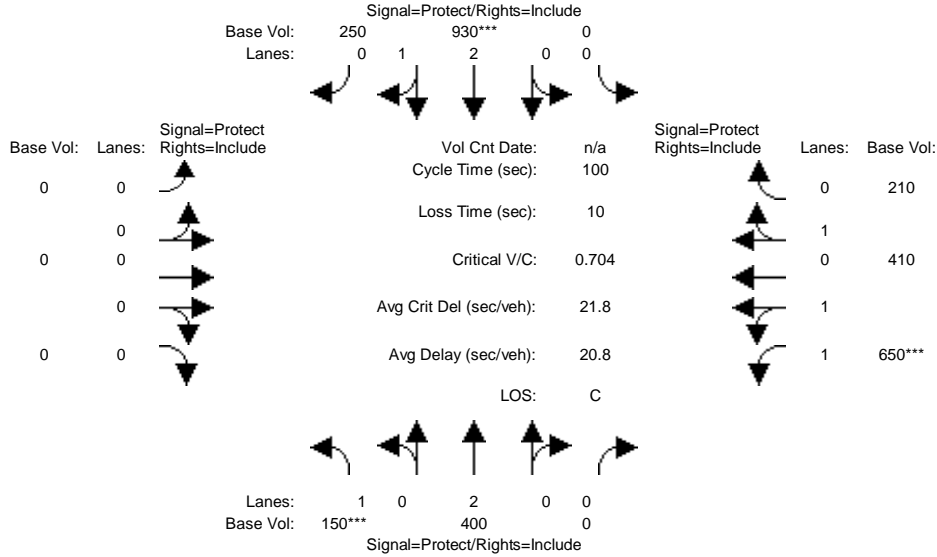


Street Name:	Central Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	100	900	30	190	1680	790	370	120	610	20	80	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	100	900	30	190	1680	790	370	120	610	20	80	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	100	900	30	190	1680	790	370	120	610	20	80	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	100	900	30	190	1680	790	370	120	610	20	80	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	100	900	30	190	1680	790	370	120	610	20	80	100
OvlAdjVol:	687											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	5760	3200	1600	5760	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.28	0.02	0.03	0.53	0.49	0.06	0.08	0.38	0.01	0.05	0.06
OvlAdjV/S:	0.43											
Crit Moves:	***				***		***		***	***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alternative 2 Weekday AM

Intersection #17: Wilmington Ave. & Artesia Blvd. WB

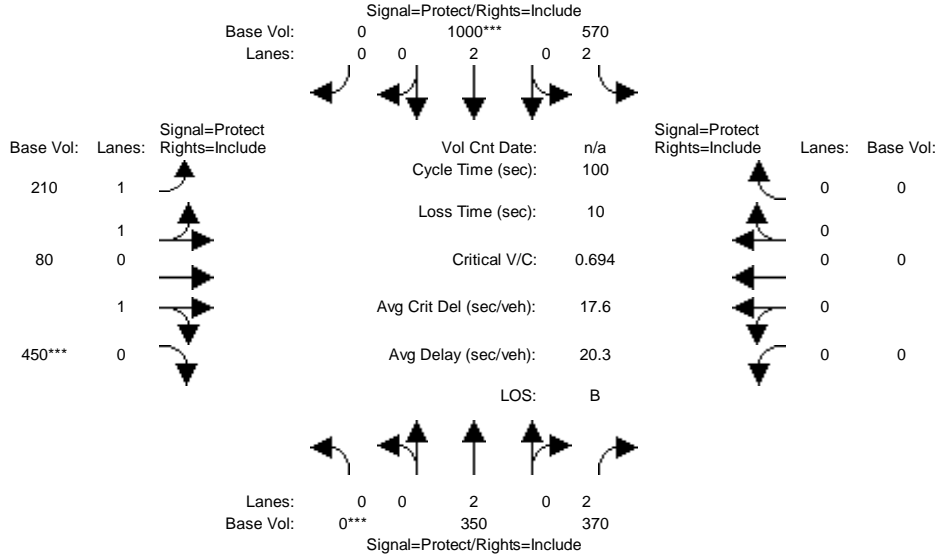


Street Name:	Wilmington Ave.						Artesia Blvd. WB														
Approach:	North Bound			South Bound			East Bound			West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																					
Base Vol:	150	400	0	0	930	250	0	0	0	650	410	210									
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
Initial Bse:	150	400	0	0	930	250	0	0	0	650	410	210									
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
PHF Volume:	150	400	0	0	930	250	0	0	0	650	410	210									
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0									
Reduced Vol:	150	400	0	0	930	250	0	0	0	650	410	210									
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
FinalVolume:	150	400	0	0	930	250	0	0	0	650	410	210									
Saturation Flow Module:																					
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600									
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
Lanes:	1.00	2.00	0.00	0.00	2.36	0.64	0.00	0.00	0.00	1.53	0.97	0.50									
Final Sat.:	1600	3200	0	0	3783	1017	0	0	0	2456	1550	794									
Capacity Analysis Module:																					
Vol/Sat:	0.09	0.13	0.00	0.00	0.25	0.25	0.00	0.00	0.00	0.26	0.26	0.26									
Crit Moves:	****				****					****											

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alternative 2 Weekday AM

Intersection #18: Wilmington Ave. & Artesia Blvd. EB

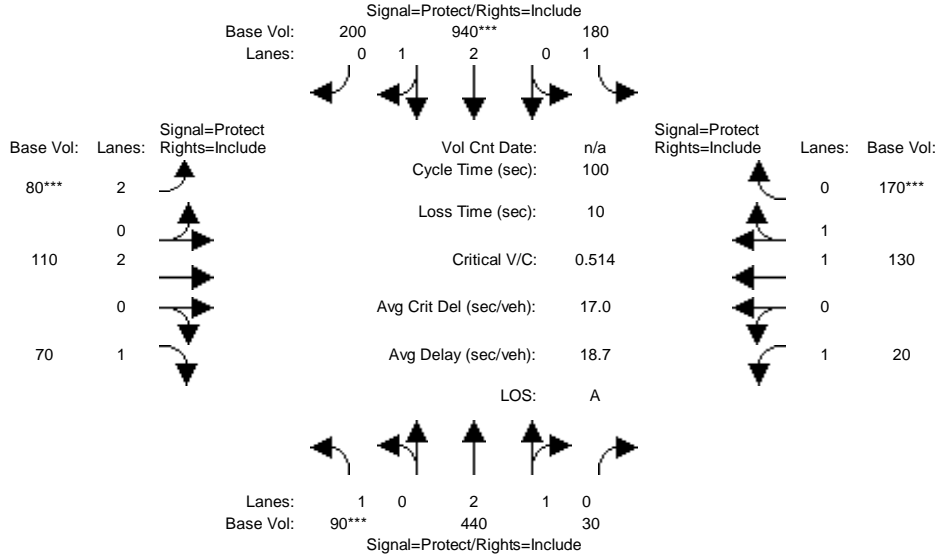


Street Name:	Wilmington Ave.						Artesia Blvd. EB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	350	370	570	1000	0	210	80	450	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	350	370	570	1000	0	210	80	450	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	350	370	570	1000	0	210	80	450	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	350	370	570	1000	0	210	80	450	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	350	370	570	1000	0	210	80	450	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.45	0.55	1.00	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	2317	883	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.11	0.12	0.10	0.31	0.00	0.09	0.09	0.28	0.00	0.00	0.00
Crit Moves:	****				****				****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alternative 2 Weekday AM

Intersection #19: Wilmington Ave. & Victoria St.

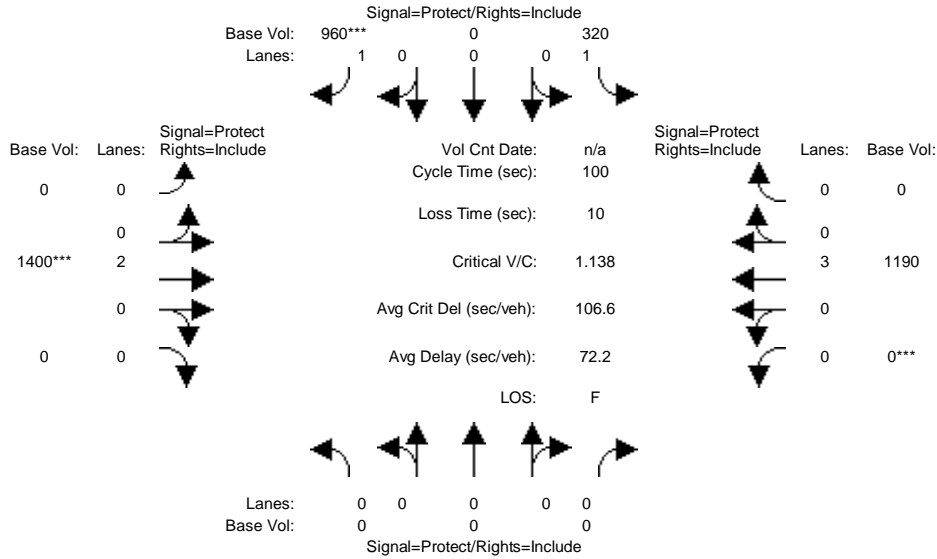


Street Name:	Wilmington Ave.						Victoria St.													
Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																				
Base Vol:	90	440	30	180	940	200	80	110	70	20	130	170								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							
Initial Bse:	90	440	30	180	940	200	80	110	70	20	130	170								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							
PHF Volume:	90	440	30	180	940	200	80	110	70	20	130	170								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	90	440	30	180	940	200	80	110	70	20	130	170								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							
FinalVolume:	90	440	30	180	940	200	80	110	70	20	130	170								
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600							
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00							
Lanes:	1.00	2.81	0.19	1.00	2.47	0.53	2.00	2.00	1.00	1.00	1.00	1.00	1.00							
Final Sat.:	1600	4494	306	1600	3958	842	5760	3200	1600	1600	1600	1600	1600							
Capacity Analysis Module:																				
Vol/Sat:	0.06	0.10	0.10	0.11	0.24	0.24	0.01	0.03	0.04	0.01	0.08	0.11								
Crit Moves:	****				****		****					****								

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alternative 2 Weekday AM

Intersection #20: I-110 SB Off-Ramp & 190th St.

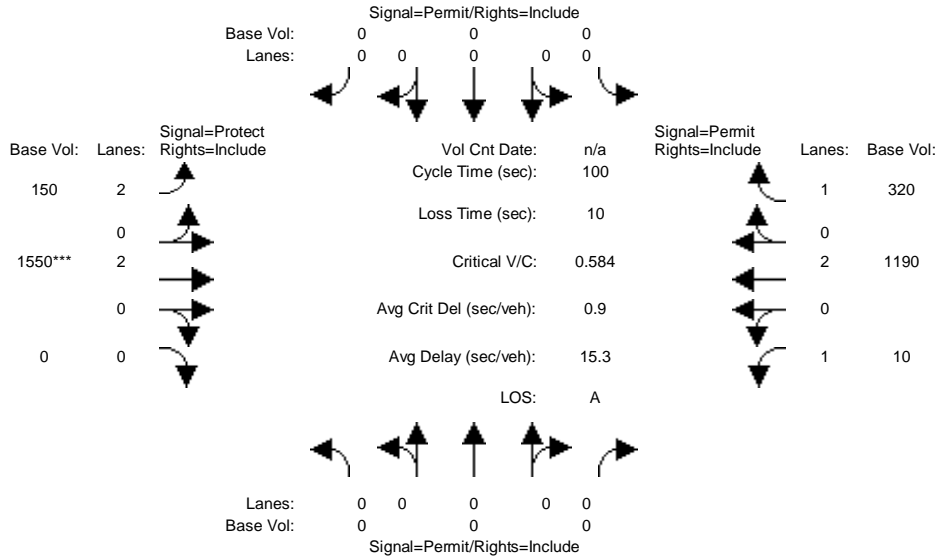


Street Name:	I-110 SB Off-Ramp						190th St.														
Approach:	North Bound			South Bound			East Bound			West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																					
Base Vol:	0	0	0	320	0	960	0	1400	0	0	1190	0	0	0	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	320	0	960	0	1400	0	0	1190	0	0	0	0	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	320	0	960	0	1400	0	0	1190	0	0	0	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	320	0	960	0	1400	0	0	1190	0	0	0	0	0	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	320	0	960	0	1400	0	0	1190	0	0	0	0	0	0	0	0	0	0
Saturation Flow Module:																					
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0	0	0	0	0	0	0	0	0	0
Capacity Analysis Module:																					
Vol/Sat:	0.00	0.00	0.00	0.20	0.00	0.60	0.00	0.44	0.00	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crit Moves:						****		****													

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alternative 2 Weekday AM

Intersection #21: I-110 NB On-Ramp & 190th St.

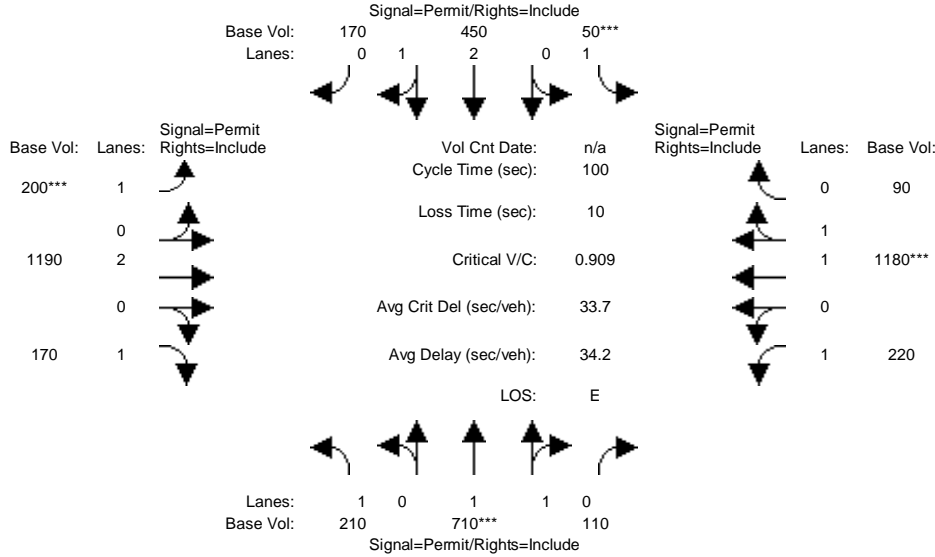


Street Name:	I-110 NB On-Ramp						190th St.														
Approach:	North Bound			South Bound			East Bound			West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																					
Base Vol:	0	0	0	0	0	0	150	1550	0	10	1190	320									
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
Initial Bse:	0	0	0	0	0	0	150	1550	0	10	1190	320									
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
PHF Volume:	0	0	0	0	0	0	150	1550	0	10	1190	320									
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0									
Reduced Vol:	0	0	0	0	0	0	150	1550	0	10	1190	320									
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
FinalVolume:	0	0	0	0	0	0	150	1550	0	10	1190	320									
Saturation Flow Module:																					
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600									
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00									
Lanes:	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00									
Final Sat.:	0	0	0	0	0	0	5760	3200	0	1600	3200	1600									
Capacity Analysis Module:																					
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.48	0.00	0.01	0.37	0.20									
Crit Moves:											****										

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alternative 2 Weekday AM

Intersection #22: Figueroa St. & 190th St./Victoria St.

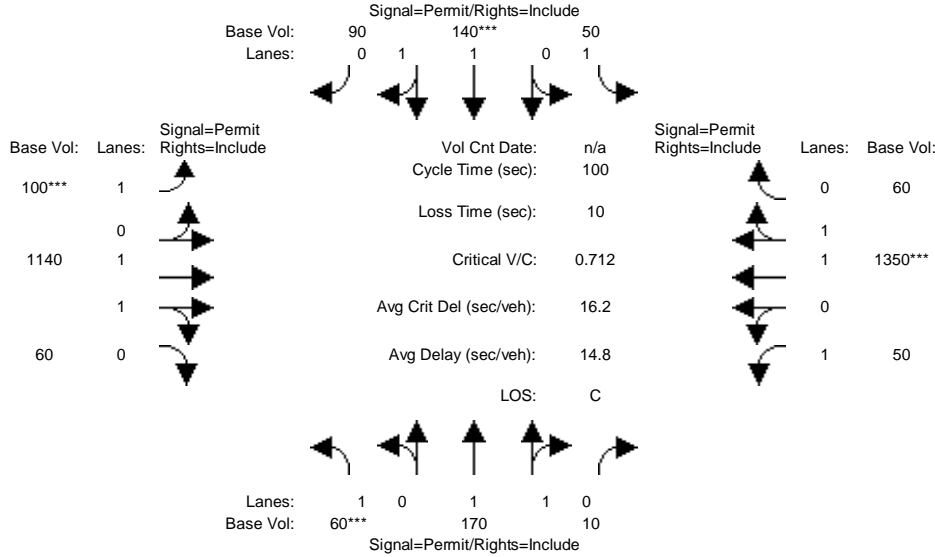


Street Name:	Figueroa St.						190th St./Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	210	710	110	50	450	170	200	1190	170	220	1180	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	210	710	110	50	450	170	200	1190	170	220	1180	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	210	710	110	50	450	170	200	1190	170	220	1180	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	210	710	110	50	450	170	200	1190	170	220	1180	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	210	710	110	50	450	170	200	1190	170	220	1180	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.73	0.27	1.00	2.18	0.82	1.00	2.00	1.00	1.00	1.86	0.14
Final Sat.:	1600	2771	429	1600	3484	1316	1600	3200	1600	1600	2973	227
Capacity Analysis Module:												
Vol/Sat:	0.13	0.26	0.26	0.03	0.13	0.13	0.13	0.37	0.11	0.14	0.40	0.40
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alternative 2 Weekday AM

Intersection #23: Broadway & Victoria St.

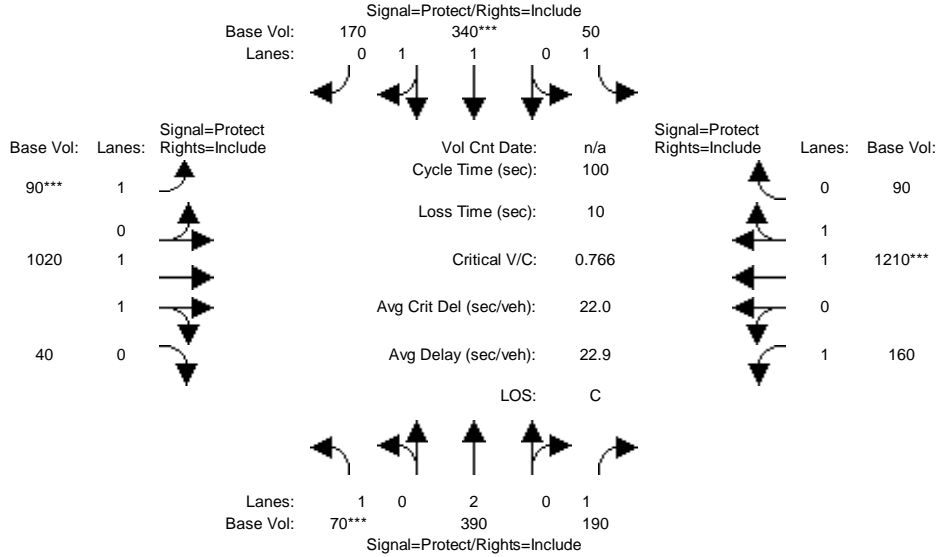


Street Name:	Broadway						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	60	170	10	50	140	90	100	1140	60	50	1350	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	170	10	50	140	90	100	1140	60	50	1350	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	170	10	50	140	90	100	1140	60	50	1350	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	170	10	50	140	90	100	1140	60	50	1350	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	170	10	50	140	90	100	1140	60	50	1350	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.89	0.11	1.00	1.22	0.78	1.00	1.90	0.10	1.00	1.91	0.09
Final Sat.:	1600	3022	178	1600	1948	1252	1600	3040	160	1600	3064	136
Capacity Analysis Module:												
Vol/Sat:	0.04	0.06	0.06	0.03	0.07	0.07	0.06	0.38	0.38	0.03	0.44	0.44
Crit Moves:	****				****		****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alternative 2 Weekday AM

Intersection #24: Main St. & Victoria St.

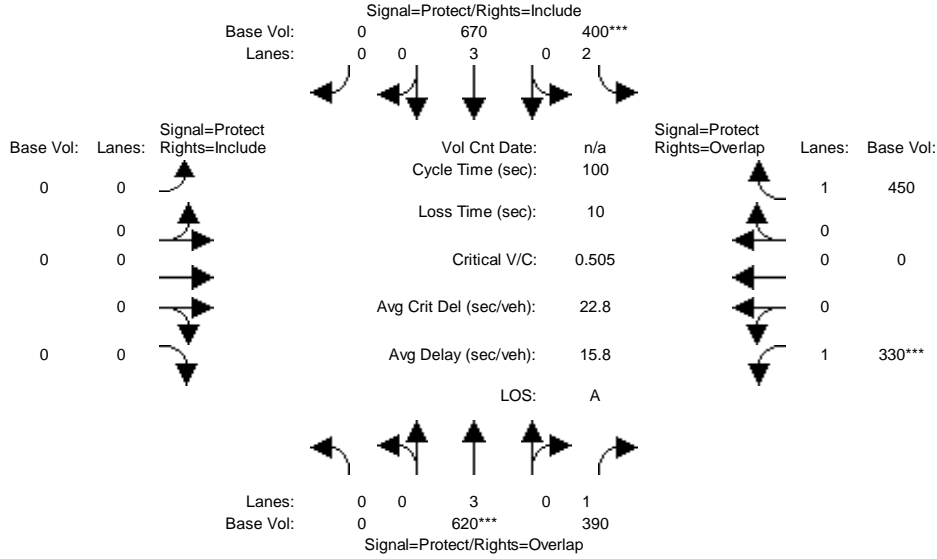


Street Name:	Main St.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	70	390	190	50	340	170	90	1020	40	160	1210	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	390	190	50	340	170	90	1020	40	160	1210	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	390	190	50	340	170	90	1020	40	160	1210	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	390	190	50	340	170	90	1020	40	160	1210	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	70	390	190	50	340	170	90	1020	40	160	1210	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.33	0.67	1.00	1.92	0.08	1.00	1.86	0.14
Final Sat.:	1600	3200	1600	1600	2133	1067	1600	3079	121	1600	2978	222
Capacity Analysis Module:												
Vol/Sat:	0.04	0.12	0.12	0.03	0.16	0.16	0.06	0.33	0.33	0.10	0.41	0.41
Crit Moves:	****				****		****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alternative 2 Weekday AM

Intersection #25: Avalon Blvd. & University Dr.

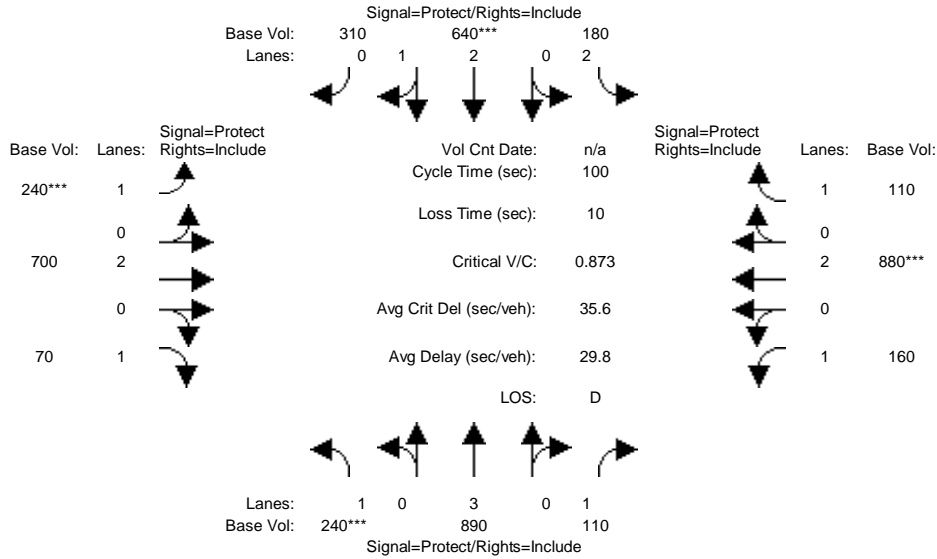


Street Name:	Avalon Blvd.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	620	390	400	670	0	0	0	0	330	0	450
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	620	390	400	670	0	0	0	0	330	0	450
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	620	390	400	670	0	0	0	0	330	0	450
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	620	390	400	670	0	0	0	0	330	0	450
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	620	390	400	670	0	0	0	0	330	0	450
OvlAdjVol:	60									339		
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.13	0.24	0.07	0.14	0.00	0.00	0.00	0.00	0.21	0.00	0.28
OvlAdjV/S:	0.04									0.21		
Crit Moves:	****			****						****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alternative 2 Weekday AM

Intersection #26: Avalon Blvd. & Del Amo Blvd.

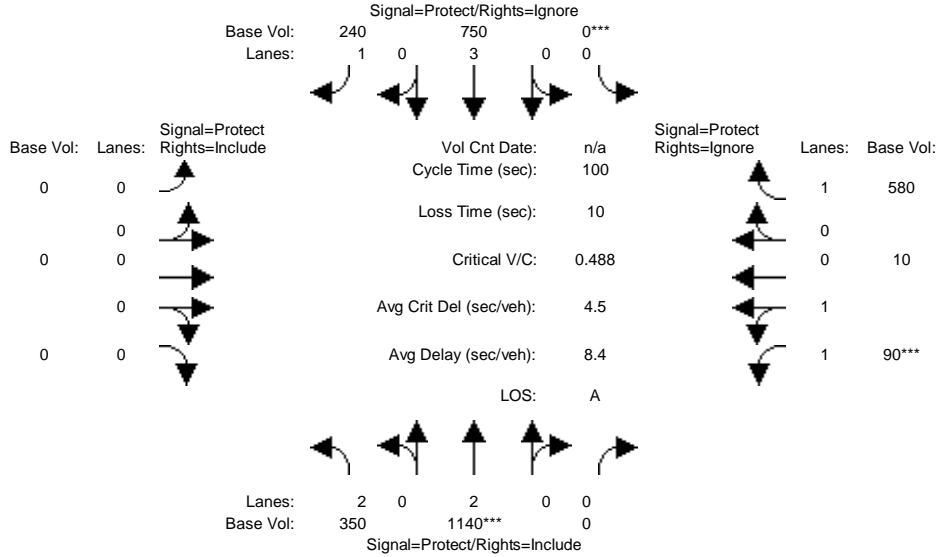


Street Name:	Avalon Blvd.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	240	890	110	180	640	310	240	700	70	160	880	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	240	890	110	180	640	310	240	700	70	160	880	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	240	890	110	180	640	310	240	700	70	160	880	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	240	890	110	180	640	310	240	700	70	160	880	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	240	890	110	180	640	310	240	700	70	160	880	110
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.02	0.98	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	3234	1566	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.15	0.19	0.07	0.03	0.20	0.20	0.15	0.22	0.04	0.10	0.28	0.07
Crit Moves:	****				****		****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alternative 2 Weekday AM

Intersection #27: Avalon Blvd. & I-405 NB Ramps

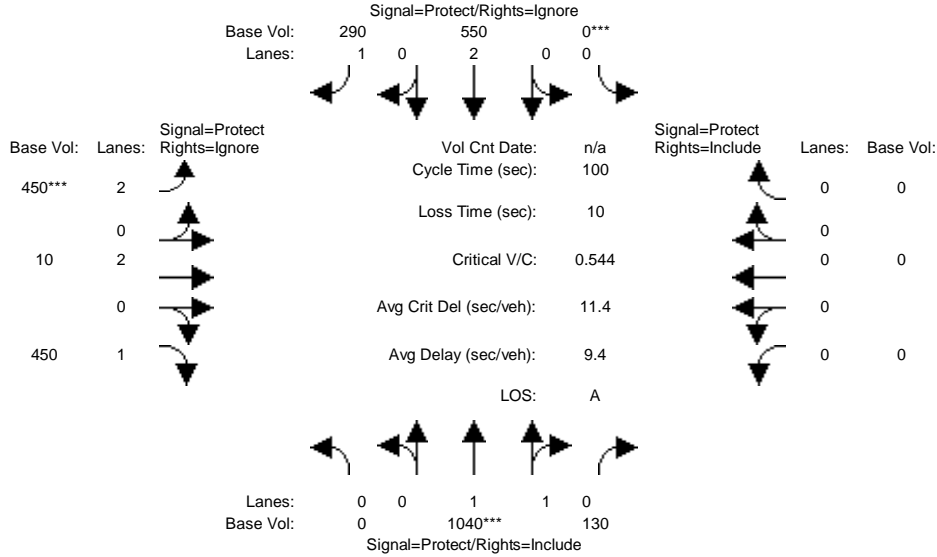


Street Name:	Avalon Blvd.						I-405 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	350	1140	0	0	750	240	0	0	0	90	10	580
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	350	1140	0	0	750	240	0	0	0	90	10	580
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	350	1140	0	0	750	0	0	0	0	90	10	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	350	1140	0	0	750	0	0	0	0	90	10	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	350	1140	0	0	750	0	0	0	0	90	10	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.80	0.20	1.00
Final Sat.:	5760	3200	0	0	4800	1600	0	0	0	2880	320	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.36	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.03	0.03	0.00
Crit Moves:	****			****						****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alternative 2 Weekday AM

Intersection #28: Avalon Blvd. & I-405 SB Ramps

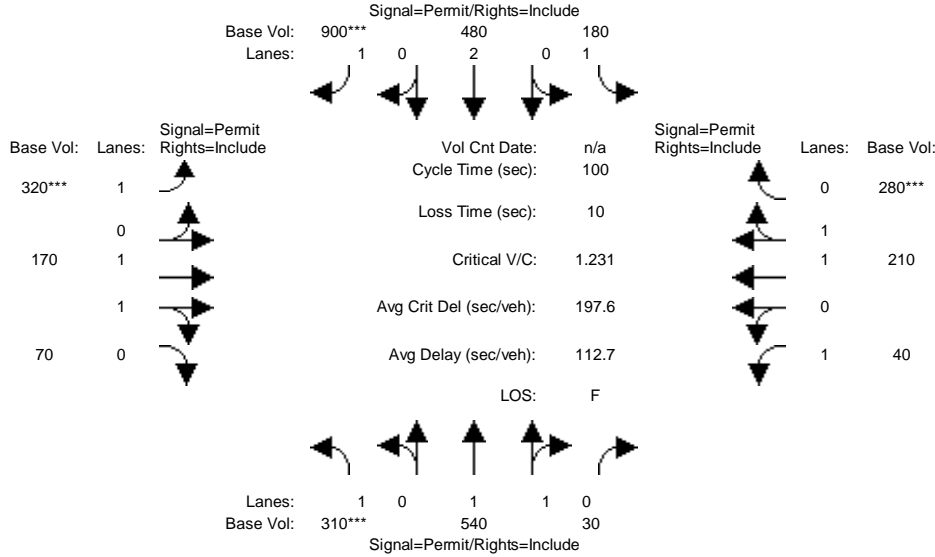


Street Name:	Avalon Blvd.						I-405 SB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1040	130	0	550	290	450	10	450	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1040	130	0	550	290	450	10	450	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	1040	130	0	550	0	450	10	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1040	130	0	550	0	450	10	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	0	1040	130	0	550	0	450	10	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.78	0.22	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	0	2844	356	0	3200	1600	5760	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.37	0.37	0.00	0.17	0.00	0.08	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alternative 2 Weekday AM

Intersection #29: Central Ave. & University Dr.

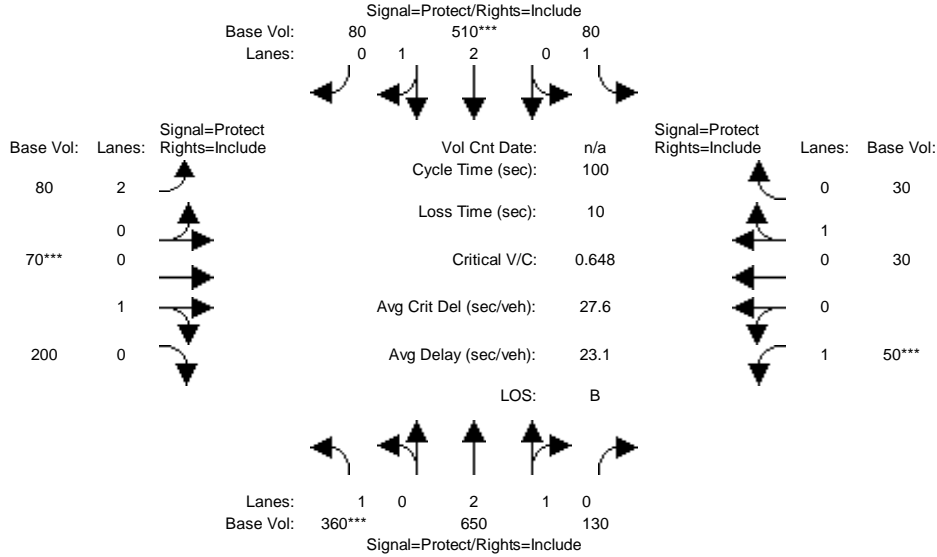


Street Name:	Central Ave.						University Dr.								
Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:															
Base Vol:	310	540	30	180	480	900	320	170	70	40	210	280			
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Initial Bse:	310	540	30	180	480	900	320	170	70	40	210	280			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Volume:	310	540	30	180	480	900	320	170	70	40	210	280			
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0			
Reduced Vol:	310	540	30	180	480	900	320	170	70	40	210	280			
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
FinalVolume:	310	540	30	180	480	900	320	170	70	40	210	280			
Saturation Flow Module:															
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600			
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Lanes:	1.00	1.89	0.11	1.00	2.00	1.00	1.00	1.42	0.58	1.00	1.00	1.00			
Final Sat.:	1600	3032	168	1600	3200	1600	1600	2267	933	1600	1600	1600			
Capacity Analysis Module:															
Vol/Sat:	0.19	0.18	0.18	0.11	0.15	0.56	0.20	0.07	0.08	0.03	0.13	0.17			
Crit Moves:	****					****	****					****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alternative 2 Weekday AM

Intersection #30: Wilmington Ave. & University Dr.

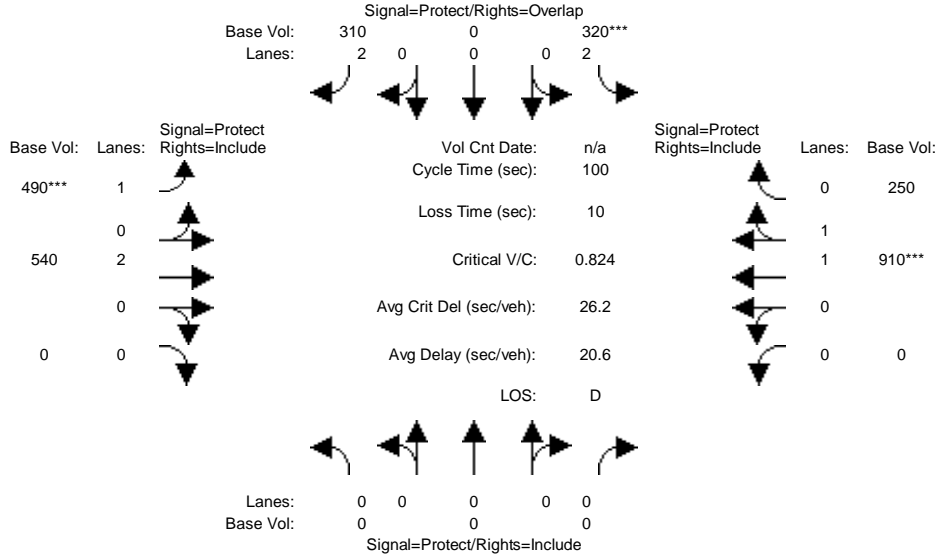


Street Name:	Wilmington Ave.						University Dr.													
Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																				
Base Vol:	360	650	130	80	510	80	80	70	200	50	30	30								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	360	650	130	80	510	80	80	70	200	50	30	30								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Volume:	360	650	130	80	510	80	80	70	200	50	30	30								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	360	650	130	80	510	80	80	70	200	50	30	30								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
FinalVolume:	360	650	130	80	510	80	80	70	200	50	30	30								
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600								
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00								
Lanes:	1.00	2.50	0.50	1.00	2.59	0.41	2.00	0.26	0.74	1.00	0.50	0.50								
Final Sat.:	1600	4000	800	1600	4149	651	5760	415	1185	1600	800	800								
Capacity Analysis Module:																				
Vol/Sat:	0.23	0.16	0.16	0.05	0.12	0.12	0.01	0.17	0.17	0.03	0.04	0.04								
Crit Moves:	****				****		****			****										

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alternative 2 Weekday AM

Intersection #31: Central Ave. & Del Amo Blvd.

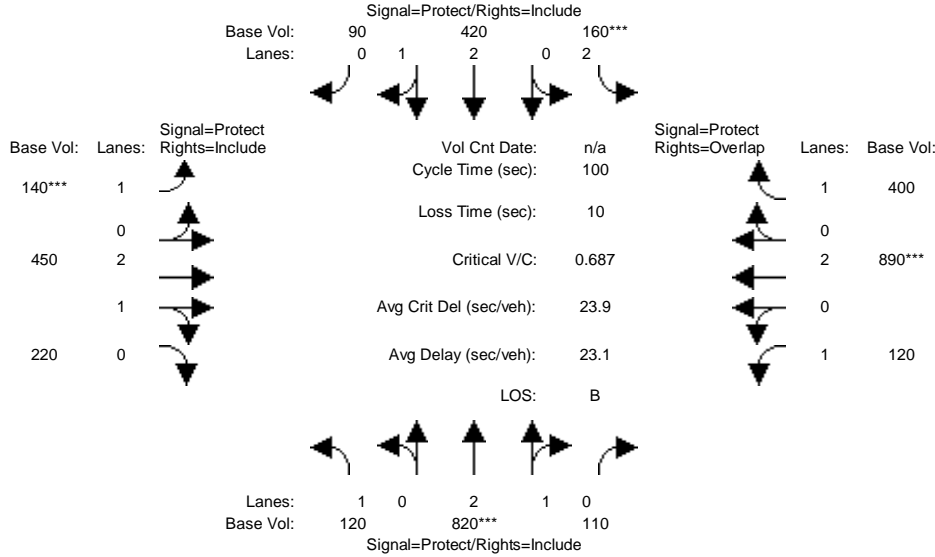


Street Name:	Central Ave.						Del Amo Blvd.													
Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																				
Base Vol:	0	0	0	320	0	310	490	540	0	0	910	250								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	320	0	310	490	540	0	0	910	250								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	320	0	310	490	540	0	0	910	250								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	0	0	0	320	0	310	490	540	0	0	910	250								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	320	0	310	490	540	0	0	910	250								
OvlAdjVol:	0																			
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	2.00	1.00	2.00	0.00	0.00	1.57	0.43								
Final Sat.:	0	0	0	5760	0	3200	1600	3200	0	0	2510	690								
Capacity Analysis Module:																				
Vol/Sat:	0.00	0.00	0.00	0.06	0.00	0.10	0.31	0.17	0.00	0.00	0.36	0.36								
OvlAdjV/S:																				0.00
Crit Moves:				****				****				****								

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alternative 2 Weekday AM

Intersection #32: Wilmington Ave. & Del Amo Blvd.

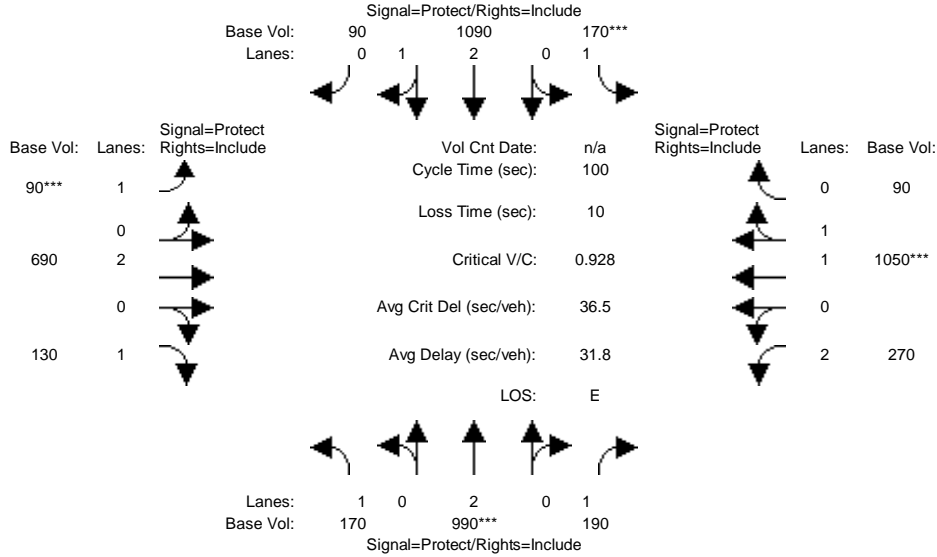


Street Name:	Wilmington Ave.						Del Amo Blvd.													
Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																				
Base Vol:	120	820	110	160	420	90	140	450	220	120	890	400								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	120	820	110	160	420	90	140	450	220	120	890	400								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Volume:	120	820	110	160	420	90	140	450	220	120	890	400								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	120	820	110	160	420	90	140	450	220	120	890	400								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Final Volume:	120	820	110	160	420	90	140	450	220	120	890	400								
OvlAdjVol:												356								
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600								
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Lanes:	1.00	2.65	0.35	2.00	2.47	0.53	1.00	2.01	0.99	1.00	2.00	1.00								
Final Sat.:	1600	4232	568	5760	3953	847	1600	3224	1576	1600	3200	1600								
Capacity Analysis Module:																				
Vol/Sat:	0.08	0.19	0.19	0.03	0.11	0.11	0.09	0.14	0.14	0.08	0.28	0.25								
OvlAdjV/S:												0.22								
Crit Moves:	****			****			****			****										

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alternative 2 Weekday AM

Intersection #33: W. Artesia Blvd. & Crenshaw Blvd.

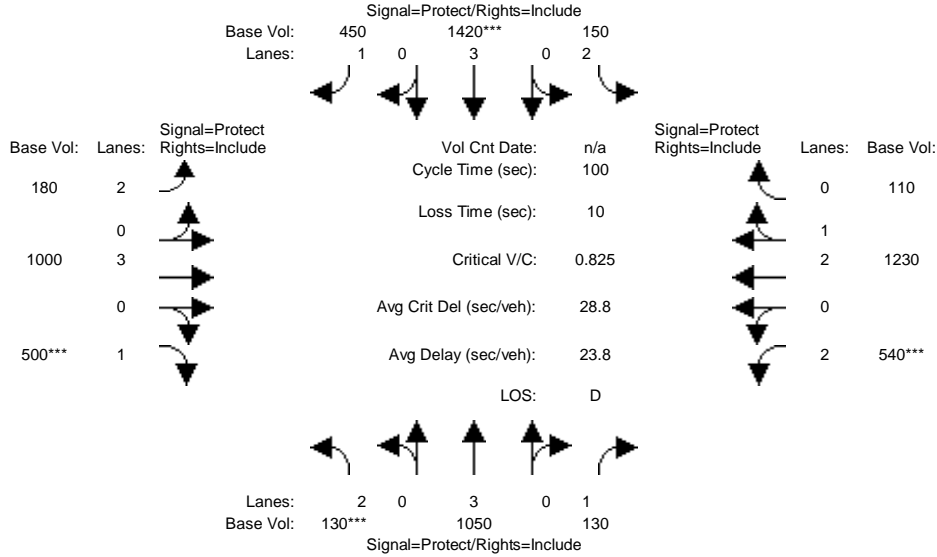


Street Name:	Crenshaw Blvd.						W. Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	170	990	190	170	1090	90	90	690	130	270	1050	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	170	990	190	170	1090	90	90	690	130	270	1050	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	170	990	190	170	1090	90	90	690	130	270	1050	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	170	990	190	170	1090	90	90	690	130	270	1050	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	170	990	190	170	1090	90	90	690	130	270	1050	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.77	0.23	1.00	2.00	1.00	2.00	1.84	0.16
Final Sat.:	1600	3200	1600	1600	4434	366	1600	3200	1600	5760	2947	253
Capacity Analysis Module:												
Vol/Sat:	0.11	0.31	0.12	0.11	0.25	0.25	0.06	0.22	0.08	0.05	0.36	0.36
Crit Moves:		****		****			****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alternative 2 Weekday AM

Intersection #34: W 190th St. & South Western Ave.

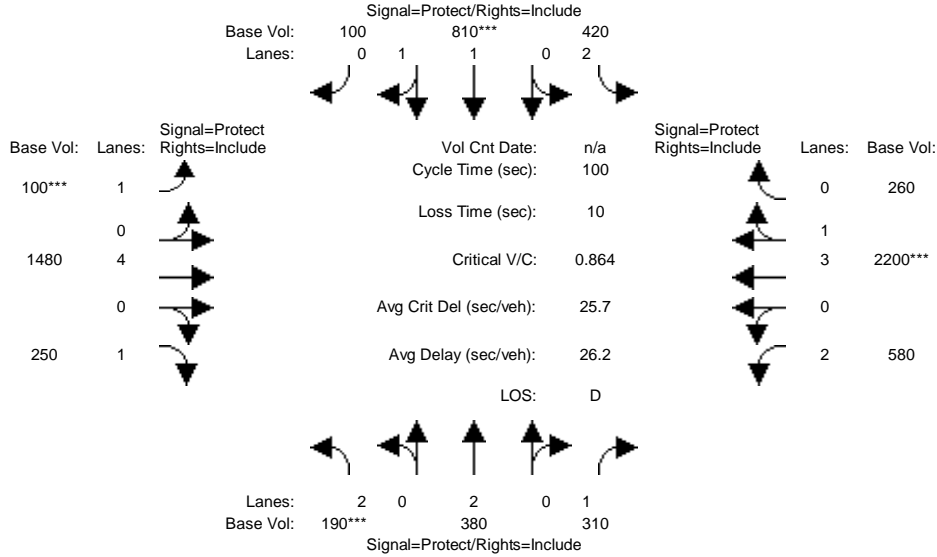


Street Name:	S. Western Ave.						W. 190th St.													
Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																				
Base Vol:	130	1050	130	150	1420	450	180	1000	500	540	1230	110								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							
Initial Bse:	130	1050	130	150	1420	450	180	1000	500	540	1230	110								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							
PHF Volume:	130	1050	130	150	1420	450	180	1000	500	540	1230	110								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0							
Reduced Vol:	130	1050	130	150	1420	450	180	1000	500	540	1230	110								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							
FinalVolume:	130	1050	130	150	1420	450	180	1000	500	540	1230	110								
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600							
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.00							
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.75	0.25	0.25							
Final Sat.:	5760	4800	1600	5760	4800	1600	5760	4800	1600	5760	4406	394	394							
Capacity Analysis Module:																				
Vol/Sat:	0.02	0.22	0.08	0.03	0.30	0.28	0.03	0.21	0.31	0.09	0.28	0.28	0.28							
Crit Moves:	****				****				****	****										

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alternative 2 Weekday AM

Intersection #35: W. Artesia Blvd. & Vermont Av.e

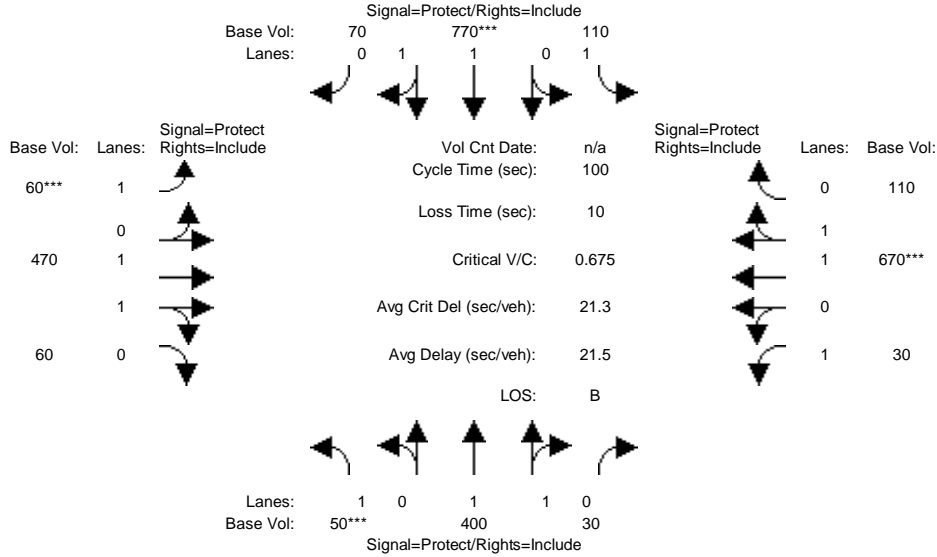


Street Name:	Vermont Ave.						W. Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	190	380	310	420	810	100	100	1480	250	580	2200	260
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	190	380	310	420	810	100	100	1480	250	580	2200	260
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	190	380	310	420	810	100	100	1480	250	580	2200	260
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	190	380	310	420	810	100	100	1480	250	580	2200	260
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	190	380	310	420	810	100	100	1480	250	580	2200	260
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	1.78	0.22	1.00	4.00	1.00	2.00	3.58	0.42
Final Sat.:	5760	3200	1600	5760	2848	352	1600	6400	1600	5760	5724	676
Capacity Analysis Module:												
Vol/Sat:	0.03	0.12	0.19	0.07	0.28	0.28	0.06	0.23	0.16	0.10	0.38	0.38
Crit Moves:	****				****		****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alternative 2 Weekday AM

Intersection #36: Alameda St. & Compton Blvd.

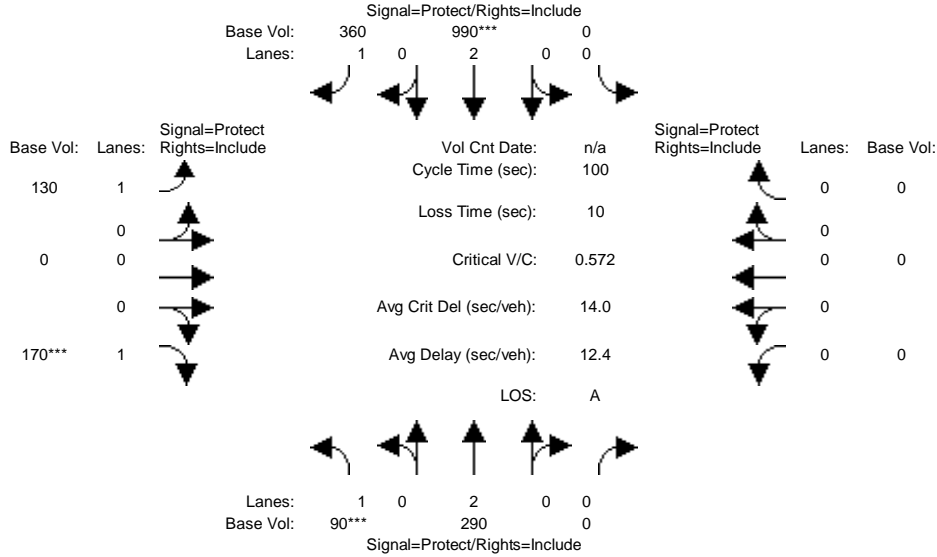


Street Name:	Alameda St.						Compton Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	50	400	30	110	770	70	60	470	60	30	670	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	400	30	110	770	70	60	470	60	30	670	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	400	30	110	770	70	60	470	60	30	670	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	400	30	110	770	70	60	470	60	30	670	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	50	400	30	110	770	70	60	470	60	30	670	110
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.86	0.14	1.00	1.83	0.17	1.00	1.77	0.23	1.00	1.72	0.28
Final Sat.:	1600	2977	223	1600	2933	267	1600	2838	362	1600	2749	451
Capacity Analysis Module:												
Vol/Sat:	0.03	0.13	0.13	0.07	0.26	0.26	0.04	0.17	0.17	0.02	0.24	0.24
Crit Moves:	****				****		****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alternative 2 Weekday AM

Intersection #37: Alameda St. & SR 91 EB Ramps

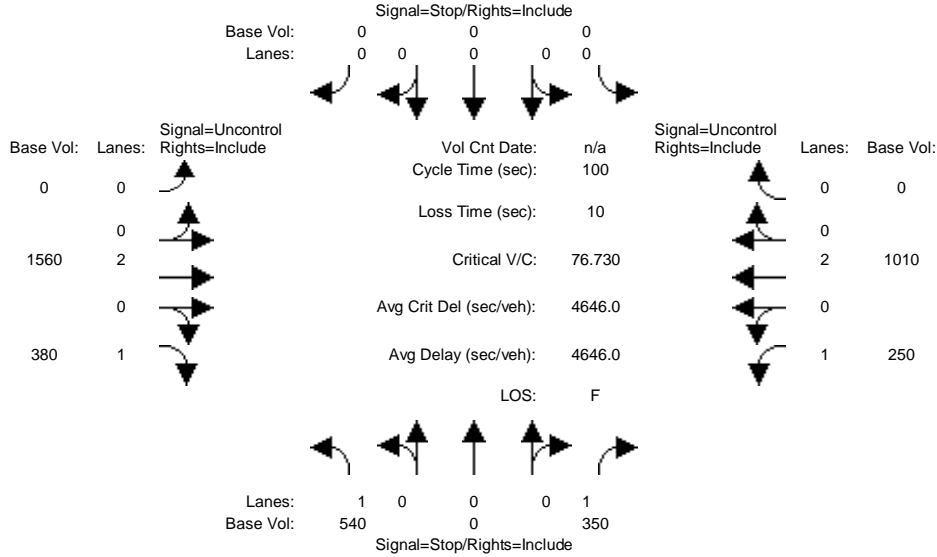


Street Name:	Alameda St.						SR 91 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	90	290	0	0	990	360	130	0	170	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	290	0	0	990	360	130	0	170	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	290	0	0	990	360	130	0	170	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	290	0	0	990	360	130	0	170	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	290	0	0	990	360	130	0	170	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	3200	0	0	3200	1600	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.09	0.00	0.00	0.31	0.23	0.08	0.00	0.11	0.00	0.00	0.00
Crit Moves:	****				****				****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 Existing With Project Alt2 Weekday PM

Intersection #1: Victoria St. & Drive D



Street Name:	Drive D						Victoria St..					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	540	0	350	0	0	0	0	1560	380	250	1010	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	540	0	350	0	0	0	0	1560	380	250	1010	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	540	0	350	0	0	0	0	1560	380	250	1010	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	540	0	350	0	0	0	0	1560	380	250	1010	0
Critical Gap Module:												
Critical Gp:	6.8	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	2565	xxxx	780	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1940	xxxx	xxxxx
Potent Cap.:	22	xxxx	342	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	307	xxxx	xxxxx
Move Cap.:	7	xxxx	342	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	307	xxxx	xxxxx
Volume/Cap:	76.73	xxxx	1.02	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.82	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	69.5	xxxx	11.9	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	6.8	xxxx	xxxxx
Control Del:	35106	xxxx	90.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	52.9	xxxx	xxxxx
LOS by Move:	F	*	F	*	*	*	*	*	*	F	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxxx		xxxxxxx			xxxxxxx	xxxxxxx		xxxxxxx	xxxxxxx		xxxxxxx

ApproachLOS: F * * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #1 Victoria St. & Drive D

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 2 0 1	1 0 2 0 0
Initial Vol:	540 0 350	0 0 0	0 1560 380	250 1010 0
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	xxxxxx

Approach[northbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=5274.7]

SUCCEED - Vehicle-hours >= 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=890]

SUCCEED - Approach volume >= 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=4090]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #1 Victoria St. & Drive D

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 2 0 1	1 0 2 0 0
Initial Vol:	540 0 350	0 0 0	0 1560 380	250 1010 0

Major Street Volume: 3200

Minor Approach Volume: 890

Minor Approach Volume Threshold: -126 [less than minimum of 150]

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

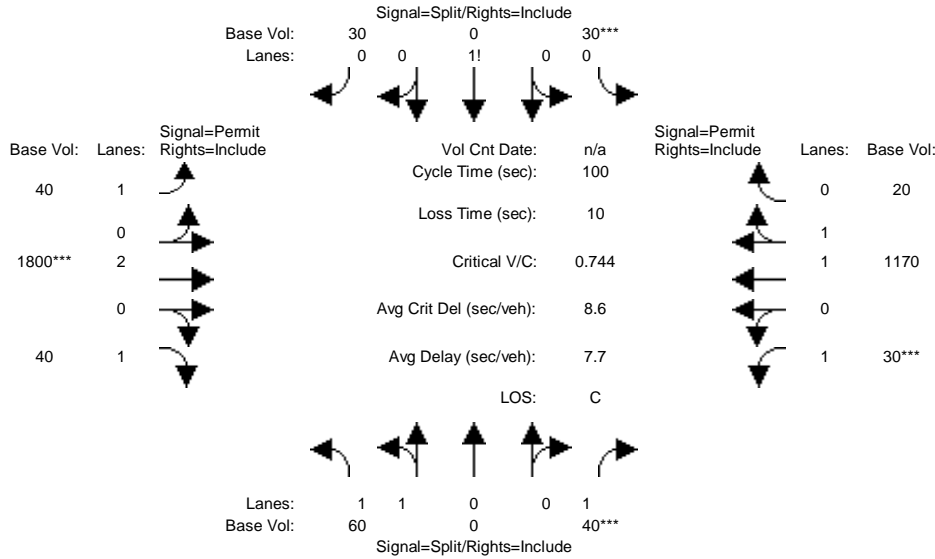
The peak hour warrant analysis in this report is not intended to replace

a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alt2 Weekday PM

Intersection #2: Victoria St. & Tamcliff Ave.

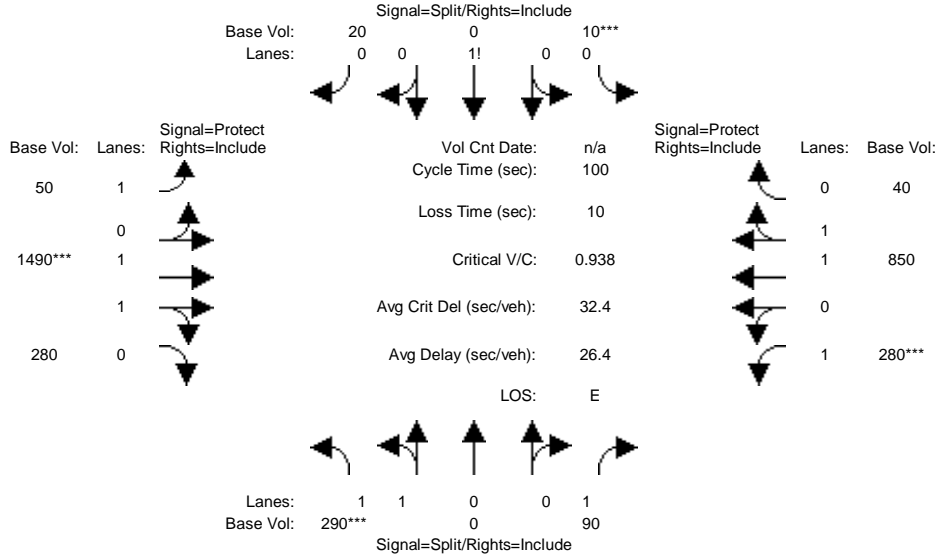


Street Name:	Victoria St.						Tamcliff Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	60	0	40	30	0	30	40	1800	40	30	1170	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	0	40	30	0	30	40	1800	40	30	1170	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	0	40	30	0	30	40	1800	40	30	1170	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	0	40	30	0	30	40	1800	40	30	1170	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	0	40	30	0	30	40	1800	40	30	1170	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.50	0.00	0.50	1.00	2.00	1.00	1.00	1.97	0.03
Final Sat.:	3200	0	1600	800	0	800	1600	3200	1600	1600	3146	54
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.03	0.04	0.00	0.04	0.03	0.56	0.03	0.02	0.37	0.37
Crit Moves:			****	****				****		****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alt2 Weekday PM

Intersection #3: Victoria St. & Birchknoll Dr.

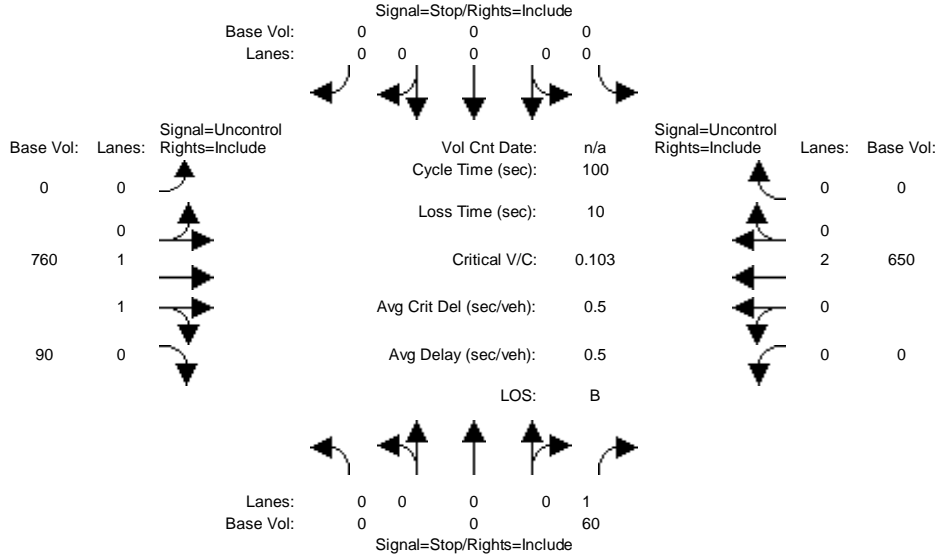


Street Name:	Victoria St.						Birchknoll Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	290	0	90	10	0	20	50	1490	280	280	850	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	290	0	90	10	0	20	50	1490	280	280	850	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	290	0	90	10	0	20	50	1490	280	280	850	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	290	0	90	10	0	20	50	1490	280	280	850	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	290	0	90	10	0	20	50	1490	280	280	850	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.33	0.00	0.67	1.00	1.68	0.32	1.00	1.91	0.09
Final Sat.:	3200	0	1600	533	0	1067	1600	2694	506	1600	3056	144
Capacity Analysis Module:												
Vol/Sat:	0.09	0.00	0.06	0.02	0.00	0.02	0.03	0.55	0.55	0.17	0.28	0.28
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
Existing With Project Alt2 Weekday PM

Intersection #4: Victoria St. & Project Service Rd.



Street Name:	Project Service Rd.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	60	0	0	0	0	760	90	0	650	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	60	0	0	0	0	760	90	0	650	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	60	0	0	0	0	760	90	0	650	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	60	0	0	0	0	760	90	0	650	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	xxxx	xxxx	425	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	583	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	583	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.10	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	0.3	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	11.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	B	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	11.9			xxxxxx			xxxxxx			xxxxxx		

ApproachLOS: B * * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #4 Victoria St. & Project Service Rd.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 1	0 0 0 0 0	0 0 1 1 0	0 0 2 0 0
Initial Vol:	0 0 60	0 0 0	0 760 90	0 650 0
ApproachDel:	11.9	xxxxxx	xxxxxx	xxxxxx

Approach[northbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.2]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=60]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=1560]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #4 Victoria St. & Project Service Rd.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 1	0 0 0 0 0	0 0 1 1 0	0 0 2 0 0
Initial Vol:	0 0 60	0 0 0	0 760 90	0 650 0

Major Street Volume: 1500

Minor Approach Volume: 60

Minor Approach Volume Threshold: 145

SIGNAL WARRANT DISCLAIMER

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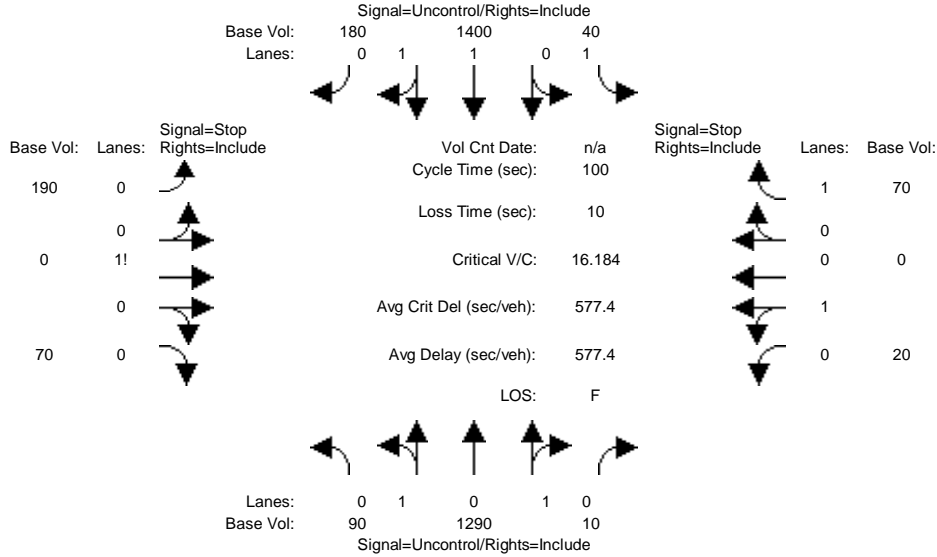
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 Existing With Project Alt2 Weekday PM

Intersection #5: Central Ave. & Charles Willard St.



Street Name:	Central Ave.					Charles Willard St.						
Approach:	North Bound			South Bound		East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	90	1290	10	40	1400	180	190	0	70	20	0	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	1290	10	40	1400	180	190	0	70	20	0	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	1290	10	40	1400	180	190	0	70	20	0	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	90	1290	10	40	1400	180	190	0	70	20	0	70
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflct Vol:	1580	xxxx	xxxxx	1300	xxxx	xxxxx	2395	3050	790	2255	3135	650
Potent Cap.:	422	xxxx	xxxxx	540	xxxx	xxxxx	18	13	337	23	11	417
Move Cap.:	422	xxxx	xxxxx	540	xxxx	xxxxx	12	9	337	14	8	417
Volume/Cap:	0.21	xxxx	xxxx	0.07	xxxx	xxxx	16.18	0.00	0.21	1.40	0.00	0.17
Level Of Service Module:												
2Way95thQ:	0.8	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0.6
Control Del:	15.8	xxxx	xxxxx	12.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	15.4
LOS by Move:	C	*	*	B	*	*	*	*	*	*	*	C
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	16	xxxxx	14	xxxx	xxxxx
Shared Queue:	0.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	33.4	xxxxx	3.1	xxxx	xxxxx
Shrd ConDel:	15.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	7392	xxxxx	753.0	xxxx	xxxxx
Shared LOS:	C	*	*	*	*	*	*	F	*	F	*	*
ApproachDel:	xxxxxxx			xxxxxxx			7392.0			179.3		

ApproachLOS: * * F F

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #5 Central Ave. & Charles Willard St.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	0	1	0	1	0	1	0	0	1	0	1	0
Initial Vol:	90	1290	10	40	1400	180	190	0	70	20	0	70
ApproachDel:	xxxxxx			xxxxxx			7392.0			179.3		

Approach[eastbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=533.9]

SUCCEED - Vehicle-hours greater than or equal to 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=260]

SUCCEED - Approach volume greater than or equal to 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=3360]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Approach[westbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=4.5]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=90]

FAIL - Approach volume less than 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=3360]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #5 Central Ave. & Charles Willard St.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	0	1	0	1	0	1	0	0	1	0	1	0
Initial Vol:	90	1290	10	40	1400	180	190	0	70	20	0	70

Major Street Volume: 3010

Minor Approach Volume: 260

Minor Approach Volume Threshold: -95 [less than minimum of 100]

SIGNAL WARRANT DISCLAIMER

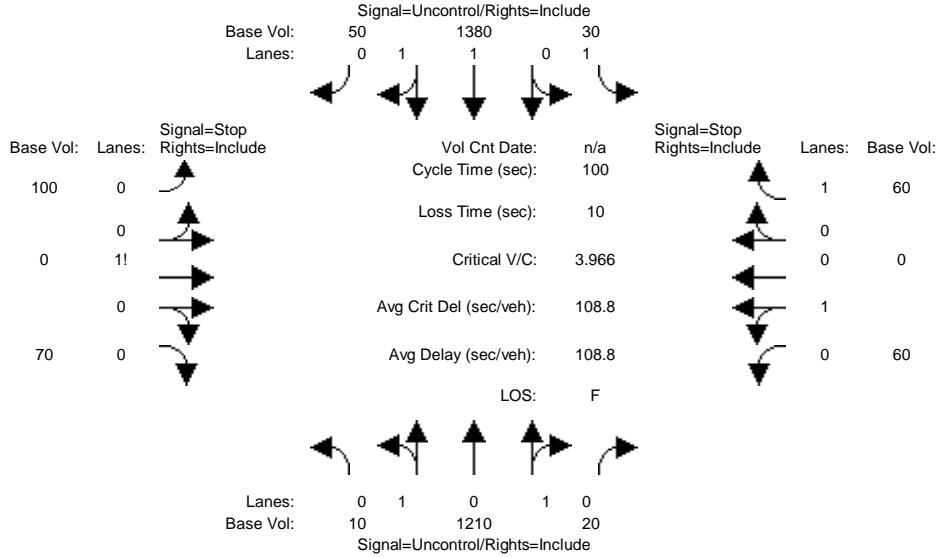
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 Existing With Project Alt2 Weekday PM

Intersection #6: Central Ave. & Project Driveway/Beachey Pl.



Street Name:	Central Ave.					Beachey Pl.									
Approach:	North Bound			South Bound		East Bound			West Bound						
Movement:	L	T	R	L	T	R	L	T	R	L	T	R			
Volume Module:															
Base Vol:	10	1210	20	30	1380	50	100	0	70	60	0	60			
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Initial Bse:	10	1210	20	30	1380	50	100	0	70	60	0	60			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Volume:	10	1210	20	30	1380	50	100	0	70	60	0	60			
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0			
FinalVolume:	10	1210	20	30	1380	50	100	0	70	60	0	60			
Critical Gap Module:															
Critical Gp:	4.1	xxxx	xxxxxx	4.1	xxxx	xxxxxx	7.5	6.5	6.9	7.5	6.5	6.9			
FollowUpTim:	2.2	xxxx	xxxxxx	2.2	xxxx	xxxxxx	3.5	4.0	3.3	3.5	4.0	3.3			
Capacity Module:															
Cnflct Vol:	1430	xxxx	xxxxxx	1230	xxxx	xxxxxx	2090	2715	715	1990	2730	615			
Potent Cap.:	482	xxxx	xxxxxx	574	xxxx	xxxxxx	31	21	378	37	21	439			
Move Cap.:	482	xxxx	xxxxxx	574	xxxx	xxxxxx	25	20	378	28	19	439			
Volume/Cap:	0.02	xxxx	xxxx	0.05	xxxx	xxxx	3.97	0.00	0.19	2.12	0.00	0.14			
Level Of Service Module:															
2Way95thQ:	0.1	xxxx	xxxxxx	0.2	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	0.5			
Control Del:	12.6	xxxx	xxxxxx	11.6	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	14.5			
LOS by Move:	B	*	*	B	*	*	*	*	*	*	*	B			
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	41	xxxxxx	28	xxxx	xxxxxx			
SharedQueue:	0.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	19.4	xxxxxx	7.1	xxxx	xxxxxx			
Shrd ConDel:	12.6	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	1619	xxxxxx	812.6	xxxx	xxxxxx			
Shared LOS:	B	*	*	*	*	*	*	F	*	F	*	*			
ApproachDel:	xxxxxxx			xxxxxxx			1618.6			413.6					

ApproachLOS: * * F F

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #6 Central Ave. & Project Driveway/Beachey Pl.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	0	1	0	1	0	1	0	0	1	0	0	1
Initial Vol:	10	1210	20	30	1380	50	100	0	70	60	0	60
ApproachDel:	xxxxxx			xxxxxx			1618.6			413.6		

Approach[eastbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=76.4]

SUCCEED - Vehicle-hours greater than or equal to 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=170]

SUCCEED - Approach volume greater than or equal to 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=2990]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Approach[westbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=13.8]

SUCCEED - Vehicle-hours >= 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=120]

FAIL - Approach volume less than 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=2990]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #6 Central Ave. & Project Driveway/Beachey Pl.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	0	1	0	1	0	1	0	0	1	0	1	0
Initial Vol:	10	1210	20	30	1380	50	100	0	70	60	0	60

Major Street Volume: 2700

Minor Approach Volume: 170

Minor Approach Volume Threshold: -57 [less than minimum of 100]

SIGNAL WARRANT DISCLAIMER

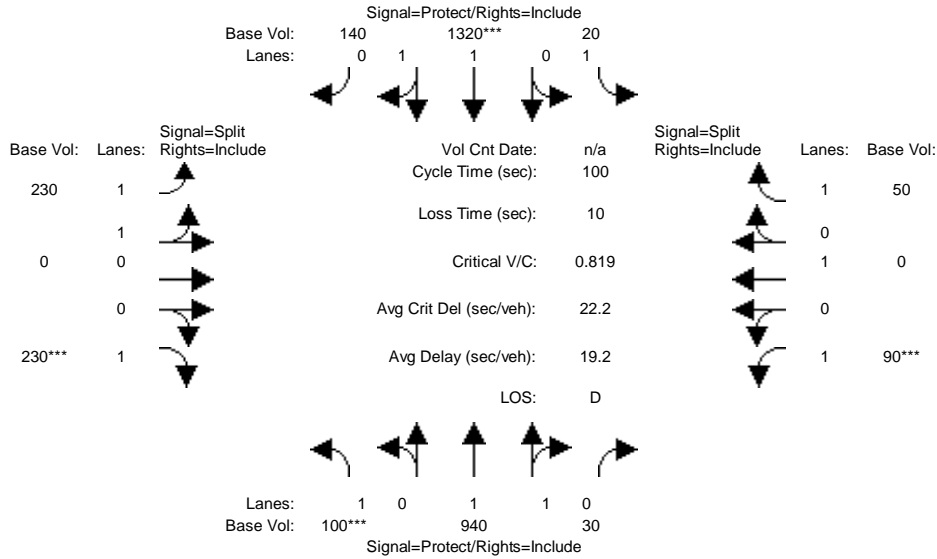
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alt2 Weekday PM

Intersection #7: Central Ave. & Glenn Curtiss St.

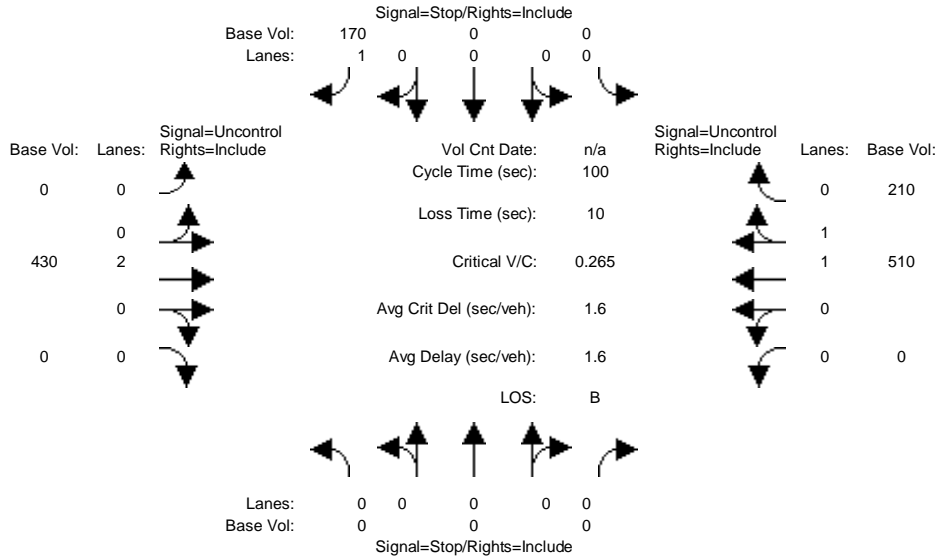


Street Name:	Central Ave.						Glenn Curtiss St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	100	940	30	20	1320	140	230	0	230	90	0	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	100	940	30	20	1320	140	230	0	230	90	0	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	100	940	30	20	1320	140	230	0	230	90	0	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	100	940	30	20	1320	140	230	0	230	90	0	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	100	940	30	20	1320	140	230	0	230	90	0	50
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.94	0.06	1.00	1.81	0.19	2.00	0.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	3101	99	1600	2893	307	3200	0	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.30	0.30	0.01	0.46	0.46	0.07	0.00	0.14	0.06	0.00	0.03
Crit Moves:	****				****				****	****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 Existing With Project Alt2 Weekday PM

Intersection #8: University Dr./Birchknoll Dr. Ext.



Street Name:	Birchknoll Dr. Ext.					University Dr.						
Approach:	North Bound			South Bound		East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	0	0	170	0	430	0	0	510	210
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	170	0	430	0	0	510	210
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	170	0	430	0	0	510	210
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	170	0	430	0	0	510	210
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	360	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	642	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	642	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	0.26	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	1.1	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	12.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	B	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxxx					12.6	xxxxxxx					xxxxxxx

ApproachLOS: * B * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #8 University Dr./Birchknoll Dr. Ext.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 0	0 0 0 0 1	0 0 2 0 0	0 0 1 1 0
Initial Vol:	0 0 0	0 0 170	0 430 0	0 510 210
ApproachDel:	xxxxxx	12.6	xxxxxx	xxxxxx

Approach[southbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.6]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=170]

SUCCEED - Approach volume greater than or equal to 100 for one lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=1320]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #8 University Dr./Birchknoll Dr. Ext.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 0	0 0 0 0 1	0 0 2 0 0	0 0 1 1 0
Initial Vol:	0 0 0	0 0 170	0 430 0	0 510 210

Major Street Volume: 1150

Minor Approach Volume: 170

Minor Approach Volume Threshold: 237

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

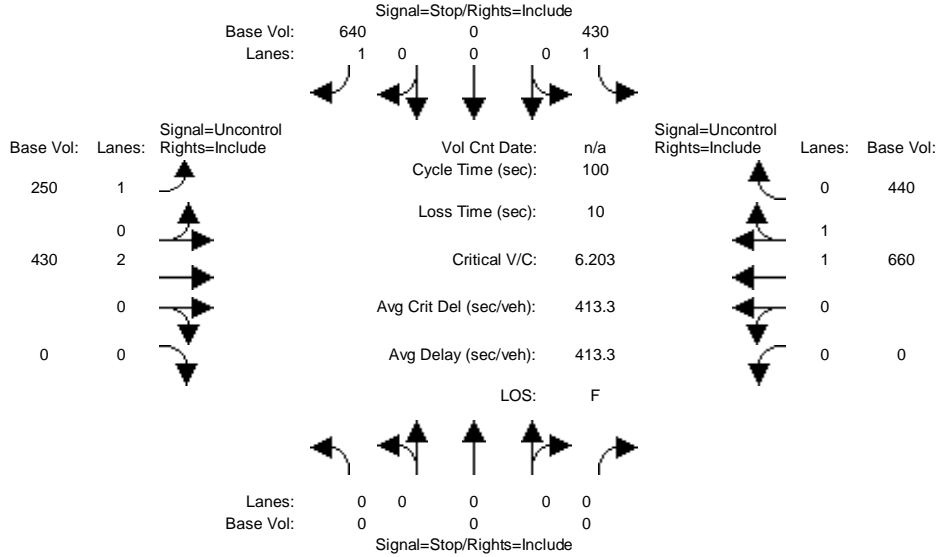
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 Existing With Project Alt2 Weekday PM

Intersection #9: University Dr. & Toro Center Dr.



Street Name:	University Dr.						Toro Center Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	430	0	640	250	430	0	0	660	440
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	430	0	640	250	430	0	0	660	440
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	430	0	640	250	430	0	0	660	440
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	430	0	640	250	430	0	0	660	440
Critical Gap Module:												
Critical Gp:	xxxx	xxxx	xxxx	6.8	xxxx	6.9	4.1	xxxx	xxxx	xxxx	xxxx	xxxx
FollowUpTim:	xxxx	xxxx	xxxx	3.5	xxxx	3.3	2.2	xxxx	xxxx	xxxx	xxxx	xxxx
Capacity Module:												
Cnflct Vol:	xxxx	xxxx	xxxx	1595	xxxx	550	1100	xxxx	xxxx	xxxx	xxxx	xxxx
Potent Cap.:	xxxx	xxxx	xxxx	100	xxxx	484	642	xxxx	xxxx	xxxx	xxxx	xxxx
Move Cap.:	xxxx	xxxx	xxxx	69	xxxx	484	642	xxxx	xxxx	xxxx	xxxx	xxxx
Volume/Cap:	xxxx	xxxx	xxxx	6.20	xxxx	1.32	0.39	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxx	48.4	xxxx	28.1	1.8	xxxx	xxxx	xxxx	xxxx	xxxx
Control Del:	xxxx	xxxx	xxxx	2458	xxxx	183.4	14.1	xxxx	xxxx	xxxx	xxxx	xxxx
LOS by Move:	*	*	*	F	*	F	B	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
SharedQueue:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Shrd ConDel:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			1097.7			xxxxxx			xxxxxx		

ApproachLOS: * F * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #9 University Dr. & Toro Center Dr.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0	0	0	0	0	0	1	0	2	0	0	1
Initial Vol:	0	0	0	430	0	640	250	430	0	0	660	440
ApproachDel:	xxxxxxx			1097.7			xxxxxxx			xxxxxxx		

Approach[southbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=326.2]

SUCCEED - Vehicle-hours >= 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=1070]

SUCCEED - Approach volume >= 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=2850]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

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The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #9 University Dr. & Toro Center Dr.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0	0	0	0	0	0	1	0	2	0	0	1
Initial Vol:	0	0	0	430	0	640	250	430	0	0	660	440

Major Street Volume: 1780

Minor Approach Volume: 1070

Minor Approach Volume Threshold: 126 [less than minimum of 150]

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

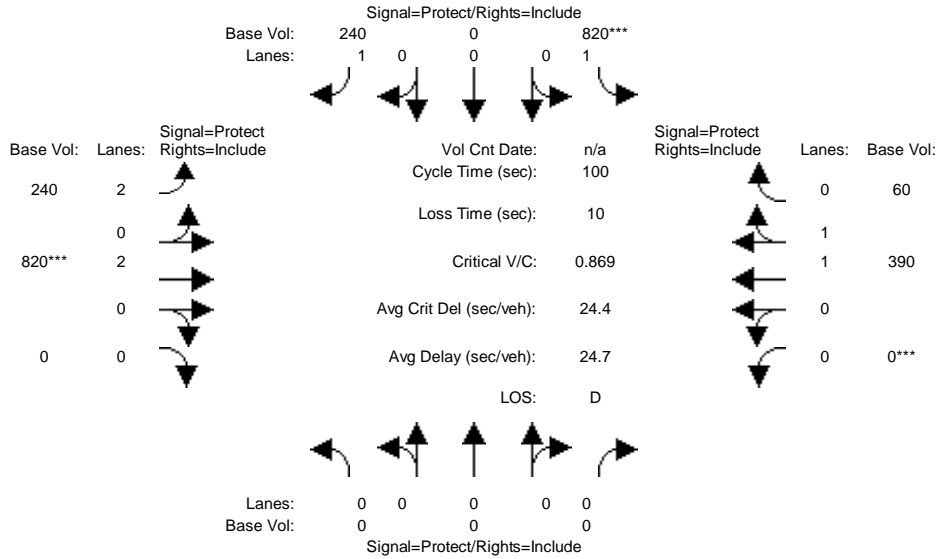
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alt2 Weekday PM

Intersection #10: Albertoni St. & SR 91 EB Ramps

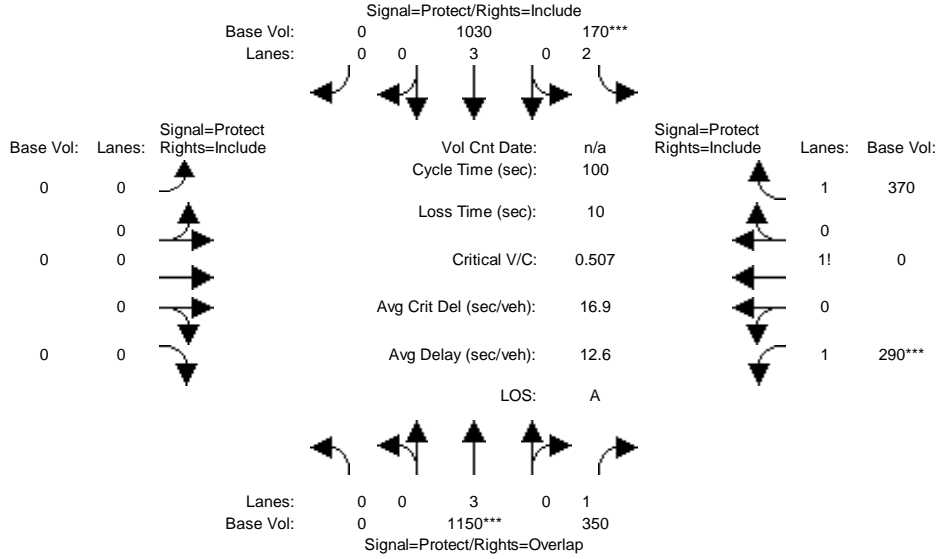


Street Name:	Albertoni St.						SR 91 EB Ramps														
Approach:	North Bound			South Bound			East Bound			West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																					
Base Vol:	0	0	0	820	0	240	240	820	0	0	390	60									
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
Initial Bse:	0	0	0	820	0	240	240	820	0	0	390	60									
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
PHF Volume:	0	0	0	820	0	240	240	820	0	0	390	60									
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0									
Reduced Vol:	0	0	0	820	0	240	240	820	0	0	390	60									
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
Final Volume:	0	0	0	820	0	240	240	820	0	0	390	60									
Saturation Flow Module:																					
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600									
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00									
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.73	0.27									
Final Sat.:	0	0	0	1600	0	1600	5760	3200	0	0	2773	427									
Capacity Analysis Module:																					
Vol/Sat:	0.00	0.00	0.00	0.51	0.00	0.15	0.04	0.26	0.00	0.00	0.14	0.14									
Crit Moves:				****							****										

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alt2 Weekday PM

Intersection #11: Avalon Blvd. & SR 91 WB On-Ramp

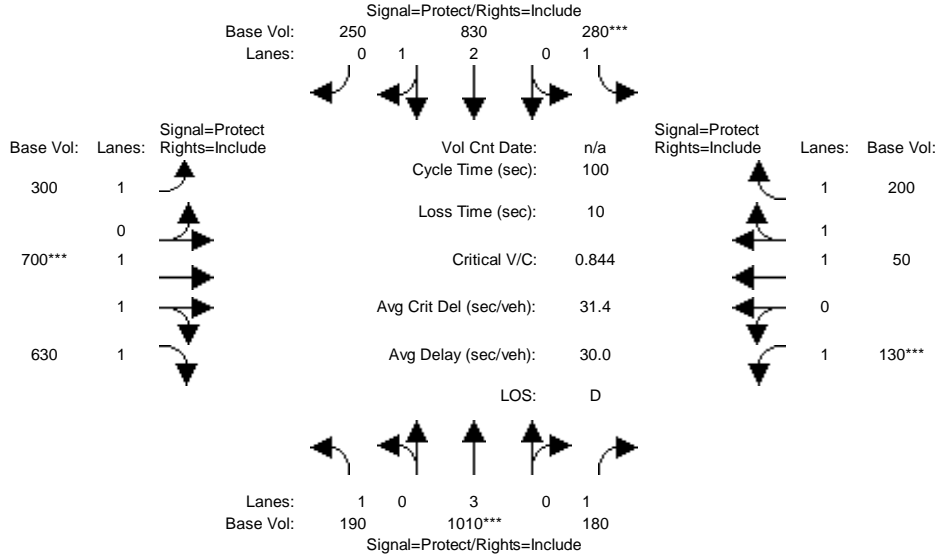


Street Name:	Avalon Blvd.						SR 91 WB On-Ramp														
Approach:	North Bound			South Bound			East Bound			West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																					
Base Vol:	0	1150	350	170	1030	0	0	0	0	290	0	370	0	0	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1150	350	170	1030	0	0	0	0	290	0	370	0	0	0	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1150	350	170	1030	0	0	0	0	290	0	370	0	0	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1150	350	170	1030	0	0	0	0	290	0	370	0	0	0	0	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	1150	350	170	1030	0	0	0	0	290	0	370	0	0	0	0	0	0	0	0	0
OvlAdjVol:			130																		
Saturation Flow Module:																					
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	1.68	0.00	0.00	0.00	0.00	0.00	0.00
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	2109	0	2691	0	0	0	0	0	0	0	0	0
Capacity Analysis Module:																					
Vol/Sat:	0.00	0.24	0.22	0.03	0.21	0.00	0.00	0.00	0.00	0.14	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OvlAdjV/S:			0.08																		
Crit Moves:	****			****						****											

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alt2 Weekday PM

Intersection #12: Avalon Blvd. & Albertoni St.

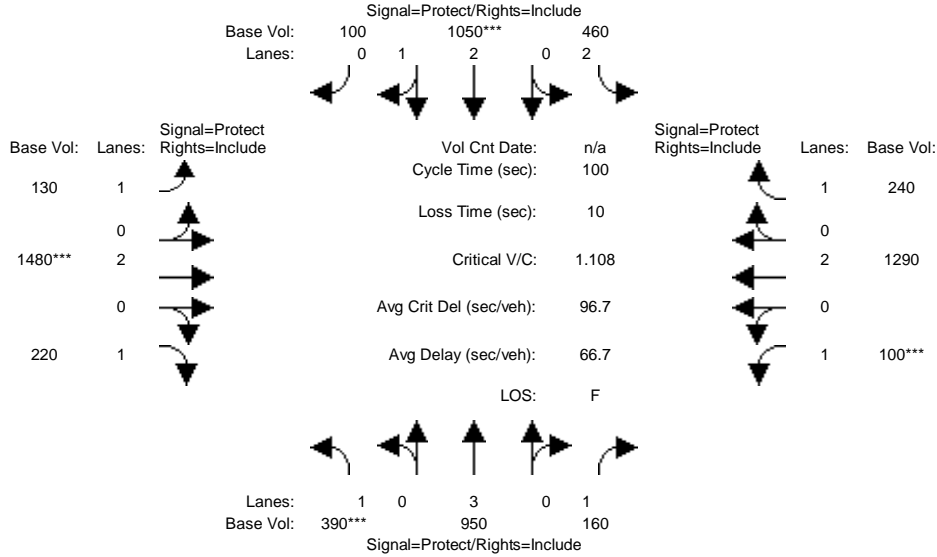


Street Name:	Avalon Blvd.						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	190	1010	180	280	830	250	300	700	630	130	50	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	190	1010	180	280	830	250	300	700	630	130	50	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	190	1010	180	280	830	250	300	700	630	130	50	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	190	1010	180	280	830	250	300	700	630	130	50	200
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	190	1010	180	280	830	250	300	700	630	130	50	200
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.31	0.69	1.00	1.58	1.42	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3689	1111	1600	2526	2274	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.12	0.21	0.11	0.17	0.22	0.23	0.19	0.28	0.28	0.08	0.03	0.06
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alt2 Weekday PM

Intersection #13: Avalon Blvd. & Victoria St.

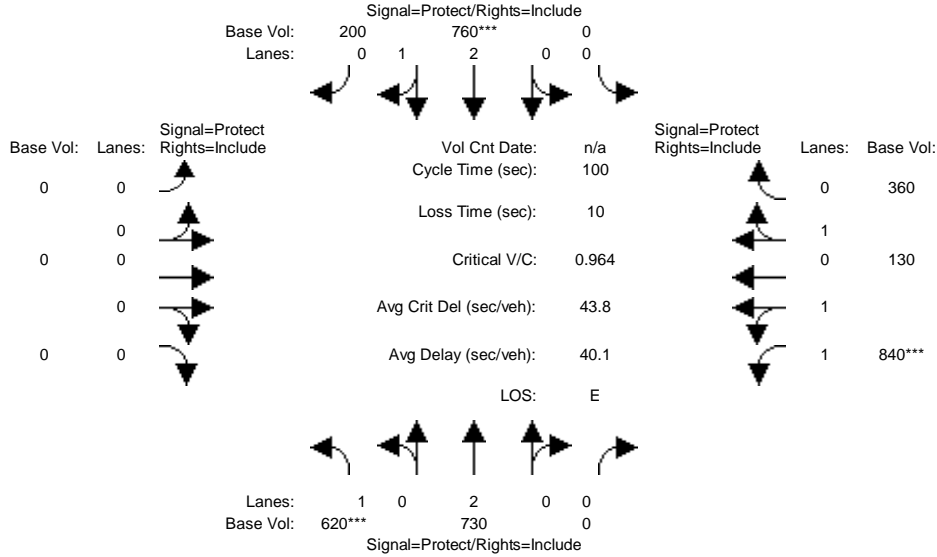


Street Name:	Avalon Blvd.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	390	950	160	460	1050	100	130	1480	220	100	1290	240
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	390	950	160	460	1050	100	130	1480	220	100	1290	240
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	390	950	160	460	1050	100	130	1480	220	100	1290	240
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	390	950	160	460	1050	100	130	1480	220	100	1290	240
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	390	950	160	460	1050	100	130	1480	220	100	1290	240
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.74	0.26	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4383	417	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.24	0.20	0.10	0.08	0.24	0.24	0.08	0.46	0.14	0.06	0.40	0.15
Crit Moves:	****				****			****			****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alt2 Weekday PM

Intersection #14: Central Ave. & Artesia Blvd.

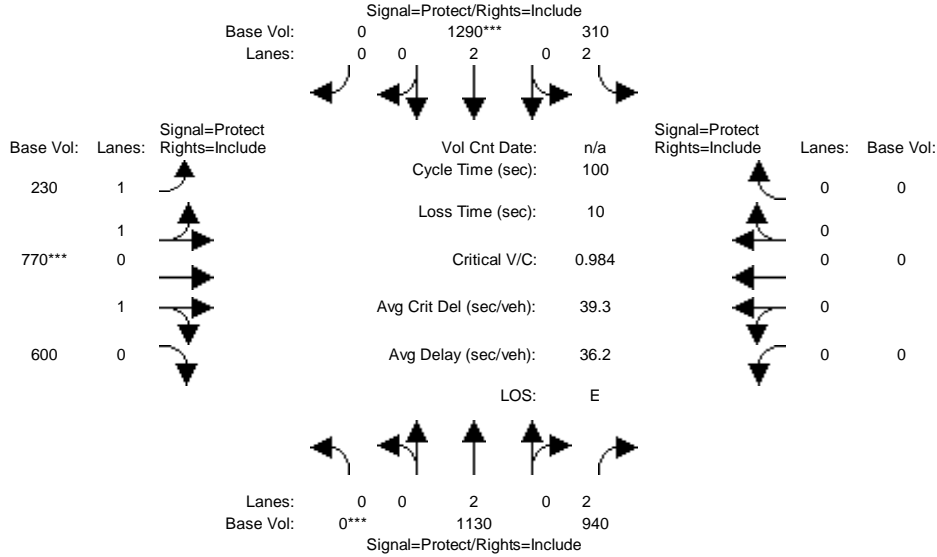


Street Name:	Central Ave.						Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	620	730	0	0	760	200	0	0	0	840	130	360
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	620	730	0	0	760	200	0	0	0	840	130	360
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	620	730	0	0	760	200	0	0	0	840	130	360
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	620	730	0	0	760	200	0	0	0	840	130	360
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	620	730	0	0	760	200	0	0	0	840	130	360
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.38	0.62	0.00	0.00	0.00	1.90	0.29	0.81
Final Sat.:	1600	3200	0	0	3800	1000	0	0	0	3040	468	1292
Capacity Analysis Module:												
Vol/Sat:	0.39	0.23	0.00	0.00	0.20	0.20	0.00	0.00	0.00	0.28	0.28	0.28
Crit Moves:	****				****					****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alt2 Weekday PM

Intersection #15: Central Ave. & Albertoni St./Artesia Blvd. EB

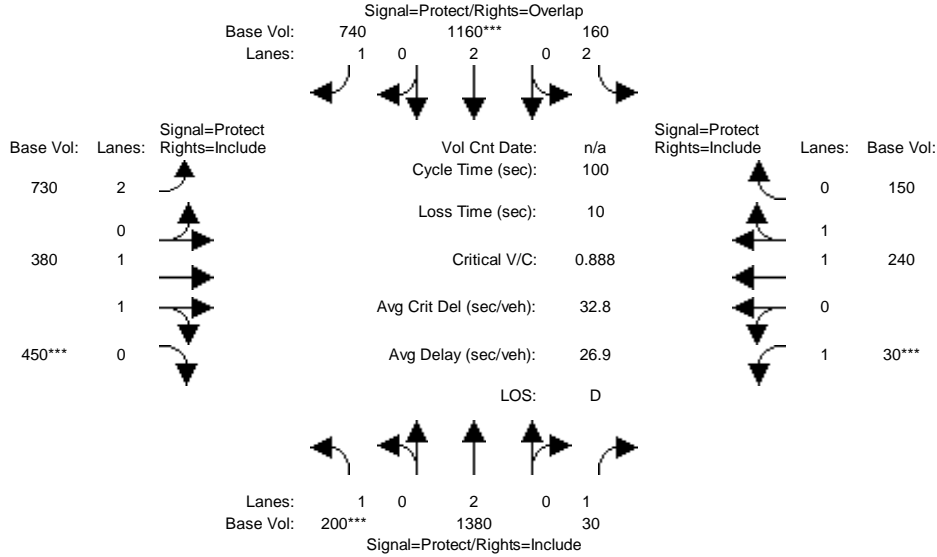


Street Name:	Central Ave.						Albertoni St./Artesia Blvd. EB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1130	940	310	1290	0	230	770	600	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1130	940	310	1290	0	230	770	600	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1130	940	310	1290	0	230	770	600	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1130	940	310	1290	0	230	770	600	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	1130	940	310	1290	0	230	770	600	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	1600	1600	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.35	0.29	0.05	0.40	0.00	0.14	0.48	0.38	0.00	0.00	0.00
Crit Moves:	****				****			****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alt2 Weekday PM

Intersection #16: Central Ave. & Victoria St.

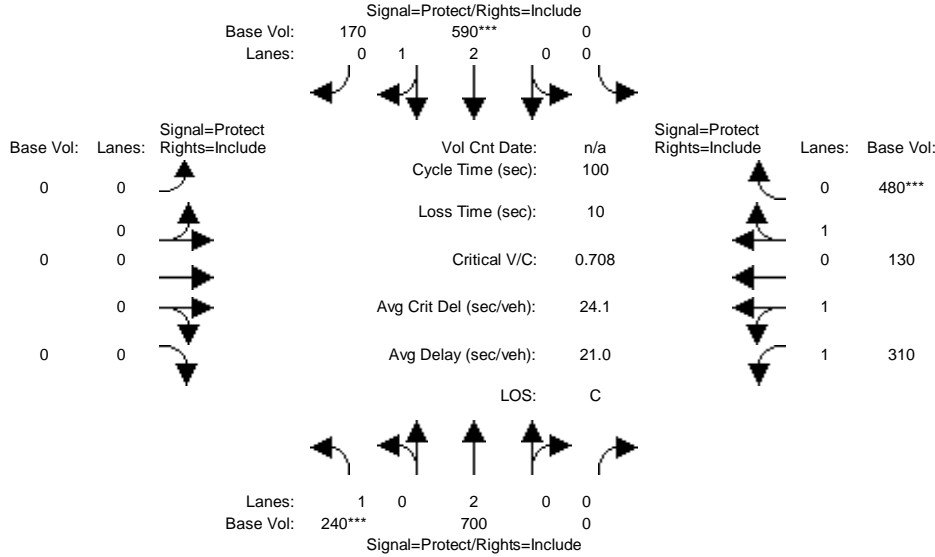


Street Name:	Central Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	200	1380	30	160	1160	740	730	380	450	30	240	150
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	200	1380	30	160	1160	740	730	380	450	30	240	150
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	200	1380	30	160	1160	740	730	380	450	30	240	150
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	200	1380	30	160	1160	740	730	380	450	30	240	150
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	200	1380	30	160	1160	740	730	380	450	30	240	150
OvlAdjVol:	537											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.00	1.00	1.00	1.23	0.77
Final Sat.:	1600	3200	1600	5760	3200	1600	5760	1600	1600	1600	1969	1231
Capacity Analysis Module:												
Vol/Sat:	0.13	0.43	0.02	0.03	0.36	0.46	0.13	0.24	0.28	0.02	0.12	0.12
OvlAdjV/S:	0.34											
Crit Moves:	***			***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alt2 Weekday PM

Intersection #17: Wilmington Ave. & Artesia Blvd. WB

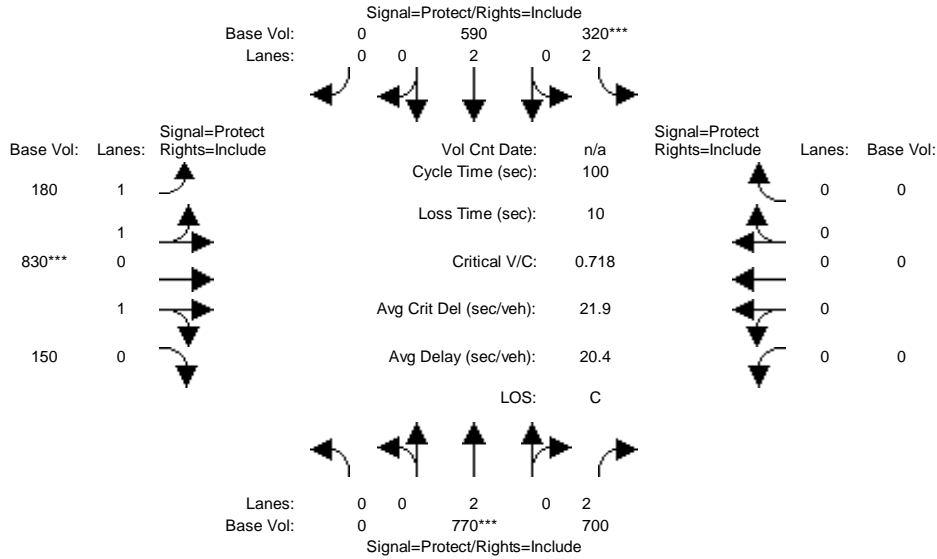


Street Name:	Wilmington Ave.						Artesia Blvd. WB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	240	700	0	0	590	170	0	0	0	310	130	480
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	240	700	0	0	590	170	0	0	0	310	130	480
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	240	700	0	0	590	170	0	0	0	310	130	480
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	240	700	0	0	590	170	0	0	0	310	130	480
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	240	700	0	0	590	170	0	0	0	310	130	480
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.33	0.67	0.00	0.00	0.00	1.41	0.59	1.00
Final Sat.:	1600	3200	0	0	3726	1074	0	0	0	2255	945	1600
Capacity Analysis Module:												
Vol/Sat:	0.15	0.22	0.00	0.00	0.16	0.16	0.00	0.00	0.00	0.14	0.14	0.30
Crit Moves:	****				****							****

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alt2 Weekday PM

Intersection #18: Wilmington Ave. & Artesia Blvd. EB

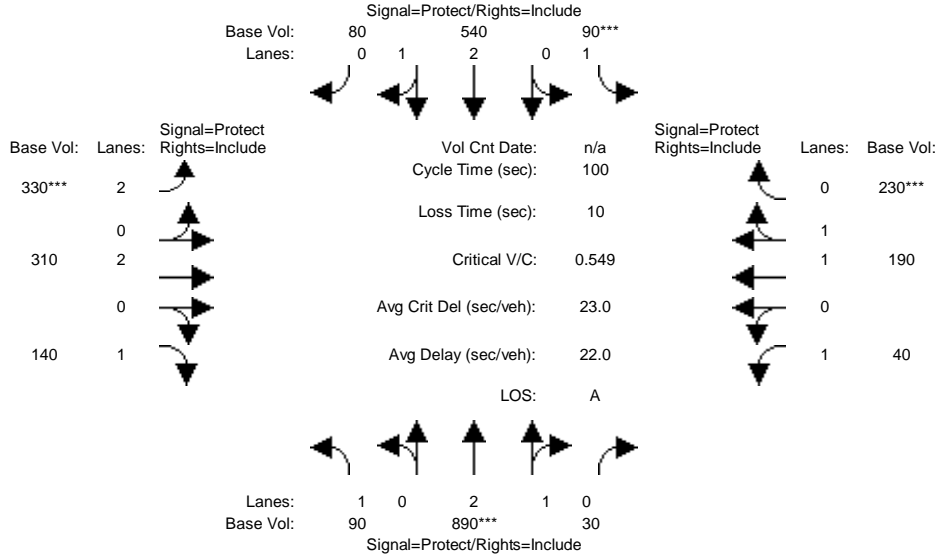


Street Name:	Wilmington Ave.						Artesia Blvd. EB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	770	700	320	590	0	180	830	150	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	770	700	320	590	0	180	830	150	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	770	700	320	590	0	180	830	150	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	770	700	320	590	0	180	830	150	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	770	700	320	590	0	180	830	150	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.00	1.61	0.39	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	1600	2583	617	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.24	0.22	0.06	0.18	0.00	0.11	0.32	0.24	0.00	0.00	0.00
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alt2 Weekday PM

Intersection #19: Wilmington Ave. & Victoria St.

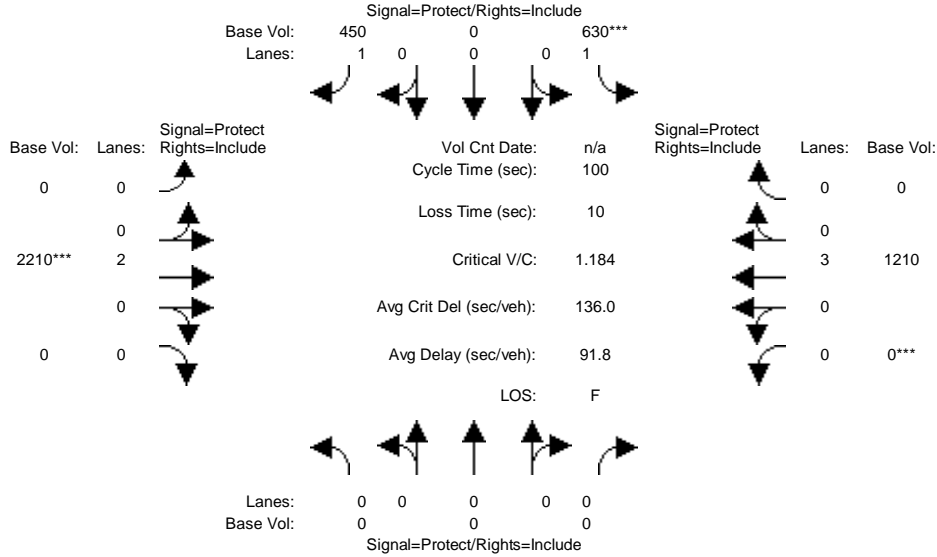


Street Name:	Wilmington Ave.						Victoria St.													
Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																				
Base Vol:	90	890	30	90	540	80	330	310	140	40	190	230								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	90	890	30	90	540	80	330	310	140	40	190	230								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Volume:	90	890	30	90	540	80	330	310	140	40	190	230								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	90	890	30	90	540	80	330	310	140	40	190	230								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
FinalVolume:	90	890	30	90	540	80	330	310	140	40	190	230								
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600								
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00								
Lanes:	1.00	2.90	0.10	1.00	2.61	0.39	2.00	2.00	1.00	1.00	1.00	1.00								
Final Sat.:	1600	4643	157	1600	4181	619	5760	3200	1600	1600	1600	1600								
Capacity Analysis Module:																				
Vol/Sat:	0.06	0.19	0.19	0.06	0.13	0.13	0.06	0.10	0.09	0.03	0.12	0.14								
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****								

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alt2 Weekday PM

Intersection #20: I-110 SB Off-Ramp & 190th St.

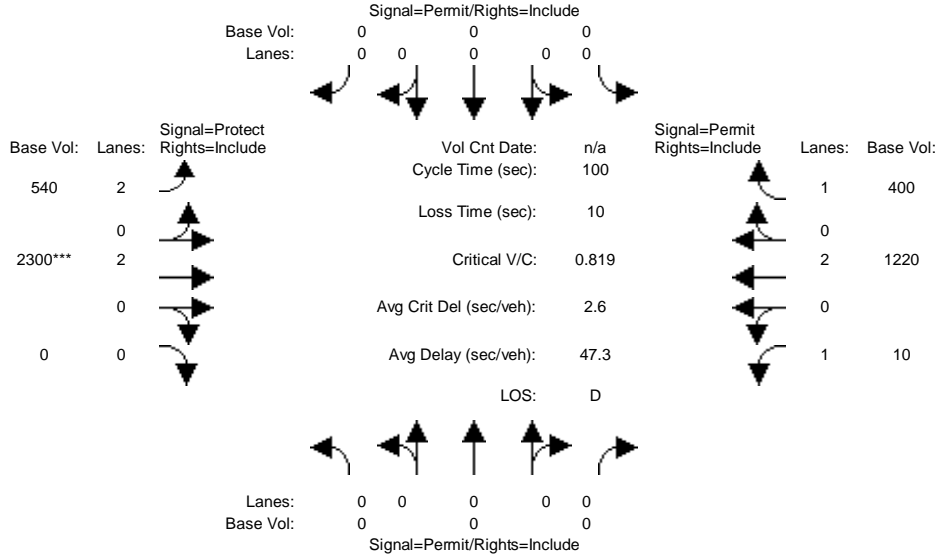


Street Name:	I-110 SB Off-Ramp						190th St.														
Approach:	North Bound			South Bound			East Bound			West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																					
Base Vol:	0	0	0	630	0	450	0	2210	0	0	1210	0	0	1210	0	0	1210	0	0	1210	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	630	0	450	0	2210	0	0	1210	0	0	1210	0	0	1210	0	0	1210	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	630	0	450	0	2210	0	0	1210	0	0	1210	0	0	1210	0	0	1210	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	630	0	450	0	2210	0	0	1210	0	0	1210	0	0	1210	0	0	1210	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	630	0	450	0	2210	0	0	1210	0	0	1210	0	0	1210	0	0	1210	0
Saturation Flow Module:																					
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00	0.00	3.00	0.00	0.00	3.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0	0	4800	0	0	4800	0	0	4800	0
Capacity Analysis Module:																					
Vol/Sat:	0.00	0.00	0.00	0.39	0.00	0.28	0.00	0.69	0.00	0.00	0.25	0.00	0.00	0.25	0.00	0.00	0.25	0.00	0.00	0.25	0.00
Crit Moves:				****				****			****			****			****			****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alt2 Weekday PM

Intersection #21: I-110 NB On-Ramp & 190th St.

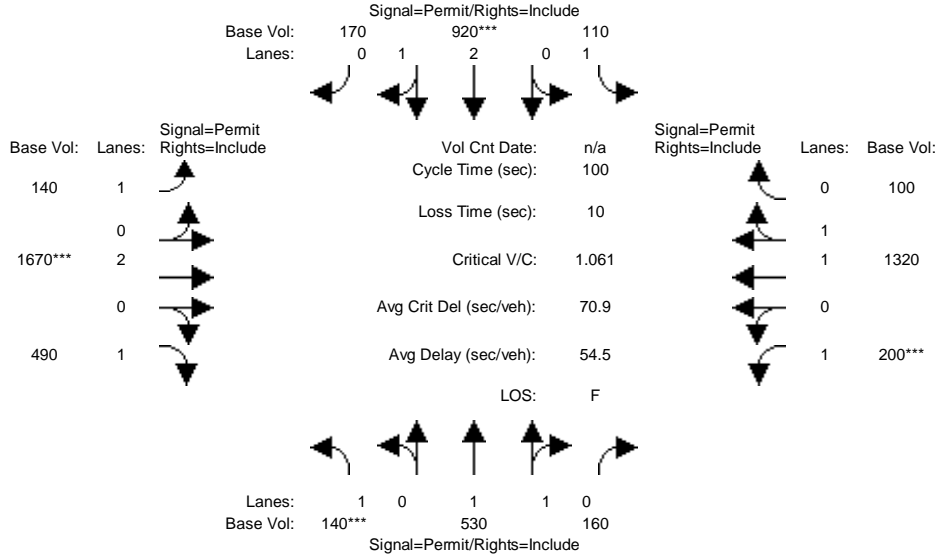


Street Name:	I-110 NB On-Ramp						190th St.														
Approach:	North Bound			South Bound			East Bound			West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Volume Module:																					
Base Vol:	0	0	0	0	0	0	540	2300	0	10	1220	400									
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	0	0	0	0	0	0	540	2300	0	10	1220	400									
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:	0	0	0	0	0	0	540	2300	0	10	1220	400									
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0									
Reduced Vol:	0	0	0	0	0	0	540	2300	0	10	1220	400									
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
FinalVolume:	0	0	0	0	0	0	540	2300	0	10	1220	400									
Saturation Flow Module:																					
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Lanes:	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00									
Final Sat.:	0	0	0	0	0	0	5760	3200	0	1600	3200	1600									
Capacity Analysis Module:																					
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.72	0.00	0.01	0.38	0.25									
Crit Moves:									****												

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alt2 Weekday PM

Intersection #22: Figueroa St. & 190th St./Victoria St.

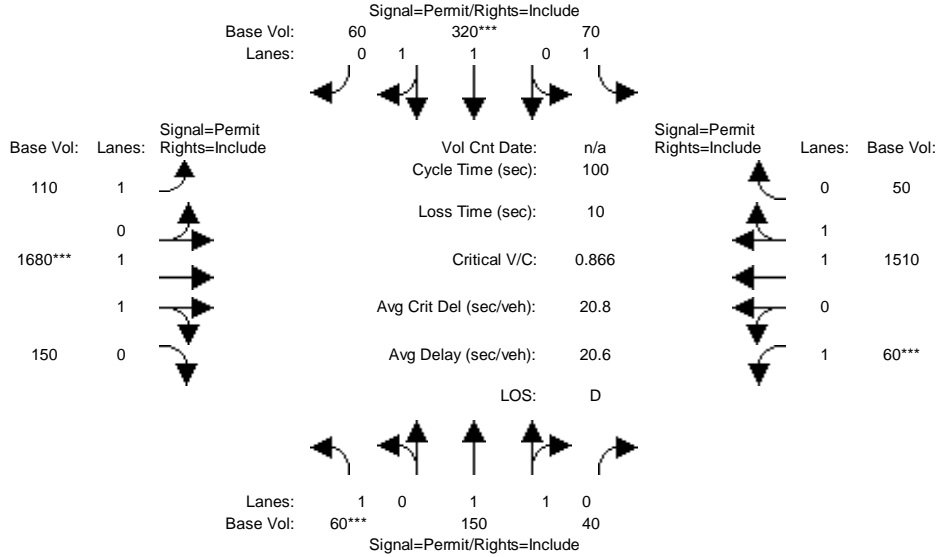


Street Name:	Figueroa St.						190th St./Victoria St.													
Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Volume Module:																				
Base Vol:	140	530	160	110	920	170	140	1670	490	200	1320	100								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	140	530	160	110	920	170	140	1670	490	200	1320	100								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Volume:	140	530	160	110	920	170	140	1670	490	200	1320	100								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	140	530	160	110	920	170	140	1670	490	200	1320	100								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
FinalVolume:	140	530	160	110	920	170	140	1670	490	200	1320	100								
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600								
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Lanes:	1.00	1.54	0.46	1.00	2.53	0.47	1.00	2.00	1.00	1.00	1.86	0.14								
Final Sat.:	1600	2458	742	1600	4051	749	1600	3200	1600	1600	2975	225								
Capacity Analysis Module:																				
Vol/Sat:	0.09	0.22	0.22	0.07	0.23	0.23	0.09	0.52	0.31	0.13	0.44	0.44								
Crit Moves:	****				****		****			****										

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alt2 Weekday PM

Intersection #23: Broadway & Victoria St.

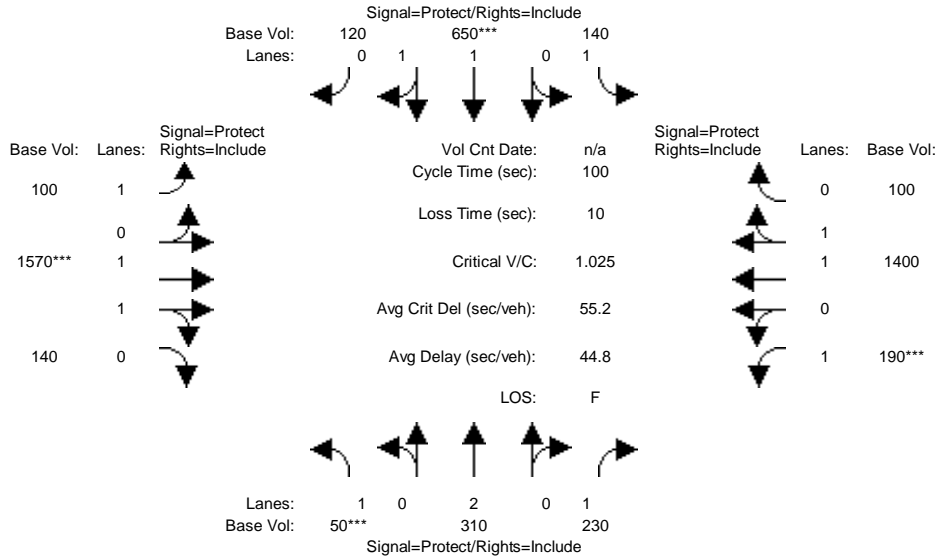


Street Name:	Broadway						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	60	150	40	70	320	60	110	1680	150	60	1510	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	150	40	70	320	60	110	1680	150	60	1510	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	150	40	70	320	60	110	1680	150	60	1510	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	150	40	70	320	60	110	1680	150	60	1510	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	150	40	70	320	60	110	1680	150	60	1510	50
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.58	0.42	1.00	1.68	0.32	1.00	1.84	0.16	1.00	1.94	0.06
Final Sat.:	1600	2526	674	1600	2695	505	1600	2938	262	1600	3097	103
Capacity Analysis Module:												
Vol/Sat:	0.04	0.06	0.06	0.04	0.12	0.12	0.07	0.57	0.57	0.04	0.49	0.49
Crit Moves:	****				****			****			****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alt2 Weekday PM

Intersection #24: Main St. & Victoria St.

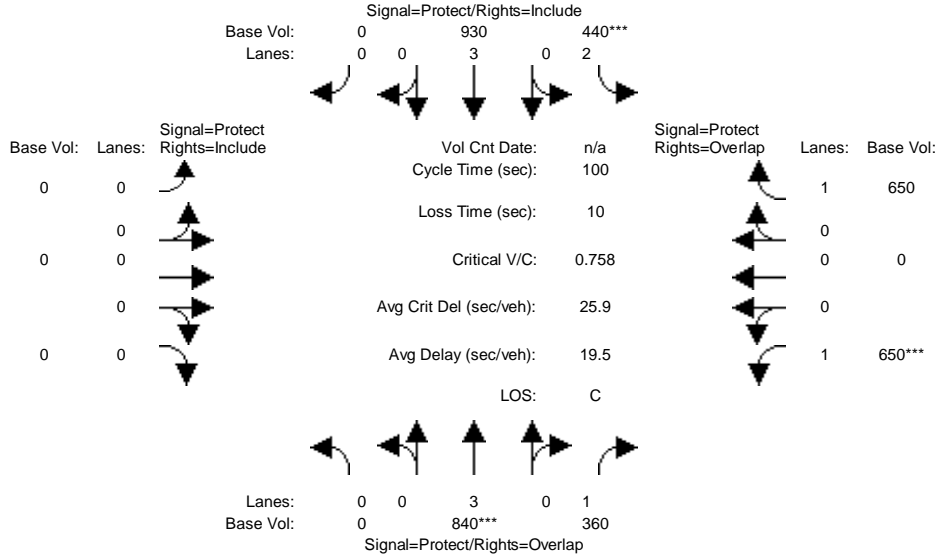


Street Name:	Main St.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	50	310	230	140	650	120	100	1570	140	190	1400	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	310	230	140	650	120	100	1570	140	190	1400	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	310	230	140	650	120	100	1570	140	190	1400	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	310	230	140	650	120	100	1570	140	190	1400	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	310	230	140	650	120	100	1570	140	190	1400	100
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.69	0.31	1.00	1.84	0.16	1.00	1.87	0.13
Final Sat.:	1600	3200	1600	1600	2701	499	1600	2938	262	1600	2987	213
Capacity Analysis Module:												
Vol/Sat:	0.03	0.10	0.14	0.09	0.24	0.24	0.06	0.53	0.53	0.12	0.47	0.47
Crit Moves:	****				****			****			****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alt2 Weekday PM

Intersection #25: Avalon Blvd. & University Dr.

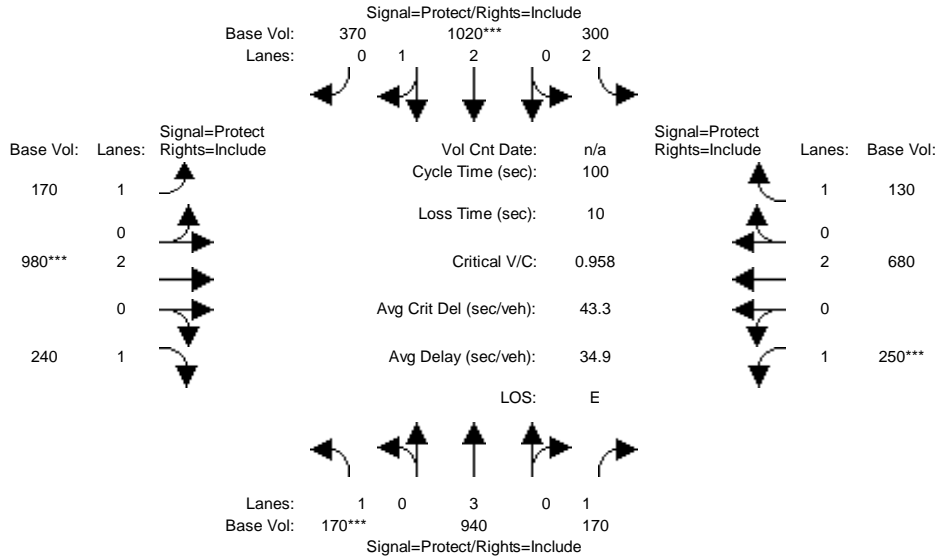


Street Name:	Avalon Blvd.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	840	360	440	930	0	0	0	0	650	0	650
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	840	360	440	930	0	0	0	0	650	0	650
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	840	360	440	930	0	0	0	0	650	0	650
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	840	360	440	930	0	0	0	0	650	0	650
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	840	360	440	930	0	0	0	0	650	0	650
OvlAdjVol:	0									528		
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.17	0.23	0.08	0.19	0.00	0.00	0.00	0.00	0.41	0.00	0.41
OvlAdjV/S:	0.00									0.33		
Crit Moves:	****			****						****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alt2 Weekday PM

Intersection #26: Avalon Blvd. & Del Amo Blvd.

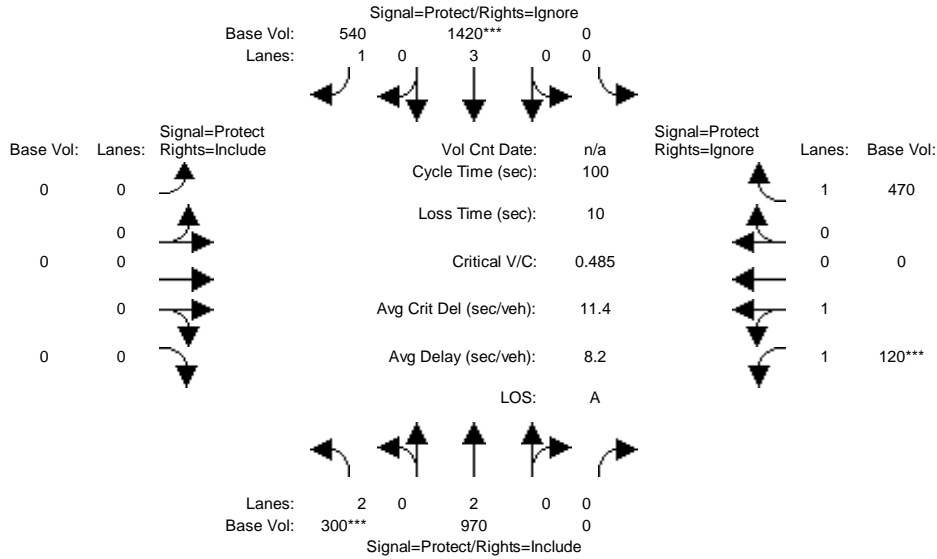


Street Name:	Avalon Blvd.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	170	940	170	300	1020	370	170	980	240	250	680	130
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	170	940	170	300	1020	370	170	980	240	250	680	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	170	940	170	300	1020	370	170	980	240	250	680	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	170	940	170	300	1020	370	170	980	240	250	680	130
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	170	940	170	300	1020	370	170	980	240	250	680	130
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.20	0.80	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	3522	1278	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.20	0.11	0.05	0.29	0.29	0.11	0.31	0.15	0.16	0.21	0.08
Crit Moves:	****				****		****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alt2 Weekday PM

Intersection #27: Avalon Blvd. & I-405 NB Ramps

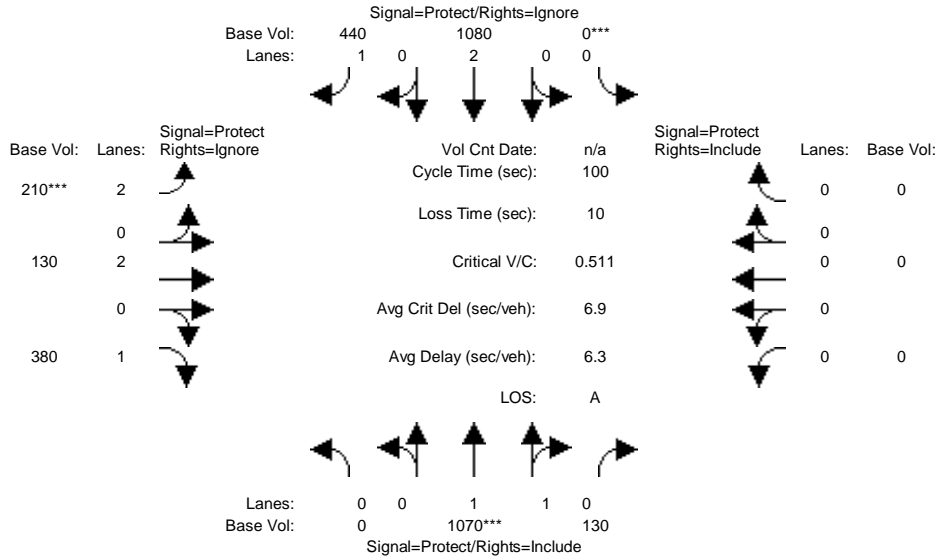


Street Name:	Avalon Blvd.						I-405 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	300	970	0	0	1420	540	0	0	0	120	0	470
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	300	970	0	0	1420	540	0	0	0	120	0	470
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	300	970	0	0	1420	0	0	0	0	120	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	300	970	0	0	1420	0	0	0	0	120	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	300	970	0	0	1420	0	0	0	0	120	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	5760	3200	0	0	4800	1600	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.30	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.04	0.00	0.00
Crit Moves:	****				****					****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alt2 Weekday PM

Intersection #28: Avalon Blvd. & I-405 SB Ramps

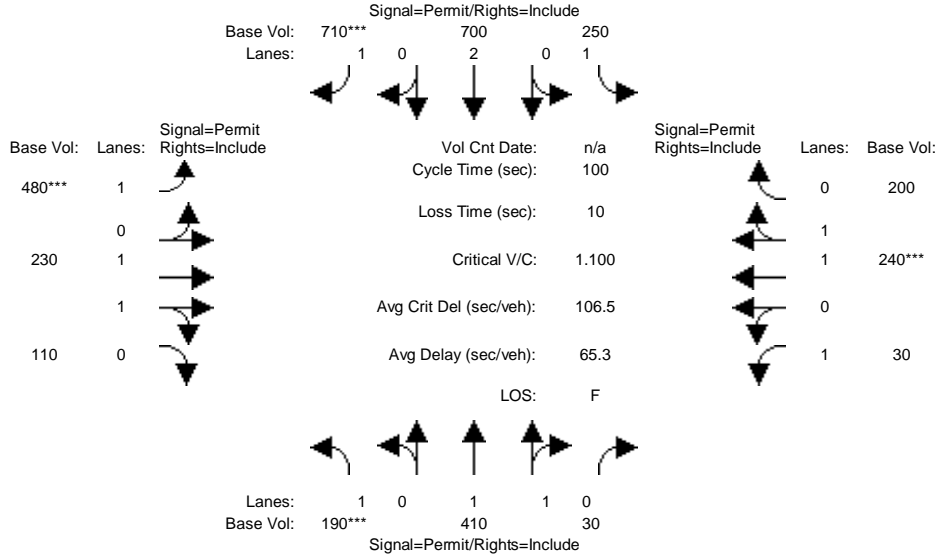


Street Name:	Avalon Blvd.						I-405 SB Ramps														
Approach:	North Bound			South Bound			East Bound			West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																					
Base Vol:	0	1070	130	0	1080	440	210	130	380	0	0	0	0	0	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1070	130	0	1080	440	210	130	380	0	0	0	0	0	0	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1070	130	0	1080	0	210	130	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1070	130	0	1080	0	210	130	0	0	0	0	0	0	0	0	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1070	130	0	1080	0	210	130	0	0	0	0	0	0	0	0	0	0	0	0	0
Saturation Flow Module:																					
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.78	0.22	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Final Sat.:	0	2853	347	0	3200	1600	5760	3200	1600	0	0	0	0	0	0	0	0	0	0	0	0
Capacity Analysis Module:																					
Vol/Sat:	0.00	0.38	0.37	0.00	0.34	0.00	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****			****			****														

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alt2 Weekday PM

Intersection #29: Central Ave. & University Dr.

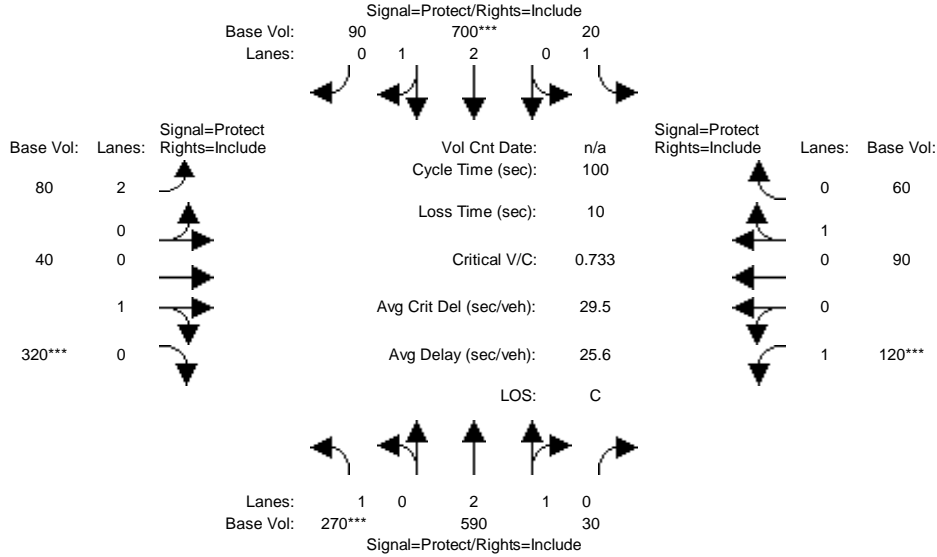


Street Name:	Central Ave.						University Dr.													
Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																				
Base Vol:	190	410	30	250	700	710	480	230	110	30	240	200								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	190	410	30	250	700	710	480	230	110	30	240	200								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	190	410	30	250	700	710	480	230	110	30	240	200								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	190	410	30	250	700	710	480	230	110	30	240	200								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	190	410	30	250	700	710	480	230	110	30	240	200								
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.86	0.14	1.00	2.00	1.00	1.00	1.35	0.65	1.00	1.09	0.91								
Final Sat.:	1600	2982	218	1600	3200	1600	1600	2165	1035	1600	1745	1455								
Capacity Analysis Module:																				
Vol/Sat:	0.12	0.14	0.14	0.16	0.22	0.44	0.30	0.11	0.11	0.02	0.14	0.14								
Crit Moves:	****					****	****				****									

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alt2 Weekday PM

Intersection #30: Wilmington Ave. & University Dr.

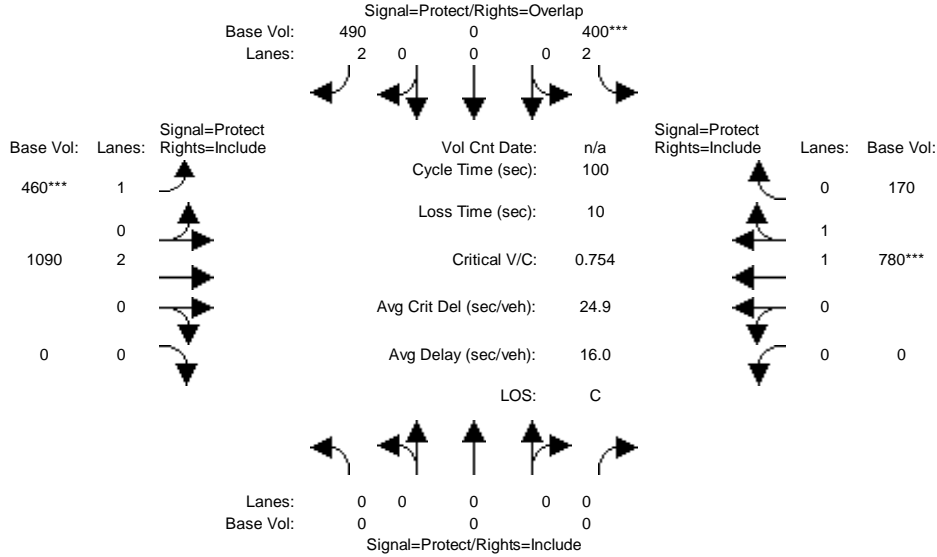


Street Name:	Wilmington Ave.						University Dr.													
Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																				
Base Vol:	270	590	30	20	700	90	80	40	320	120	90	60								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	270	590	30	20	700	90	80	40	320	120	90	60								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Volume:	270	590	30	20	700	90	80	40	320	120	90	60								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	270	590	30	20	700	90	80	40	320	120	90	60								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
FinalVolume:	270	590	30	20	700	90	80	40	320	120	90	60								
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600								
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00								
Lanes:	1.00	2.85	0.15	1.00	2.66	0.34	2.00	0.11	0.89	1.00	0.60	0.40								
Final Sat.:	1600	4568	232	1600	4253	547	5760	178	1422	1600	960	640								
Capacity Analysis Module:																				
Vol/Sat:	0.17	0.13	0.13	0.01	0.16	0.16	0.01	0.22	0.23	0.08	0.09	0.09								
Crit Moves:	****				****				****	****										

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alt2 Weekday PM

Intersection #31: Central Ave. & Del Amo Blvd.

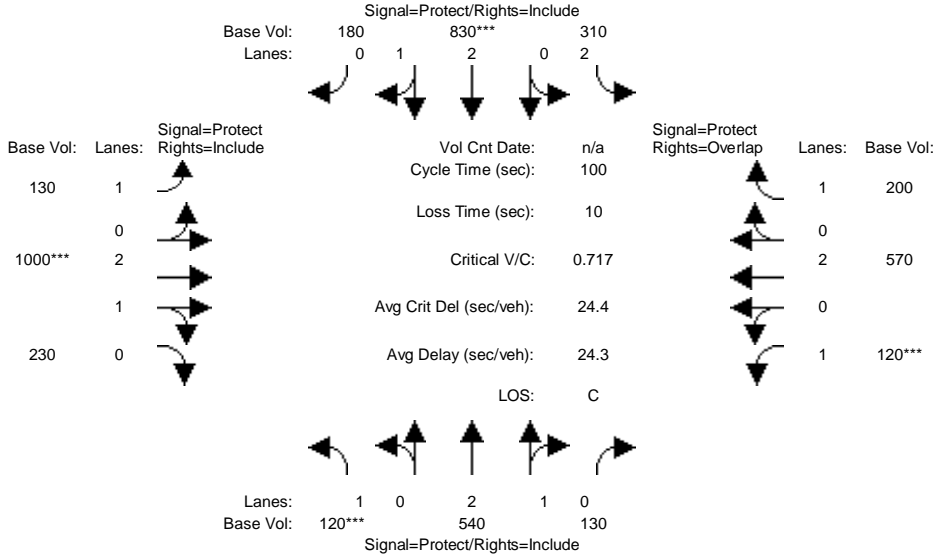


Street Name:	Central Ave.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	400	0	490	460	1090	0	0	780	170
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	400	0	490	460	1090	0	0	780	170
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	400	0	490	460	1090	0	0	780	170
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	400	0	490	460	1090	0	0	780	170
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	400	0	490	460	1090	0	0	780	170
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	2.00	1.00	2.00	0.00	0.00	1.64	0.36
Final Sat.:	0	0	0	5760	0	3200	1600	3200	0	0	2627	573
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.07	0.00	0.15	0.29	0.34	0.00	0.00	0.30	0.30
OvlAdjV/S:	0.00											
Crit Moves:				****				****				****

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alt2 Weekday PM

Intersection #32: Wilmington Ave. & Del Amo Blvd.

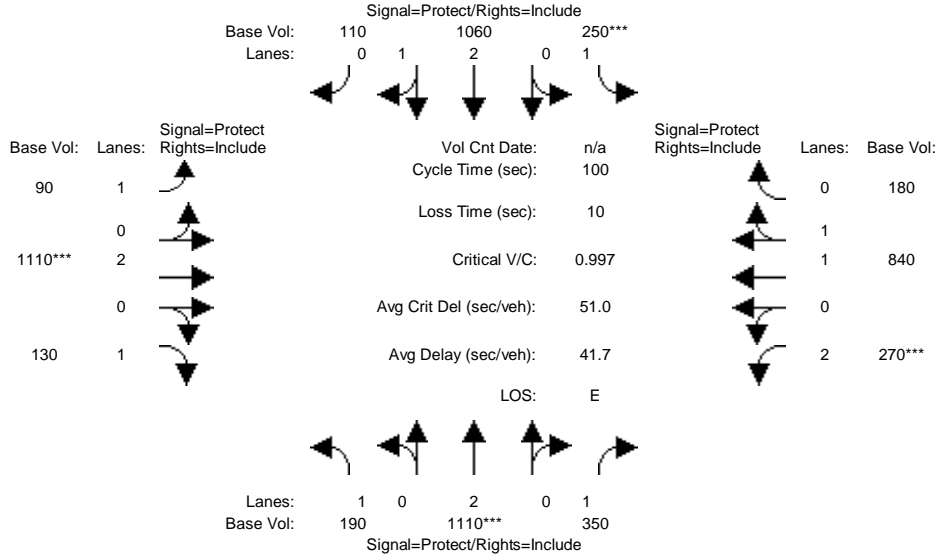


Street Name:	Wilmington Ave.						Del Amo Blvd.													
Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																				
Base Vol:	120	540	130	310	830	180	130	1000	230	120	570	200	120	540	130	310	830	180	130	1000
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	120	540	130	310	830	180	130	1000	230	120	570	200	120	540	130	310	830	180	130	1000
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	120	540	130	310	830	180	130	1000	230	120	570	200	120	540	130	310	830	180	130	1000
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	540	130	310	830	180	130	1000	230	120	570	200	120	540	130	310	830	180	130	1000
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	120	540	130	310	830	180	130	1000	230	120	570	200	120	540	130	310	830	180	130	1000
OvlAdjVol:																				114
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.42	0.58	2.00	2.47	0.53	1.00	2.44	0.56	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00
Final Sat.:	1600	3869	931	5760	3945	855	1600	3902	898	1600	3200	1600	1600	3869	931	5760	3945	855	1600	3902
Capacity Analysis Module:																				
Vol/Sat:	0.08	0.14	0.14	0.05	0.21	0.21	0.08	0.26	0.26	0.08	0.18	0.13	0.08	0.14	0.14	0.05	0.21	0.21	0.08	0.26
OvlAdjV/S:												0.07								
Crit Moves:	***					***				***			***						***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alt2 Weekday PM

Intersection #33: W. Artesia Blvd. & Crenshaw Blvd.

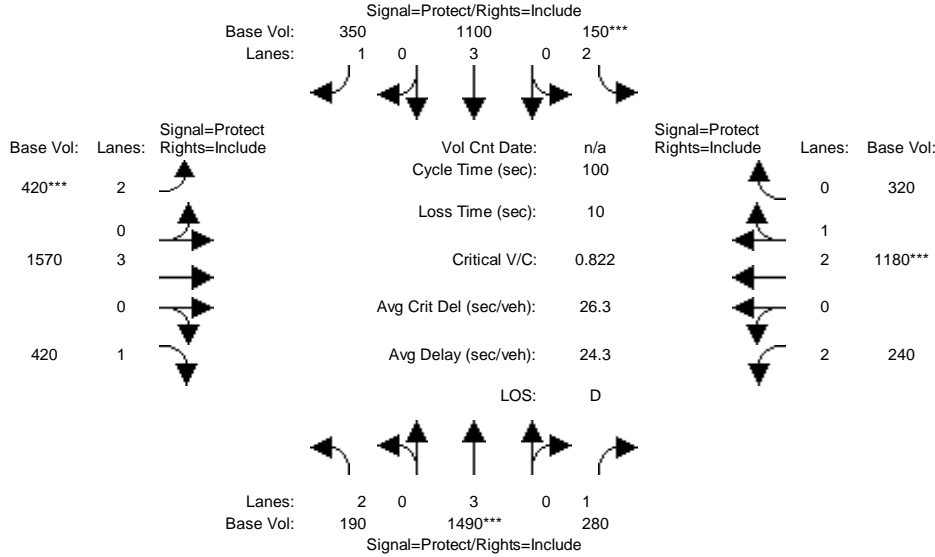


Street Name:	Crenshaw Blvd.						W. Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	190	1110	350	250	1060	110	90	1110	130	270	840	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	190	1110	350	250	1060	110	90	1110	130	270	840	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	190	1110	350	250	1060	110	90	1110	130	270	840	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	190	1110	350	250	1060	110	90	1110	130	270	840	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	190	1110	350	250	1060	110	90	1110	130	270	840	180
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.72	0.28	1.00	2.00	1.00	2.00	1.65	0.35
Final Sat.:	1600	3200	1600	1600	4349	451	1600	3200	1600	5760	2635	565
Capacity Analysis Module:												
Vol/Sat:	0.12	0.35	0.22	0.16	0.24	0.24	0.06	0.35	0.08	0.05	0.32	0.32
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alt2 Weekday PM

Intersection #34: W 190th St. & South Western Ave.

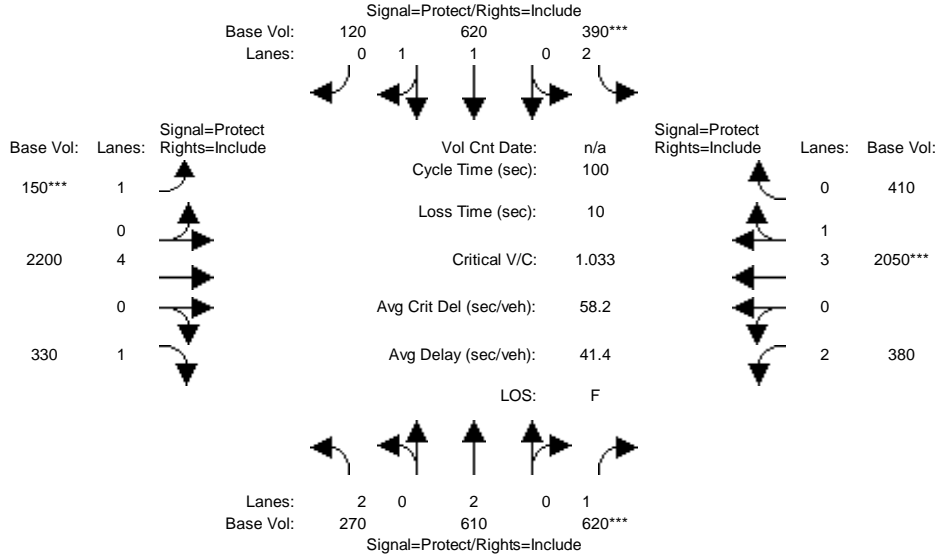


Street Name:	S. Western Ave.						W. 190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	190	1490	280	150	1100	350	420	1570	420	240	1180	320
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	190	1490	280	150	1100	350	420	1570	420	240	1180	320
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	190	1490	280	150	1100	350	420	1570	420	240	1180	320
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	190	1490	280	150	1100	350	420	1570	420	240	1180	320
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	190	1490	280	150	1100	350	420	1570	420	240	1180	320
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.36	0.64
Final Sat.:	5760	4800	1600	5760	4800	1600	5760	4800	1600	5760	3776	1024
Capacity Analysis Module:												
Vol/Sat:	0.03	0.31	0.17	0.03	0.23	0.22	0.07	0.33	0.26	0.04	0.31	0.31
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alt2 Weekday PM

Intersection #35: W. Artesia Blvd. & Vermont Av.e

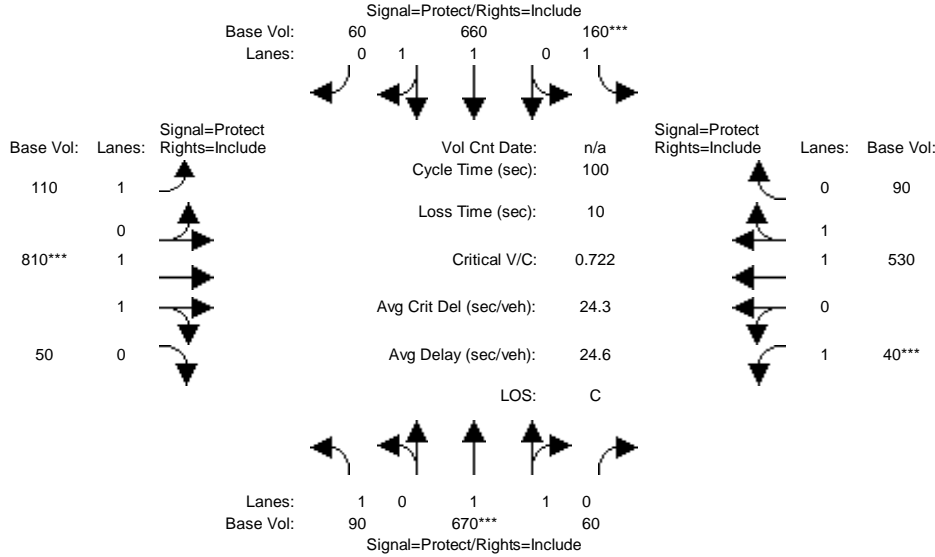


Street Name:	Vermont Ave.						W. Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	270	610	620	390	620	120	150	2200	330	380	2050	410
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	270	610	620	390	620	120	150	2200	330	380	2050	410
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	270	610	620	390	620	120	150	2200	330	380	2050	410
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	270	610	620	390	620	120	150	2200	330	380	2050	410
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	270	610	620	390	620	120	150	2200	330	380	2050	410
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	1.68	0.32	1.00	4.00	1.00	2.00	3.33	0.67
Final Sat.:	5760	3200	1600	5760	2681	519	1600	6400	1600	5760	5333	1067
Capacity Analysis Module:												
Vol/Sat:	0.05	0.19	0.39	0.07	0.23	0.23	0.09	0.34	0.21	0.07	0.38	0.38
Crit Moves:			****	****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alt2 Weekday PM

Intersection #36: Alameda St. & Compton Blvd.

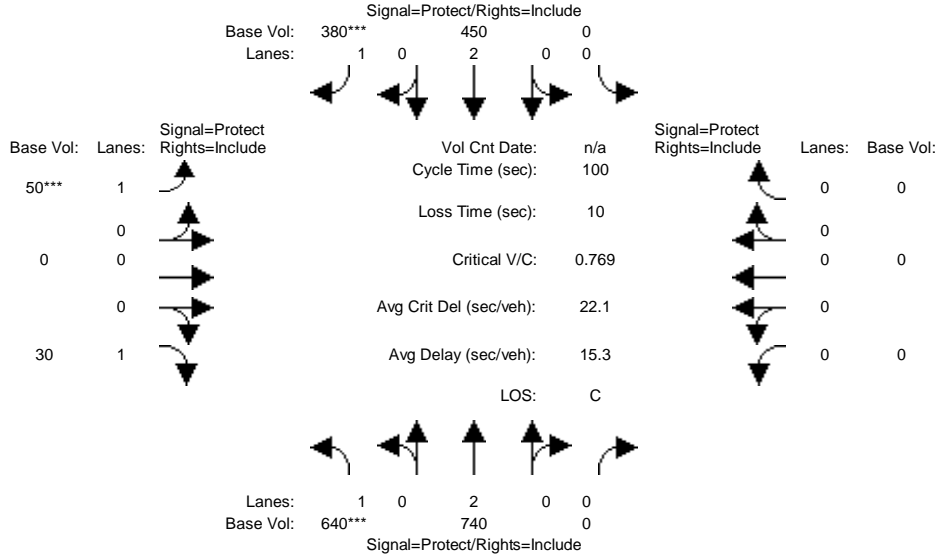


Street Name:	Alameda St.						Compton Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	90	670	60	160	660	60	110	810	50	40	530	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	670	60	160	660	60	110	810	50	40	530	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	670	60	160	660	60	110	810	50	40	530	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	670	60	160	660	60	110	810	50	40	530	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	90	670	60	160	660	60	110	810	50	40	530	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.84	0.16	1.00	1.83	0.17	1.00	1.88	0.12	1.00	1.71	0.29
Final Sat.:	1600	2937	263	1600	2933	267	1600	3014	186	1600	2735	465
Capacity Analysis Module:												
Vol/Sat:	0.06	0.23	0.23	0.10	0.23	0.22	0.07	0.27	0.27	0.03	0.19	0.19
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 Existing With Project Alt2 Weekday PM

Intersection #37: Alameda St. & SR 91 EB Ramps



Street Name:	Alameda St.						SR 91 EB Ramps					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	640	740	0	0	450	380	50	0	30	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	640	740	0	0	450	380	50	0	30	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	640	740	0	0	450	380	50	0	30	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	640	740	0	0	450	380	50	0	30	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	640	740	0	0	450	380	50	0	30	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	3200	0	0	3200	1600	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.40	0.23	0.00	0.00	0.14	0.24	0.03	0.00	0.02	0.00	0.00	0.00
Crit Moves:	****					****	****					

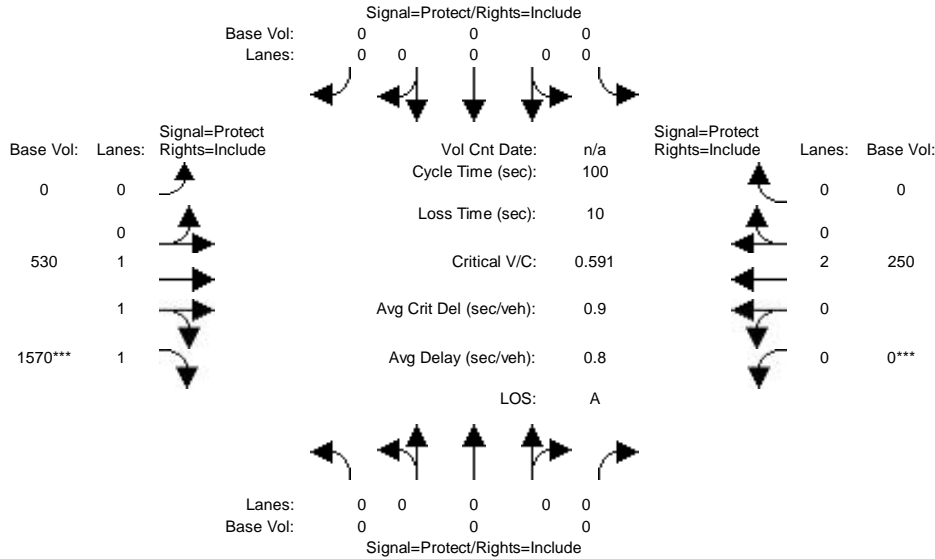
Appendix I

Intersection LOS Worksheets for Existing Sunday with 30,000-Seats Conditions

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Pre-Game

Intersection #1: Victoria St. & Drive D

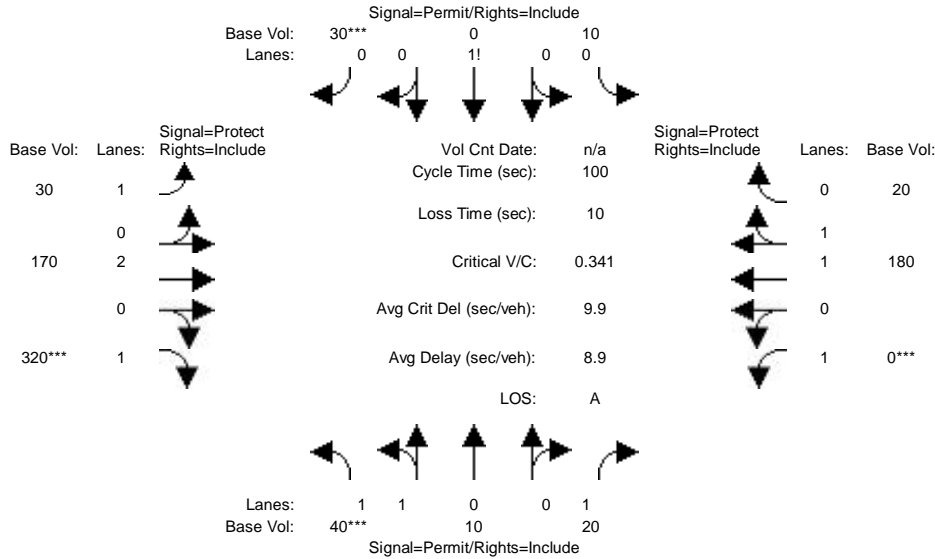


Street Name:	Drive D						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	530	1570	0	250	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	530	1570	0	250	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	0	530	1570	0	250	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	0	530	1570	0	250	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	0	530	1570	0	250	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	2.00	0.00	2.00	0.00
Final Sat.:	0	0	0	0	0	0	0	1600	3200	0	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.49	0.00	0.08	0.00
Crit Moves:							****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Pre-Game

Intersection #2: Victoria St & Tamcliff Ave

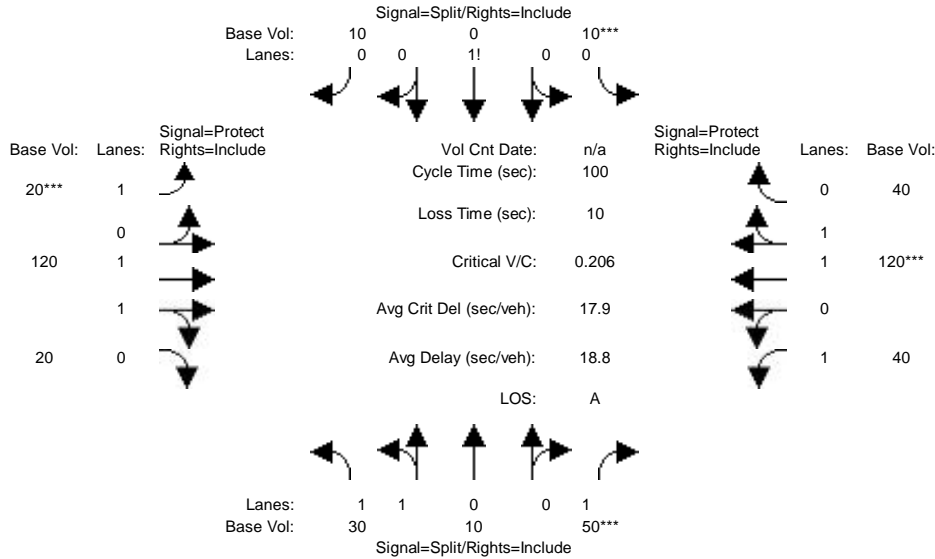


Street Name:	Victoria St						Tamcliff Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	40	10	20	10	0	30	30	170	320	0	180	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	10	20	10	0	30	30	170	320	0	180	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	10	20	10	0	30	30	170	320	0	180	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	10	20	10	0	30	30	170	320	0	180	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	10	20	10	0	30	30	170	320	0	180	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.60	0.40	1.00	0.25	0.00	0.75	1.00	2.00	1.00	1.00	1.80	0.20
Final Sat.:	2560	640	1600	400	0	1200	1600	3200	1600	1600	2880	320
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.01	0.01	0.00	0.03	0.02	0.05	0.20	0.00	0.06	0.06
Crit Moves:	****					****	****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Pre-Game

Intersection #3: Victoria St. & Birchknoll Dr.

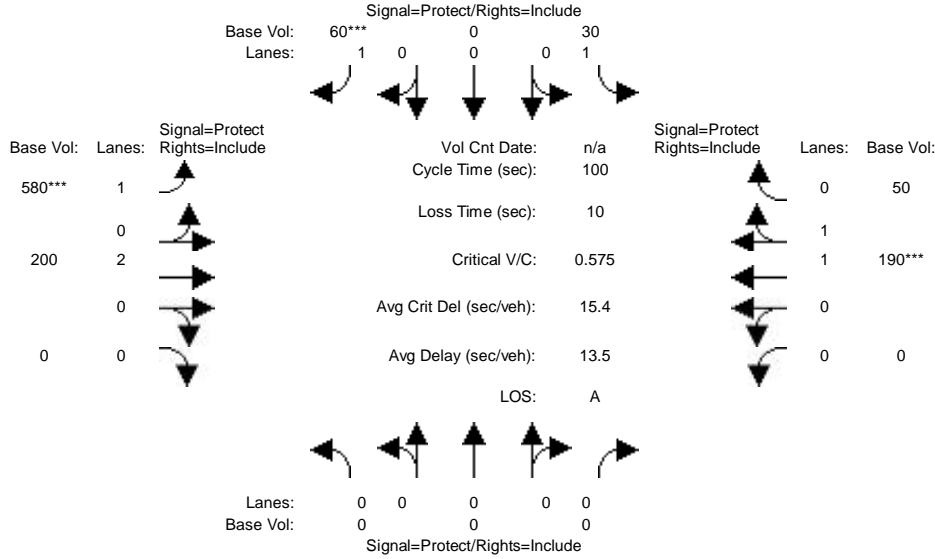


Street Name:	Victoria St.				Birchknoll Dr.							
Approach:	North Bound		South Bound		East Bound		West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	30	10	50	10	0	10	20	120	20	40	120	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	10	50	10	0	10	20	120	20	40	120	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	10	50	10	0	10	20	120	20	40	120	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	10	50	10	0	10	20	120	20	40	120	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	10	50	10	0	10	20	120	20	40	120	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.50	0.50	1.00	0.50	0.00	0.50	1.00	1.71	0.29	1.00	1.50	0.50
Final Sat.:	2400	800	1600	800	0	800	1600	2743	457	1600	2400	800
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.03	0.01	0.00	0.01	0.01	0.04	0.04	0.03	0.05	0.05
Crit Moves:			****	****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Pre-Game

Intersection #9: University Dr. & Toro Center Dr.

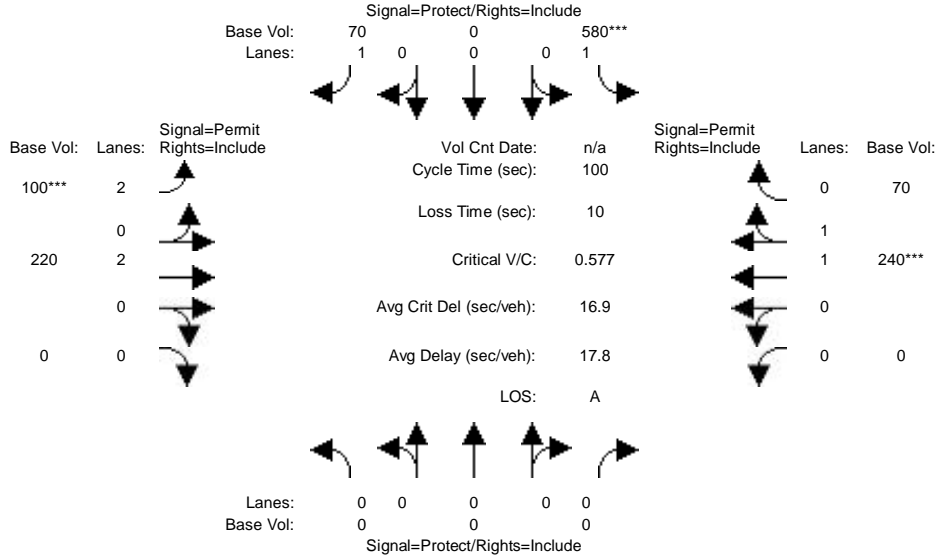


Street Name:	University Dr.						Toro Center Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	30	0	60	580	200	0	0	190	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	30	0	60	580	200	0	0	190	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	30	0	60	580	200	0	0	190	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	30	0	60	580	200	0	0	190	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	30	0	60	580	200	0	0	190	50
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.58	0.42
Final Sat.:	0	0	0	1600	0	1600	1600	3200	0	0	2533	667
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.00	0.04	0.36	0.06	0.00	0.00	0.08	0.07
Crit Moves:				****		****				****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Pre-Game

Intersection #10: Albertoni St. & SR 91 EB Ramps [Moved from Main St & Albertoni St]

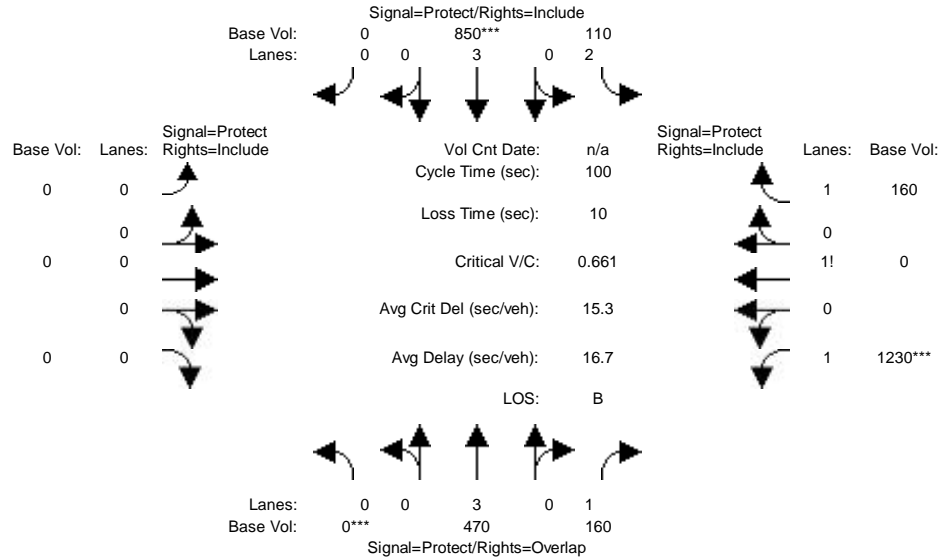


Street Name:	Sr 91 EB Ramps						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	580	0	70	100	220	0	0	240	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	580	0	70	100	220	0	0	240	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	580	0	70	100	220	0	0	240	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	580	0	70	100	220	0	0	240	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	580	0	70	100	220	0	0	240	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.55	0.45
Final Sat.:	0	0	0	1600	0	1600	5760	3200	0	0	2477	723
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.36	0.00	0.04	0.02	0.07	0.00	0.00	0.10	0.10
Crit Moves:				****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Pre-Game

Intersection #11: Avalon Blvd. & SR 91 WB On-Ramp

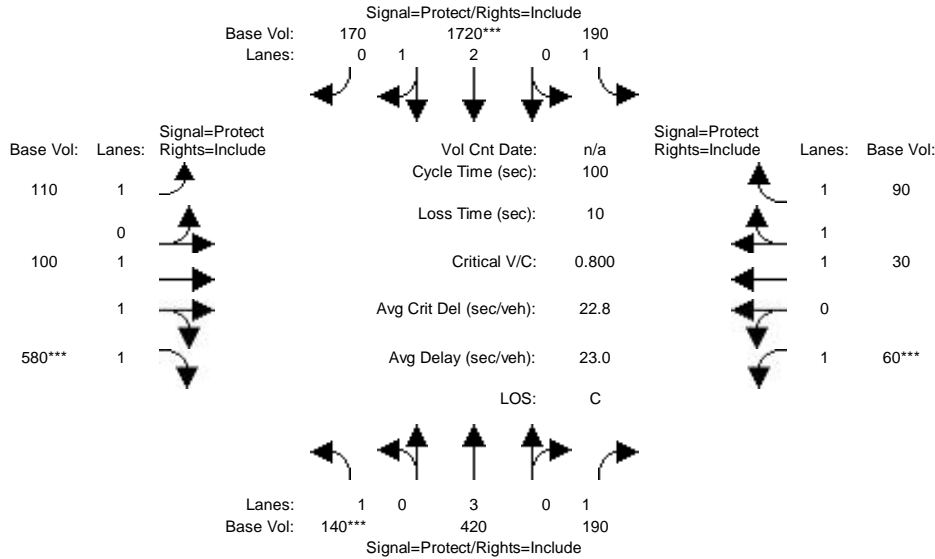


Street Name:	Avalon Blvd.						SR 91 WB On-Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	470	160	110	850	0	0	0	0	0	1230	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	470	160	110	850	0	0	0	0	0	1230	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	470	160	110	850	0	0	0	0	0	1230	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	470	160	110	850	0	0	0	0	0	1230	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	470	160	110	850	0	0	0	0	0	1230	0
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	0	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.10	0.10	0.02	0.18	0.00	0.00	0.00	0.00	0.00	0.38	0.00
OvlAdjV/S:	0.00											
Crit Moves:	****			****						****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Pre-Game

Intersection #12: Avalon Blvd. & Albertoni St.

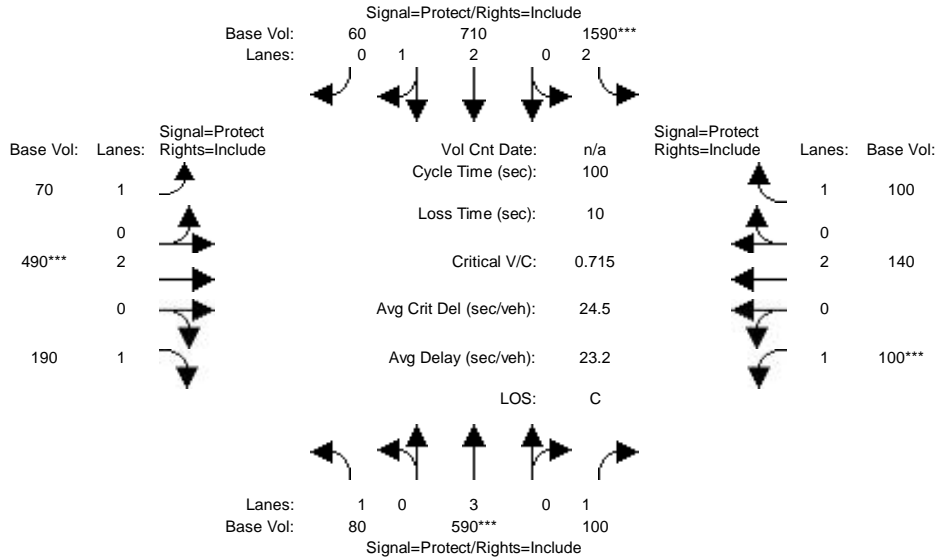


Street Name:	Avalon Blvd.						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	140	420	190	190	1720	170	110	100	580	60	30	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	420	190	190	1720	170	110	100	580	60	30	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	140	420	190	190	1720	170	110	100	580	60	30	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	420	190	190	1720	170	110	100	580	60	30	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	140	420	190	190	1720	170	110	100	580	60	30	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.73	0.27	1.00	1.00	2.00	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	4368	432	1600	1600	3200	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.12	0.12	0.39	0.39	0.07	0.06	0.18	0.04	0.02	0.03
Crit Moves:	****			****			****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Pre-Game

Intersection #13: Avalon Blvd. & Victoria St.

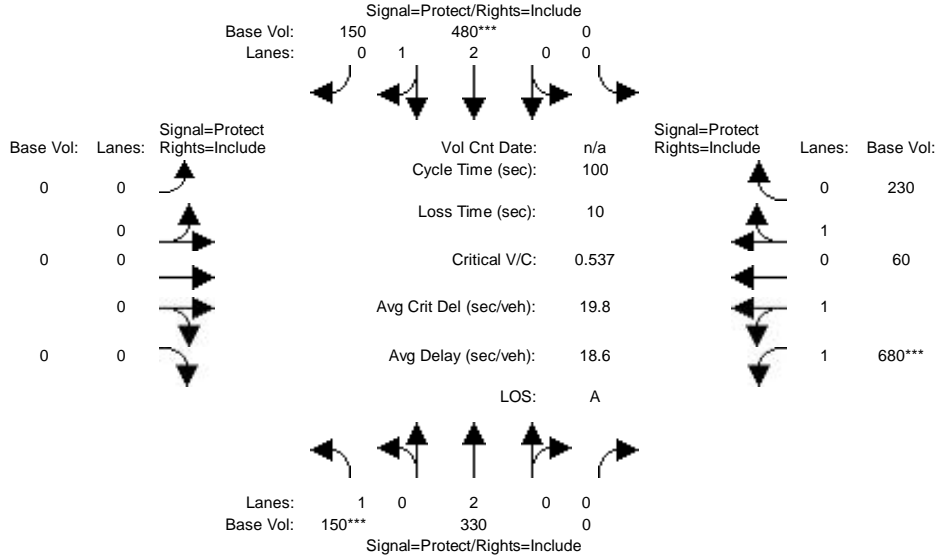


Street Name:	Avalon Blvd.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	80	590	100	1590	710	60	70	490	190	100	140	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	590	100	1590	710	60	70	490	190	100	140	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	590	100	1590	710	60	70	490	190	100	140	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	590	100	1590	710	60	70	490	190	100	140	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	590	100	1590	710	60	70	490	190	100	140	100
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.77	0.23	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4426	374	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.12	0.06	0.28	0.16	0.16	0.04	0.15	0.12	0.06	0.04	0.06
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Pre-Game

Intersection #14: Central Ave. & Artesia Blvd.

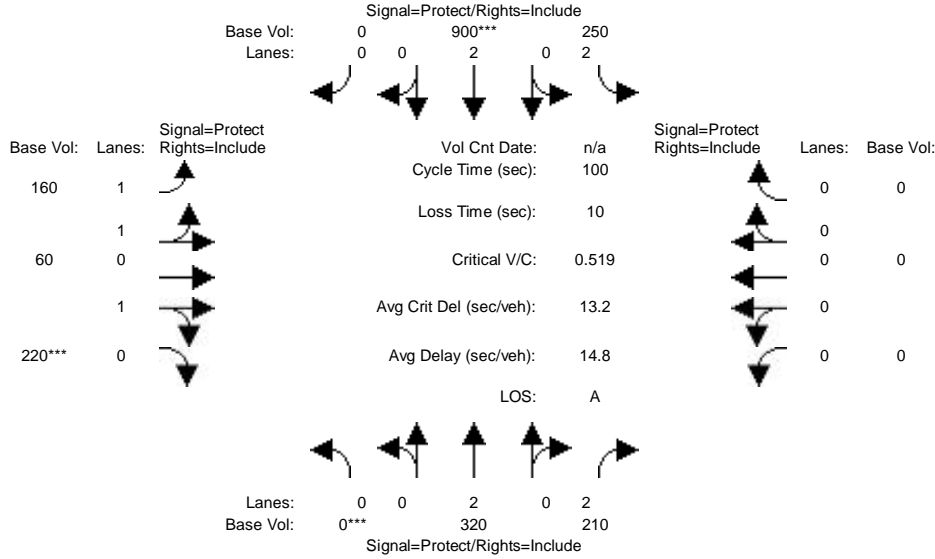


Street Name:	Central Ave.						Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	150	330	0	0	480	150	0	0	0	680	60	230
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	330	0	0	480	150	0	0	0	680	60	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	330	0	0	480	150	0	0	0	680	60	230
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	330	0	0	480	150	0	0	0	680	60	230
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	330	0	0	480	150	0	0	0	680	60	230
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.29	0.71	0.00	0.00	0.00	2.00	0.21	0.79
Final Sat.:	1600	3200	0	0	3657	1143	0	0	0	3200	331	1269
Capacity Analysis Module:												
Vol/Sat:	0.09	0.10	0.00	0.00	0.13	0.13	0.00	0.00	0.00	0.21	0.18	0.18
Crit Moves:	****				****					****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Pre-Game

Intersection #15: Central Ave. & Albertoni St.

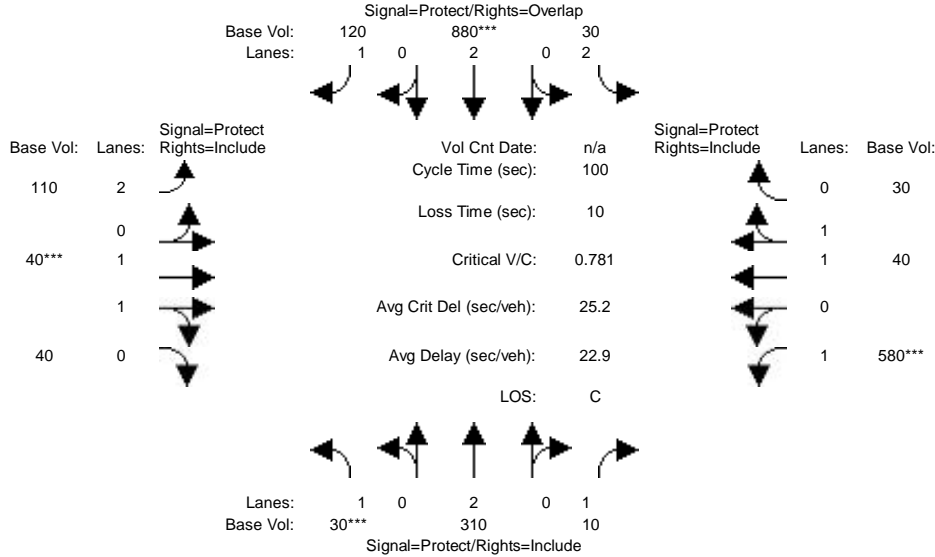


Street Name:	Central Ave.						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	320	210	250	900	0	160	60	220	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	320	210	250	900	0	160	60	220	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	320	210	250	900	0	160	60	220	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	320	210	250	900	0	160	60	220	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	320	210	250	900	0	160	60	220	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.45	0.55	1.00	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	2327	873	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.10	0.07	0.04	0.28	0.00	0.07	0.07	0.14	0.00	0.00	0.00
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Pre-Game

Intersection #16: Central Ave. & Victoria St.

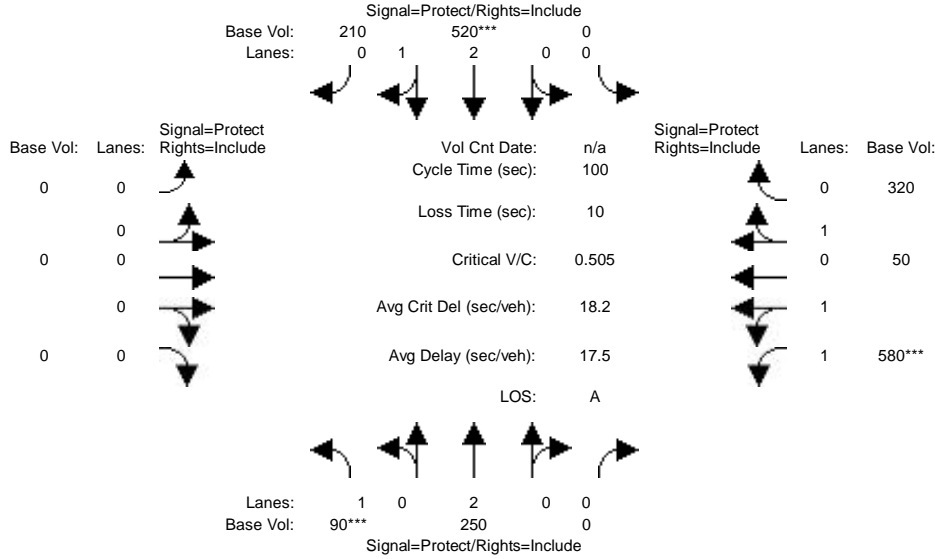


Street Name:	Central Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	30	310	10	30	880	120	110	40	40	580	40	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	310	10	30	880	120	110	40	40	580	40	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	310	10	30	880	120	110	40	40	580	40	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	310	10	30	880	120	110	40	40	580	40	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	310	10	30	880	120	110	40	40	580	40	30
OvlAdjVol:	89											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.00	1.00	1.00	1.14	0.86
Final Sat.:	1600	3200	1600	5760	3200	1600	5760	1600	1600	1600	1829	1371
Capacity Analysis Module:												
Vol/Sat:	0.02	0.10	0.01	0.01	0.28	0.08	0.02	0.03	0.03	0.36	0.02	0.02
OvlAdjV/S:	0.06											
Crit Moves:	****				****				****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Pre-Game

Intersection #17: Wilmington Ave. & Artesia Blvd. WB

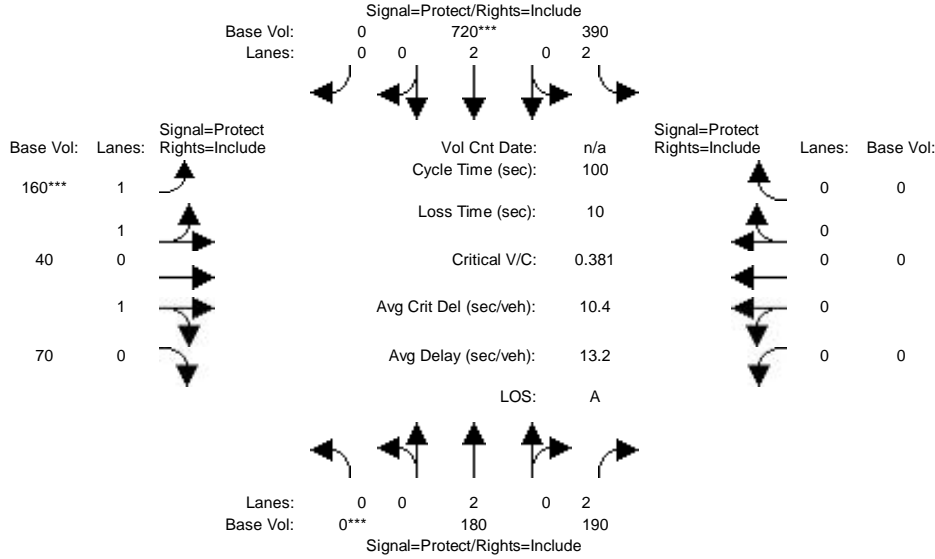


Street Name:	Wilmington Ave.						Artesia Blvd. WB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	90	250	0	0	520	210	0	0	0	580	50	320
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	250	0	0	520	210	0	0	0	580	50	320
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	250	0	0	520	210	0	0	0	580	50	320
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	250	0	0	520	210	0	0	0	580	50	320
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	250	0	0	520	210	0	0	0	580	50	320
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.14	0.86	0.00	0.00	0.00	1.84	0.16	1.00
Final Sat.:	1600	3200	0	0	3419	1381	0	0	0	2946	254	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.08	0.00	0.00	0.15	0.15	0.00	0.00	0.00	0.20	0.20	0.20
Crit Moves:	****				****					****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Pre-Game

Intersection #18: Wilmington Ave. & Artesia Blvd. EB

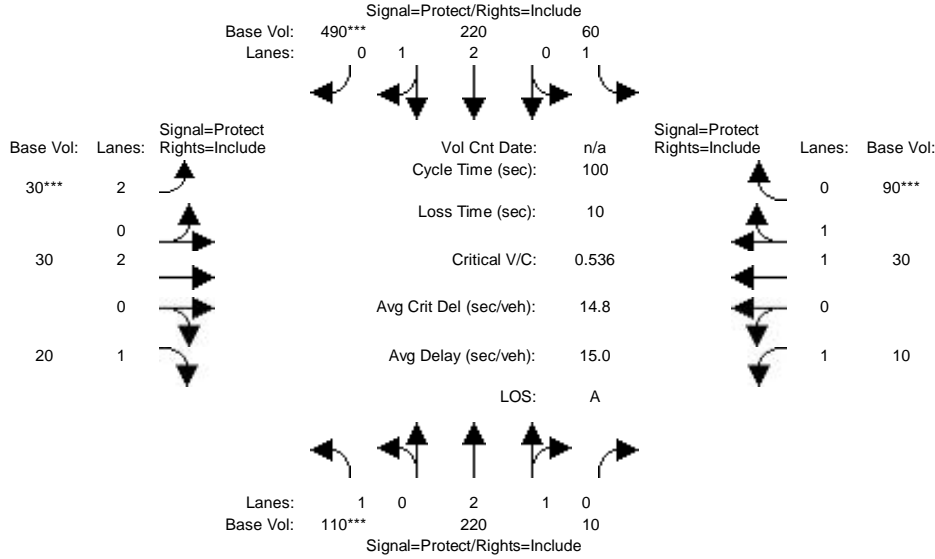


Street Name:	Wilmington Ave.				Artesia Blvd. EB							
Approach:	North Bound		South Bound		East Bound		West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	180	190	390	720	0	160	40	70	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	180	190	390	720	0	160	40	70	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	180	190	390	720	0	160	40	70	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	180	190	390	720	0	160	40	70	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	180	190	390	720	0	160	40	70	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.78	0.44	0.78	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	2844	711	1244	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.06	0.06	0.07	0.23	0.00	0.06	0.06	0.06	0.00	0.00	0.00
Crit Moves:	****			****		****						

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Pre-Game

Intersection #19: Wilmington Ave. & Victoria St.

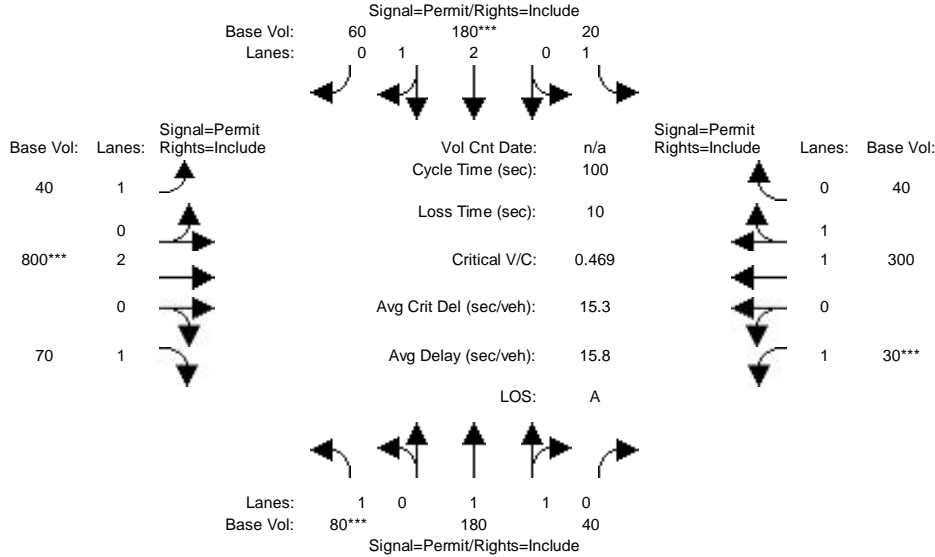


Street Name:	Wilmington Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	110	220	10	60	220	490	30	30	20	10	30	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	220	10	60	220	490	30	30	20	10	30	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	110	220	10	60	220	490	30	30	20	10	30	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	220	10	60	220	490	30	30	20	10	30	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	110	220	10	60	220	490	30	30	20	10	30	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.87	0.13	1.00	2.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	4591	209	1600	3200	1600	5760	3200	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.05	0.05	0.04	0.07	0.31	0.01	0.01	0.01	0.01	0.02	0.06
Crit Moves:	****					****	****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Pre-Game

Intersection #22: Figueroa St. & 190th St./Victoria St.

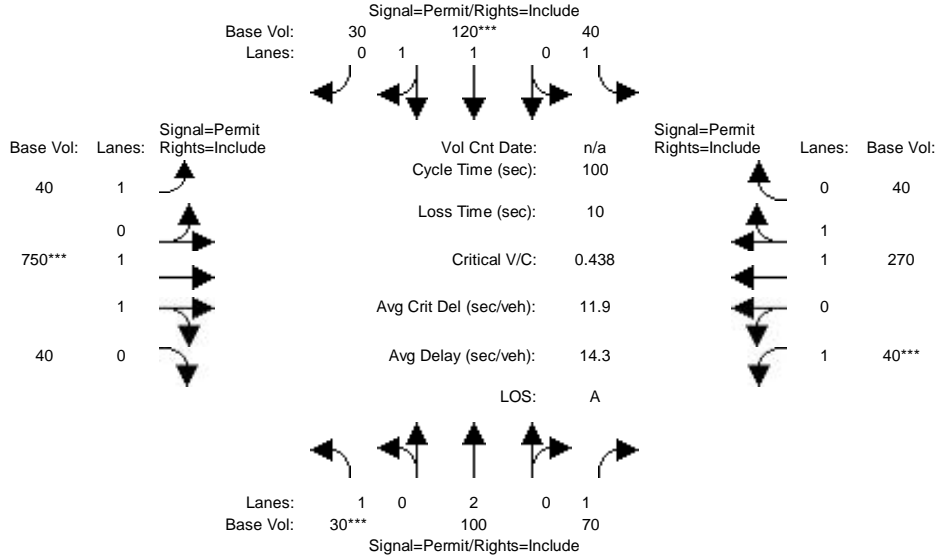


Street Name:	Figueroa St.						190th St./Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	80	180	40	20	180	60	40	800	70	30	300	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	180	40	20	180	60	40	800	70	30	300	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	180	40	20	180	60	40	800	70	30	300	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	180	40	20	180	60	40	800	70	30	300	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	180	40	20	180	60	40	800	70	30	300	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.64	0.36	1.00	2.25	0.75	1.00	2.00	1.00	1.00	1.76	0.24
Final Sat.:	1600	2618	582	1600	3600	1200	1600	3200	1600	1600	2824	376
Capacity Analysis Module:												
Vol/Sat:	0.05	0.07	0.07	0.01	0.05	0.05	0.03	0.25	0.04	0.02	0.11	0.11
Crit Moves:	****			****			****		****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Pre-Game

Intersection #24: Main St. & Victoria St.

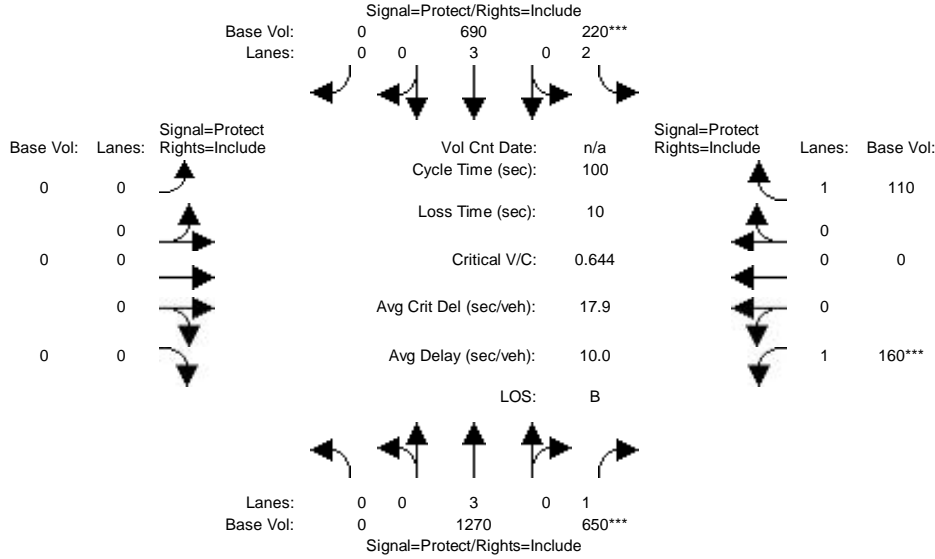


Street Name:	Main St.						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	30	100	70	40	120	30	40	750	40	40	270	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	100	70	40	120	30	40	750	40	40	270	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	100	70	40	120	30	40	750	40	40	270	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	100	70	40	120	30	40	750	40	40	270	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	100	70	40	120	30	40	750	40	40	270	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.60	0.40	1.00	1.90	0.10	1.00	1.74	0.26
Final Sat.:	1600	3200	1600	1600	2560	640	1600	3038	162	1600	2787	413
Capacity Analysis Module:												
Vol/Sat:	0.02	0.03	0.04	0.03	0.05	0.05	0.03	0.25	0.25	0.03	0.10	0.10
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
2017 with 30k-Seat Sunday Pre-Game

Intersection #25: Avalon Blvd. & University Dr.

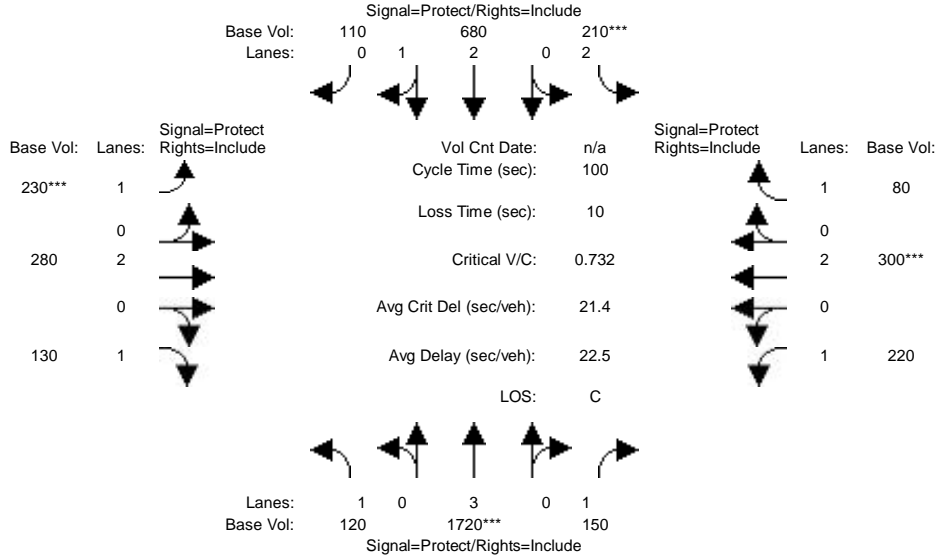


Street Name:	Avalon Blvd.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1270	650	220	690	0	0	0	0	160	0	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1270	650	220	690	0	0	0	0	160	0	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1270	650	220	690	0	0	0	0	160	0	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1270	650	220	690	0	0	0	0	160	0	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1270	650	220	690	0	0	0	0	160	0	110
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.41	0.04	0.14	0.00	0.00	0.00	0.00	0.00	0.10	0.00
Crit Moves:		****	****							****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Pre-Game

Intersection #26: Avalon Blvd. & Del Amo Blvd.

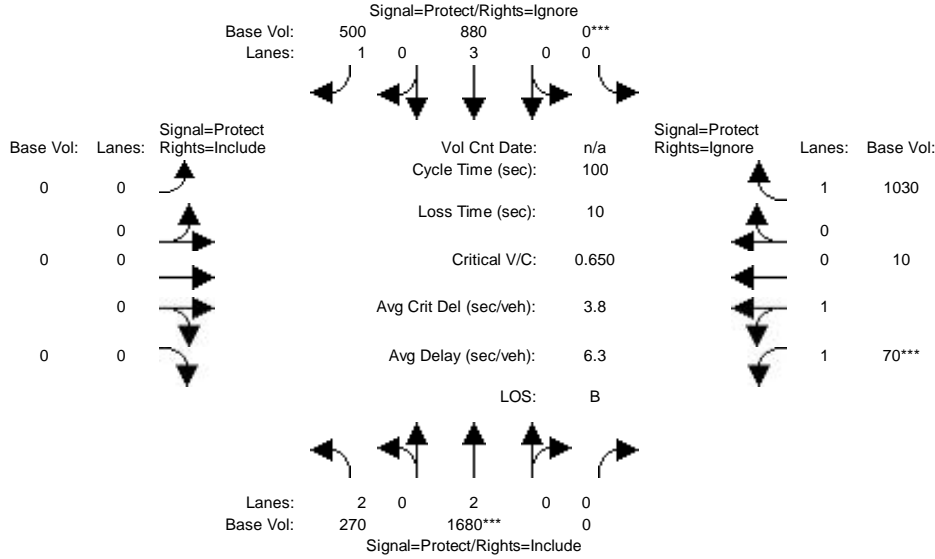


Street Name:	Avalon Blvd.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	120	1720	150	210	680	110	230	280	130	220	300	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	120	1720	150	210	680	110	230	280	130	220	300	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	120	1720	150	210	680	110	230	280	130	220	300	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	1720	150	210	680	110	230	280	130	220	300	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	120	1720	150	210	680	110	230	280	130	220	300	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.58	0.42	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4132	668	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.36	0.09	0.04	0.16	0.16	0.14	0.09	0.08	0.14	0.09	0.05
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Pre-Game

Intersection #27: Avalon Blvd. & I-405 NB Ramps

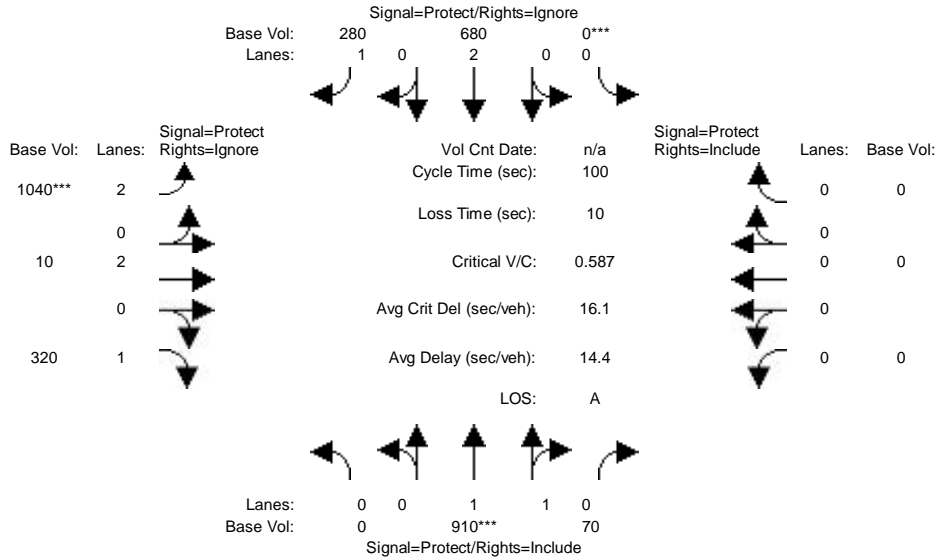


Street Name:	Avalon Blvd.						I-405 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	270	1680	0	0	880	500	0	0	0	70	10	1030
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	270	1680	0	0	880	500	0	0	0	70	10	1030
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	270	1680	0	0	880	0	0	0	0	70	10	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	270	1680	0	0	880	0	0	0	0	70	10	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	270	1680	0	0	880	0	0	0	0	70	10	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.75	0.25	1.00
Final Sat.:	5760	3200	0	0	4800	1600	0	0	0	2800	400	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.53	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.03	0.03
Crit Moves:	****			****						****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Pre-Game

Intersection #28: Avalon Blvd. & I-405 SB Ramps

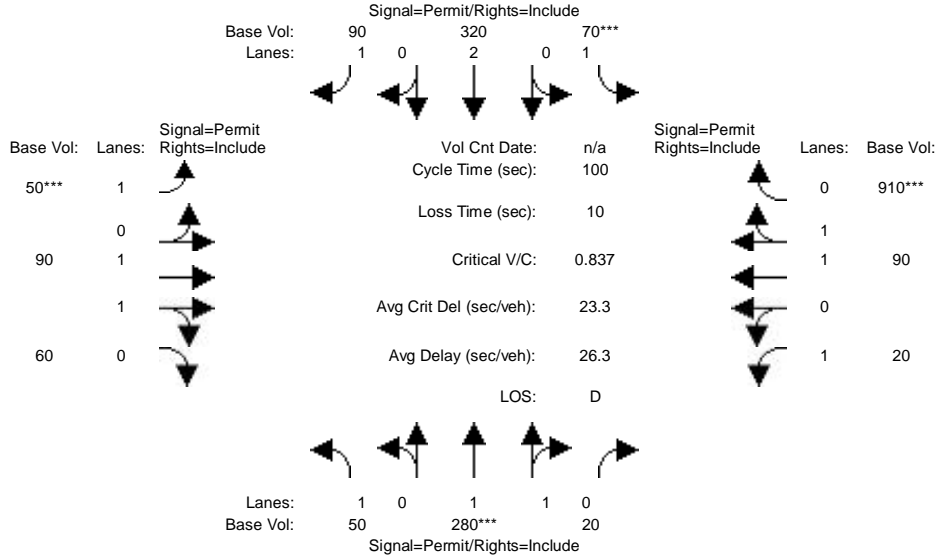


Street Name:	Avalon Blvd.						I-405 SB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	910	70	0	680	280	1040	10	320	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	910	70	0	680	280	1040	10	320	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	910	70	0	680	0	1040	10	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	910	70	0	680	0	1040	10	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Volume:	0	910	70	0	680	0	1040	10	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.86	0.14	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	0	2971	229	0	3200	1600	5760	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.31	0.31	0.00	0.21	0.00	0.18	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Pre-Game

Intersection #29: Central Ave. & University Dr.

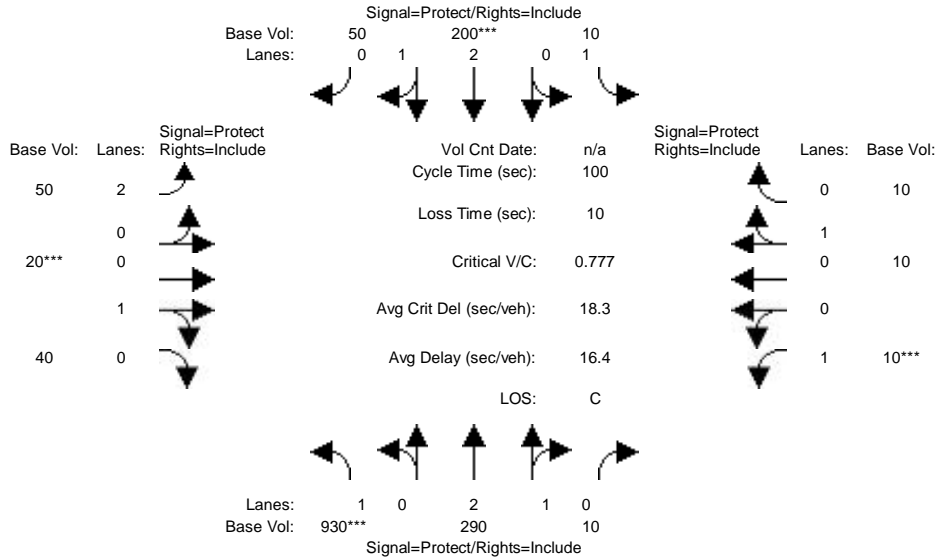


Street Name:	Central Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	50	280	20	70	320	90	50	90	60	20	90	910
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	280	20	70	320	90	50	90	60	20	90	910
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	280	20	70	320	90	50	90	60	20	90	910
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	280	20	70	320	90	50	90	60	20	90	910
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	280	20	70	320	90	50	90	60	20	90	910
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.87	0.13	1.00	2.00	1.00	1.00	1.20	0.80	1.00	1.00	1.00
Final Sat.:	1600	2987	213	1600	3200	1600	1600	1920	1280	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.09	0.09	0.04	0.10	0.06	0.03	0.05	0.05	0.01	0.06	0.57
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Pre-Game

Intersection #30: Wilmington Ave. & University Dr.

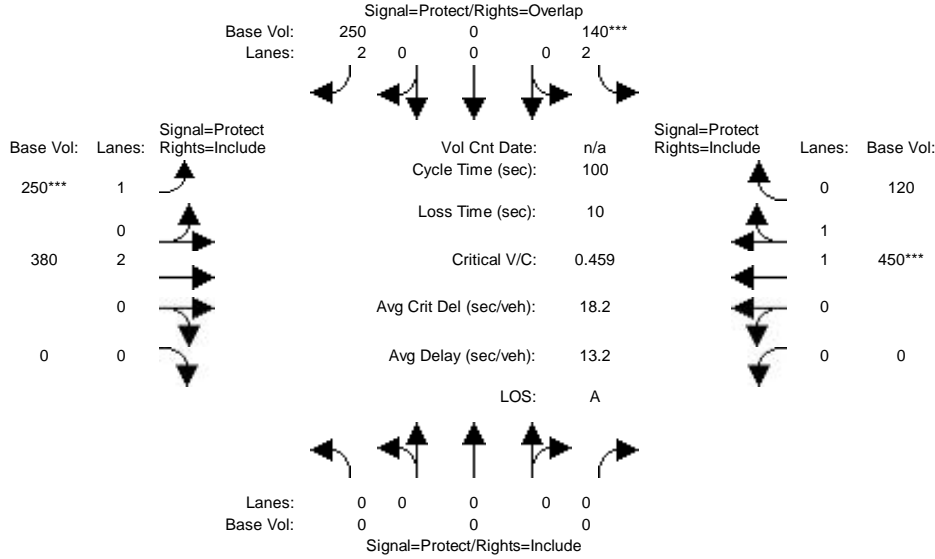


Street Name:	Wilmington Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	930	290	10	10	200	50	50	20	40	10	10	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	930	290	10	10	200	50	50	20	40	10	10	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	930	290	10	10	200	50	50	20	40	10	10	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	930	290	10	10	200	50	50	20	40	10	10	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	930	290	10	10	200	50	50	20	40	10	10	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.90	0.10	1.00	2.40	0.60	2.00	0.33	0.67	1.00	0.50	0.50
Final Sat.:	1600	4640	160	1600	3840	960	5760	533	1067	1600	800	800
Capacity Analysis Module:												
Vol/Sat:	0.58	0.06	0.06	0.01	0.05	0.05	0.01	0.04	0.04	0.01	0.01	0.01
Crit Moves:	****			****			****		****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Pre-Game

Intersection #31: Central Ave. & Del Amo Blvd.

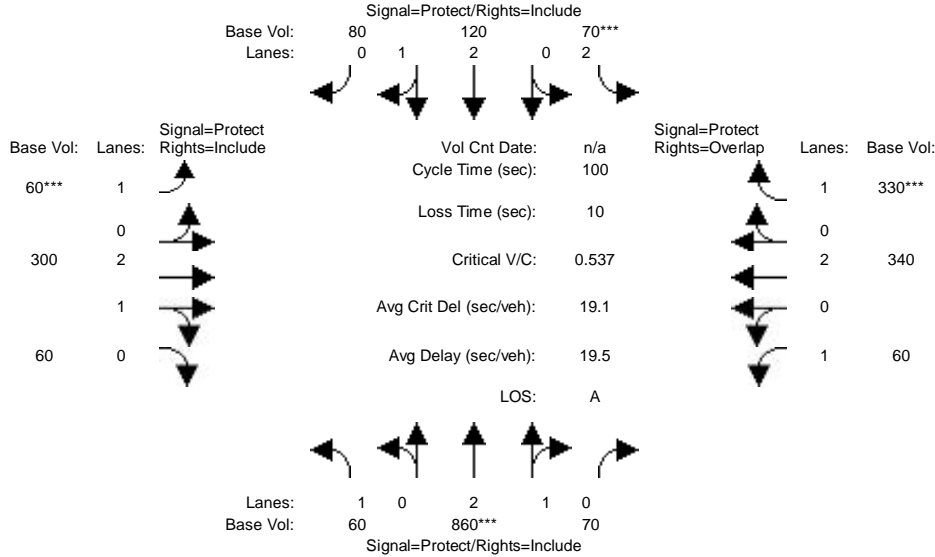


Street Name:	Central Ave.				Del Amo Blvd							
Approach:	North Bound		South Bound		East Bound		West Bound					
Movement:	L	T	R	L	T	R	L	T	R			
Min. Green:	0	0	0	0	0	0	0	0	0			
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0			
Volume Module:												
Base Vol:	0	0	0	140	0	250	250	380	0	0	450	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	140	0	250	250	380	0	0	450	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	140	0	250	250	380	0	0	450	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	140	0	250	250	380	0	0	450	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	140	0	250	250	380	0	0	450	120
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	2.00	1.00	2.00	0.00	0.00	1.58	0.42
Final Sat.:	0	0	0	5760	0	3200	1600	3200	0	0	2526	674
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.00	0.08	0.16	0.12	0.00	0.00	0.18	0.18
OvlAdjV/S:	0.00											
Crit Moves:	****			****				****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Pre-Game

Intersection #32: Wilmington Ave. & Del Amo Blvd.

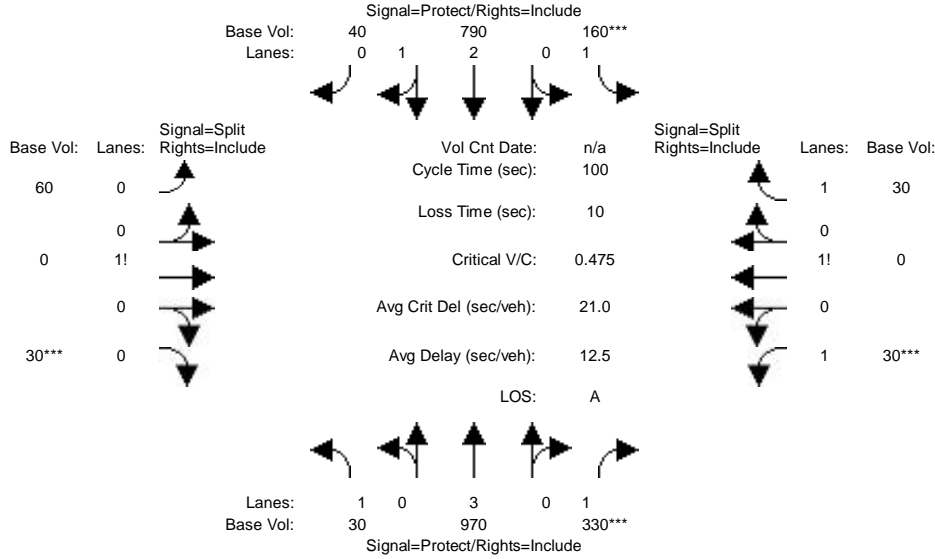


Street Name:	Wilmington Ave.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	60	860	70	70	120	80	60	300	60	60	340	330
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	860	70	70	120	80	60	300	60	60	340	330
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	860	70	70	120	80	60	300	60	60	340	330
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	860	70	70	120	80	60	300	60	60	340	330
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	60	860	70	70	120	80	60	300	60	60	340	330
OvlAdjVol:												311
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.77	0.23	2.00	2.00	1.00	1.00	2.50	0.50	1.00	2.00	1.00
Final Sat.:	1600	4439	361	5760	3200	1600	1600	4000	800	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.19	0.19	0.01	0.04	0.05	0.04	0.08	0.08	0.04	0.11	0.21
OvlAdjV/S:												0.19
Crit Moves:	****	****		****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Pre-Game

Intersection #38: Avalon Blvd. & 184th St. - Drive A

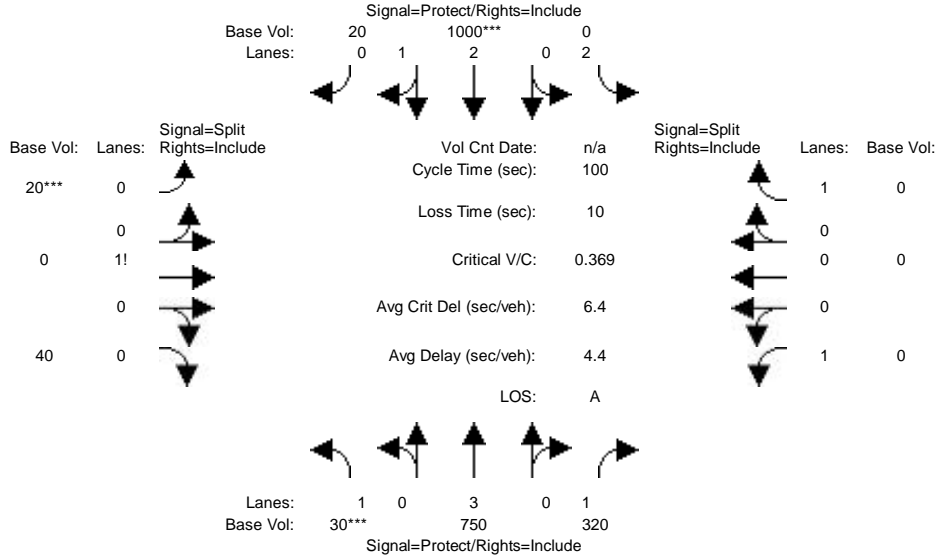


Street Name:	S. Avolon Blvd.						184th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	30	970	330	160	790	40	60	0	30	30	0	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	970	330	160	790	40	60	0	30	30	0	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	970	330	160	790	40	60	0	30	30	0	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	970	330	160	790	40	60	0	30	30	0	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	970	330	160	790	40	60	0	30	30	0	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.86	0.14	0.67	0.00	0.33	1.50	0.00	1.50
Final Sat.:	1600	4800	1600	1600	4569	231	1067	0	533	2400	0	2400
Capacity Analysis Module:												
Vol/Sat:	0.02	0.20	0.21	0.10	0.17	0.17	0.06	0.00	0.06	0.01	0.00	0.01
Crit Moves:			****	****			****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Pre-Game

Intersection #39: Avalon Blvd. & 182nd St. - Drive B

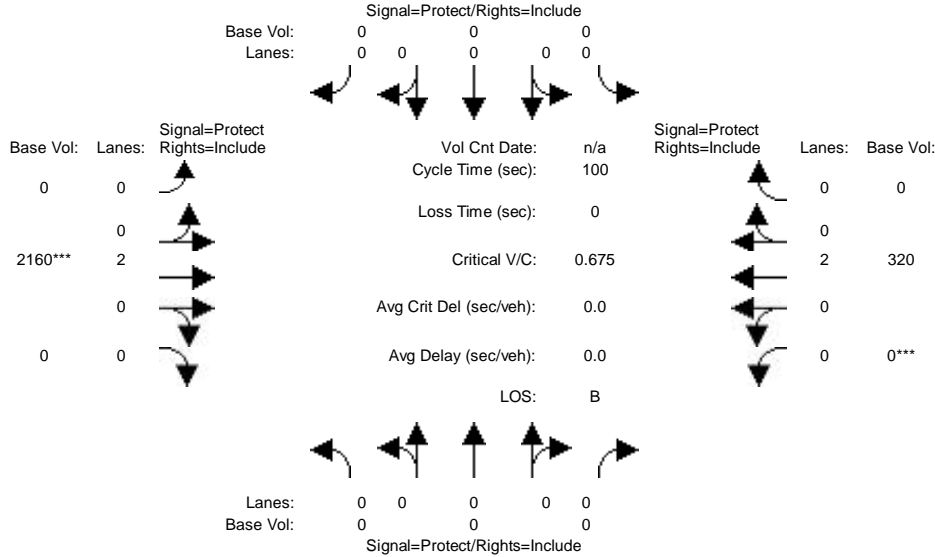


Street Name:	S. Avalon Blvd.				182nd St.							
Approach:	North Bound			South Bound			East Bound		West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	30	750	320	0	1000	20	20	0	40	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	750	320	0	1000	20	20	0	40	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	750	320	0	1000	20	20	0	40	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	750	320	0	1000	20	20	0	40	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	750	320	0	1000	20	20	0	40	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.94	0.06	0.33	0.00	0.67	1.00	0.00	1.00
Final Sat.:	1600	4800	1600	5760	4706	94	533	0	1067	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.16	0.20	0.00	0.21	0.21	0.04	0.00	0.04	0.00	0.00	0.00
Crit Moves:	****			****		****						

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Pre-Game

Intersection #40: Victoria St. & Drive C

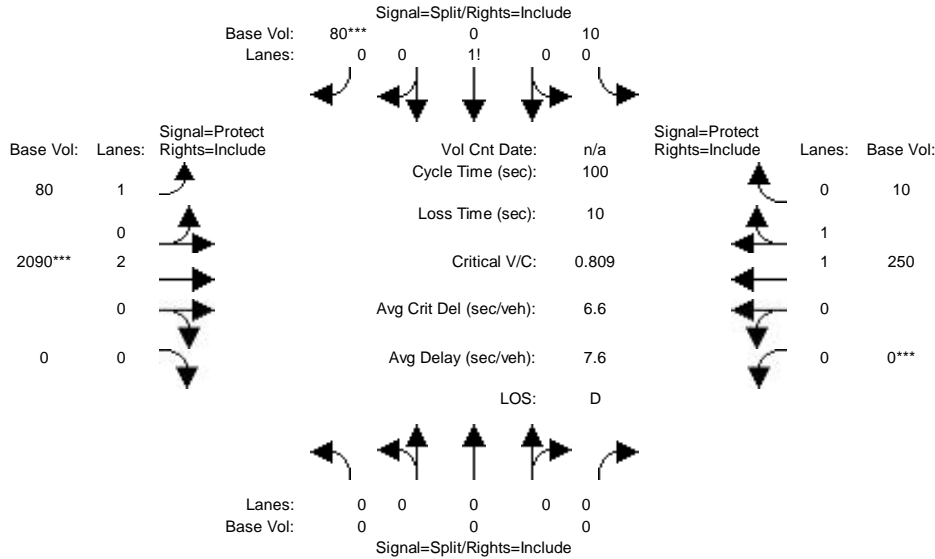


Street Name:	Drive C						E. Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	2160	0	0	0	320
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	2160	0	0	0	320
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	0	2160	0	0	0	320
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	0	2160	0	0	0	320
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	0	2160	0	0	0	320
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00
Final Sat.:	0	0	0	0	0	0	0	3200	0	0	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68	0.00	0.00	0.10	0.00
Crit Moves:							****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Pre-Game

Intersection #41: Victoria St. & Rainsbury Ave.

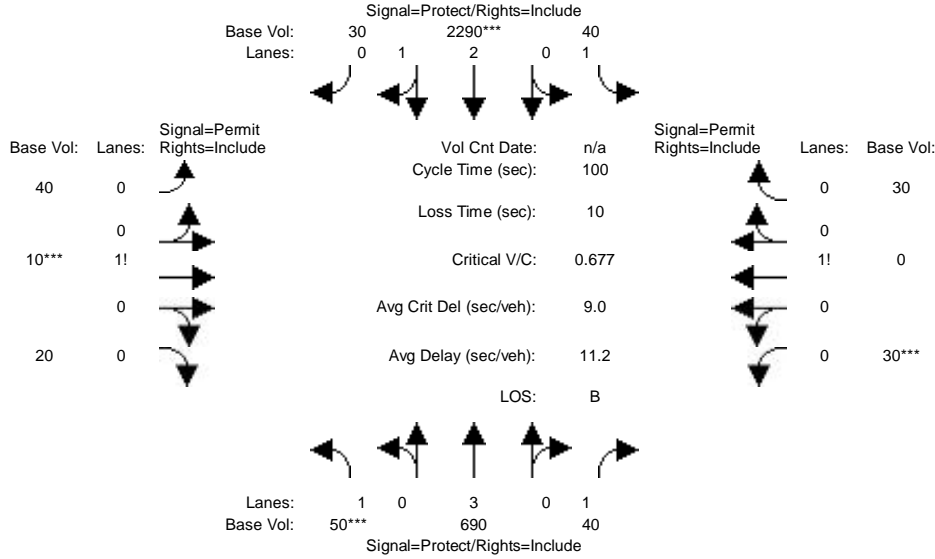


Street Name:	E. Victoria St.						Rainsbury Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	10	0	80	80	2090	0	0	250	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	10	0	80	80	2090	0	0	250	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	10	0	80	80	2090	0	0	250	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	10	0	80	80	2090	0	0	250	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	10	0	80	80	2090	0	0	250	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.11	0.00	0.89	1.00	2.00	0.00	0.00	1.92	0.08
Final Sat.:	0	0	0	178	0	1422	1600	3200	0	0	3077	123
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.06	0.00	0.06	0.05	0.65	0.00	0.00	0.08	0.08
Crit Moves:				****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Pre-Game

Intersection #42: Avalon Blvd. & Harbor Village / Colony Cove

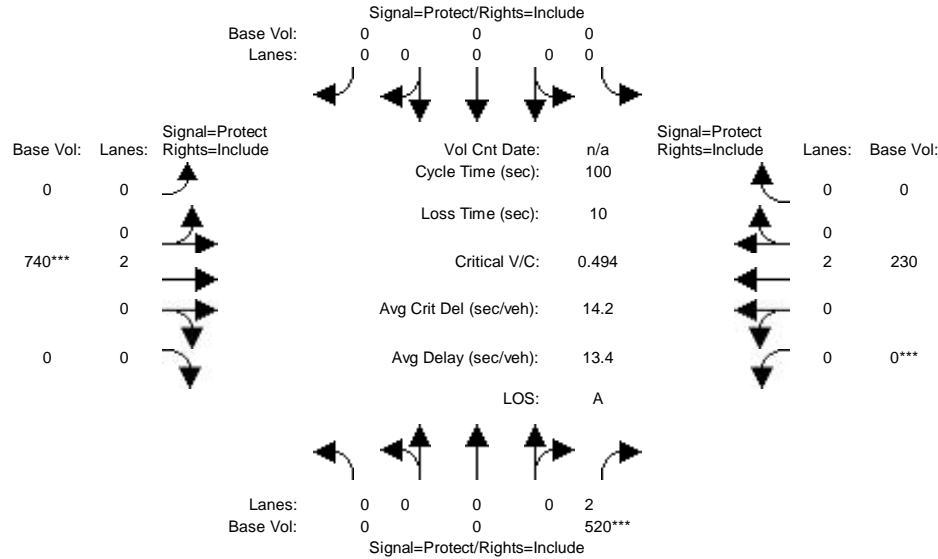


Street Name:	Avalon Blvd.						Harbor Village / Colony Cove					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	50	690	40	40	2290	30	40	10	20	30	0	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	690	40	40	2290	30	40	10	20	30	0	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	690	40	40	2290	30	40	10	20	30	0	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	690	40	40	2290	30	40	10	20	30	0	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	690	40	40	2290	30	40	10	20	30	0	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.96	0.04	0.57	0.14	0.29	0.50	0.00	0.50
Final Sat.:	1600	4800	1600	1600	4738	62	914	229	457	800	0	800
Capacity Analysis Module:												
Vol/Sat:	0.03	0.14	0.03	0.03	0.48	0.48	0.03	0.04	0.04	0.02	0.00	0.04
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Post-Game

Intersection #1: Victoria St. & Drive D

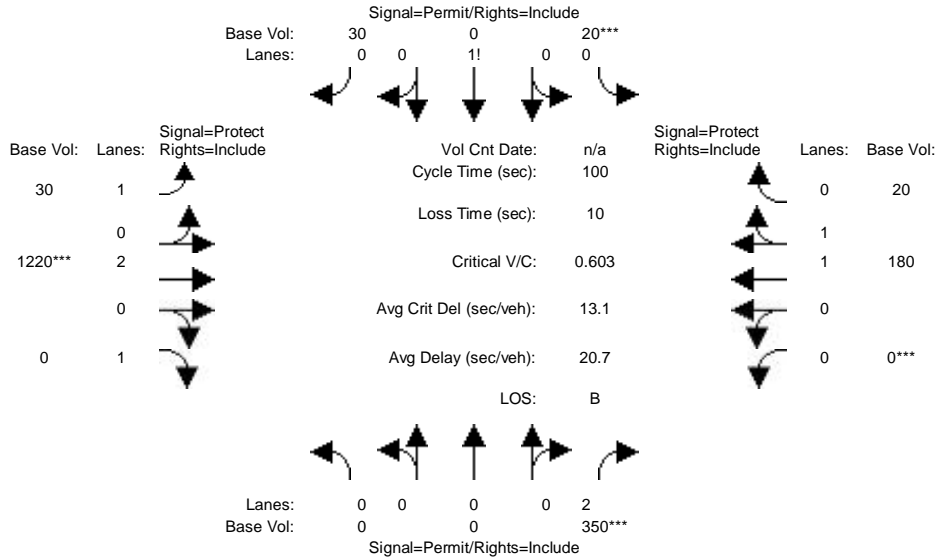


Street Name:	Drive D						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	520	0	0	0	0	740	0	0	230	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	520	0	0	0	0	740	0	0	230	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	520	0	0	0	0	740	0	0	230	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	520	0	0	0	0	740	0	0	230	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	520	0	0	0	0	740	0	0	230	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00
Final Sat.:	0	0	3200	0	0	0	0	3200	0	0	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.07	0.00
Crit Moves:			****				****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Post-Game

Intersection #2: Victoria St & Tamcliff Ave

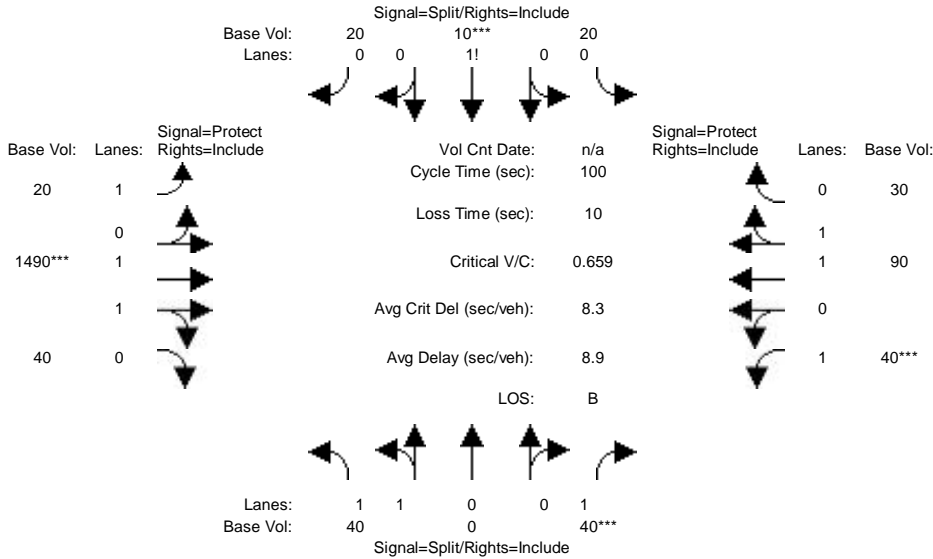


Street Name:	Victoria St						Tamcliff Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	350	20	0	30	30	1220	0	0	180	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	350	20	0	30	30	1220	0	0	180	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	350	20	0	30	30	1220	0	0	180	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	350	20	0	30	30	1220	0	0	180	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	350	20	0	30	30	1220	0	0	180	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	2.00	0.40	0.00	0.60	1.00	2.00	1.00	0.00	1.80	0.20
Final Sat.:	0	0	3200	640	0	960	1600	3200	1600	0	2880	320
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.11	0.01	0.00	0.03	0.02	0.38	0.00	0.00	0.06	0.06
Crit Moves:			****	****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Post-Game

Intersection #3: Victoria St. & Birchknoll Dr.

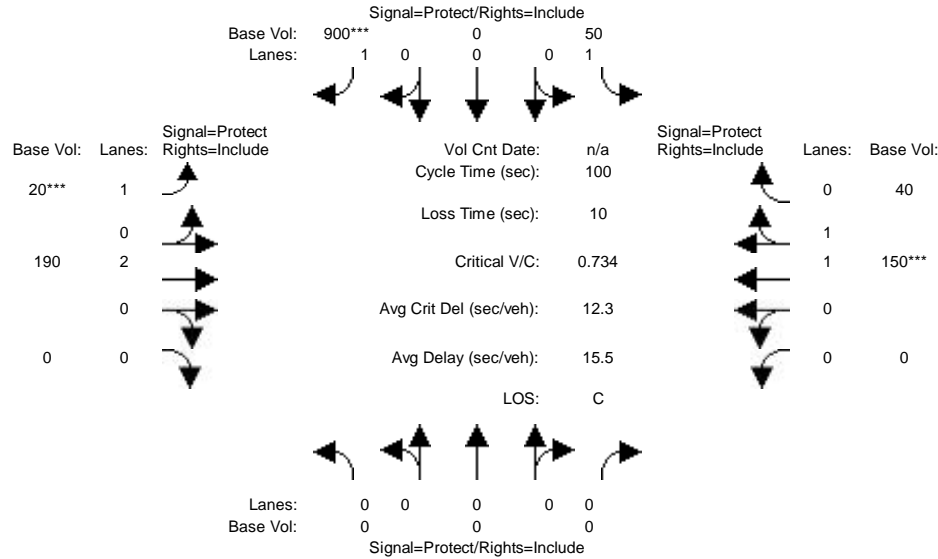


Street Name:	Victoria St.						Birchknoll Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	40	0	40	20	10	20	20	1490	40	40	90	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	0	40	20	10	20	20	1490	40	40	90	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	0	40	20	10	20	20	1490	40	40	90	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	0	40	20	10	20	20	1490	40	40	90	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	0	40	20	10	20	20	1490	40	40	90	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.40	0.20	0.40	1.00	1.95	0.05	1.00	1.50	0.50
Final Sat.:	3200	0	1600	640	320	640	1600	3116	84	1600	2400	800
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.03	0.03	0.03	0.03	0.01	0.48	0.48	0.03	0.04	0.04
Crit Moves:			****	****			****		****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Post-Game

Intersection #9: University Dr. & Toro Center Dr.

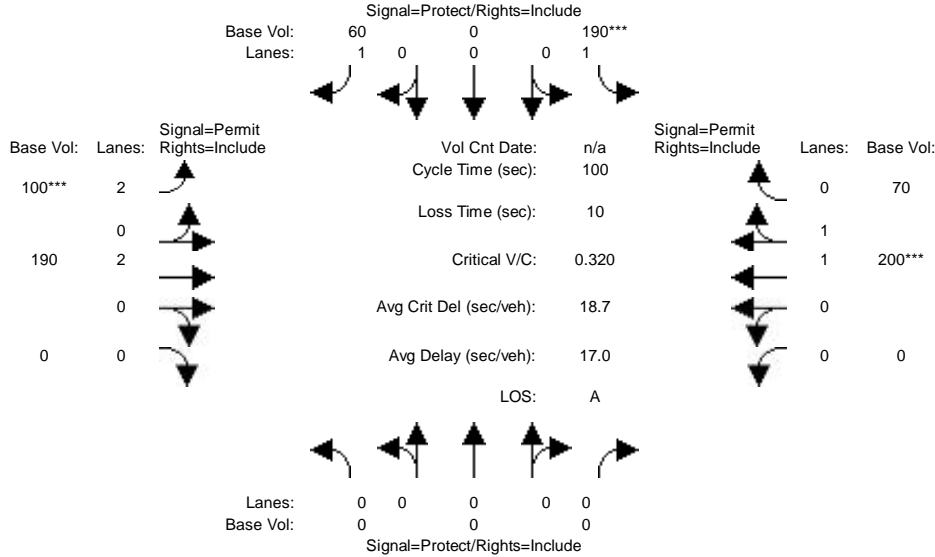


Street Name:	University Dr.						Toro Center Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	50	0	900	20	190	0	0	150	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	50	0	900	20	190	0	0	150	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	50	0	900	20	190	0	0	150	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	50	0	900	20	190	0	0	150	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	50	0	900	20	190	0	0	150	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.58	0.42
Final Sat.:	0	0	0	1600	0	1600	1600	3200	0	0	2526	674
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.03	0.00	0.56	0.01	0.06	0.00	0.00	0.06	0.06
Crit Moves:				****		****				****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Post-Game

Intersection #10: Albertoni St. & SR 91 EB Ramps [Moved from Main St & Albertoni St]

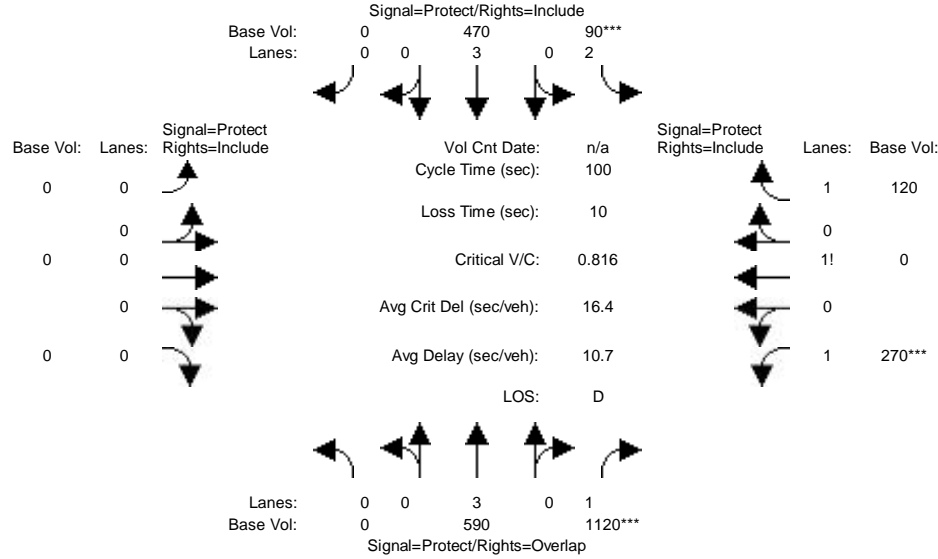


Street Name:	Sr 91 EB Ramps						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	190	0	60	100	190	0	0	200	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	190	0	60	100	190	0	0	200	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	190	0	60	100	190	0	0	200	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	190	0	60	100	190	0	0	200	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	190	0	60	100	190	0	0	200	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.48	0.52
Final Sat.:	0	0	0	1600	0	1600	5760	3200	0	0	2370	830
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.12	0.00	0.04	0.02	0.06	0.00	0.00	0.08	0.08
Crit Moves:				****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Post-Game

Intersection #11: Avalon Blvd. & SR 91 WB On-Ramp

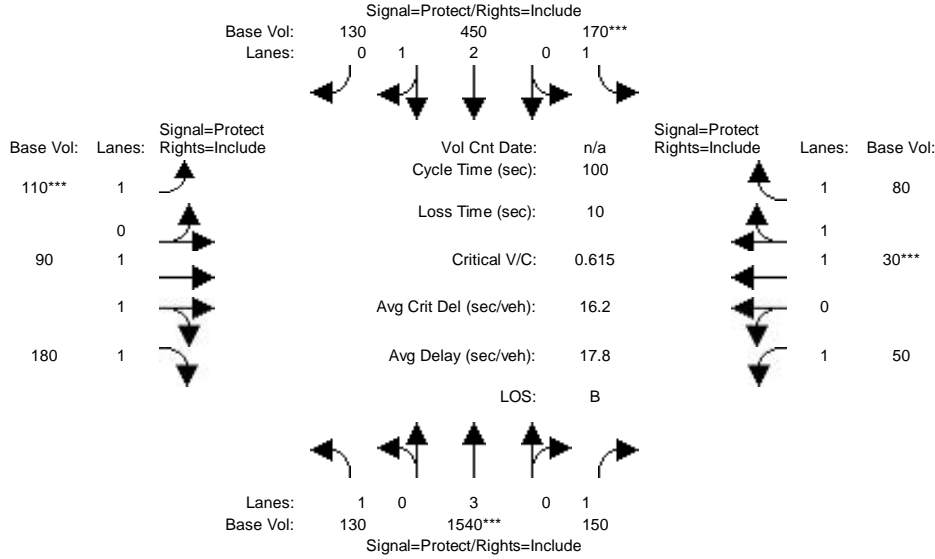


Street Name:	Avalon Blvd.						SR 91 WB On-Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	590	1120	90	470	0	0	0	0	0	270	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	590	1120	90	470	0	0	0	0	270	0	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	590	1120	90	470	0	0	0	0	270	0	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	590	1120	90	470	0	0	0	0	270	0	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	590	1120	90	470	0	0	0	0	270	0	120
OvlAdjVol:	985											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.12	0.70	0.02	0.10	0.00	0.00	0.00	0.00	0.00	0.08	0.00
OvlAdjV/S:	0.62											
Crit Moves:	***			***			***					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Post-Game

Intersection #12: Avalon Blvd. & Albertoni St.

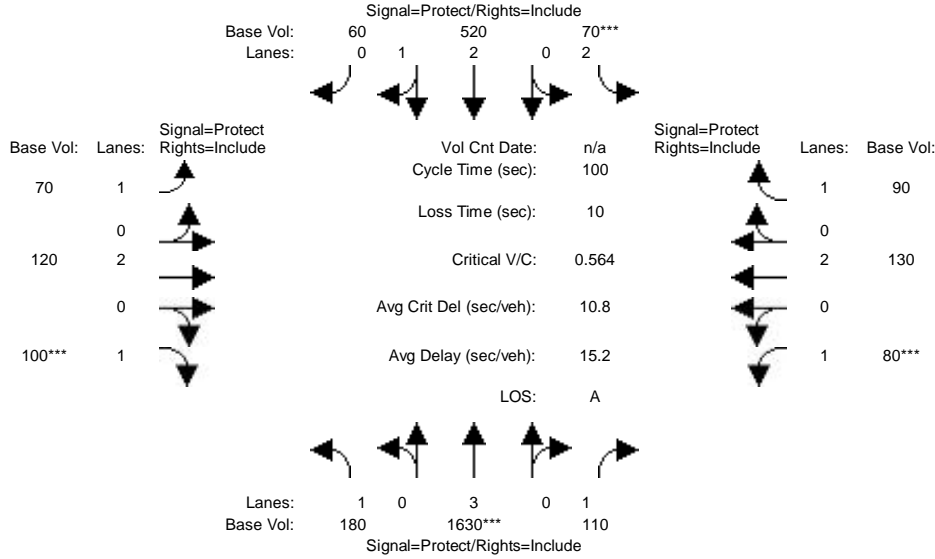


Street Name:	Avalon Blvd.						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	130	1540	150	170	450	130	110	90	180	50	30	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	1540	150	170	450	130	110	90	180	50	30	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	1540	150	170	450	130	110	90	180	50	30	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	1540	150	170	450	130	110	90	180	50	30	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	1540	150	170	450	130	110	90	180	50	30	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.33	0.67	1.00	1.00	2.00	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3724	1076	1600	1600	3200	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.08	0.32	0.09	0.11	0.12	0.12	0.07	0.06	0.06	0.03	0.02	0.03
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Post-Game

Intersection #13: Avalon Blvd. & Victoria St.

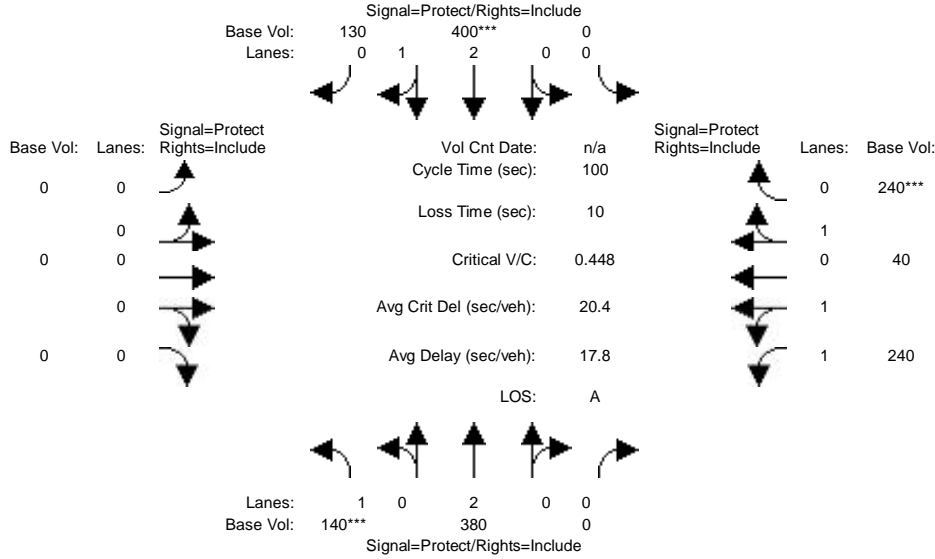


Street Name:	Avalon Blvd.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	180	1630	110	70	520	60	70	120	100	80	130	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	180	1630	110	70	520	60	70	120	100	80	130	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	180	1630	110	70	520	60	70	120	100	80	130	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	180	1630	110	70	520	60	70	120	100	80	130	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	180	1630	110	70	520	60	70	120	100	80	130	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.69	0.31	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4303	497	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.34	0.07	0.01	0.12	0.12	0.04	0.04	0.06	0.05	0.04	0.06
Crit Moves:	****			****			****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Post-Game

Intersection #14: Central Ave. & Artesia Blvd.

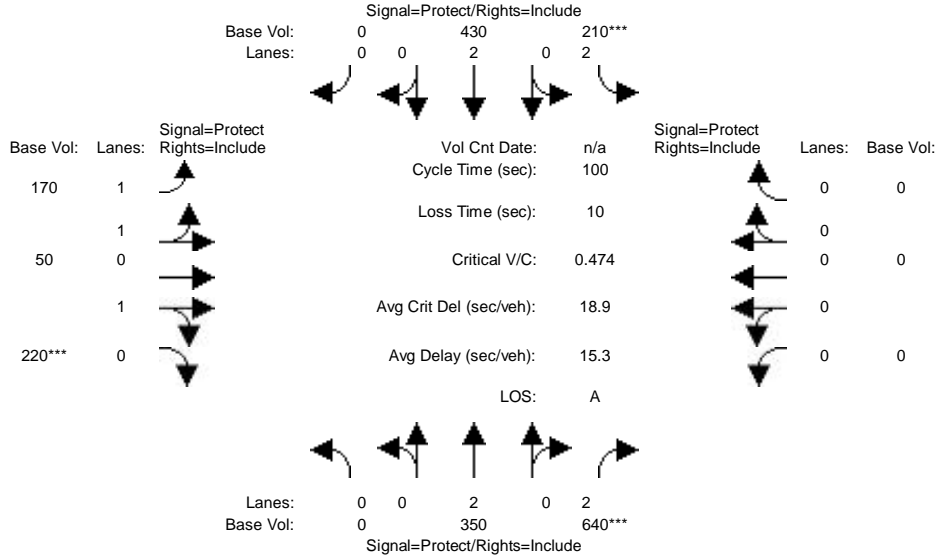


Street Name:	Central Ave.						Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	140	380	0	0	400	130	0	0	0	240	40	240
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	380	0	0	400	130	0	0	0	240	40	240
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	140	380	0	0	400	130	0	0	0	240	40	240
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	380	0	0	400	130	0	0	0	240	40	240
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	140	380	0	0	400	130	0	0	0	240	40	240
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.26	0.74	0.00	0.00	0.00	1.71	0.29	1.00
Final Sat.:	1600	3200	0	0	3623	1177	0	0	0	2743	457	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.12	0.00	0.00	0.11	0.11	0.00	0.00	0.00	0.09	0.09	0.15
Crit Moves:	****				****					****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Post-Game

Intersection #15: Central Ave. & Albertoni St.

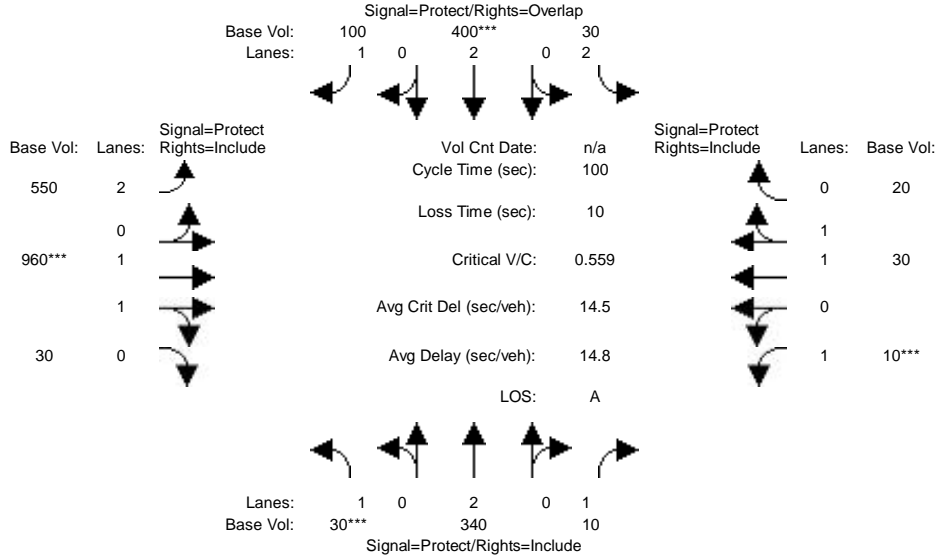


Street Name:	Central Ave.						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	350	640	210	430	0	170	50	220	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	350	640	210	430	0	170	50	220	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	350	640	210	430	0	170	50	220	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	350	640	210	430	0	170	50	220	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	350	640	210	430	0	170	50	220	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.55	0.45	1.00	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	2473	727	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.11	0.20	0.04	0.13	0.00	0.07	0.07	0.14	0.00	0.00	0.00
Crit Moves:		****	****				****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Post-Game

Intersection #16: Central Ave. & Victoria St.

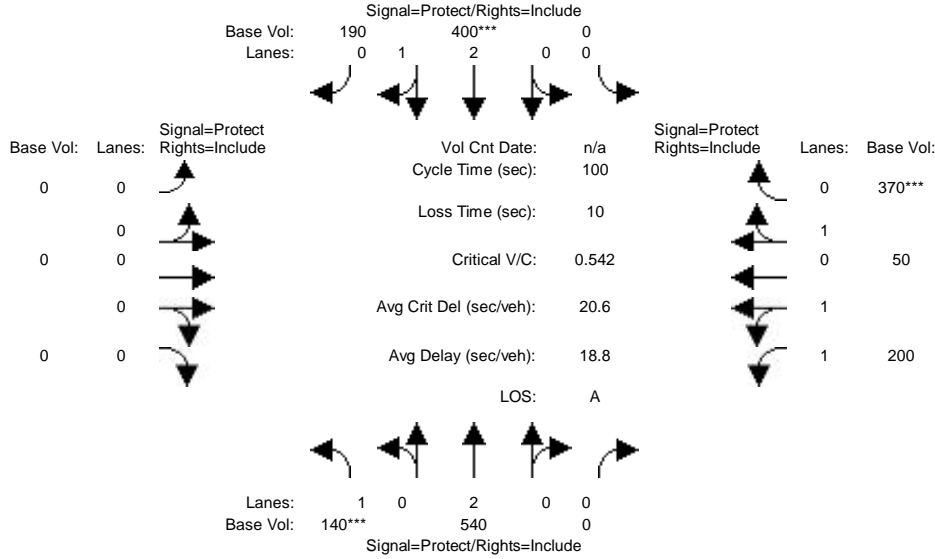


Street Name:	Central Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	30	340	10	30	400	100	550	960	30	10	30	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	340	10	30	400	100	550	960	30	10	30	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	340	10	30	400	100	550	960	30	10	30	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	340	10	30	400	100	550	960	30	10	30	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	340	10	30	400	100	550	960	30	10	30	20
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.94	0.06	1.00	1.20	0.80
Final Sat.:	1600	3200	1600	5760	3200	1600	5760	3103	97	1600	1920	1280
Capacity Analysis Module:												
Vol/Sat:	0.02	0.11	0.01	0.01	0.13	0.06	0.10	0.31	0.31	0.01	0.02	0.02
OvlAdjV/S:	0.00											
Crit Moves:	****	****			****	****	****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Post-Game

Intersection #17: Wilmington Ave. & Artesia Blvd. WB

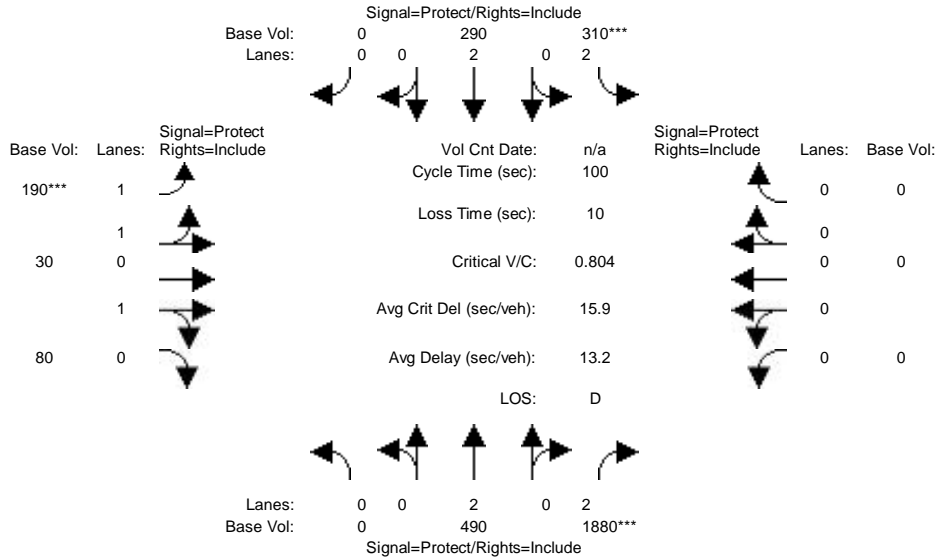


Street Name:	Wilmington Ave.						Artesia Blvd. WB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	140	540	0	0	400	190	0	0	0	200	50	370
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	540	0	0	400	190	0	0	0	200	50	370
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	140	540	0	0	400	190	0	0	0	200	50	370
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	540	0	0	400	190	0	0	0	200	50	370
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	140	540	0	0	400	190	0	0	0	200	50	370
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.03	0.97	0.00	0.00	0.00	1.60	0.40	1.00
Final Sat.:	1600	3200	0	0	3254	1546	0	0	0	2560	640	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.17	0.00	0.00	0.12	0.12	0.00	0.00	0.00	0.08	0.08	0.23
Crit Moves:	****				****						****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Post-Game

Intersection #18: Wilmington Ave. & Artesia Blvd. EB

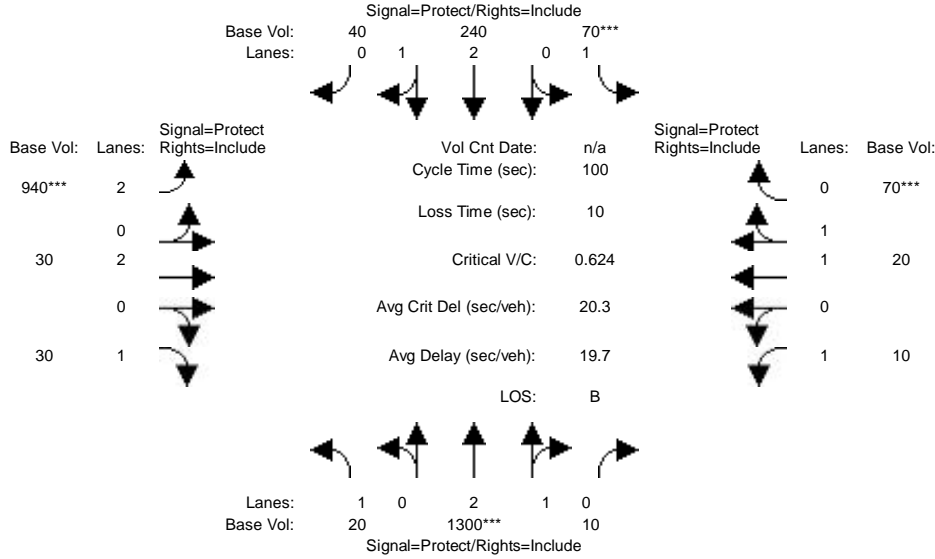


Street Name:	Wilmington Ave.				Artesia Blvd. EB							
Approach:	North Bound		South Bound		East Bound		West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	490	1880	310	290	0	190	30	80	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	490	1880	310	290	0	190	30	80	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	490	1880	310	290	0	190	30	80	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	490	1880	310	290	0	190	30	80	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	490	1880	310	290	0	190	30	80	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.90	0.30	0.80	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	3046	479	1275	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.15	0.59	0.05	0.09	0.00	0.06	0.06	0.06	0.00	0.00	0.00
Crit Moves:		****	****			****						

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Post-Game

Intersection #19: Wilmington Ave. & Victoria St.

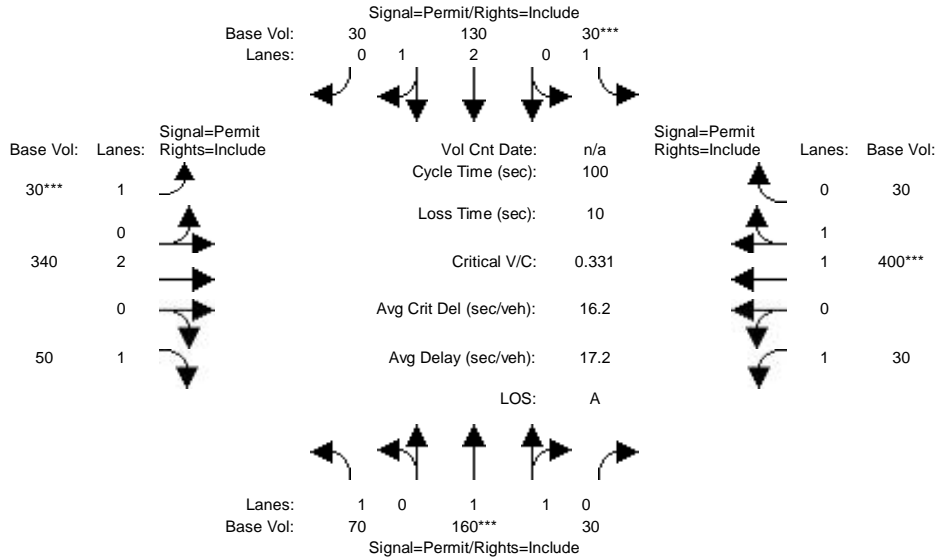


Street Name:	Wilmington Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	20	1300	10	70	240	40	940	30	30	10	20	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	1300	10	70	240	40	940	30	30	10	20	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	1300	10	70	240	40	940	30	30	10	20	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	1300	10	70	240	40	940	30	30	10	20	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	1300	10	70	240	40	940	30	30	10	20	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.98	0.02	1.00	2.57	0.43	2.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	4763	37	1600	4114	686	5760	3200	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.27	0.27	0.04	0.06	0.06	0.16	0.01	0.02	0.01	0.01	0.04
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Post-Game

Intersection #22: Figueroa St. & 190th St./Victoria St.

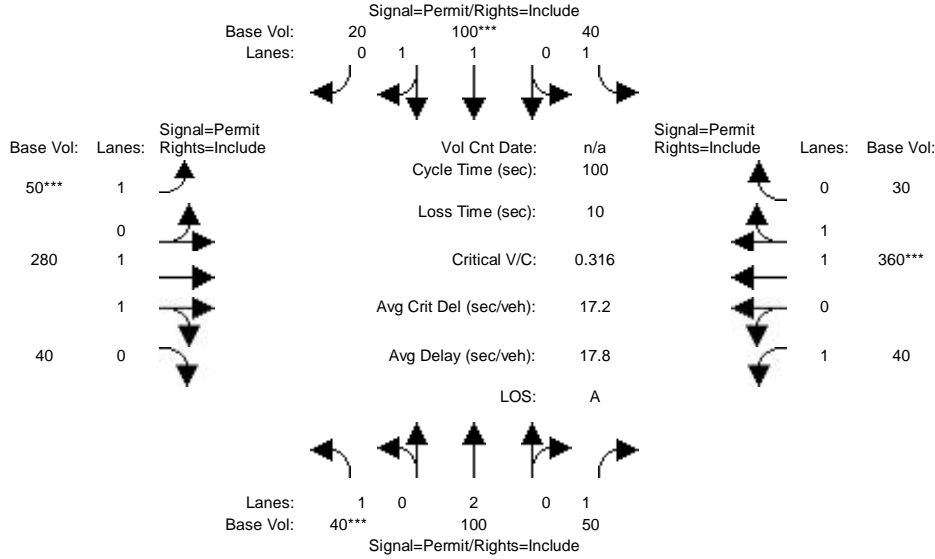


Street Name:	Figueroa St.						190th St./Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	70	160	30	30	130	30	30	340	50	30	400	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	160	30	30	130	30	30	340	50	30	400	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	160	30	30	130	30	30	340	50	30	400	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	160	30	30	130	30	30	340	50	30	400	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	70	160	30	30	130	30	30	340	50	30	400	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.68	0.32	1.00	2.44	0.56	1.00	2.00	1.00	1.00	1.86	0.14
Final Sat.:	1600	2695	505	1600	3900	900	1600	3200	1600	1600	2977	223
Capacity Analysis Module:												
Vol/Sat:	0.04	0.06	0.06	0.02	0.03	0.03	0.02	0.11	0.03	0.02	0.13	0.13
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Post-Game

Intersection #24: Main St. & Victoria St.

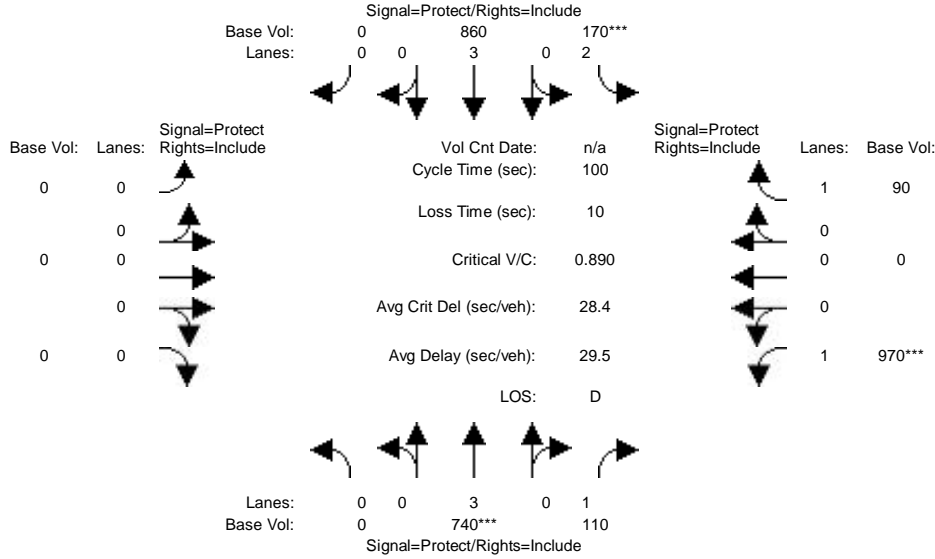


Street Name:	Main St.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	40	100	50	40	100	20	50	280	40	40	360	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	100	50	40	100	20	50	280	40	40	360	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	100	50	40	100	20	50	280	40	40	360	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	100	50	40	100	20	50	280	40	40	360	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	100	50	40	100	20	50	280	40	40	360	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.67	0.33	1.00	1.75	0.25	1.00	1.85	0.15
Final Sat.:	1600	3200	1600	1600	2667	533	1600	2800	400	1600	2954	246
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.03	0.03	0.04	0.04	0.03	0.10	0.10	0.03	0.12	0.12
Crit Moves:	****			****		****	****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Post-Game

Intersection #25: Avalon Blvd. & University Dr.

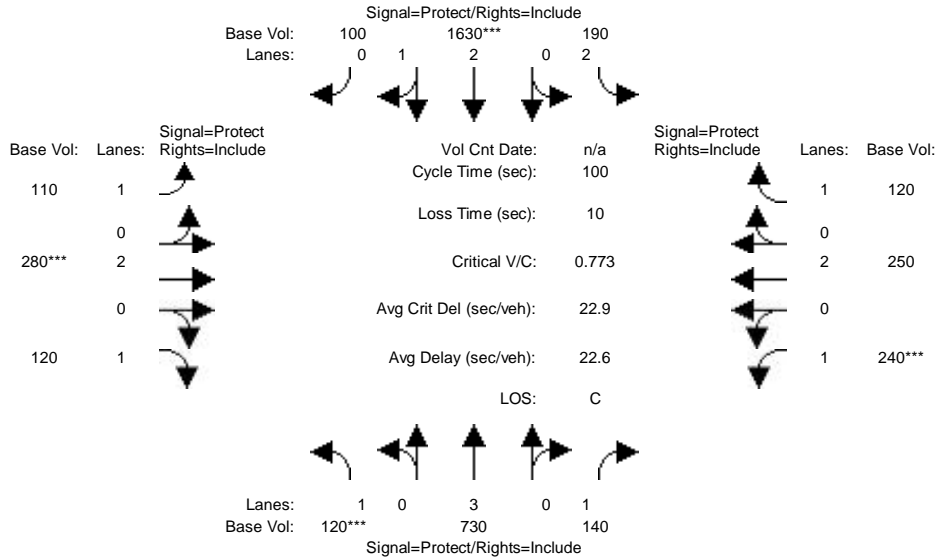


Street Name:	Avalon Blvd.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	740	110	170	860	0	0	0	0	970	0	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	740	110	170	860	0	0	0	0	970	0	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	740	110	170	860	0	0	0	0	970	0	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	740	110	170	860	0	0	0	0	970	0	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	740	110	170	860	0	0	0	0	970	0	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.15	0.07	0.03	0.18	0.00	0.00	0.00	0.00	0.00	0.61	0.00
Crit Moves:	****			****						****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Post-Game

Intersection #26: Avalon Blvd. & Del Amo Blvd.

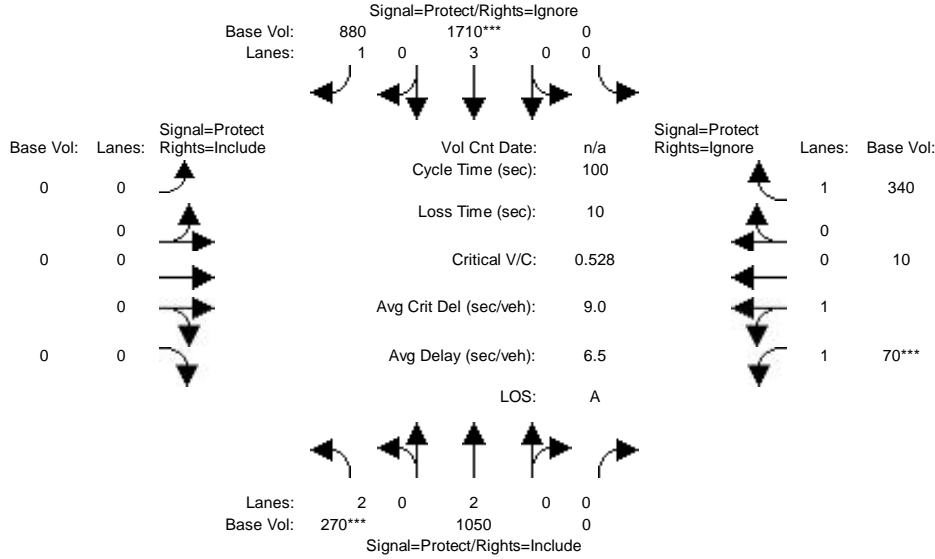


Street Name:	Avalon Blvd.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	120	730	140	190	1630	100	110	280	120	240	250	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	120	730	140	190	1630	100	110	280	120	240	250	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	120	730	140	190	1630	100	110	280	120	240	250	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	730	140	190	1630	100	110	280	120	240	250	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	120	730	140	190	1630	100	110	280	120	240	250	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.83	0.17	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4523	277	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.15	0.09	0.03	0.36	0.36	0.07	0.09	0.08	0.15	0.08	0.08
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Post-Game

Intersection #27: Avalon Blvd. & I-405 NB Ramps

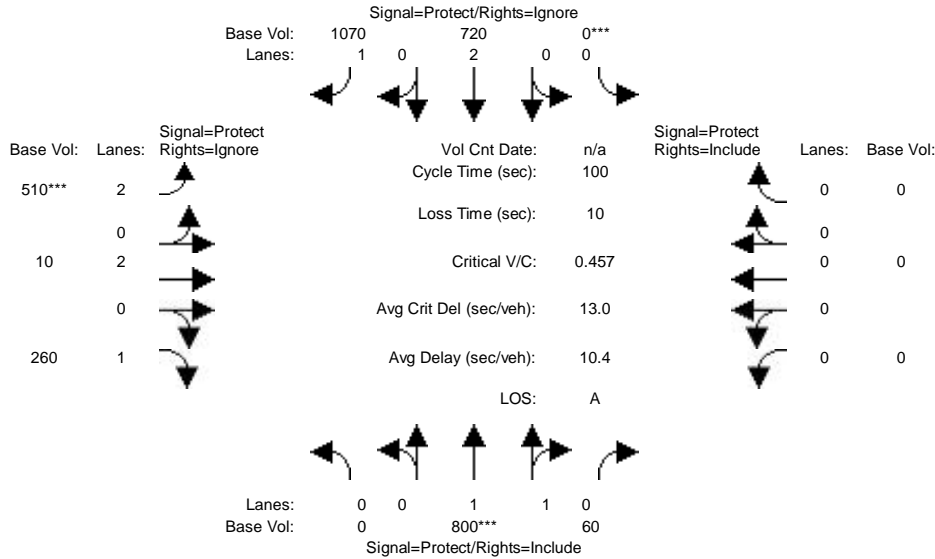


Street Name:	Avalon Blvd.						I-405 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	270	1050	0	0	1710	880	0	0	0	70	10	340
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	270	1050	0	0	1710	880	0	0	0	70	10	340
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	270	1050	0	0	1710	0	0	0	0	70	10	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	270	1050	0	0	1710	0	0	0	0	70	10	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	270	1050	0	0	1710	0	0	0	0	70	10	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.75	0.25	1.00
Final Sat.:	5760	3200	0	0	4800	1600	0	0	0	2800	400	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.33	0.00	0.00	0.36	0.00	0.00	0.00	0.00	0.00	0.03	0.03
Crit Moves:	****				****					****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Post-Game

Intersection #28: Avalon Blvd. & I-405 SB Ramps

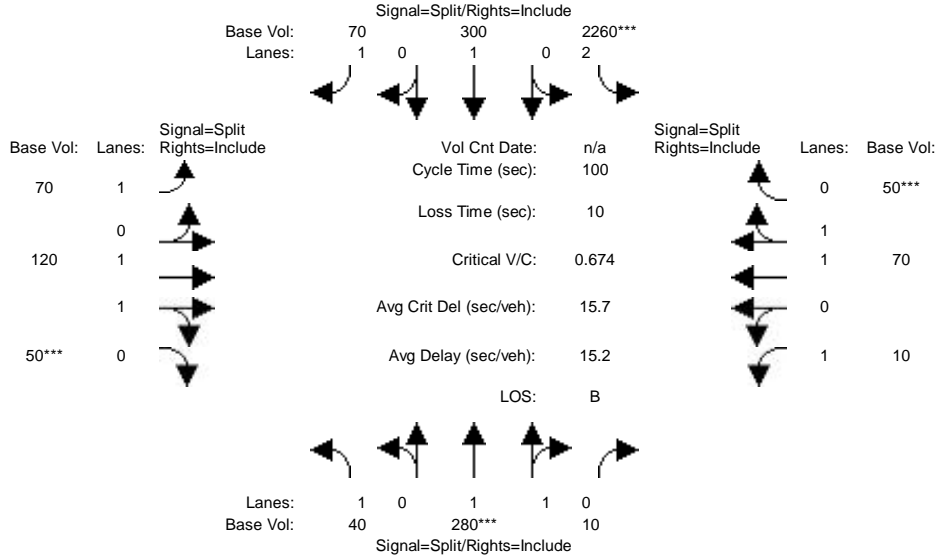


Street Name:	Avalon Blvd.						I-405 SB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	800	60	0	720	1070	510	10	260	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	800	60	0	720	1070	510	10	260	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	800	60	0	720	0	510	10	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	800	60	0	720	0	510	10	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	0	800	60	0	720	0	510	10	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.86	0.14	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	0	2977	223	0	3200	1600	5760	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.27	0.27	0.00	0.23	0.00	0.09	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Post-Game

Intersection #29: Central Ave. & University Dr.

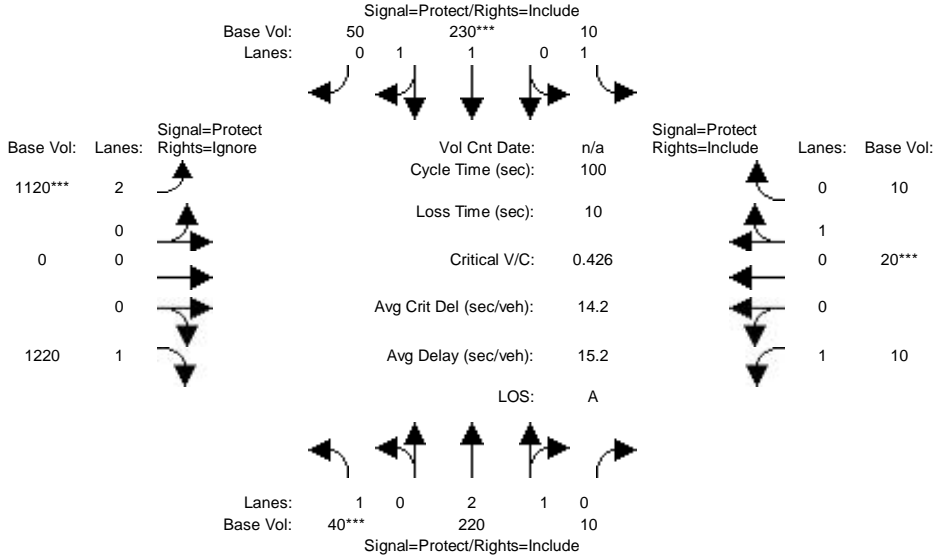


Street Name:	Central Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	40	280	10	2260	300	70	70	120	50	10	70	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	280	10	2260	300	70	70	120	50	10	70	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	280	10	2260	300	70	70	120	50	10	70	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	280	10	2260	300	70	70	120	50	10	70	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	280	10	2260	300	70	70	120	50	10	70	50
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.93	0.07	2.00	1.00	1.00	1.00	1.41	0.59	1.00	1.17	0.83
Final Sat.:	1600	3090	110	5760	1600	1600	1600	2259	941	1600	1867	1333
Capacity Analysis Module:												
Vol/Sat:	0.03	0.09	0.09	0.39	0.19	0.04	0.04	0.05	0.05	0.01	0.04	0.04
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Post-Game

Intersection #30: Wilmington Ave. & University Dr.

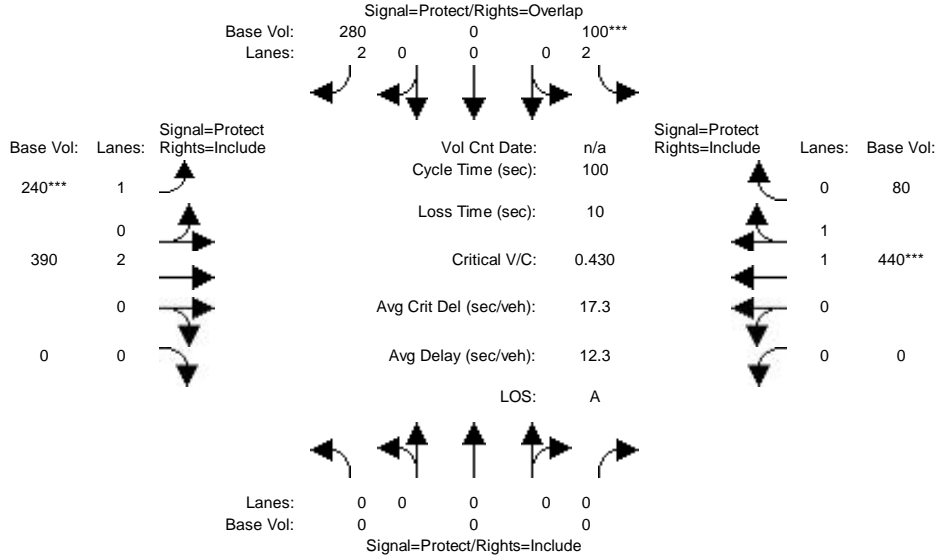


Street Name:	Wilmington Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	40	220	10	10	230	50	1120	0	1220	10	20	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	220	10	10	230	50	1120	0	1220	10	20	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
PHF Volume:	40	220	10	10	230	50	1120	0	0	10	20	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	220	10	10	230	50	1120	0	0	10	20	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
FinalVolume:	40	220	10	10	230	50	1120	0	0	10	20	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.87	0.13	1.00	1.64	0.36	2.00	0.00	1.00	1.00	0.67	0.33
Final Sat.:	1600	4591	209	1600	2629	571	5760	0	1600	1600	1067	533
Capacity Analysis Module:												
Vol/Sat:	0.03	0.05	0.05	0.01	0.09	0.09	0.19	0.00	0.00	0.01	0.02	0.02
Crit Moves:	****			****		****				****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Post-Game

Intersection #31: Central Ave. & Del Amo Blvd.

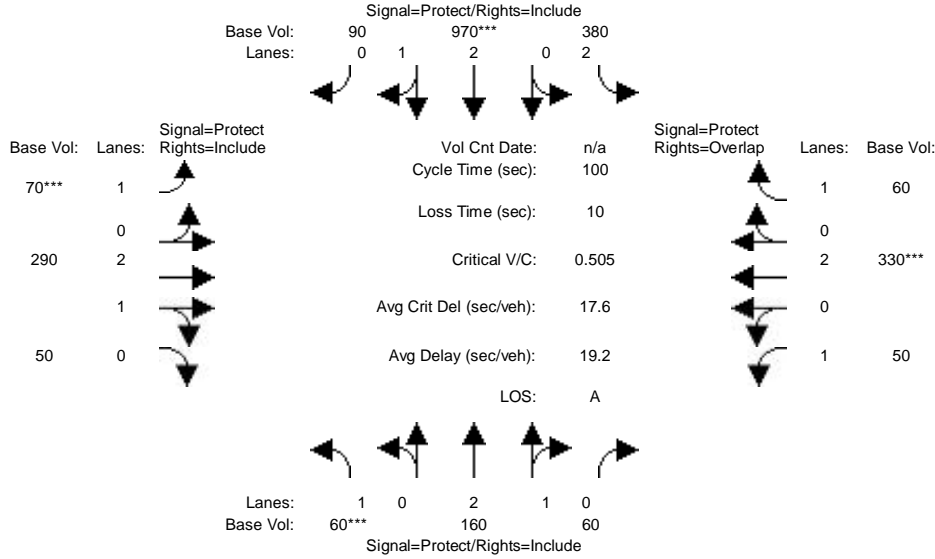


Street Name:	Central Ave.						Del Amo Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	100	0	280	240	390	0	0	440	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	100	0	280	240	390	0	0	440	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	100	0	280	240	390	0	0	440	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	100	0	280	240	390	0	0	440	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	100	0	280	240	390	0	0	440	80
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	2.00	1.00	2.00	0.00	0.00	1.69	0.31
Final Sat.:	0	0	0	5760	0	3200	1600	3200	0	0	2708	492
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.00	0.09	0.15	0.12	0.00	0.00	0.16	0.16
OvlAdjV/S:	0.00											
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Post-Game

Intersection #32: Wilmington Ave. & Del Amo Blvd.

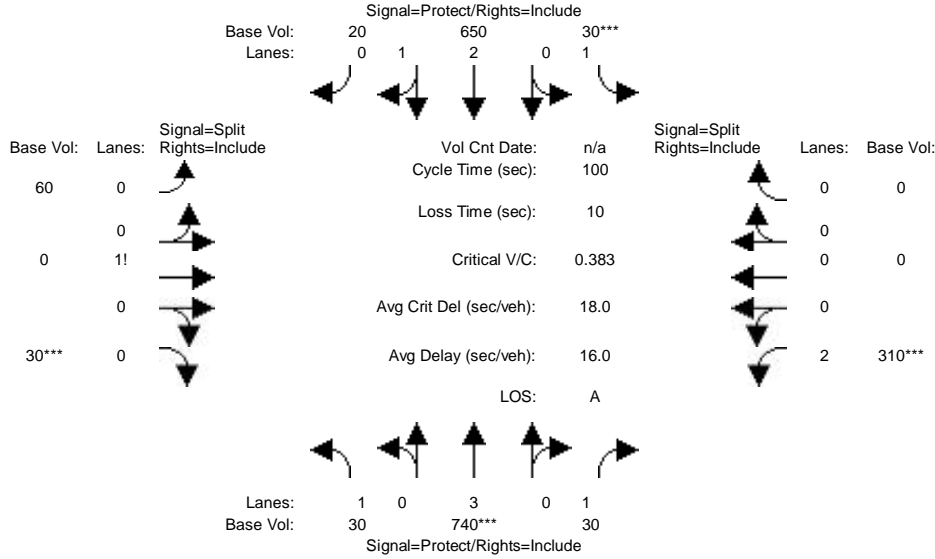


Street Name:	Wilmington Ave.				Del Amo Blvd.							
Approach:	North Bound		South Bound		East Bound		West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	60	160	60	380	970	90	70	290	50	50	330	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	160	60	380	970	90	70	290	50	50	330	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	160	60	380	970	90	70	290	50	50	330	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	160	60	380	970	90	70	290	50	50	330	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	160	60	380	970	90	70	290	50	50	330	60
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.18	0.82	2.00	2.75	0.25	1.00	2.56	0.44	1.00	2.00	1.00
Final Sat.:	1600	3491	1309	5760	4392	408	1600	4094	706	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.05	0.05	0.07	0.22	0.22	0.04	0.07	0.07	0.03	0.10	0.04
OvlAdjV/S:	0.00											
Crit Moves:	****			****		****	****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Post-Game

Intersection #38: Avalon Blvd. & 184th St. - Drive A

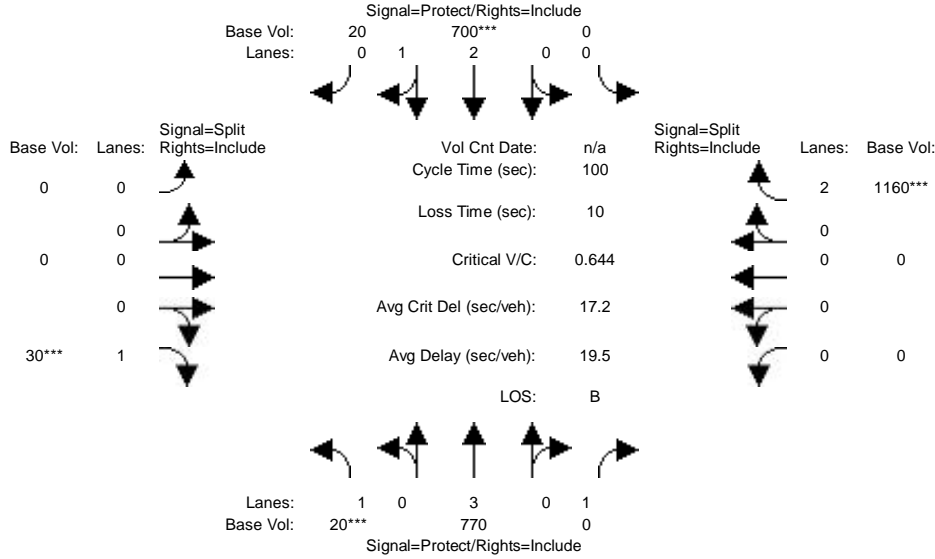


Street Name:	S. Avolon Blvd.						184th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	30	740	30	30	650	20	60	0	30	310	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	740	30	30	650	20	60	0	30	310	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	740	30	30	650	20	60	0	30	310	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	740	30	30	650	20	60	0	30	310	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	740	30	30	650	20	60	0	30	310	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.91	0.09	0.67	0.00	0.33	2.00	0.00	0.00
Final Sat.:	1600	4800	1600	1600	4657	143	1067	0	533	5760	0	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.15	0.02	0.02	0.14	0.14	0.06	0.00	0.06	0.05	0.00	0.00
Crit Moves:	****			****			****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Post-Game

Intersection #39: Avalon Blvd. & 182nd St. - Drive B

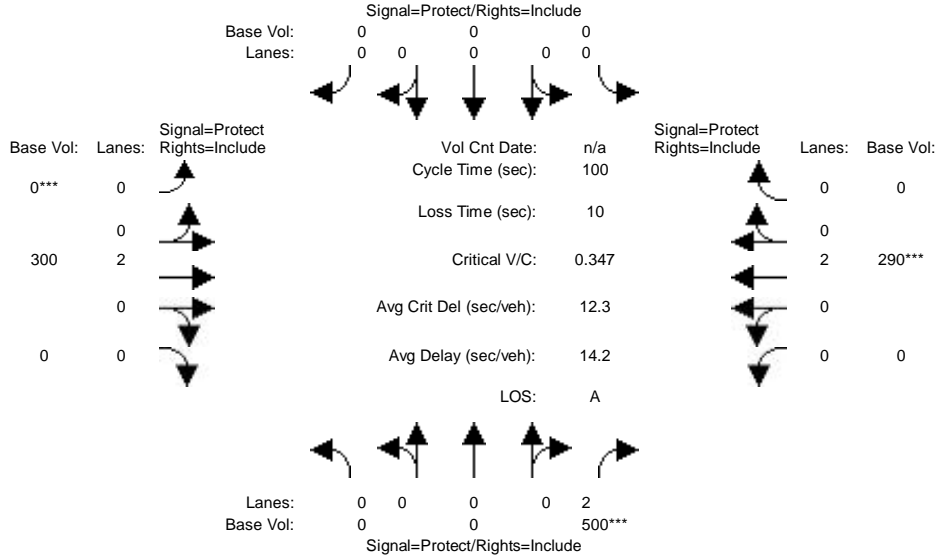


Street Name:	S. Avalon Blvd.				182nd St.							
Approach:	North Bound		South Bound		East Bound		West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	20	770	0	0	700	20	0	0	30	0	0	1160
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	770	0	0	700	20	0	0	30	0	0	1160
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	770	0	0	700	20	0	0	30	0	0	1160
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	770	0	0	700	20	0	0	30	0	0	1160
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	770	0	0	700	20	0	0	30	0	0	1160
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	0.00	2.92	0.08	0.00	0.00	1.00	0.00	0.00	2.00
Final Sat.:	1600	4800	1600	0	4667	133	0	0	1600	0	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.01	0.16	0.00	0.00	0.15	0.15	0.00	0.00	0.02	0.00	0.00	0.36
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Post-Game

Intersection #40: Victoria St. & Drive C

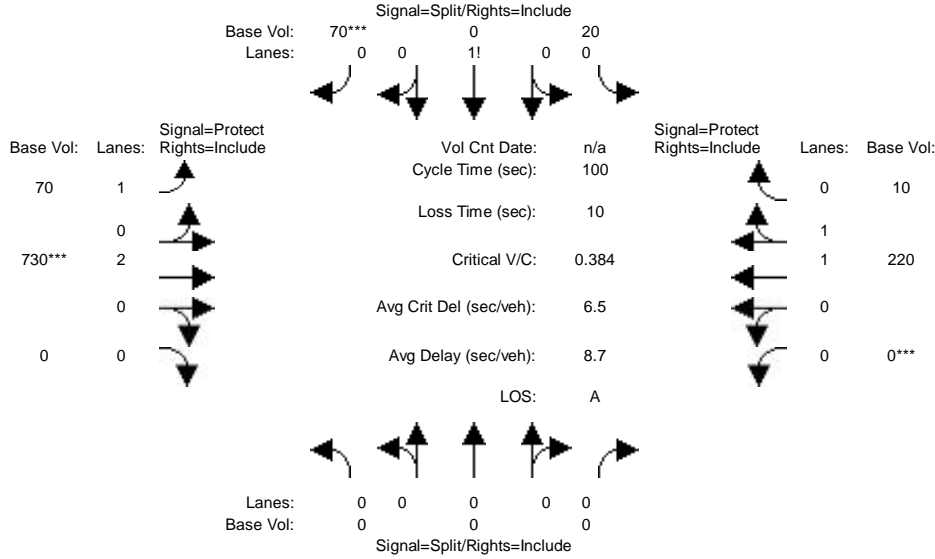


Street Name:	Drive C						E. Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	500	0	0	0	0	300	0	0	290	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	500	0	0	0	0	300	0	0	290	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	500	0	0	0	0	300	0	0	290	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	500	0	0	0	0	300	0	0	290	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	500	0	0	0	0	300	0	0	290	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00
Final Sat.:	0	0	3200	0	0	0	0	3200	0	0	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.09	0.00
Crit Moves:			****			****			****			****

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Post-Game

Intersection #41: Victoria St. & Rainsbury Ave.

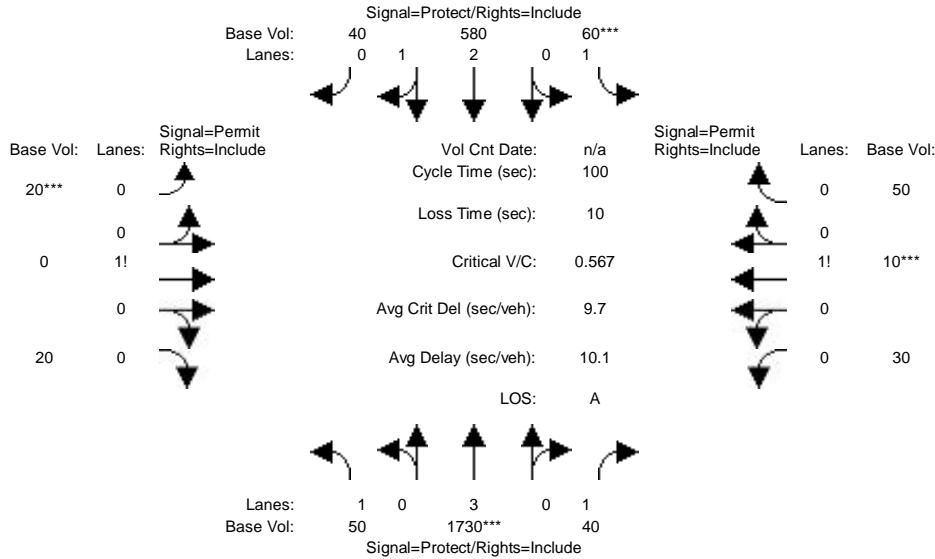


Street Name:	E. Victoria St.						Rainsbury Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	20	0	70	70	730	0	0	220	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	20	0	70	70	730	0	0	220	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	20	0	70	70	730	0	0	220	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	20	0	70	70	730	0	0	220	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	20	0	70	70	730	0	0	220	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.22	0.00	0.78	1.00	2.00	0.00	0.00	1.91	0.09
Final Sat.:	0	0	0	356	0	1244	1600	3200	0	0	3061	139
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.06	0.00	0.06	0.04	0.23	0.00	0.00	0.07	0.07
Crit Moves:				****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2017 with 30k-Seat Sunday Post-Game

Intersection #42: Avalon Blvd. & Harbor Village / Colony Cove



Street Name:	Avalon Blvd.						Harbor Village / Colony Cove					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	50	1730	40	60	580	40	20	0	20	30	10	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	1730	40	60	580	40	20	0	20	30	10	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	1730	40	60	580	40	20	0	20	30	10	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	1730	40	60	580	40	20	0	20	30	10	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	1730	40	60	580	40	20	0	20	30	10	50
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.81	0.19	0.50	0.00	0.50	0.33	0.11	0.56
Final Sat.:	1600	4800	1600	1600	4490	310	800	0	800	533	178	889
Capacity Analysis Module:												
Vol/Sat:	0.03	0.36	0.03	0.04	0.13	0.13	0.01	0.00	0.03	0.02	0.06	0.06
Crit Moves:	****			****			****			****		

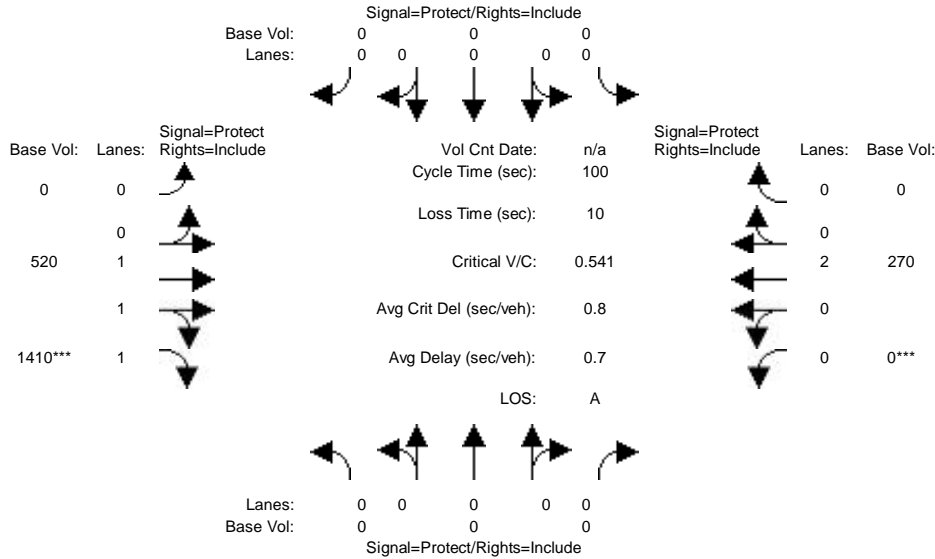
Appendix J

Intersection LOS Worksheets for 2019 Sunday No Project (27,000-Seats) Conditions

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Pre-Game

Intersection #1: Victoria St. & Drive D

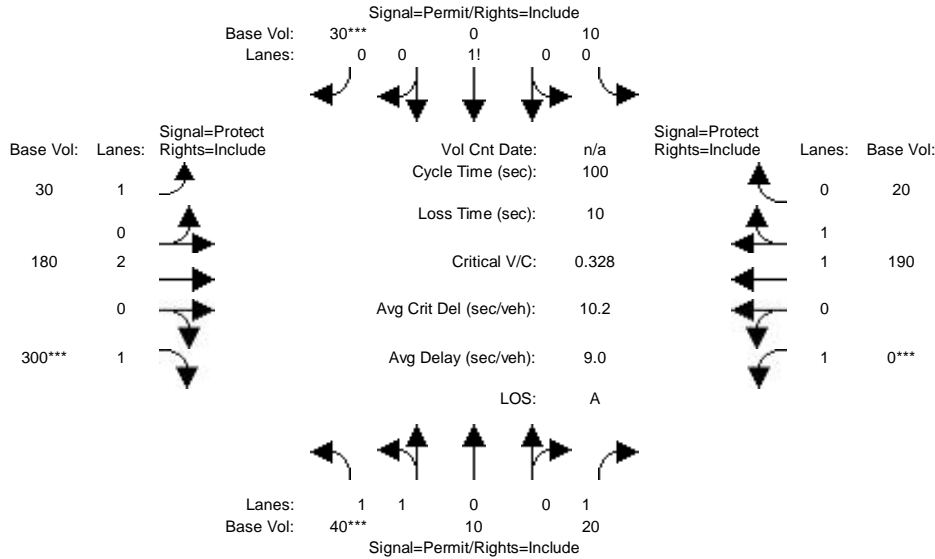


Street Name:	Drive D						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	520	1410	0	270	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	520	1410	0	270	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	0	520	1410	0	270	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	0	520	1410	0	270	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	0	520	1410	0	270	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	2.00	0.00	2.00	0.00
Final Sat.:	0	0	0	0	0	0	0	1600	3200	0	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.44	0.00	0.08	0.00
Crit Moves:							****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Pre-Game

Intersection #2: Victoria St & Tamcliff Ave

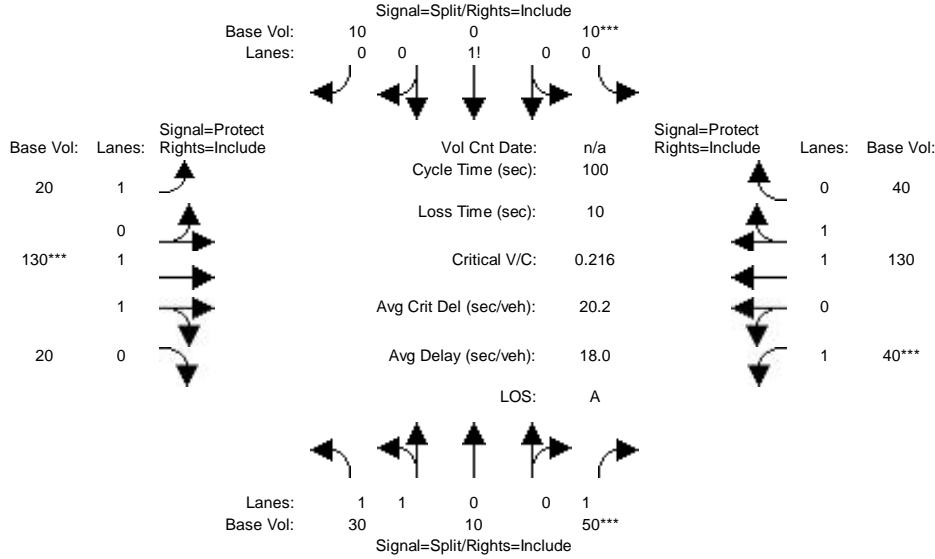


Street Name:	Victoria St						Tamcliff Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	40	10	20	10	0	30	30	180	300	0	190	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	10	20	10	0	30	30	180	300	0	190	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	10	20	10	0	30	30	180	300	0	190	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	10	20	10	0	30	30	180	300	0	190	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	10	20	10	0	30	30	180	300	0	190	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.60	0.40	1.00	0.25	0.00	0.75	1.00	2.00	1.00	1.00	1.81	0.19
Final Sat.:	2560	640	1600	400	0	1200	1600	3200	1600	1600	2895	305
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.01	0.01	0.00	0.03	0.02	0.06	0.19	0.00	0.07	0.07
Crit Moves:	****					****	****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Pre-Game

Intersection #3: Victoria St. & Birchknoll Dr.

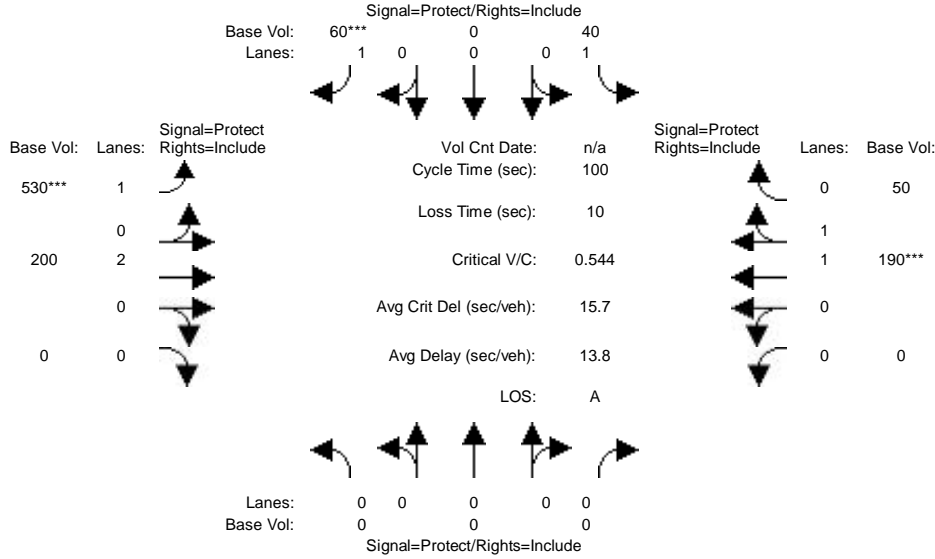


Street Name:	Victoria St.				Birchknoll Dr.							
Approach:	North Bound		South Bound		East Bound		West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	30	10	50	10	0	10	20	130	20	40	130	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	10	50	10	0	10	20	130	20	40	130	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	10	50	10	0	10	20	130	20	40	130	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	10	50	10	0	10	20	130	20	40	130	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	10	50	10	0	10	20	130	20	40	130	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.50	0.50	1.00	0.50	0.00	0.50	1.00	1.73	0.27	1.00	1.53	0.47
Final Sat.:	2400	800	1600	800	0	800	1600	2773	427	1600	2447	753
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.03	0.01	0.00	0.01	0.01	0.05	0.05	0.03	0.05	0.05
Crit Moves:			****	****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Pre-Game

Intersection #9: University Dr. & Toro Center Dr.

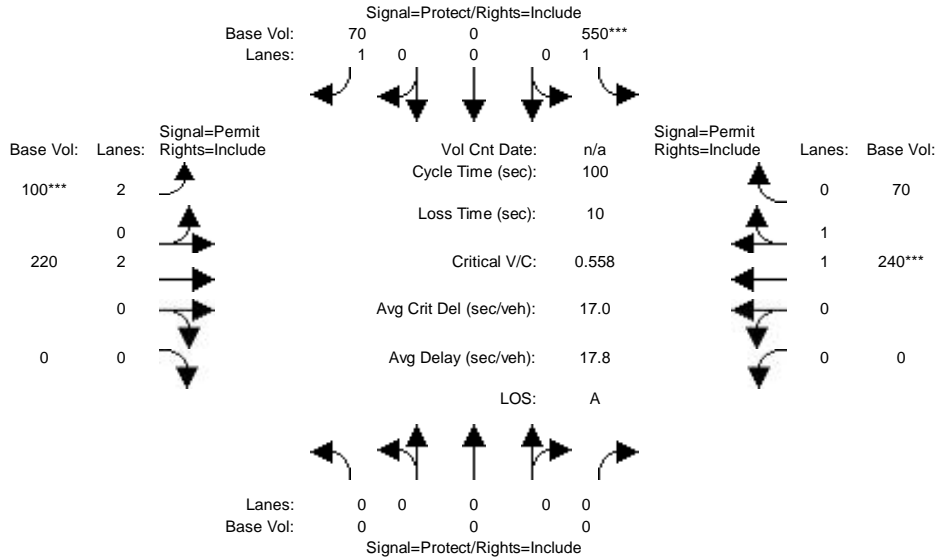


Street Name:	University Dr.						Toro Center Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	40	0	60	530	200	0	0	190	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	40	0	60	530	200	0	0	190	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	40	0	60	530	200	0	0	190	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	40	0	60	530	200	0	0	190	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	40	0	60	530	200	0	0	190	50
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.58	0.42
Final Sat.:	0	0	0	1600	0	1600	1600	3200	0	0	2533	667
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.03	0.00	0.04	0.33	0.06	0.00	0.00	0.08	0.07
Crit Moves:				****		****				****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Pre-Game

Intersection #10: Albertoni St. & SR 91 EB Ramps [Moved from Main St & Albertoni St]

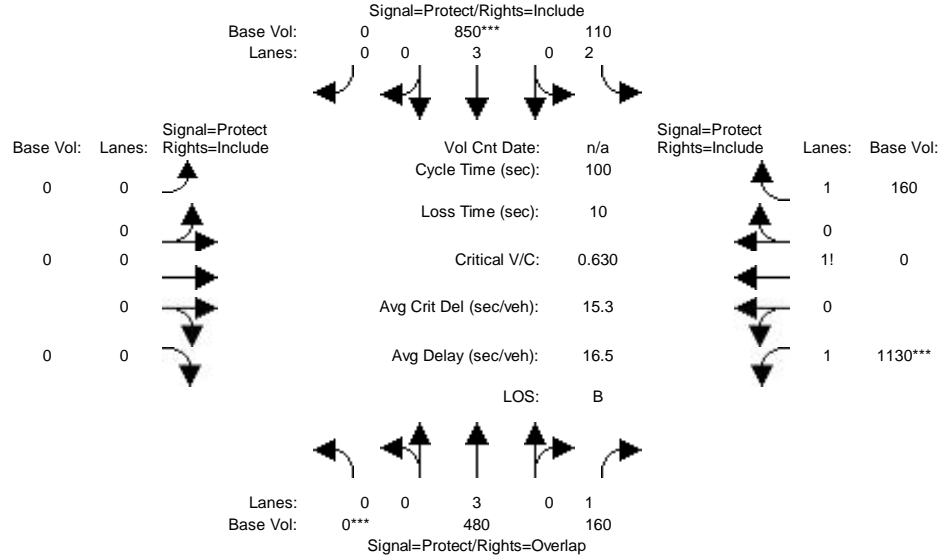


Street Name:	Sr 91 EB Ramps						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	550	0	70	100	220	0	0	240	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	550	0	70	100	220	0	0	240	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	550	0	70	100	220	0	0	240	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	550	0	70	100	220	0	0	240	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	550	0	70	100	220	0	0	240	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.55	0.45
Final Sat.:	0	0	0	1600	0	1600	5760	3200	0	0	2477	723
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.34	0.00	0.04	0.02	0.07	0.00	0.00	0.10	0.10
Crit Moves:				****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Pre-Game

Intersection #11: Avalon Blvd. & SR 91 WB On-Ramp

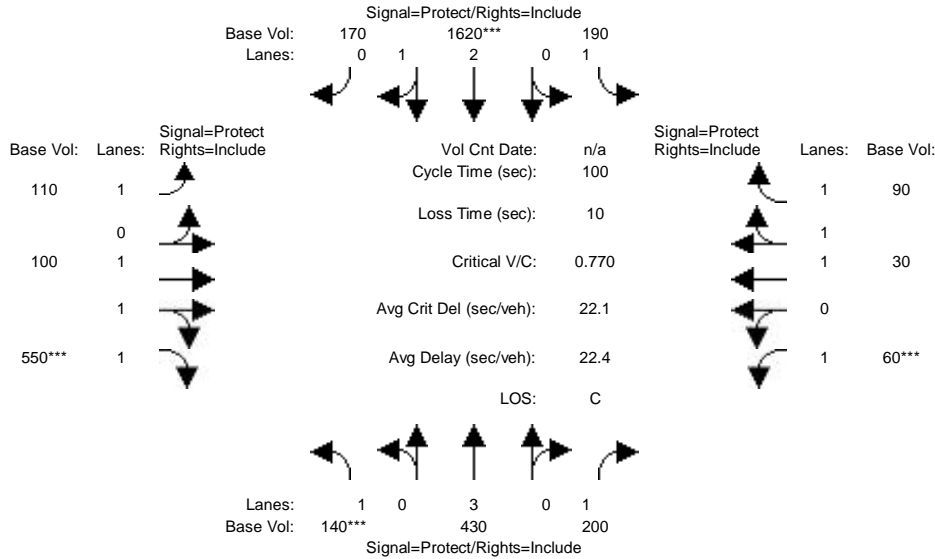


Street Name:	Avalon Blvd.						SR 91 WB On-Ramp						
Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Volume Module:													
Base Vol:	0	480	160	110	850	0	0	0	0	1130	0	160	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	0	480	160	110	850	0	0	0	0	1130	0	160	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:	0	480	160	110	850	0	0	0	0	1130	0	160	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	0	480	160	110	850	0	0	0	0	1130	0	160	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
FinalVolume:	0	480	160	110	850	0	0	0	0	1130	0	160	
OvlAdjVol:	0												
Saturation Flow Module:													
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	3200	0	1600	
Capacity Analysis Module:													
Vol/Sat:	0.00	0.10	0.10	0.02	0.18	0.00	0.00	0.00	0.00	0.00	0.35	0.00	
OvlAdjV/S:	0.00												
Crit Moves:	****	****						****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Pre-Game

Intersection #12: Avalon Blvd. & Albertoni St.

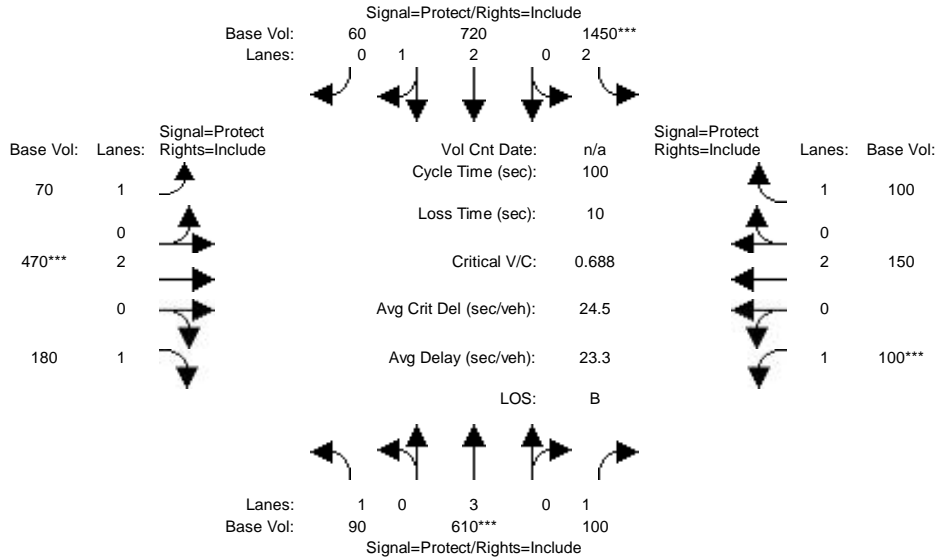


Street Name:	Avalon Blvd.						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	140	430	200	190	1620	170	110	100	550	60	30	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	430	200	190	1620	170	110	100	550	60	30	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	140	430	200	190	1620	170	110	100	550	60	30	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	430	200	190	1620	170	110	100	550	60	30	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	140	430	200	190	1620	170	110	100	550	60	30	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.72	0.28	1.00	1.00	2.00	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	4344	456	1600	1600	3200	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.13	0.12	0.37	0.37	0.07	0.06	0.17	0.04	0.02	0.03
Crit Moves:	****			****			****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Pre-Game

Intersection #13: Avalon Blvd. & Victoria St.

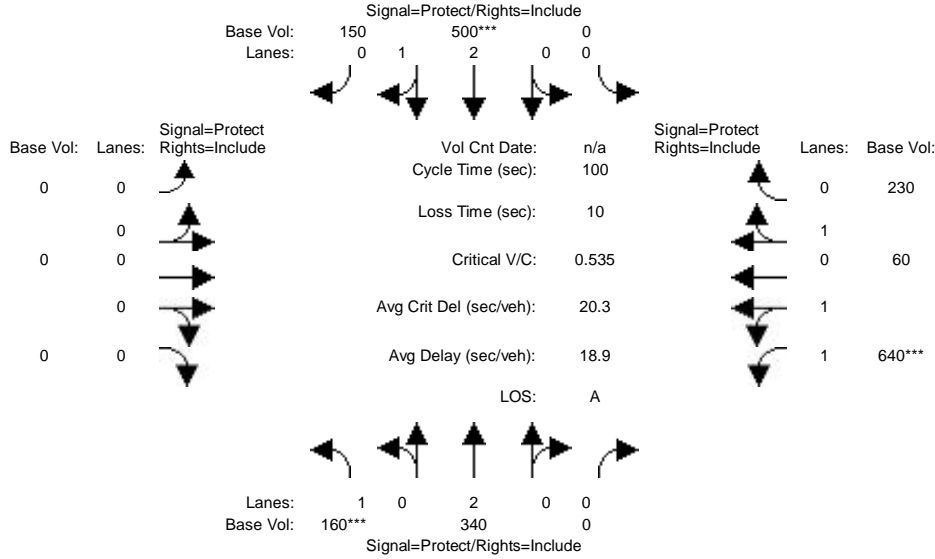


Street Name:	Avalon Blvd.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	90	610	100	1450	720	60	70	470	180	100	150	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	610	100	1450	720	60	70	470	180	100	150	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	610	100	1450	720	60	70	470	180	100	150	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	610	100	1450	720	60	70	470	180	100	150	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	610	100	1450	720	60	70	470	180	100	150	100
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.77	0.23	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4431	369	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.13	0.06	0.25	0.16	0.16	0.04	0.15	0.11	0.06	0.05	0.06
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Pre-Game

Intersection #14: Central Ave. & Artesia Blvd.

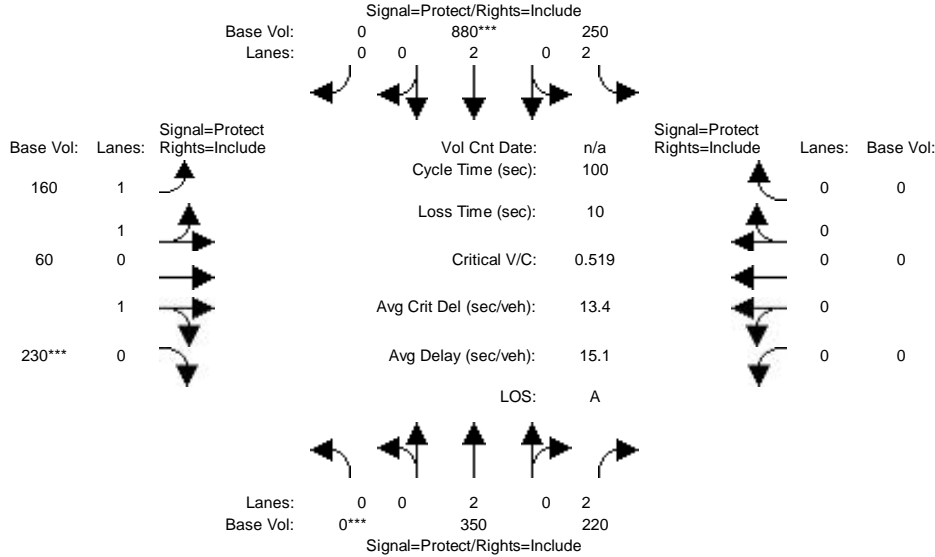


Street Name:	Central Ave.						Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	160	340	0	0	500	150	0	0	0	640	60	230
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	160	340	0	0	500	150	0	0	0	640	60	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	160	340	0	0	500	150	0	0	0	640	60	230
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	340	0	0	500	150	0	0	0	640	60	230
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	160	340	0	0	500	150	0	0	0	640	60	230
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.31	0.69	0.00	0.00	0.00	2.00	0.21	0.79
Final Sat.:	1600	3200	0	0	3692	1108	0	0	0	3200	331	1269
Capacity Analysis Module:												
Vol/Sat:	0.10	0.11	0.00	0.00	0.14	0.14	0.00	0.00	0.00	0.20	0.18	0.18
Crit Moves:	****				****					****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Pre-Game

Intersection #15: Central Ave. & Albertoni St.

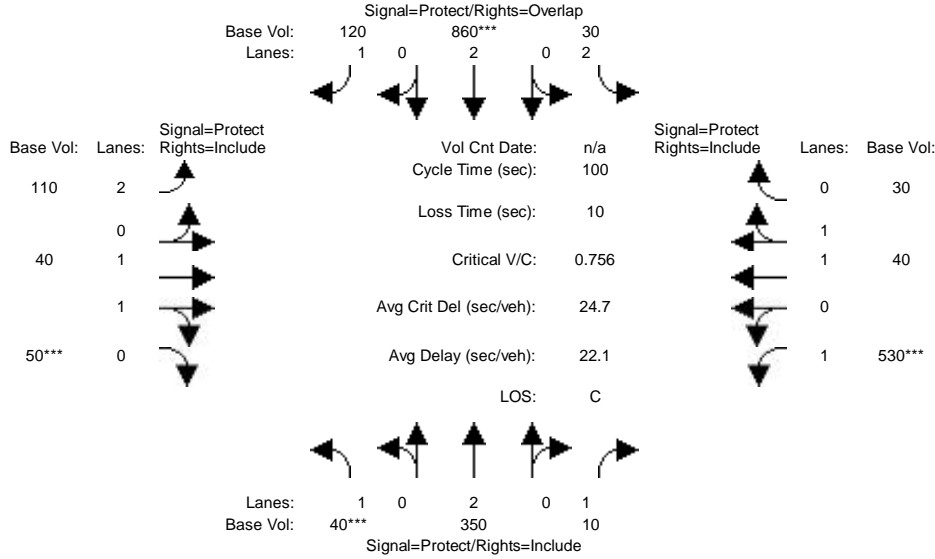


Street Name:	Central Ave.						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	350	220	250	880	0	160	60	230	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	350	220	250	880	0	160	60	230	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	350	220	250	880	0	160	60	230	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	350	220	250	880	0	160	60	230	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	350	220	250	880	0	160	60	230	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.45	0.55	1.00	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	2327	873	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.11	0.07	0.04	0.28	0.00	0.07	0.07	0.14	0.00	0.00	0.00
Crit Moves:	****				****			****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Pre-Game

Intersection #16: Central Ave. & Victoria St.

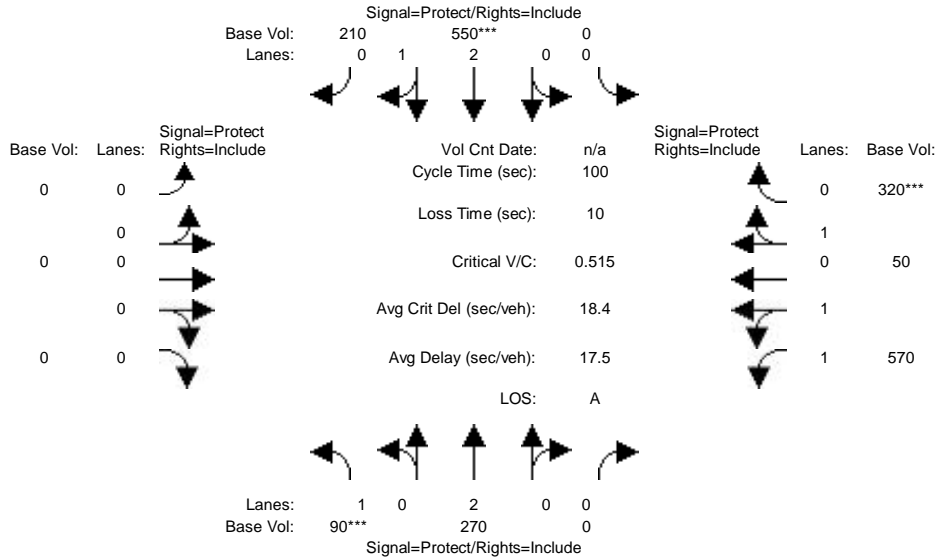


Street Name:	Central Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	40	350	10	30	860	120	110	40	50	530	40	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	350	10	30	860	120	110	40	50	530	40	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	350	10	30	860	120	110	40	50	530	40	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	350	10	30	860	120	110	40	50	530	40	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	350	10	30	860	120	110	40	50	530	40	30
OvlAdjVol:	89											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.00	1.00	1.00	1.14	0.86
Final Sat.:	1600	3200	1600	5760	3200	1600	5760	1600	1600	1600	1829	1371
Capacity Analysis Module:												
Vol/Sat:	0.03	0.11	0.01	0.01	0.27	0.08	0.02	0.03	0.03	0.33	0.02	0.02
OvlAdjV/S:	0.06											
Crit Moves:	****			****			****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Pre-Game

Intersection #17: Wilmington Ave. & Artesia Blvd. WB

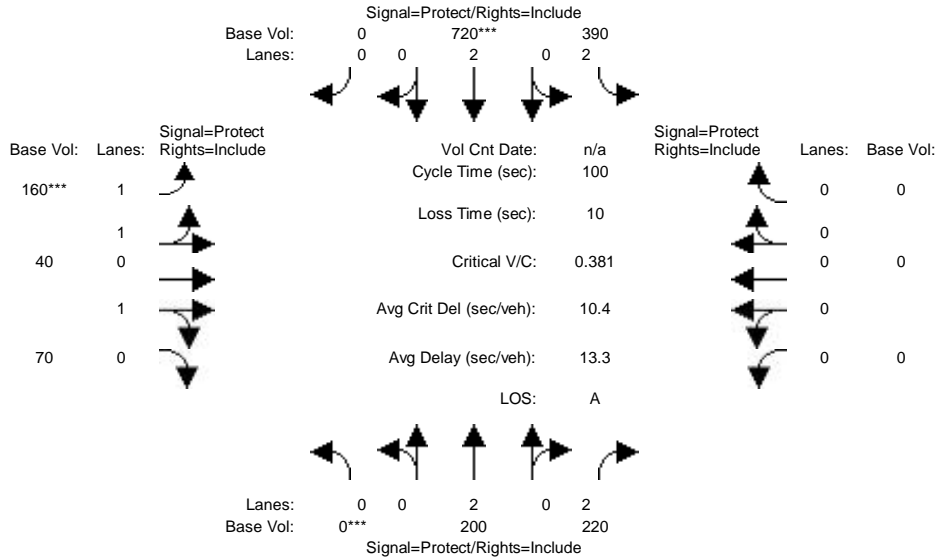


Street Name:	Wilmington Ave.						Artesia Blvd. WB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	90	270	0	0	550	210	0	0	0	570	50	320
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	270	0	0	550	210	0	0	0	570	50	320
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	270	0	0	550	210	0	0	0	570	50	320
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	270	0	0	550	210	0	0	0	570	50	320
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	270	0	0	550	210	0	0	0	570	50	320
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.17	0.83	0.00	0.00	0.00	1.84	0.16	1.00
Final Sat.:	1600	3200	0	0	3474	1326	0	0	0	2942	258	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.08	0.00	0.00	0.16	0.16	0.00	0.00	0.00	0.19	0.19	0.20
Crit Moves:	****				****					****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Pre-Game

Intersection #18: Wilmington Ave. & Artesia Blvd. EB

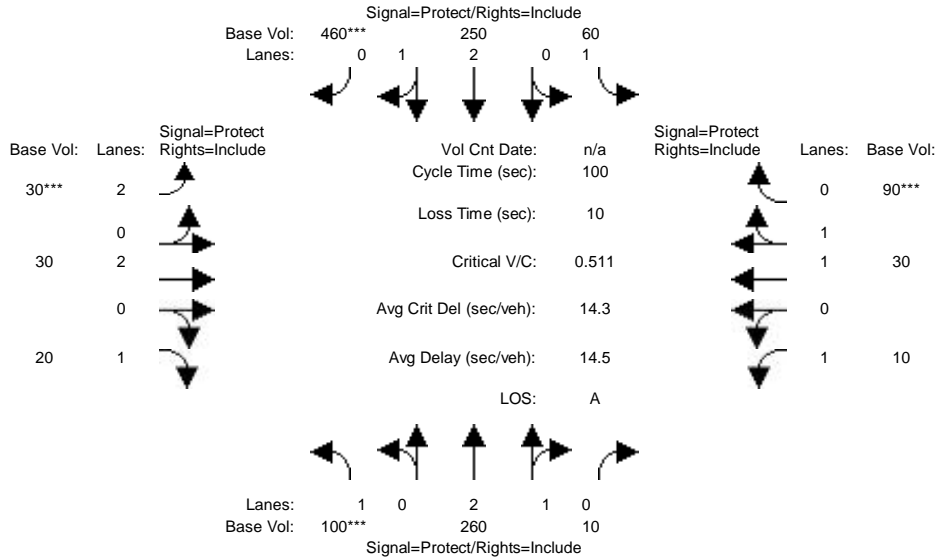


Street Name:	Wilmington Ave.				Artesia Blvd. EB							
Approach:	North Bound		South Bound		East Bound		West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	200	220	390	720	0	160	40	70	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	200	220	390	720	0	160	40	70	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	200	220	390	720	0	160	40	70	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	200	220	390	720	0	160	40	70	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	200	220	390	720	0	160	40	70	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.78	0.44	0.78	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	2844	711	1244	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.06	0.07	0.07	0.23	0.00	0.06	0.06	0.06	0.00	0.00	0.00
Crit Moves:	****			****		****						

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Pre-Game

Intersection #19: Wilmington Ave. & Victoria St.

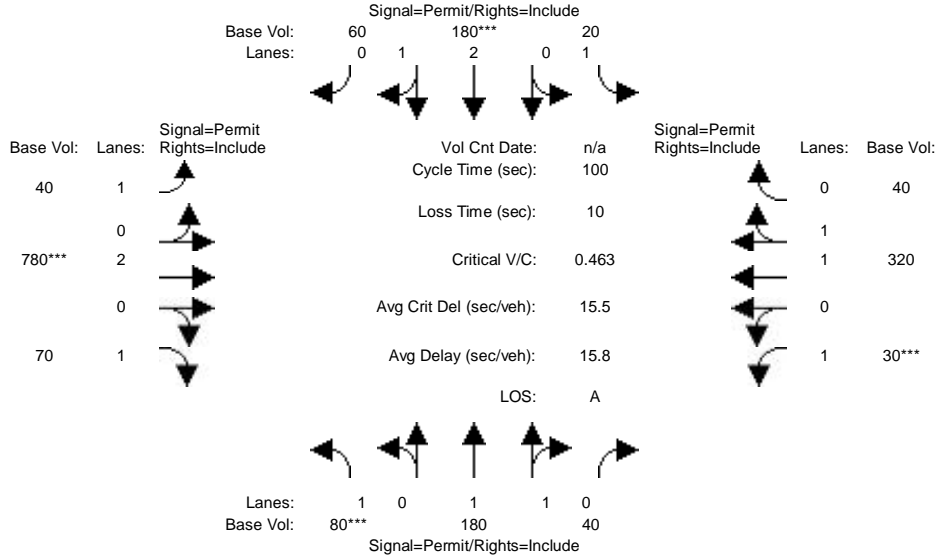


Street Name:	Wilmington Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	100	260	10	60	250	460	30	30	20	10	30	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	100	260	10	60	250	460	30	30	20	10	30	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	100	260	10	60	250	460	30	30	20	10	30	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	100	260	10	60	250	460	30	30	20	10	30	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	100	260	10	60	250	460	30	30	20	10	30	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.89	0.11	1.00	2.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	4622	178	1600	3200	1600	5760	3200	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.06	0.06	0.04	0.08	0.29	0.01	0.01	0.01	0.01	0.02	0.06
Crit Moves:	****				****	****					****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Pre-Game

Intersection #22: Figueroa St. & 190th St./Victoria St.

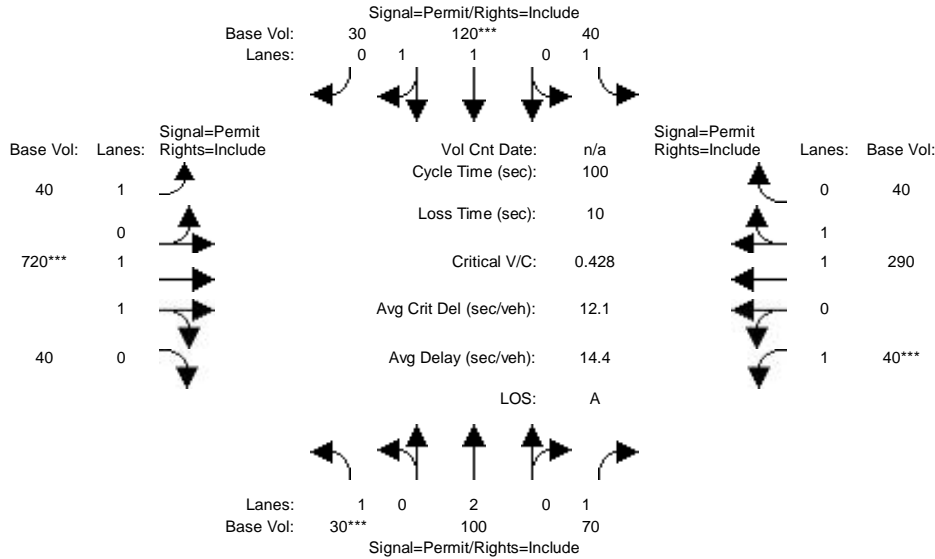


Street Name: Figueroa St.						190th St./Victoria St.						
Approach: North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	80	180	40	20	180	60	40	780	70	30	320	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	180	40	20	180	60	40	780	70	30	320	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	180	40	20	180	60	40	780	70	30	320	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	180	40	20	180	60	40	780	70	30	320	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	180	40	20	180	60	40	780	70	30	320	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.64	0.36	1.00	2.25	0.75	1.00	2.00	1.00	1.00	1.78	0.22
Final Sat.:	1600	2618	582	1600	3600	1200	1600	3200	1600	1600	2844	356
Capacity Analysis Module:												
Vol/Sat:	0.05	0.07	0.07	0.01	0.05	0.05	0.03	0.24	0.04	0.02	0.11	0.11
Crit Moves:	****			****			****		****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Pre-Game

Intersection #24: Main St. & Victoria St.

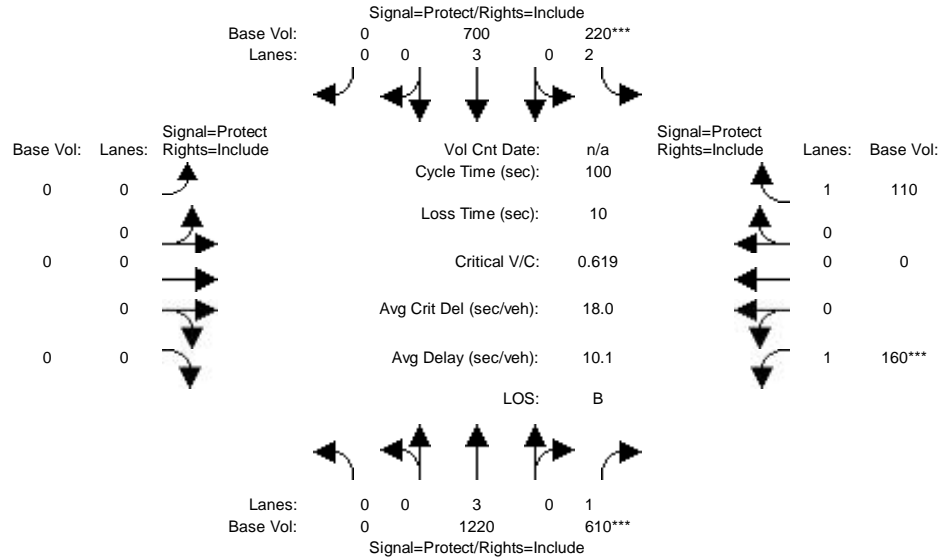


Street Name:	Main St.						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	30	100	70	40	120	30	40	720	40	40	290	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	100	70	40	120	30	40	720	40	40	290	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	100	70	40	120	30	40	720	40	40	290	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	100	70	40	120	30	40	720	40	40	290	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	100	70	40	120	30	40	720	40	40	290	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.60	0.40	1.00	1.89	0.11	1.00	1.76	0.24
Final Sat.:	1600	3200	1600	1600	2560	640	1600	3032	168	1600	2812	388
Capacity Analysis Module:												
Vol/Sat:	0.02	0.03	0.04	0.03	0.05	0.05	0.03	0.24	0.24	0.03	0.10	0.10
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Pre-Game

Intersection #25: Avalon Blvd. & University Dr.

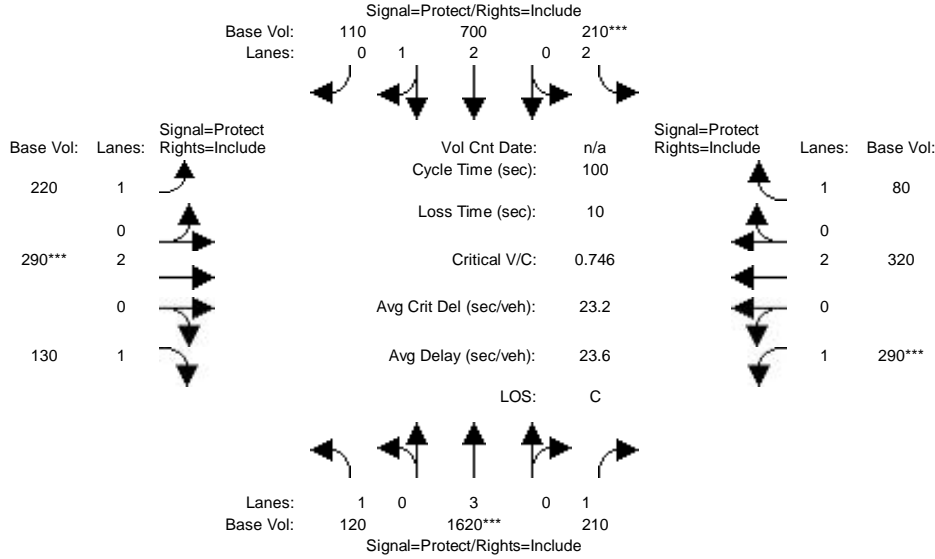


Street Name:	Avalon Blvd.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1220	610	220	700	0	0	0	0	160	0	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1220	610	220	700	0	0	0	0	160	0	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1220	610	220	700	0	0	0	0	160	0	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1220	610	220	700	0	0	0	0	160	0	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1220	610	220	700	0	0	0	0	160	0	110
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.38	0.04	0.15	0.00	0.00	0.00	0.00	0.00	0.10	0.00
Crit Moves:		****	****							****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Pre-Game

Intersection #26: Avalon Blvd. & Del Amo Blvd.

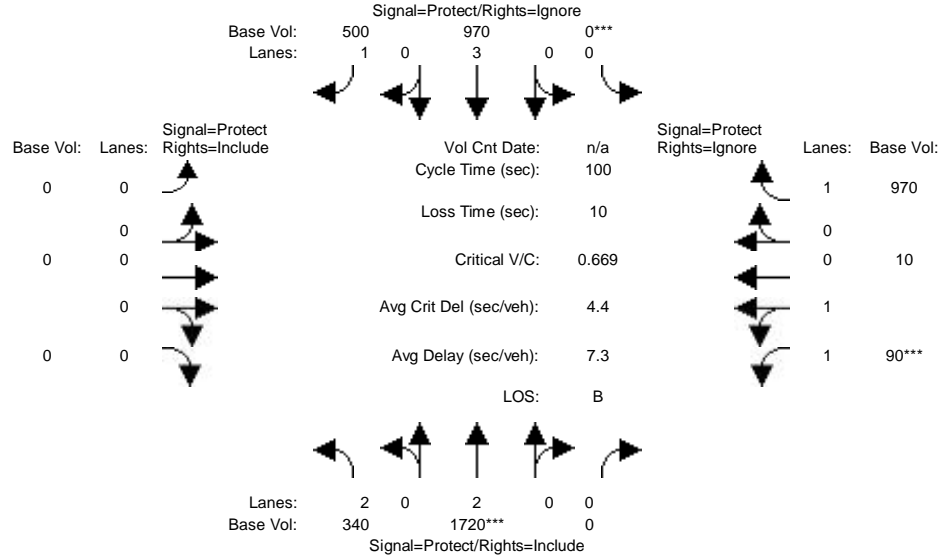


Street Name:	Avalon Blvd.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	120	1620	210	210	700	110	220	290	130	290	320	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	120	1620	210	210	700	110	220	290	130	290	320	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	120	1620	210	210	700	110	220	290	130	290	320	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	1620	210	210	700	110	220	290	130	290	320	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	120	1620	210	210	700	110	220	290	130	290	320	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.59	0.41	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4148	652	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.34	0.13	0.04	0.17	0.17	0.14	0.09	0.08	0.18	0.10	0.05
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Pre-Game

Intersection #27: Avalon Blvd. & I-405 NB Ramps

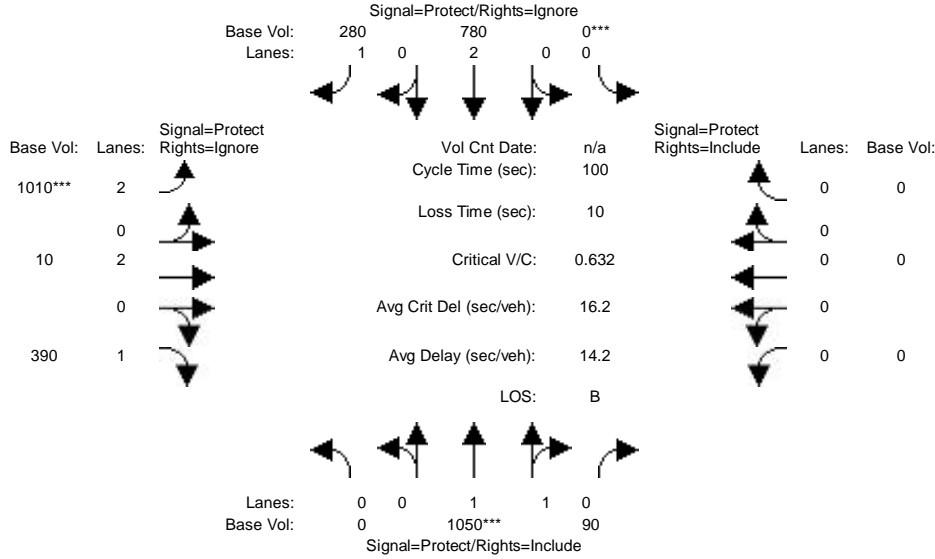


Street Name:	Avalon Blvd.						I-405 NB Ramps						
Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Volume Module:													
Base Vol:	340	1720	0	0	0	970	500	0	0	0	90	10	970
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	340	1720	0	0	0	970	500	0	0	0	90	10	970
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	340	1720	0	0	0	970	0	0	0	0	90	10	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	340	1720	0	0	0	970	0	0	0	0	90	10	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Volume:	340	1720	0	0	0	970	0	0	0	0	90	10	0
Saturation Flow Module:													
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.80	0.20	1.00	
Final Sat.:	5760	3200	0	0	4800	1600	0	0	0	2880	320	1600	
Capacity Analysis Module:													
Vol/Sat:	0.06	0.54	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.00
Crit Moves:	****			****						****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Pre-Game

Intersection #28: Avalon Blvd. & I-405 SB Ramps

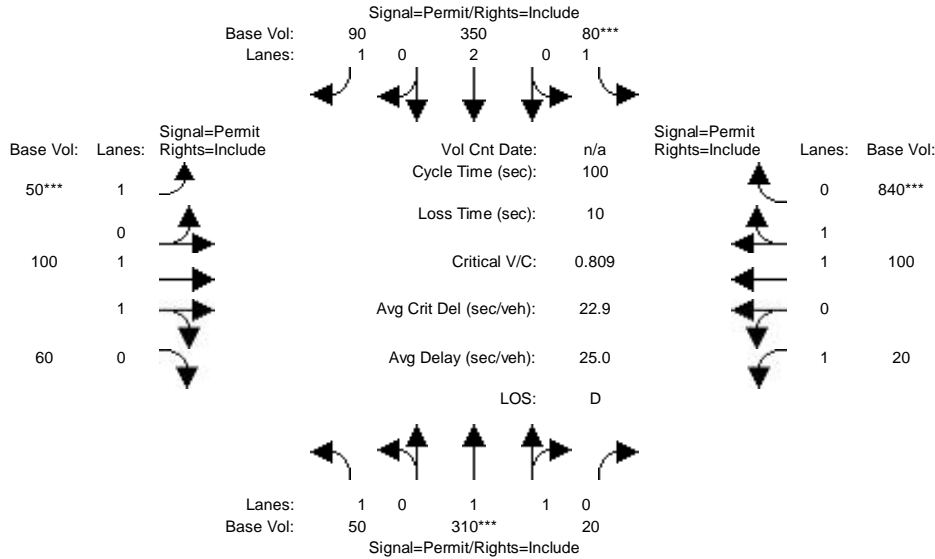


Street Name:	Avalon Blvd.						I-405 SB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1050	90	0	780	280	1010	10	390	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1050	90	0	780	280	1010	10	390	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	1050	90	0	780	0	1010	10	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1050	90	0	780	0	1010	10	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Volume:	0	1050	90	0	780	0	1010	10	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.84	0.16	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	0	2947	253	0	3200	1600	5760	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.36	0.36	0.00	0.24	0.00	0.18	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Pre-Game

Intersection #29: Central Ave. & University Dr.

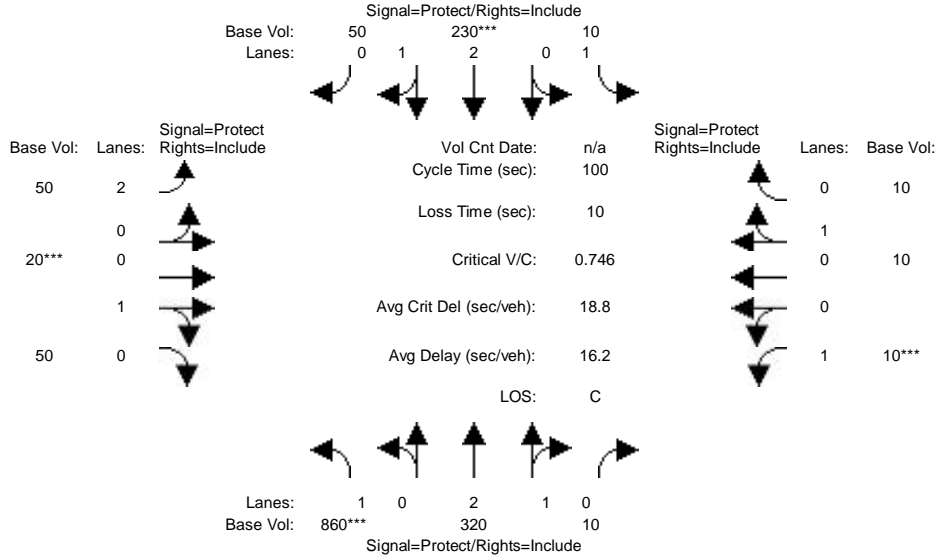


Street Name:	Central Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	50	310	20	80	350	90	50	100	60	20	100	840
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	310	20	80	350	90	50	100	60	20	100	840
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	310	20	80	350	90	50	100	60	20	100	840
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	310	20	80	350	90	50	100	60	20	100	840
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	310	20	80	350	90	50	100	60	20	100	840
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.88	0.12	1.00	2.00	1.00	1.00	1.25	0.75	1.00	1.00	1.00
Final Sat.:	1600	3006	194	1600	3200	1600	1600	2000	1200	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.10	0.10	0.05	0.11	0.06	0.03	0.05	0.05	0.01	0.06	0.53
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Pre-Game

Intersection #30: Wilmington Ave. & University Dr.

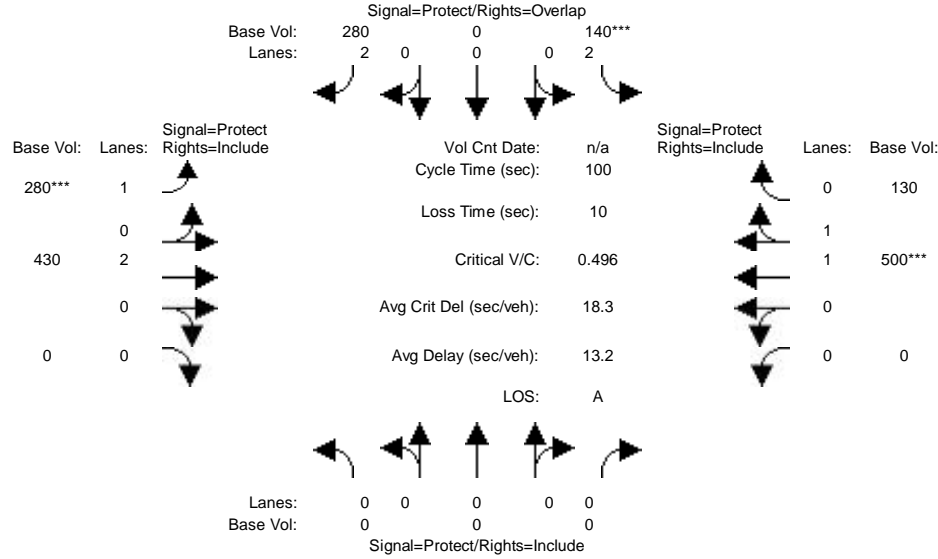


Street Name:	Wilmington Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	860	320	10	10	230	50	50	20	50	10	10	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	860	320	10	10	230	50	50	20	50	10	10	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	860	320	10	10	230	50	50	20	50	10	10	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	860	320	10	10	230	50	50	20	50	10	10	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	860	320	10	10	230	50	50	20	50	10	10	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.91	0.09	1.00	2.46	0.54	2.00	0.29	0.71	1.00	0.50	0.50
Final Sat.:	1600	4655	145	1600	3943	857	5760	457	1143	1600	800	800
Capacity Analysis Module:												
Vol/Sat:	0.54	0.07	0.07	0.01	0.06	0.06	0.01	0.04	0.04	0.01	0.01	0.01
Crit Moves:	****			****			****		****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Pre-Game

Intersection #31: Central Ave. & Del Amo Blvd.

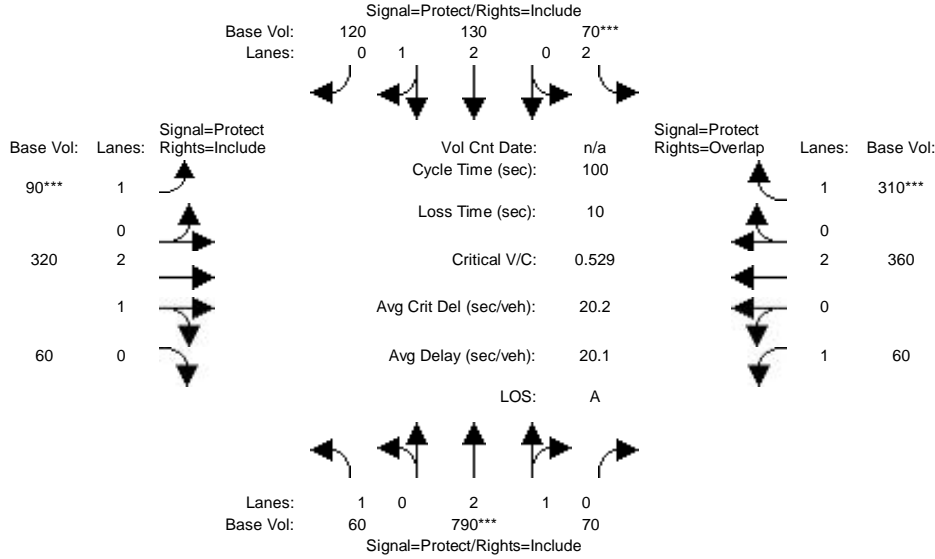


Street Name:	Central Ave.						Del Amo Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	140	0	280	280	430	0	0	500	130
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	140	0	280	280	430	0	0	500	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	140	0	280	280	430	0	0	500	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	140	0	280	280	430	0	0	500	130
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	140	0	280	280	430	0	0	500	130
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	2.00	1.00	2.00	0.00	0.00	1.59	0.41
Final Sat.:	0	0	0	5760	0	3200	1600	3200	0	0	2540	660
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.00	0.09	0.17	0.13	0.00	0.00	0.20	0.20
OvlAdjV/S:	0.00											
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Pre-Game

Intersection #32: Wilmington Ave. & Del Amo Blvd.

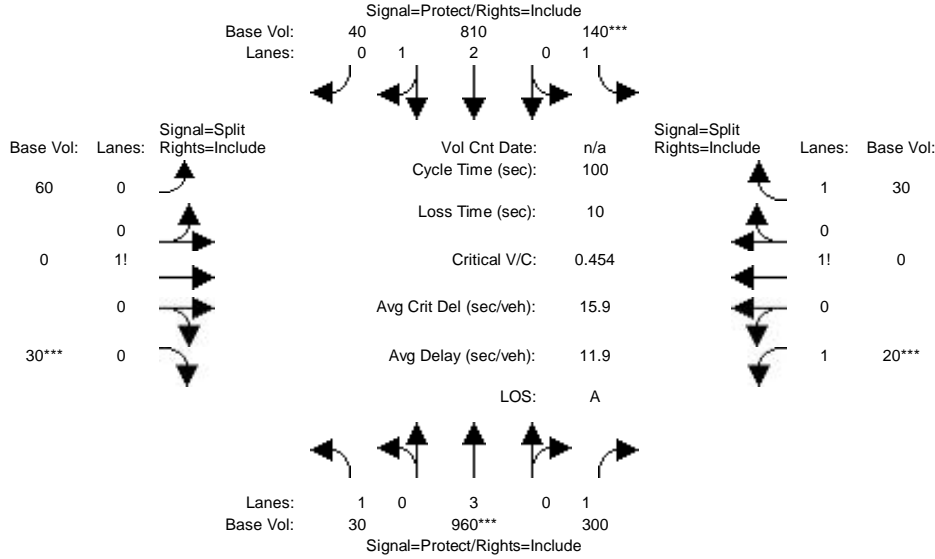


Street Name:	Wilmington Ave.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	60	790	70	70	130	120	90	320	60	60	360	310
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	790	70	70	130	120	90	320	60	60	360	310
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	790	70	70	130	120	90	320	60	60	360	310
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	790	70	70	130	120	90	320	60	60	360	310
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	60	790	70	70	130	120	90	320	60	60	360	310
OvlAdjVol:												291
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.76	0.24	2.00	2.00	1.00	1.00	2.53	0.47	1.00	2.00	1.00
Final Sat.:	1600	4409	391	5760	3200	1600	1600	4042	758	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.18	0.18	0.01	0.04	0.08	0.06	0.08	0.08	0.04	0.11	0.19
OvlAdjV/S:												0.18
Crit Moves:	****	****		****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Pre-Game

Intersection #38: Avalon Blvd. & 184th St. - Drive A

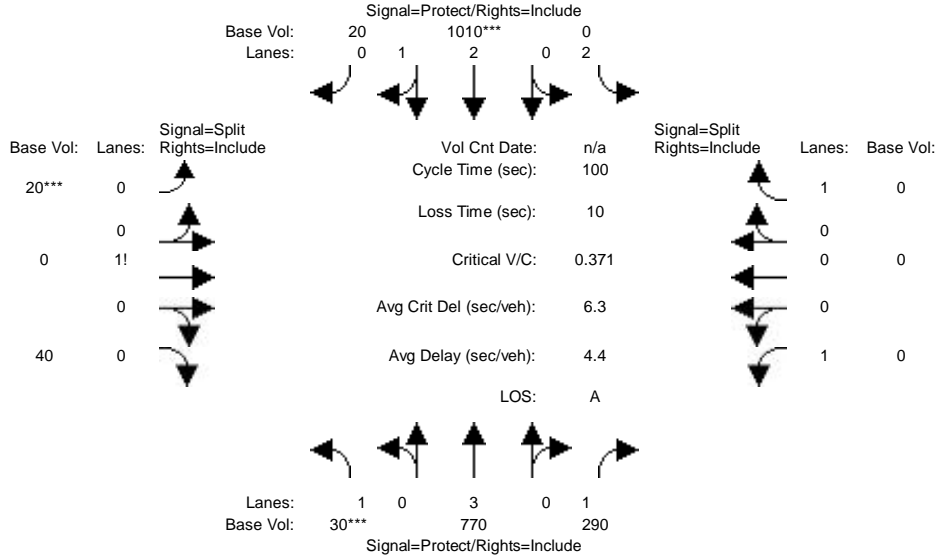


Street Name:	S. Avolon Blvd.						184th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	30	960	300	140	810	40	60	0	30	20	0	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	960	300	140	810	40	60	0	30	20	0	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	960	300	140	810	40	60	0	30	20	0	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	960	300	140	810	40	60	0	30	20	0	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	960	300	140	810	40	60	0	30	20	0	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.86	0.14	0.67	0.00	0.33	1.20	0.01	1.79
Final Sat.:	1600	4800	1600	1600	4574	226	1067	0	533	1920	0	2880
Capacity Analysis Module:												
Vol/Sat:	0.02	0.20	0.19	0.09	0.18	0.18	0.06	0.00	0.06	0.01	0.00	0.01
Crit Moves:	****			****			****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Pre-Game

Intersection #39: Avalon Blvd. & 182nd St. - Drive B

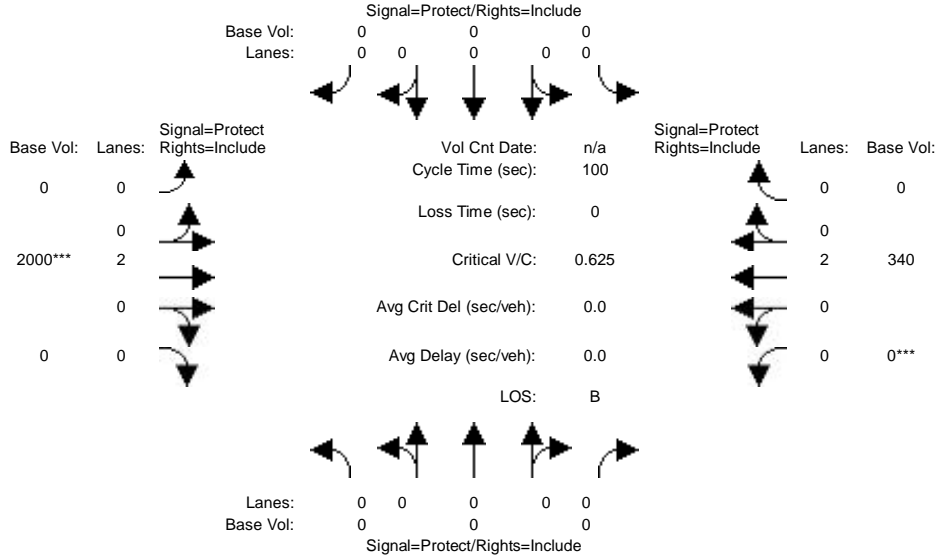


Street Name:	S. Avalon Blvd.						182nd St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	30	770	290	0	1010	20	20	0	40	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	770	290	0	1010	20	20	0	40	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	770	290	0	1010	20	20	0	40	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	770	290	0	1010	20	20	0	40	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	770	290	0	1010	20	20	0	40	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.94	0.06	0.33	0.00	0.67	1.00	0.00	1.00
Final Sat.:	1600	4800	1600	5760	4707	93	533	0	1067	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.16	0.18	0.00	0.21	0.21	0.04	0.00	0.04	0.00	0.00	0.00
Crit Moves:	****			****		****	****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Pre-Game

Intersection #40: Victoria St. & Drive C

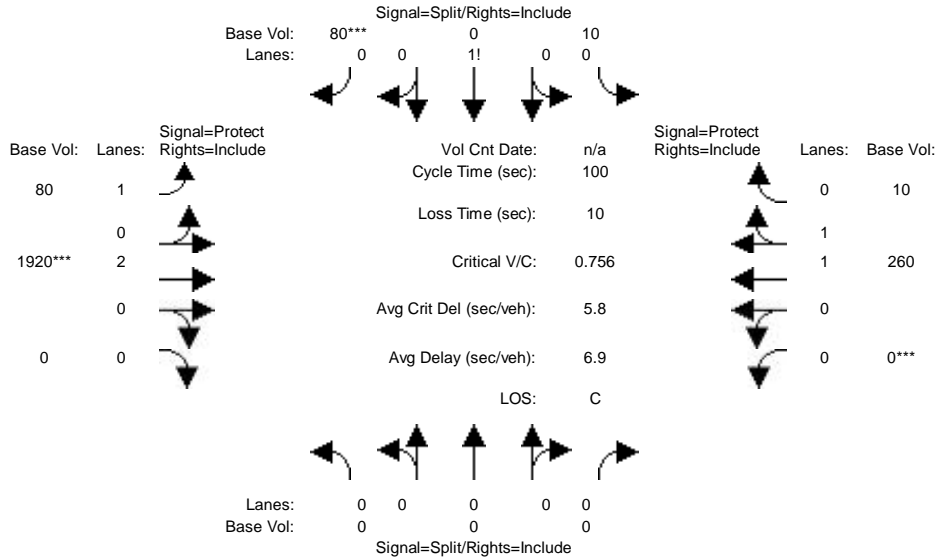


Street Name:	Drive C						E. Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	2000	0	0	0	340
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	2000	0	0	0	340
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	0	2000	0	0	0	340
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	0	2000	0	0	0	340
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	0	2000	0	0	0	340
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00
Final Sat.:	0	0	0	0	0	0	0	3200	0	0	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63	0.00	0.00	0.11	0.00
Crit Moves:							****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Pre-Game

Intersection #41: Victoria St. & Rainsbury Ave.

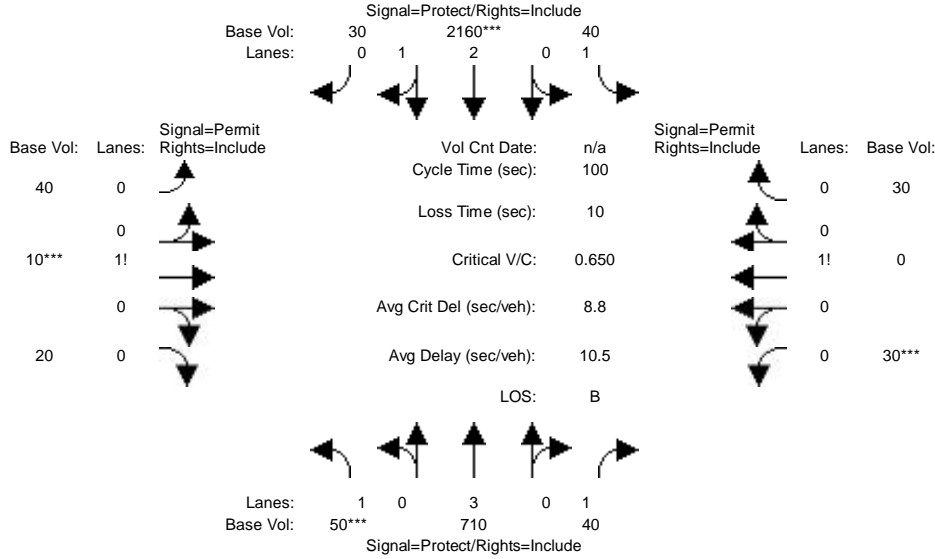


Street Name:	E. Victoria St.						Rainsbury Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	10	0	80	80	1920	0	0	260	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	10	0	80	80	1920	0	0	260	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	10	0	80	80	1920	0	0	260	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	10	0	80	80	1920	0	0	260	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	10	0	80	80	1920	0	0	260	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.11	0.00	0.89	1.00	2.00	0.00	0.00	1.93	0.07
Final Sat.:	0	0	0	178	0	1422	1600	3200	0	0	3081	119
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.06	0.00	0.06	0.05	0.60	0.00	0.00	0.08	0.08
Crit Moves:				****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Pre-Game

Intersection #42: Avalon Blvd. & Harbor Village / Colony Cove

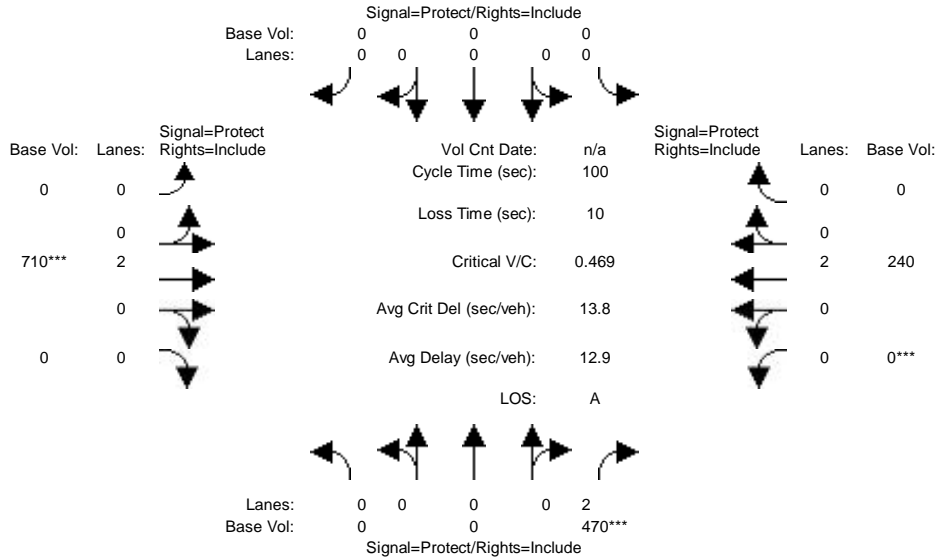


Street Name:	Avalon Blvd.						Harbor Village / Colony Cove					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	50	710	40	40	2160	30	40	10	20	30	0	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	710	40	40	2160	30	40	10	20	30	0	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	710	40	40	2160	30	40	10	20	30	0	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	710	40	40	2160	30	40	10	20	30	0	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	710	40	40	2160	30	40	10	20	30	0	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.96	0.04	0.57	0.14	0.29	0.50	0.00	0.50
Final Sat.:	1600	4800	1600	1600	4734	66	914	229	457	800	0	800
Capacity Analysis Module:												
Vol/Sat:	0.03	0.15	0.03	0.03	0.46	0.46	0.03	0.04	0.04	0.02	0.00	0.04
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Post-Game

Intersection #1: Victoria St. & Drive D

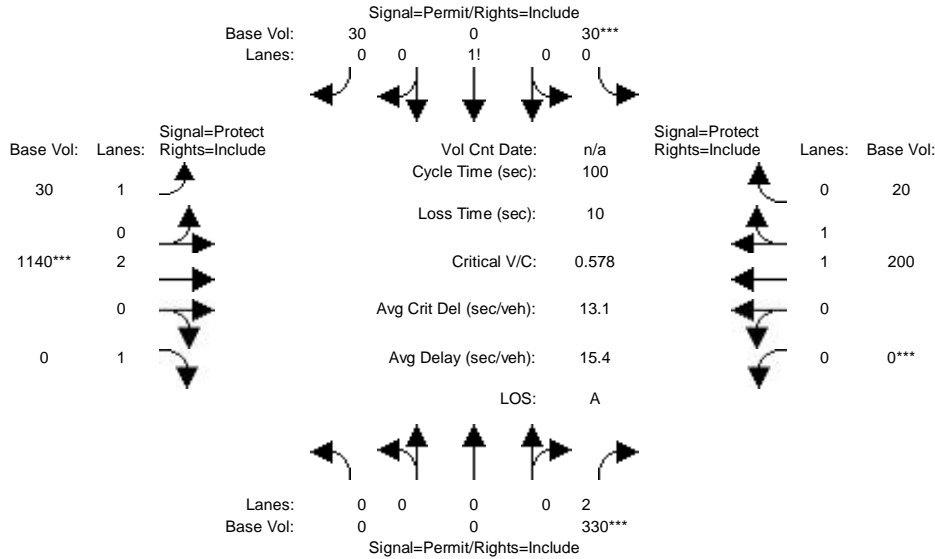


Street Name:	Drive D						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	470	0	0	0	0	710	0	0	240	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	470	0	0	0	0	710	0	0	240	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	470	0	0	0	0	710	0	0	240	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	470	0	0	0	0	710	0	0	240	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	470	0	0	0	0	710	0	0	240	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00
Final Sat.:	0	0	3200	0	0	0	0	3200	0	0	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.08	0.00
Crit Moves:			****				****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Post-Game

Intersection #2: Victoria St & Tamcliff Ave

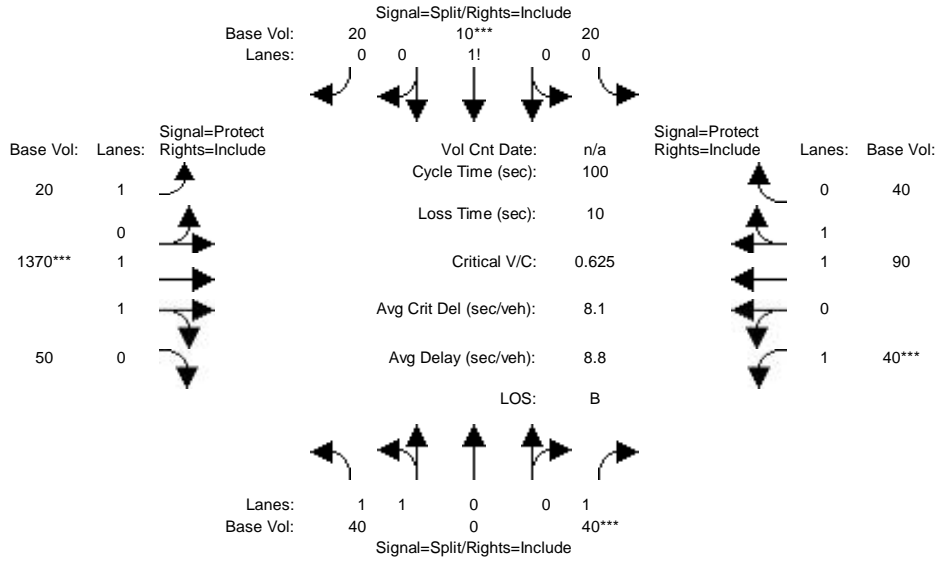


Street Name:	Victoria St						Tamcliff Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	330	30	0	30	30	1140	0	0	200	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	330	30	0	30	30	1140	0	0	200	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	330	30	0	30	30	1140	0	0	200	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	330	30	0	30	30	1140	0	0	200	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	330	30	0	30	30	1140	0	0	200	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	2.00	0.50	0.00	0.50	1.00	2.00	1.00	0.00	1.82	0.18
Final Sat.:	0	0	3200	800	0	800	1600	3200	1600	0	2909	291
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.10	0.02	0.00	0.04	0.02	0.36	0.00	0.00	0.07	0.07
Crit Moves:			****	****			****		****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Post-Game

Intersection #3: Victoria St. & Birchknoll Dr.

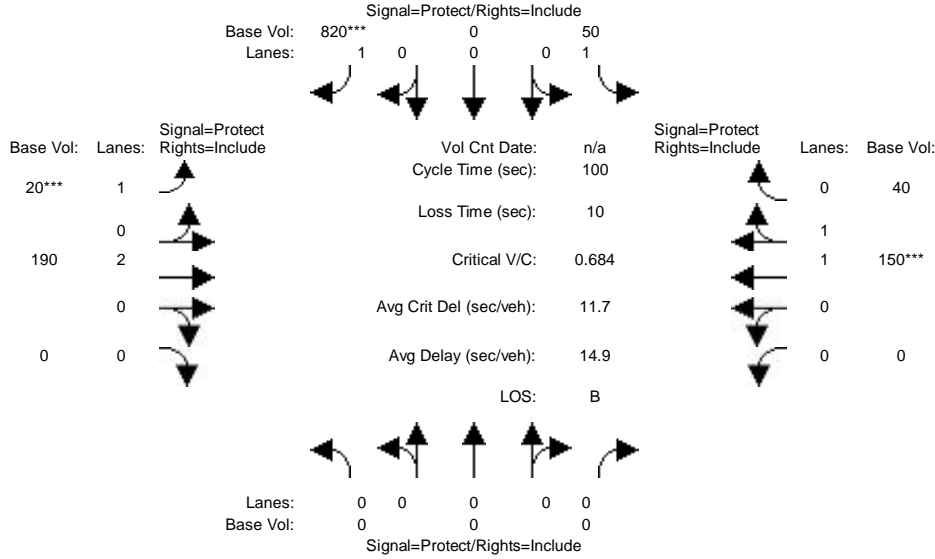


Street Name:	Victoria St.						Birchknoll Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	40	0	40	20	10	20	20	1370	50	40	90	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	0	40	20	10	20	20	1370	50	40	90	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	0	40	20	10	20	20	1370	50	40	90	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	0	40	20	10	20	20	1370	50	40	90	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	0	40	20	10	20	20	1370	50	40	90	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.40	0.20	0.40	1.00	1.93	0.07	1.00	1.38	0.62
Final Sat.:	3200	0	1600	640	320	640	1600	3087	113	1600	2215	985
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.03	0.03	0.03	0.03	0.01	0.44	0.44	0.03	0.04	0.04
Crit Moves:			****	****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Post-Game

Intersection #9: University Dr. & Toro Center Dr.

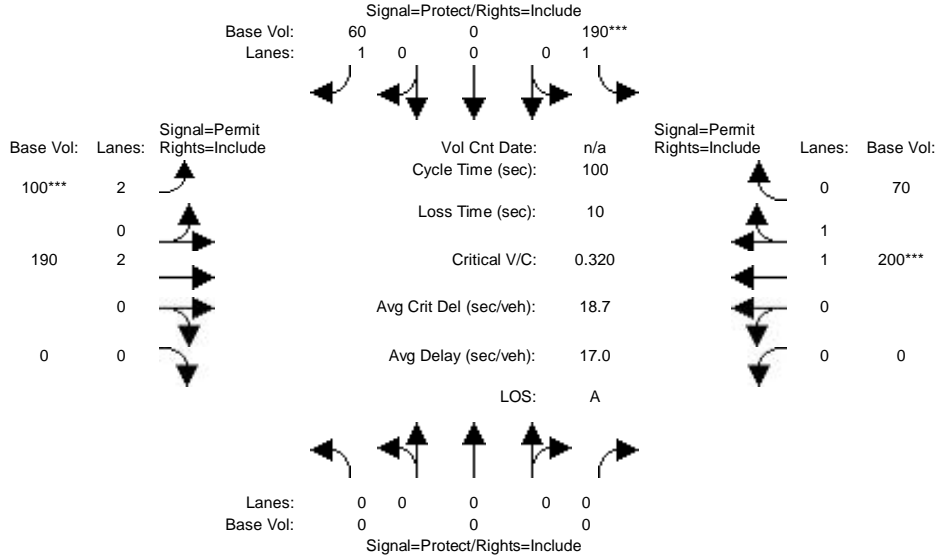


Street Name:	University Dr.						Toro Center Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	50	0	820	20	190	0	0	150	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	50	0	820	20	190	0	0	150	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	50	0	820	20	190	0	0	150	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	50	0	820	20	190	0	0	150	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	50	0	820	20	190	0	0	150	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.58	0.42
Final Sat.:	0	0	0	1600	0	1600	1600	3200	0	0	2526	674
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.03	0.00	0.51	0.01	0.06	0.00	0.00	0.06	0.06
Crit Moves:				****		****				****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Post-Game

Intersection #10: Albertoni St. & SR 91 EB Ramps [Moved from Main St & Albertoni St]

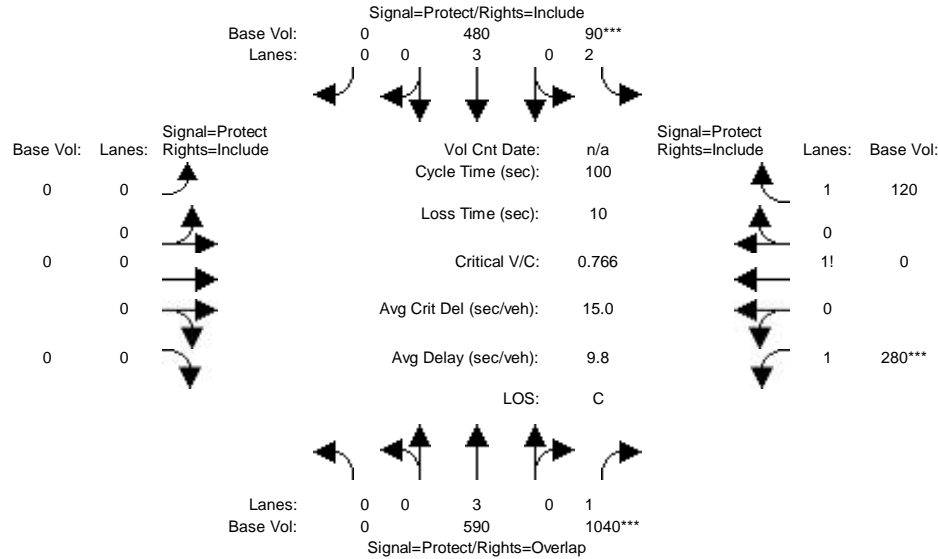


Street Name:	Sr 91 EB Ramps						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	190	0	60	100	190	0	0	200	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	190	0	60	100	190	0	0	200	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	190	0	60	100	190	0	0	200	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	190	0	60	100	190	0	0	200	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	190	0	60	100	190	0	0	200	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.48	0.52
Final Sat.:	0	0	0	1600	0	1600	5760	3200	0	0	2370	830
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.12	0.00	0.04	0.02	0.06	0.00	0.00	0.08	0.08
Crit Moves:				****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Post-Game

Intersection #11: Avalon Blvd. & SR 91 WB On-Ramp

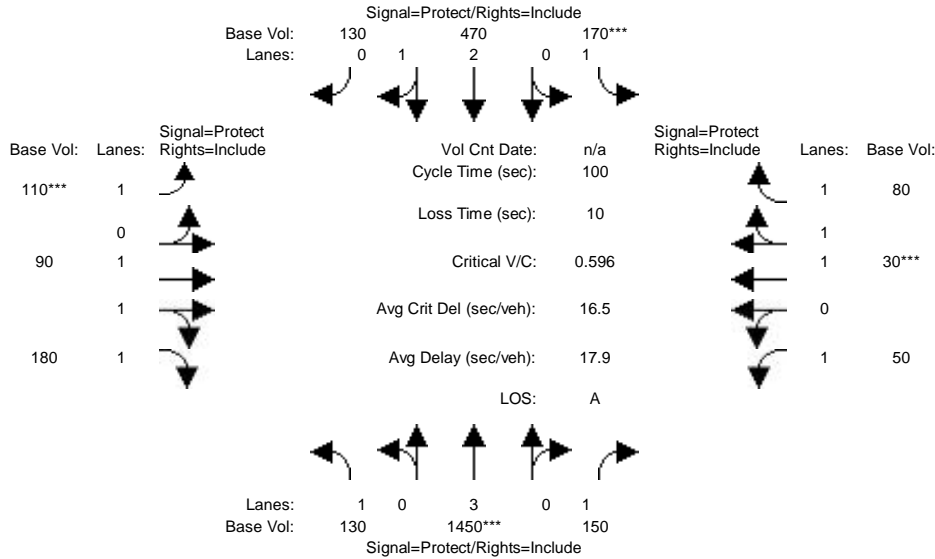


Street Name:	Avalon Blvd.						SR 91 WB On-Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	590	1040	90	480	0	0	0	0	0	280	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	590	1040	90	480	0	0	0	0	280	0	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	590	1040	90	480	0	0	0	0	280	0	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	590	1040	90	480	0	0	0	0	280	0	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	590	1040	90	480	0	0	0	0	280	0	120
OvlAdjVol:	900											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.12	0.65	0.02	0.10	0.00	0.00	0.00	0.00	0.00	0.09	0.00
OvlAdjV/S:	0.56											
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Post-Game

Intersection #12: Avalon Blvd. & Albertoni St.

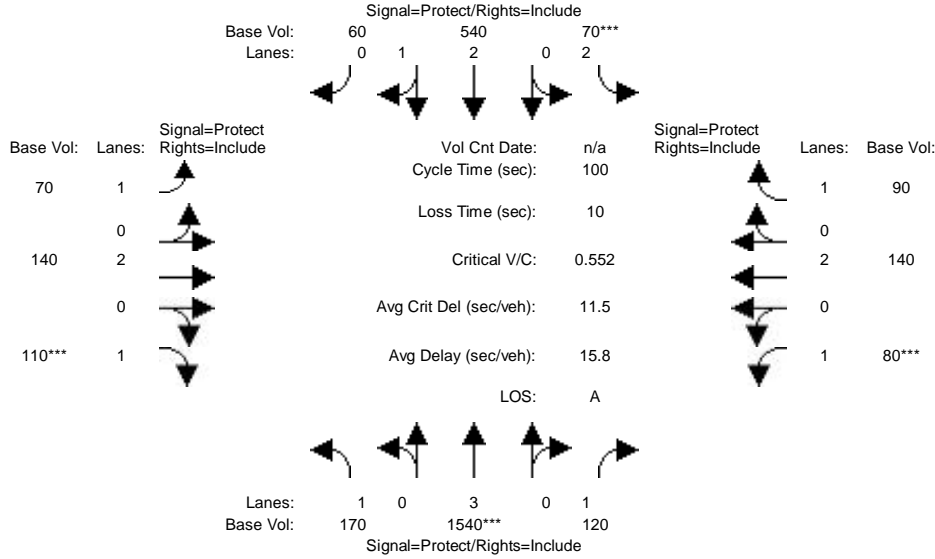


Street Name:	Avalon Blvd.						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	130	1450	150	170	470	130	110	90	180	50	30	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	1450	150	170	470	130	110	90	180	50	30	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	1450	150	170	470	130	110	90	180	50	30	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	1450	150	170	470	130	110	90	180	50	30	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	1450	150	170	470	130	110	90	180	50	30	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.35	0.65	1.00	1.00	2.00	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3760	1040	1600	1600	3200	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.08	0.30	0.09	0.11	0.13	0.13	0.07	0.06	0.06	0.03	0.02	0.03
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Post-Game

Intersection #13: Avalon Blvd. & Victoria St.

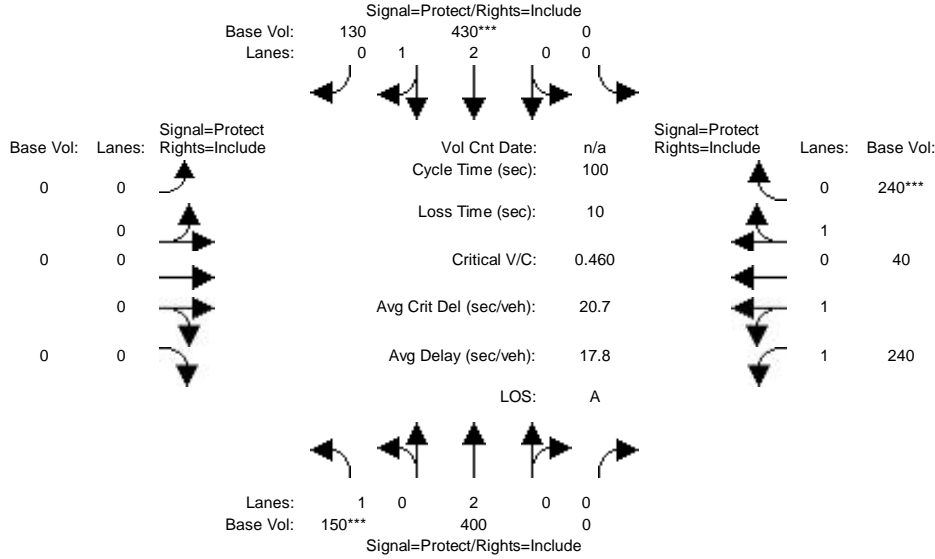


Street Name:	Avalon Blvd.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	170	1540	120	70	540	60	70	140	110	80	140	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	170	1540	120	70	540	60	70	140	110	80	140	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	170	1540	120	70	540	60	70	140	110	80	140	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	170	1540	120	70	540	60	70	140	110	80	140	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	170	1540	120	70	540	60	70	140	110	80	140	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.70	0.30	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4320	480	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.32	0.08	0.01	0.13	0.13	0.04	0.04	0.07	0.05	0.04	0.06
Crit Moves:	****			****			****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Post-Game

Intersection #14: Central Ave. & Artesia Blvd.

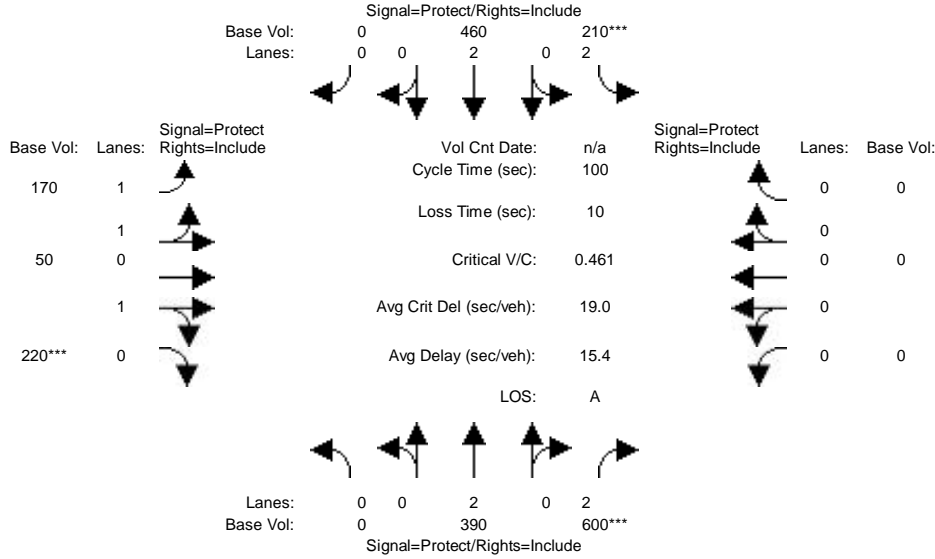


Street Name:	Central Ave.						Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	150	400	0	0	430	130	0	0	0	240	40	240
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	400	0	0	430	130	0	0	0	240	40	240
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	400	0	0	430	130	0	0	0	240	40	240
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	400	0	0	430	130	0	0	0	240	40	240
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	400	0	0	430	130	0	0	0	240	40	240
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.30	0.70	0.00	0.00	0.00	1.71	0.29	1.00
Final Sat.:	1600	3200	0	0	3686	1114	0	0	0	2743	457	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.13	0.00	0.00	0.12	0.12	0.00	0.00	0.00	0.09	0.09	0.15
Crit Moves:	****				****					****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Post-Game

Intersection #15: Central Ave. & Albertoni St.

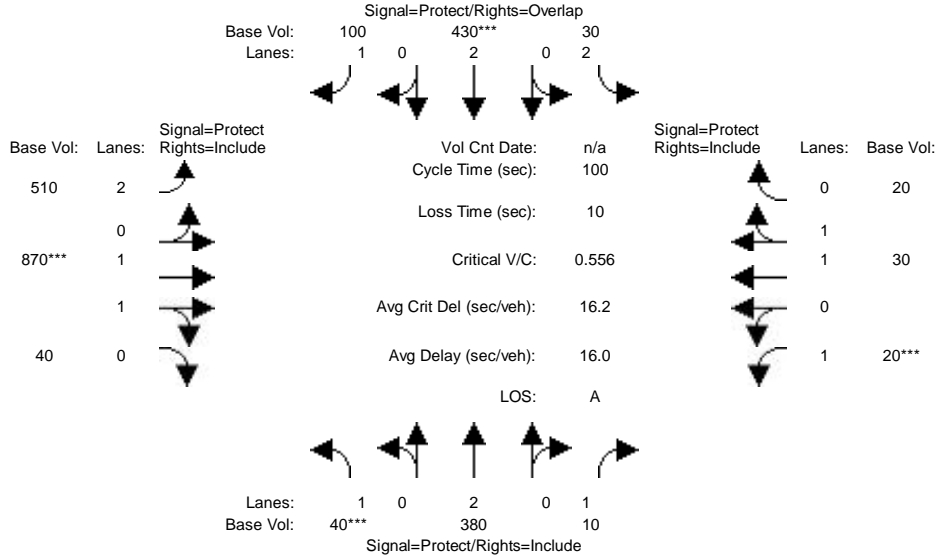


Street Name:	Central Ave.						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	390	600	210	460	0	170	50	220	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	390	600	210	460	0	170	50	220	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	390	600	210	460	0	170	50	220	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	390	600	210	460	0	170	50	220	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	390	600	210	460	0	170	50	220	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.55	0.45	1.00	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	2473	727	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.12	0.19	0.04	0.14	0.00	0.07	0.07	0.14	0.00	0.00	0.00
Crit Moves:		****	****				****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Post-Game

Intersection #16: Central Ave. & Victoria St.

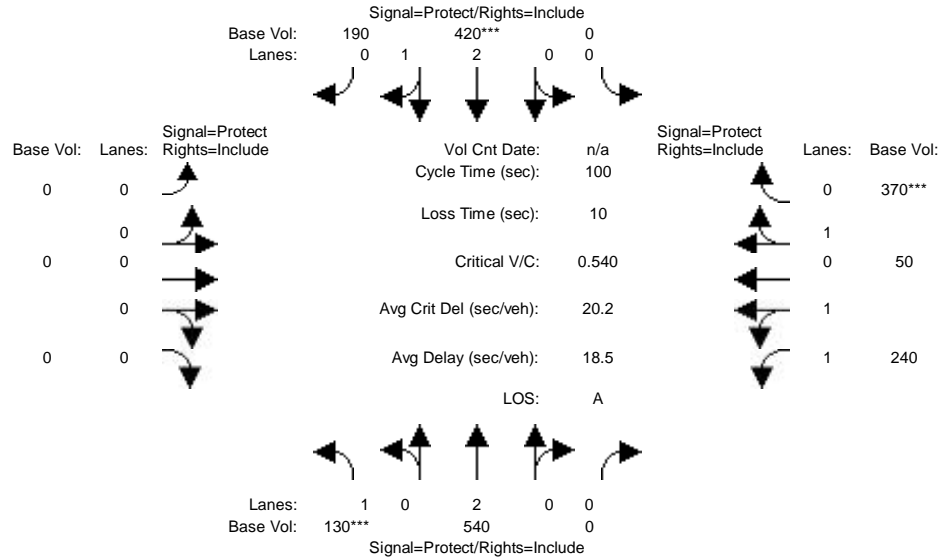


Street Name:	Central Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	40	380	10	30	430	100	510	870	40	20	30	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	380	10	30	430	100	510	870	40	20	30	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	380	10	30	430	100	510	870	40	20	30	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	380	10	30	430	100	510	870	40	20	30	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	380	10	30	430	100	510	870	40	20	30	20
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.91	0.09	1.00	1.20	0.80
Final Sat.:	1600	3200	1600	5760	3200	1600	5760	3059	141	1600	1920	1280
Capacity Analysis Module:												
Vol/Sat:	0.03	0.12	0.01	0.01	0.13	0.06	0.09	0.28	0.28	0.01	0.02	0.02
OvlAdjV/S:	0.00											
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Post-Game

Intersection #17: Wilmington Ave. & Artesia Blvd. WB

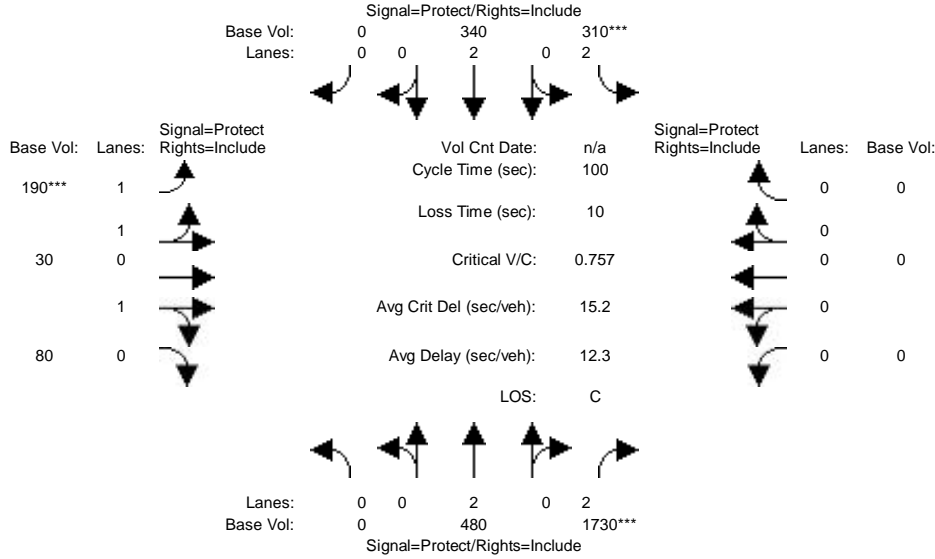


Street Name:	Wilmington Ave.						Artesia Blvd. WB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	130	540	0	0	420	190	0	0	0	240	50	370
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	540	0	0	420	190	0	0	0	240	50	370
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	540	0	0	420	190	0	0	0	240	50	370
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	540	0	0	420	190	0	0	0	240	50	370
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	130	540	0	0	420	190	0	0	0	240	50	370
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.07	0.93	0.00	0.00	0.00	1.66	0.34	1.00
Final Sat.:	1600	3200	0	0	3305	1495	0	0	0	2648	552	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.17	0.00	0.00	0.13	0.13	0.00	0.00	0.00	0.09	0.09	0.23
Crit Moves:	****				****						****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Post-Game

Intersection #18: Wilmington Ave. & Artesia Blvd. EB

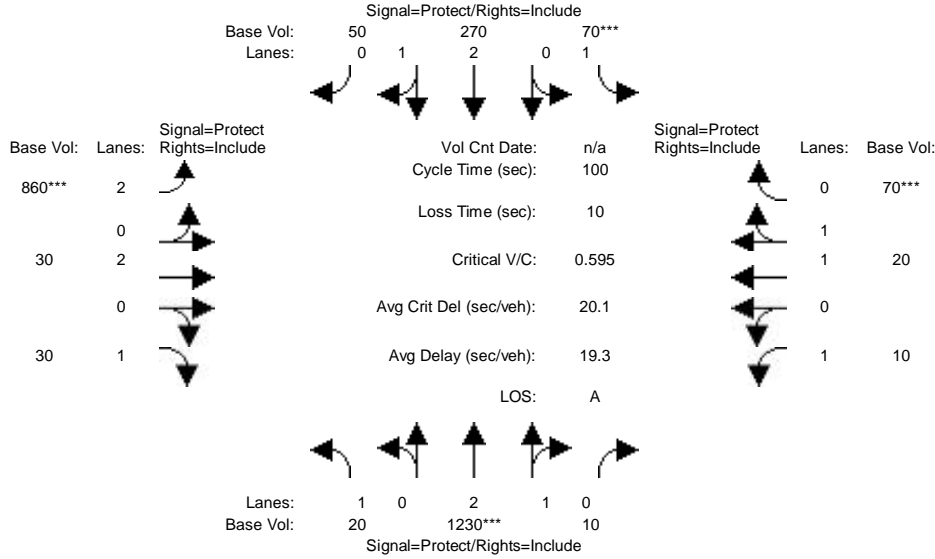


Street Name:	Wilmington Ave.						Artesia Blvd. EB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	480	1730	310	340	0	190	30	80	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	480	1730	310	340	0	190	30	80	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	480	1730	310	340	0	190	30	80	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	480	1730	310	340	0	190	30	80	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	480	1730	310	340	0	190	30	80	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.90	0.30	0.80	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	3046	479	1275	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.15	0.54	0.05	0.11	0.00	0.06	0.06	0.06	0.00	0.00	0.00
Crit Moves:		****	****			****						

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Post-Game

Intersection #19: Wilmington Ave. & Victoria St.

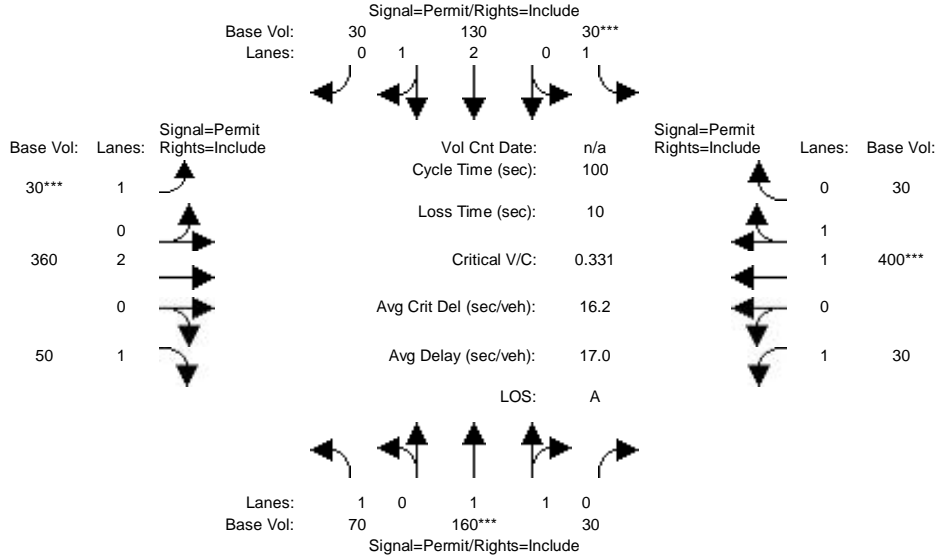


Street Name:	Wilmington Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	20	1230	10	70	270	50	860	30	30	10	20	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	1230	10	70	270	50	860	30	30	10	20	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	1230	10	70	270	50	860	30	30	10	20	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	1230	10	70	270	50	860	30	30	10	20	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	1230	10	70	270	50	860	30	30	10	20	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.98	0.02	1.00	2.53	0.47	2.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	4761	39	1600	4050	750	5760	3200	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.26	0.26	0.04	0.07	0.07	0.15	0.01	0.02	0.01	0.01	0.04
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Post-Game

Intersection #22: Figueroa St. & 190th St./Victoria St.

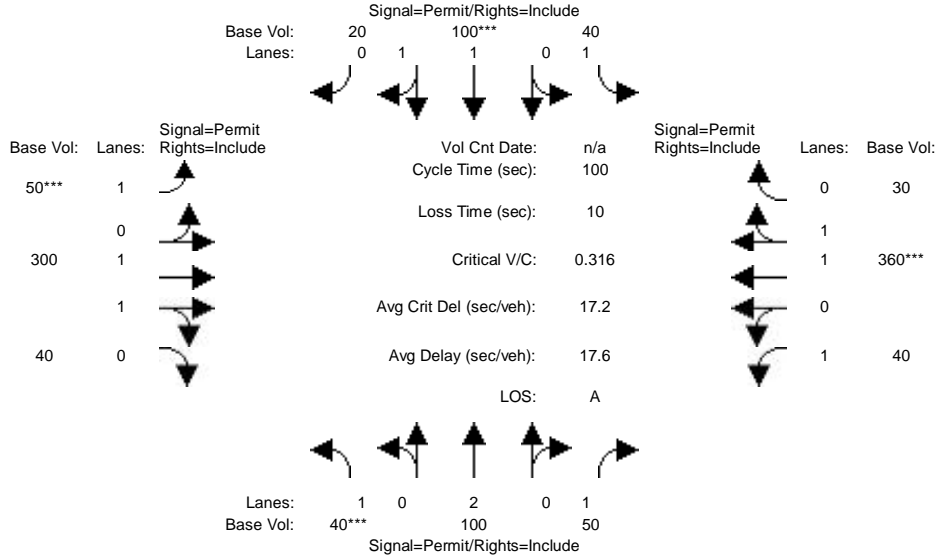


Street Name:	Figueroa St.						190th St./Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	70	160	30	30	130	30	30	360	50	30	400	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	160	30	30	130	30	30	360	50	30	400	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	160	30	30	130	30	30	360	50	30	400	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	160	30	30	130	30	30	360	50	30	400	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	70	160	30	30	130	30	30	360	50	30	400	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.68	0.32	1.00	2.44	0.56	1.00	2.00	1.00	1.00	1.86	0.14
Final Sat.:	1600	2695	505	1600	3900	900	1600	3200	1600	1600	2977	223
Capacity Analysis Module:												
Vol/Sat:	0.04	0.06	0.06	0.02	0.03	0.03	0.02	0.11	0.03	0.02	0.13	0.13
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Post-Game

Intersection #24: Main St. & Victoria St.

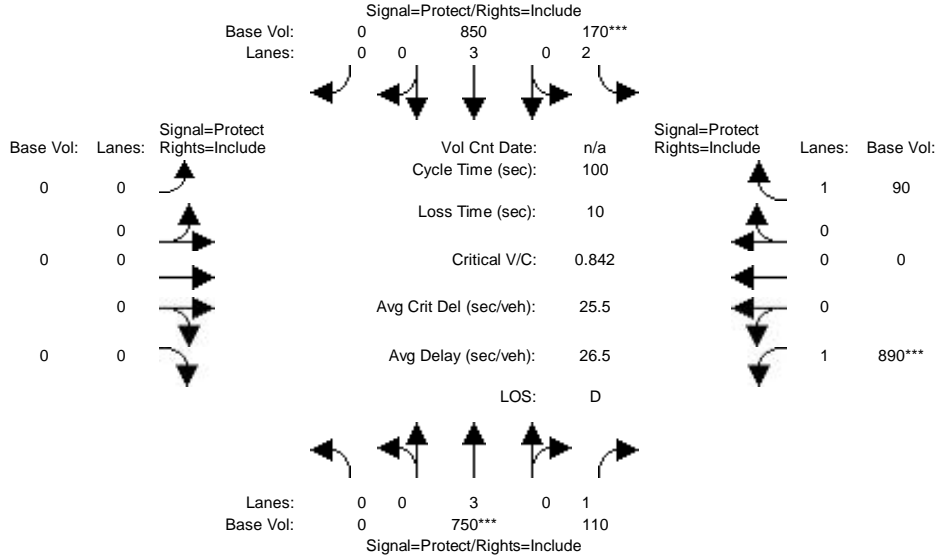


Street Name:	Main St.						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	40	100	50	40	100	20	50	300	40	40	360	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	100	50	40	100	20	50	300	40	40	360	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	100	50	40	100	20	50	300	40	40	360	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	100	50	40	100	20	50	300	40	40	360	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	100	50	40	100	20	50	300	40	40	360	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.67	0.33	1.00	1.76	0.24	1.00	1.85	0.15
Final Sat.:	1600	3200	1600	1600	2667	533	1600	2824	376	1600	2954	246
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.03	0.03	0.04	0.04	0.03	0.11	0.11	0.03	0.12	0.12
Crit Moves:	****			****		****	****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Post-Game

Intersection #25: Avalon Blvd. & University Dr.

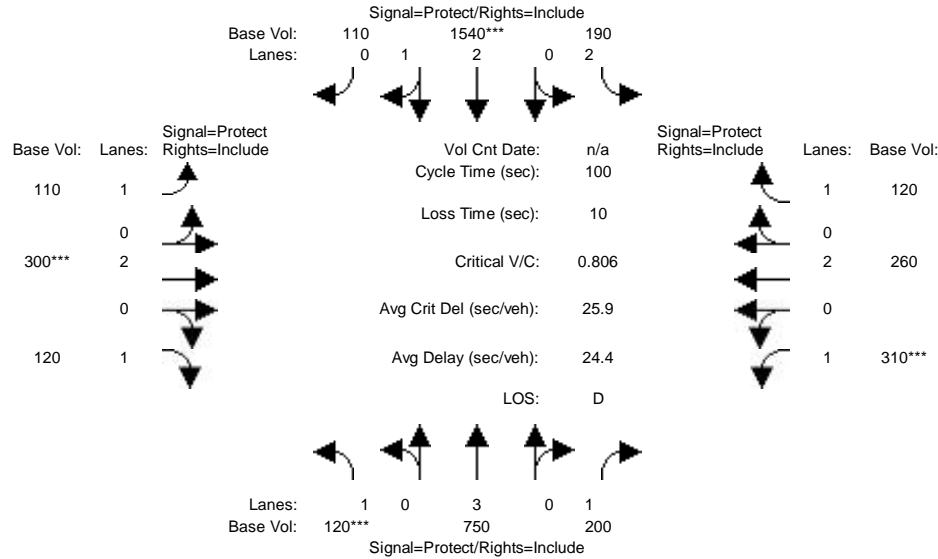


Street Name:	Avalon Blvd.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	750	110	170	850	0	0	0	0	890	0	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	750	110	170	850	0	0	0	0	890	0	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	750	110	170	850	0	0	0	0	890	0	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	750	110	170	850	0	0	0	0	890	0	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	750	110	170	850	0	0	0	0	890	0	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.16	0.07	0.03	0.18	0.00	0.00	0.00	0.00	0.00	0.56	0.00
Crit Moves:	****			****						****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Post-Game

Intersection #26: Avalon Blvd. & Del Amo Blvd.

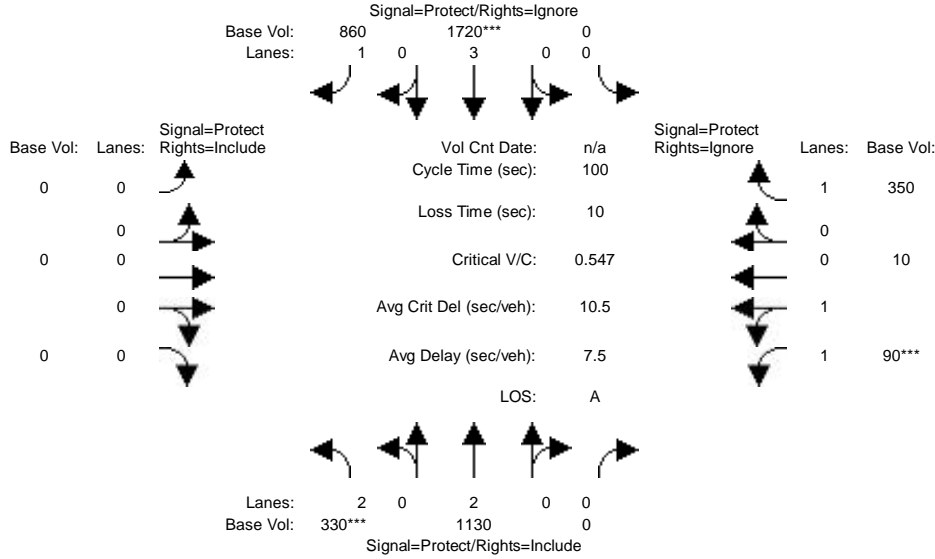


Street Name:	Avalon Blvd.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	120	750	200	190	1540	110	110	300	120	310	260	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	120	750	200	190	1540	110	110	300	120	310	260	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	120	750	200	190	1540	110	110	300	120	310	260	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	750	200	190	1540	110	110	300	120	310	260	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	120	750	200	190	1540	110	110	300	120	310	260	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.80	0.20	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4480	320	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.16	0.13	0.03	0.34	0.34	0.07	0.09	0.08	0.19	0.08	0.08
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Post-Game

Intersection #27: Avalon Blvd. & I-405 NB Ramps

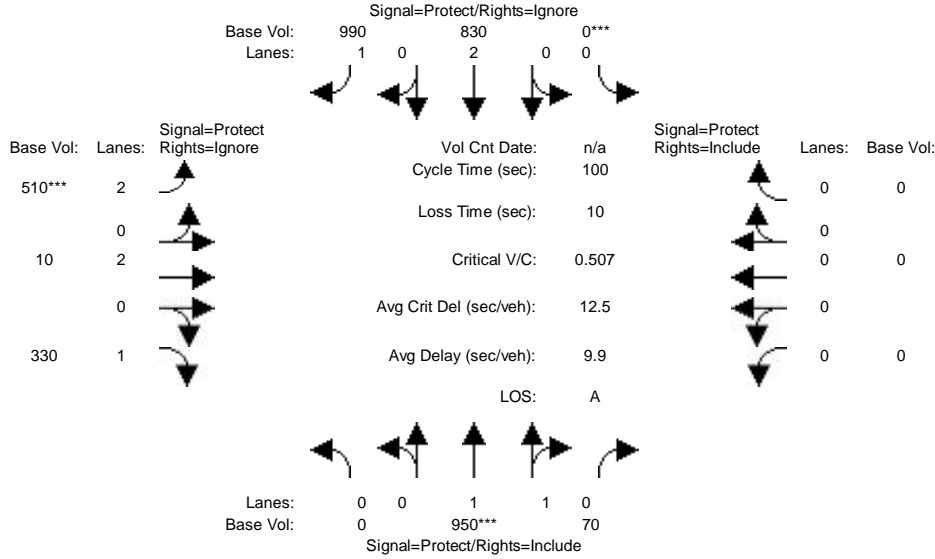


Street Name:	Avalon Blvd.						I-405 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	330	1130	0	0	1720	860	0	0	0	90	10	350
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	330	1130	0	0	1720	860	0	0	0	90	10	350
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	330	1130	0	0	1720	0	0	0	0	90	10	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	330	1130	0	0	1720	0	0	0	0	90	10	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	330	1130	0	0	1720	0	0	0	0	90	10	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.80	0.20	1.00
Final Sat.:	5760	3200	0	0	4800	1600	0	0	0	2880	320	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.35	0.00	0.00	0.36	0.00	0.00	0.00	0.00	0.00	0.03	0.03
Crit Moves:	****				****					****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Post-Game

Intersection #28: Avalon Blvd. & I-405 SB Ramps

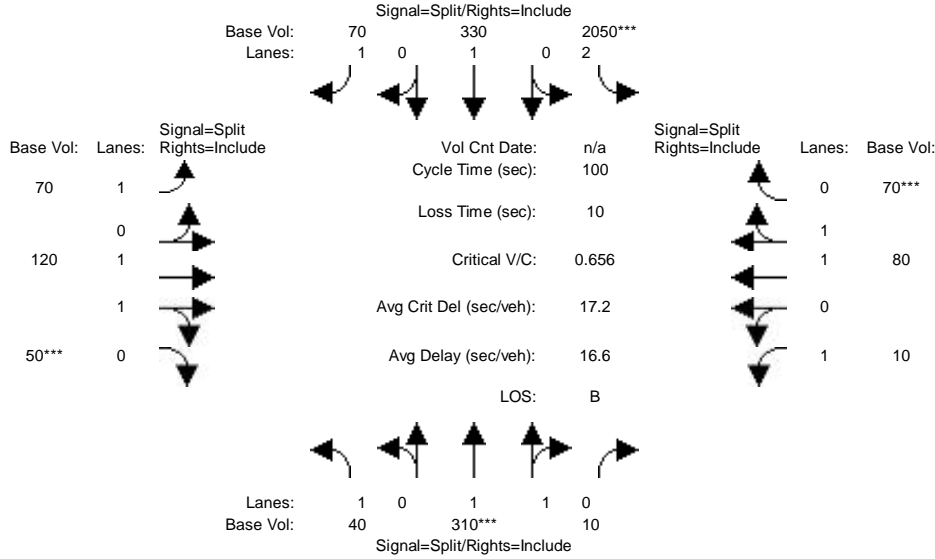


Street Name:	Avalon Blvd.						I-405 SB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	950	70	0	830	990	510	10	330	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	950	70	0	830	990	510	10	330	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	950	70	0	830	0	510	10	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	950	70	0	830	0	510	10	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Volume:	0	950	70	0	830	0	510	10	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.86	0.14	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	0	2980	220	0	3200	1600	5760	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.32	0.32	0.00	0.26	0.00	0.09	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Post-Game

Intersection #29: Central Ave. & University Dr.

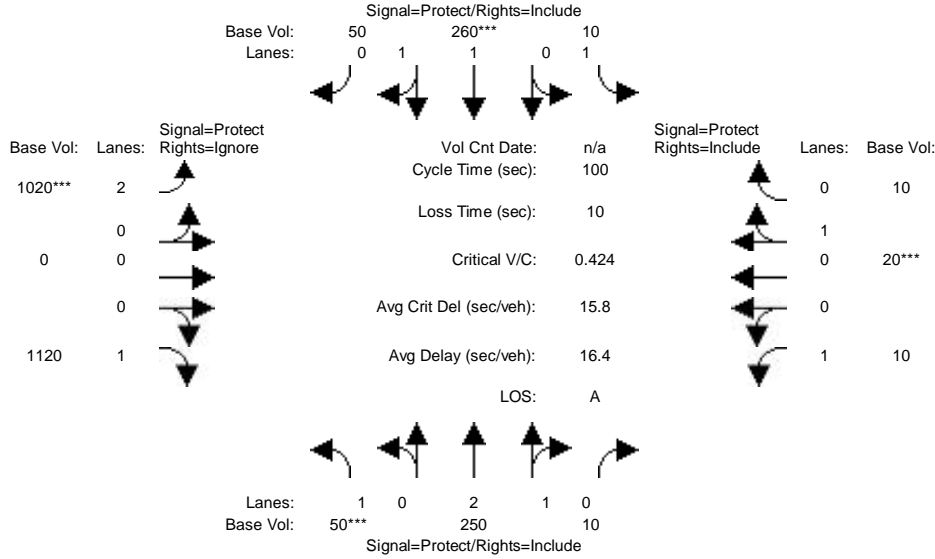


Street Name:	Central Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	40	310	10	2050	330	70	70	120	50	10	80	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	310	10	2050	330	70	70	120	50	10	80	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	310	10	2050	330	70	70	120	50	10	80	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	310	10	2050	330	70	70	120	50	10	80	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	310	10	2050	330	70	70	120	50	10	80	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.94	0.06	2.00	1.00	1.00	1.00	1.41	0.59	1.00	1.07	0.93
Final Sat.:	1600	3100	100	5760	1600	1600	1600	2259	941	1600	1707	1493
Capacity Analysis Module:												
Vol/Sat:	0.03	0.10	0.10	0.36	0.21	0.04	0.04	0.05	0.05	0.01	0.05	0.05
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Post-Game

Intersection #30: Wilmington Ave. & University Dr.

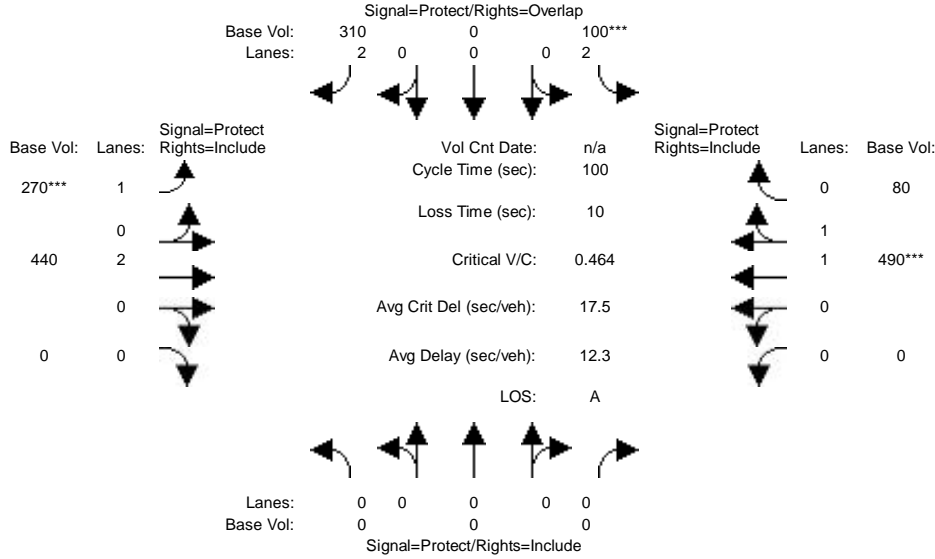


Street Name:	Wilmington Ave.				University Dr.							
Approach:	North Bound		South Bound		East Bound		West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	50	250	10	10	260	50	1020	0	1120	10	20	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	250	10	10	260	50	1020	0	1120	10	20	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
PHF Volume:	50	250	10	10	260	50	1020	0	0	10	20	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	250	10	10	260	50	1020	0	0	10	20	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
Final Volume:	50	250	10	10	260	50	1020	0	0	10	20	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.88	0.12	1.00	1.68	0.32	2.00	0.00	1.00	1.00	0.67	0.33
Final Sat.:	1600	4615	185	1600	2684	516	5760	0	1600	1600	1067	533
Capacity Analysis Module:												
Vol/Sat:	0.03	0.05	0.05	0.01	0.10	0.10	0.18	0.00	0.00	0.01	0.02	0.02
Crit Moves:	****			****		****				****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Post-Game

Intersection #31: Central Ave. & Del Amo Blvd.

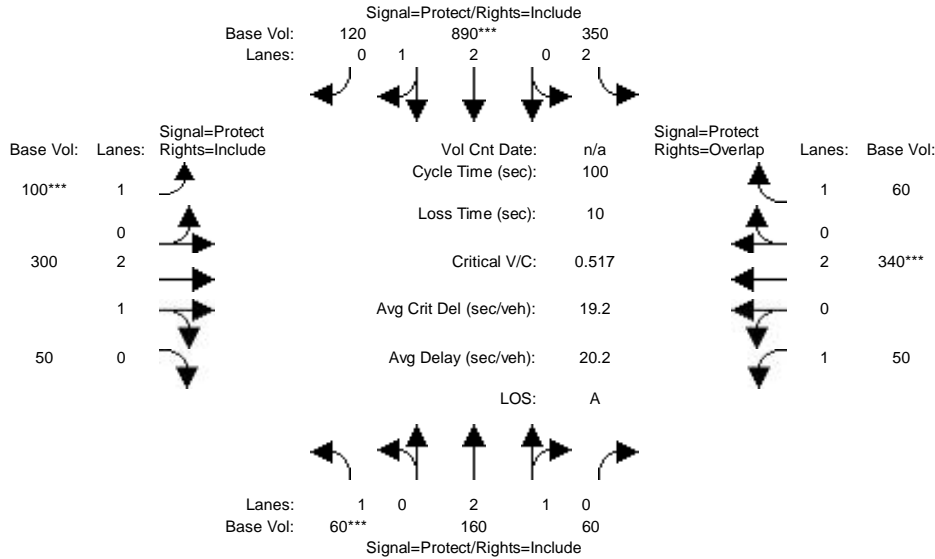


Street Name:	Central Ave.						Del Amo Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	100	0	310	270	440	0	0	490	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	100	0	310	270	440	0	0	490	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	100	0	310	270	440	0	0	490	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	100	0	310	270	440	0	0	490	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	100	0	310	270	440	0	0	490	80
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	2.00	1.00	2.00	0.00	0.00	1.72	0.28
Final Sat.:	0	0	0	5760	0	3200	1600	3200	0	0	2751	449
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.00	0.10	0.17	0.14	0.00	0.00	0.18	0.18
OvlAdjV/S:	0.00											
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Post-Game

Intersection #32: Wilmington Ave. & Del Amo Blvd.

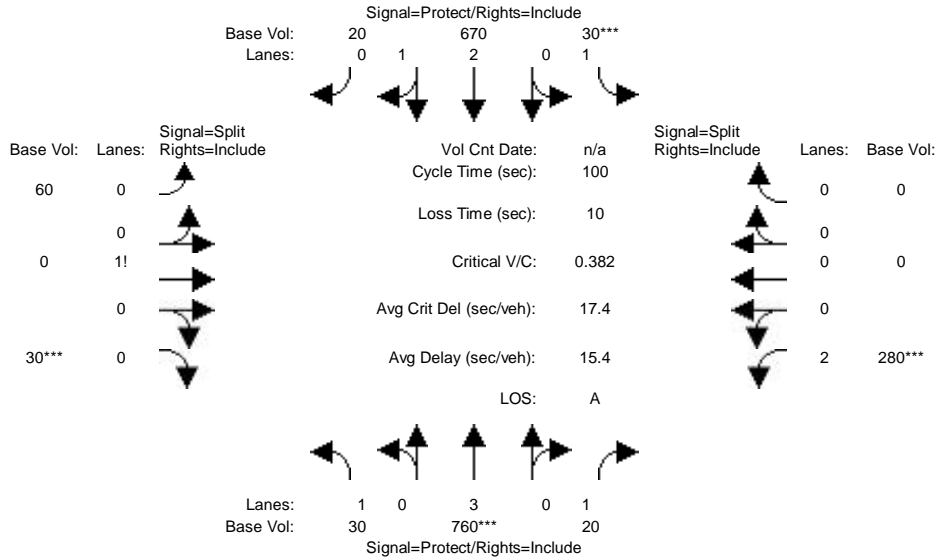


Street Name:	Wilmington Ave.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	60	160	60	350	890	120	100	300	50	50	340	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	160	60	350	890	120	100	300	50	50	340	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	160	60	350	890	120	100	300	50	50	340	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	160	60	350	890	120	100	300	50	50	340	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	60	160	60	350	890	120	100	300	50	50	340	60
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.18	0.82	2.00	2.64	0.36	1.00	2.57	0.43	1.00	2.00	1.00
Final Sat.:	1600	3491	1309	5760	4230	570	1600	4114	686	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.05	0.05	0.06	0.21	0.21	0.06	0.07	0.07	0.03	0.11	0.04
OvlAdjV/S:	0.00											
Crit Moves:	****			****		****	****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Post-Game

Intersection #38: Avalon Blvd. & 184th St. - Drive A

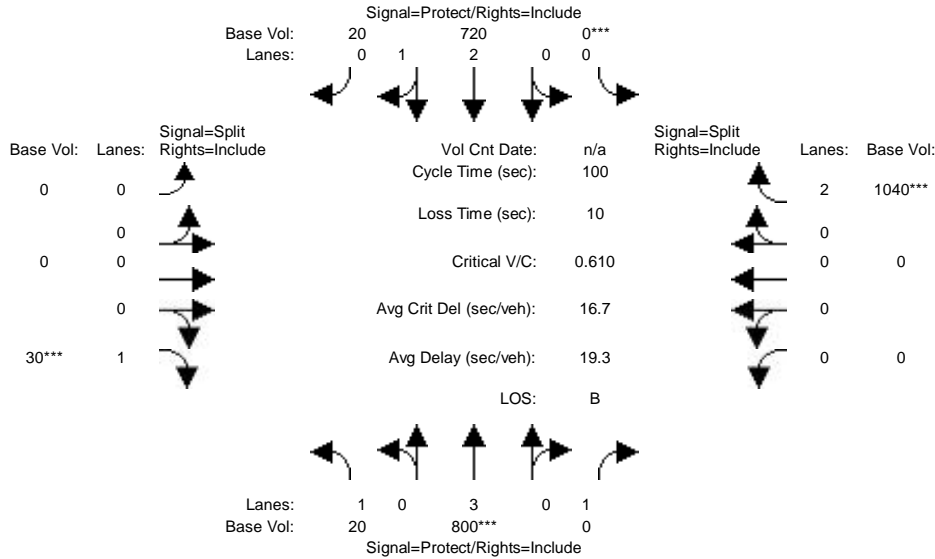


Street Name:	S. Avolon Blvd.						184th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	30	760	20	30	670	20	60	0	30	280	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	760	20	30	670	20	60	0	30	280	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	760	20	30	670	20	60	0	30	280	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	760	20	30	670	20	60	0	30	280	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	760	20	30	670	20	60	0	30	280	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.91	0.09	0.67	0.00	0.33	2.00	0.00	0.00
Final Sat.:	1600	4800	1600	1600	4661	139	1067	0	533	5760	0	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.16	0.01	0.02	0.14	0.14	0.06	0.00	0.06	0.05	0.00	0.00
Crit Moves:	****			****			****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Post-Game

Intersection #39: Avalon Blvd. & 182nd St. - Drive B

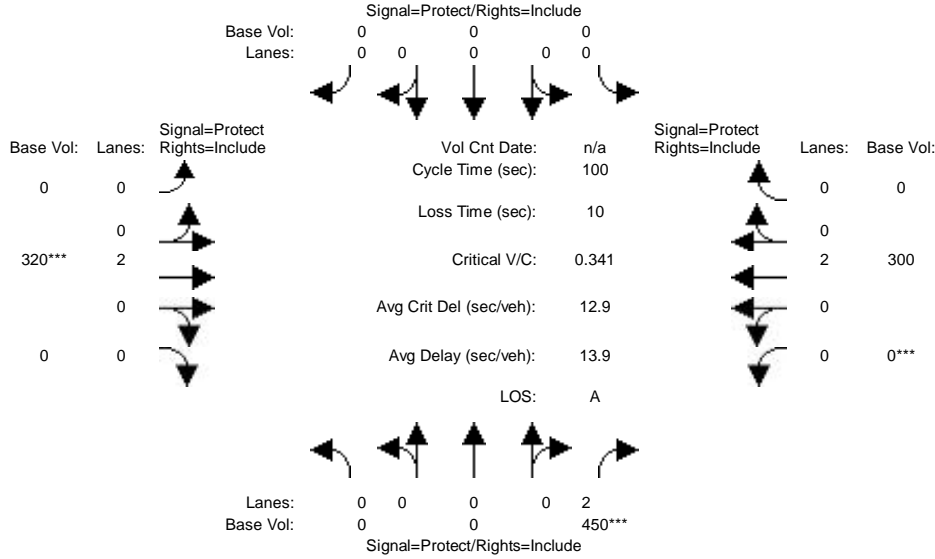


Street Name:	S. Avalon Blvd.						182nd St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	20	800	0	0	720	20	0	0	30	0	0	1040
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	800	0	0	720	20	0	0	30	0	0	1040
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	800	0	0	720	20	0	0	30	0	0	1040
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	800	0	0	720	20	0	0	30	0	0	1040
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	800	0	0	720	20	0	0	30	0	0	1040
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	0.00	2.92	0.08	0.00	0.00	1.00	0.00	0.00	2.00
Final Sat.:	1600	4800	1600	0	4670	130	0	0	1600	0	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.01	0.17	0.00	0.00	0.15	0.15	0.00	0.00	0.02	0.00	0.00	0.33
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Post-Game

Intersection #40: Victoria St. & Drive C

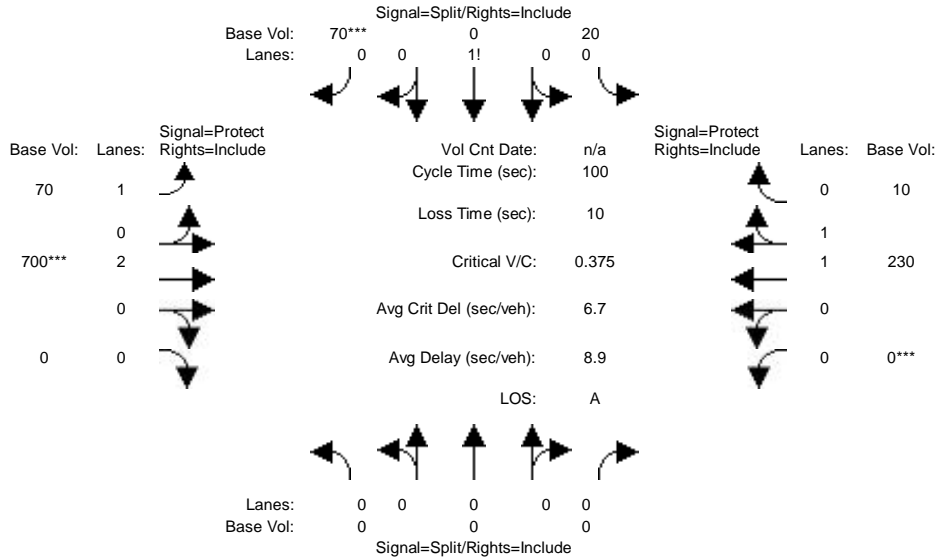


Street Name:	Drive C						E. Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	450	0	0	0	0	320	0	0	0	300
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	450	0	0	0	0	320	0	0	0	300
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	450	0	0	0	0	320	0	0	0	300
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	450	0	0	0	0	320	0	0	0	300
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	450	0	0	0	0	320	0	0	0	300
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	2.00
Final Sat.:	0	0	3200	0	0	0	0	3200	0	0	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.09
Crit Moves:			****				****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Post-Game

Intersection #41: Victoria St. & Rainsbury Ave.

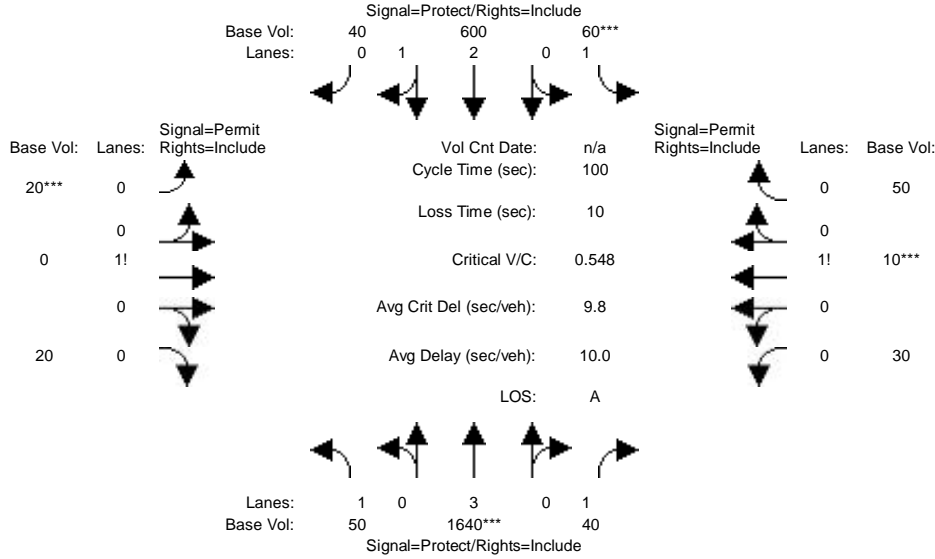


Street Name:	E. Victoria St.						Rainsbury Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	20	0	70	70	700	0	0	230	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	20	0	70	70	700	0	0	230	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	20	0	70	70	700	0	0	230	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	20	0	70	70	700	0	0	230	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	20	0	70	70	700	0	0	230	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.22	0.00	0.78	1.00	2.00	0.00	0.00	1.92	0.08
Final Sat.:	0	0	0	356	0	1244	1600	3200	0	0	3067	133
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.06	0.00	0.06	0.04	0.22	0.00	0.00	0.07	0.08
Crit Moves:				****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 27k-Seat Sunday Post-Game

Intersection #42: Avalon Blvd. & Harbor Village / Colony Cove



Street Name:	Avalon Blvd.						Harbor Village / Colony Cove					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	50	1640	40	60	600	40	20	0	20	30	10	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	1640	40	60	600	40	20	0	20	30	10	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	1640	40	60	600	40	20	0	20	30	10	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	1640	40	60	600	40	20	0	20	30	10	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	1640	40	60	600	40	20	0	20	30	10	50
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.81	0.19	0.50	0.00	0.50	0.33	0.11	0.56
Final Sat.:	1600	4800	1600	1600	4500	300	800	0	800	533	178	889
Capacity Analysis Module:												
Vol/Sat:	0.03	0.34	0.03	0.04	0.13	0.13	0.01	0.00	0.03	0.02	0.06	0.06
Crit Moves:	****			****			****			****		

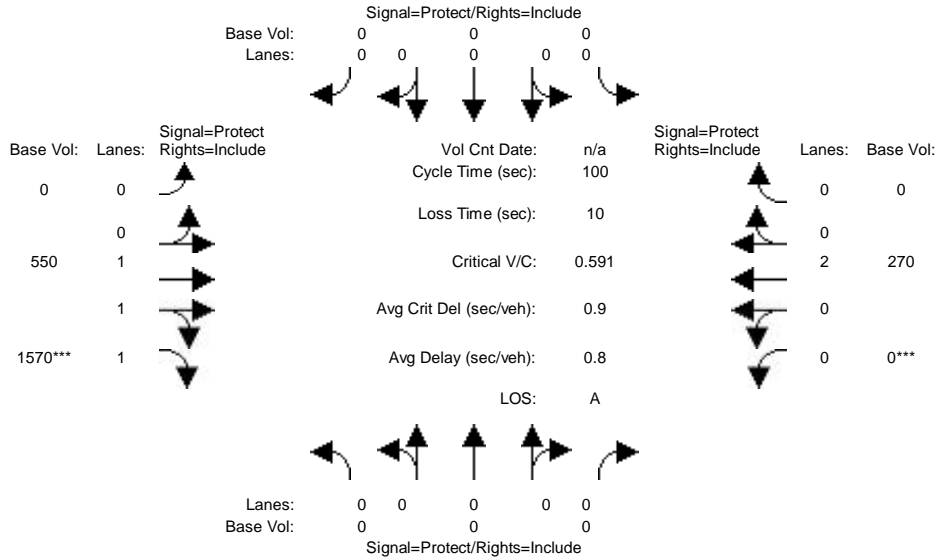
Appendix K

Intersection LOS Worksheets for 2019 Sunday with 30,000-Seats Conditions

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Pre-Game

Intersection #1: Victoria St. & Drive D

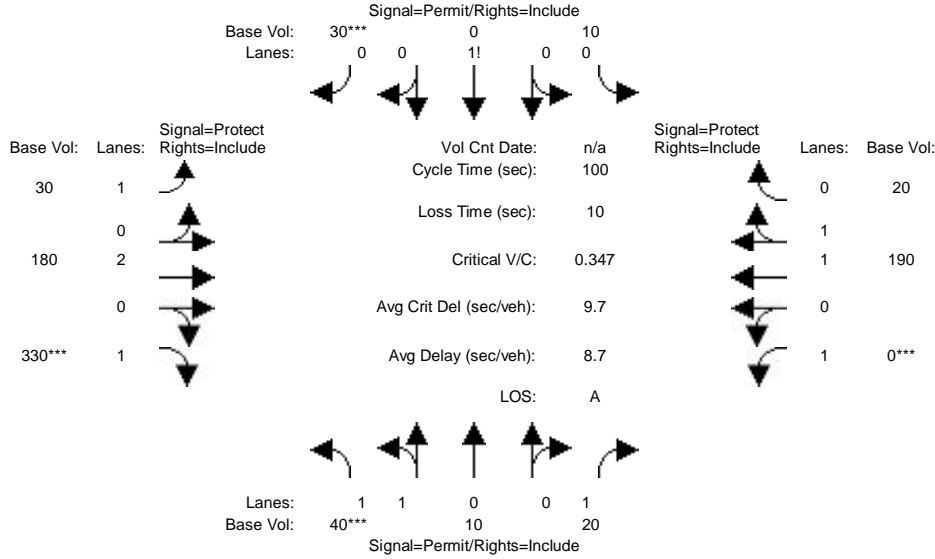


Street Name:	Drive D						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	550	1570	0	270	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	550	1570	0	270	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	0	550	1570	0	270	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	0	550	1570	0	270	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	0	550	1570	0	270	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	2.00	0.00	2.00	0.00
Final Sat.:	0	0	0	0	0	0	0	1600	3200	0	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.49	0.00	0.08	0.00
Crit Moves:							****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Pre-Game

Intersection #2: Victoria St & Tamcliff Ave

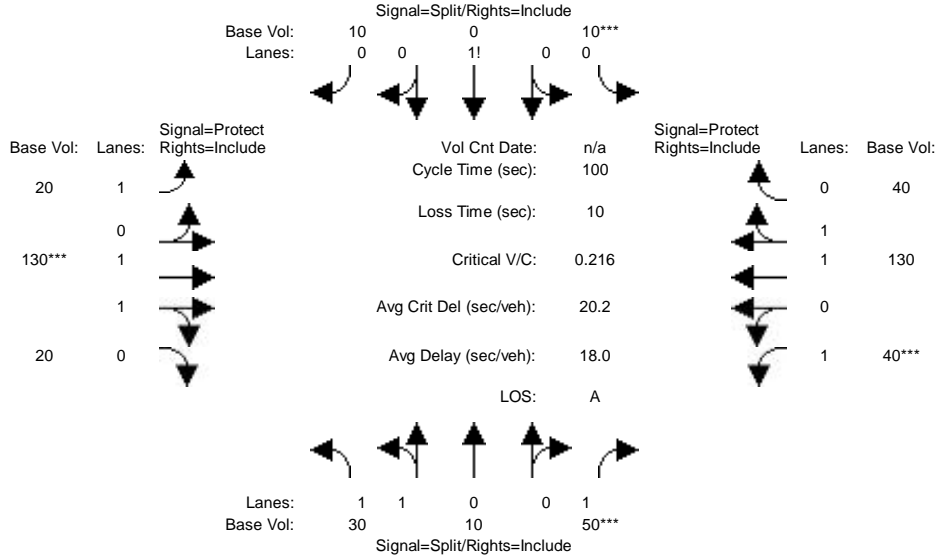


Street Name:	Victoria St						Tamcliff Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	40	10	20	10	0	30	30	180	330	0	190	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	10	20	10	0	30	30	180	330	0	190	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	10	20	10	0	30	30	180	330	0	190	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	10	20	10	0	30	30	180	330	0	190	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	10	20	10	0	30	30	180	330	0	190	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.60	0.40	1.00	0.25	0.00	0.75	1.00	2.00	1.00	1.00	1.81	0.19
Final Sat.:	2560	640	1600	400	0	1200	1600	3200	1600	1600	2895	305
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.01	0.01	0.00	0.03	0.02	0.06	0.21	0.00	0.07	0.07
Crit Moves:	****					****	****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Pre-Game

Intersection #3: Victoria St. & Birchknoll Dr.

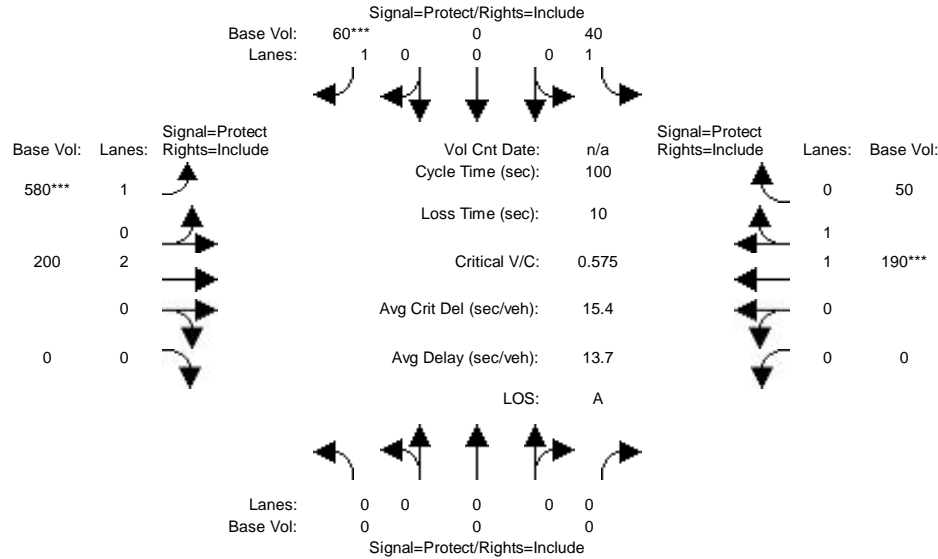


Street Name:	Victoria St.						Birchknoll Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	30	10	50	10	0	10	20	130	20	40	130	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	10	50	10	0	10	20	130	20	40	130	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	10	50	10	0	10	20	130	20	40	130	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	10	50	10	0	10	20	130	20	40	130	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	10	50	10	0	10	20	130	20	40	130	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.50	0.50	1.00	0.50	0.00	0.50	1.00	1.73	0.27	1.00	1.53	0.47
Final Sat.:	2400	800	1600	800	0	800	1600	2773	427	1600	2447	753
Capacity Analysis Module:												
Vol/Sat:	0.01	0.01	0.03	0.01	0.00	0.01	0.01	0.05	0.05	0.03	0.05	0.05
Crit Moves:			****	****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Pre-Game

Intersection #9: University Dr. & Toro Center Dr.

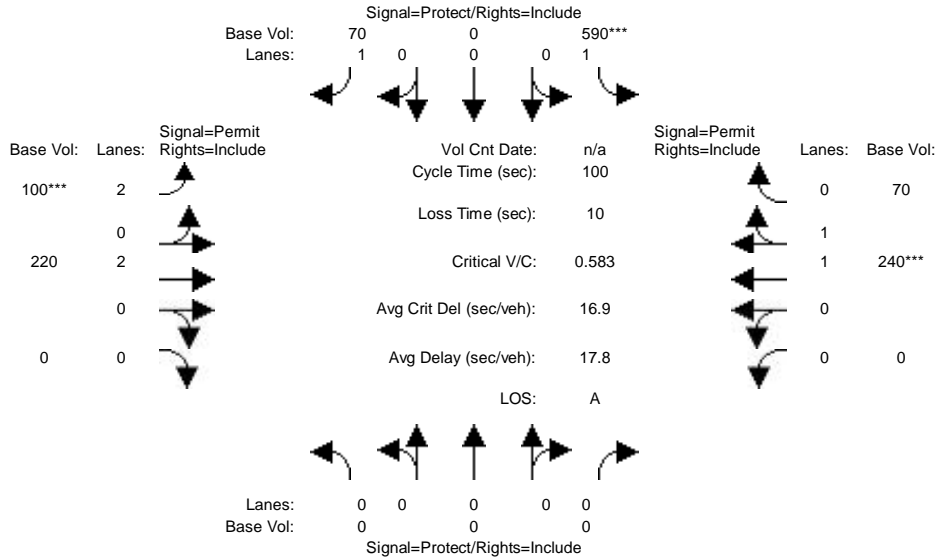


Street Name:	University Dr.						Toro Center Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	40	0	60	580	200	0	0	190	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	40	0	60	580	200	0	0	190	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	40	0	60	580	200	0	0	190	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	40	0	60	580	200	0	0	190	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	40	0	60	580	200	0	0	190	50
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.58	0.42
Final Sat.:	0	0	0	1600	0	1600	1600	3200	0	0	2533	667
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.03	0.00	0.04	0.36	0.06	0.00	0.00	0.08	0.07
Crit Moves:				****		****				****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Pre-Game

Intersection #10: Albertoni St. & SR 91 EB Ramps [Moved from Main St & Albertoni St]

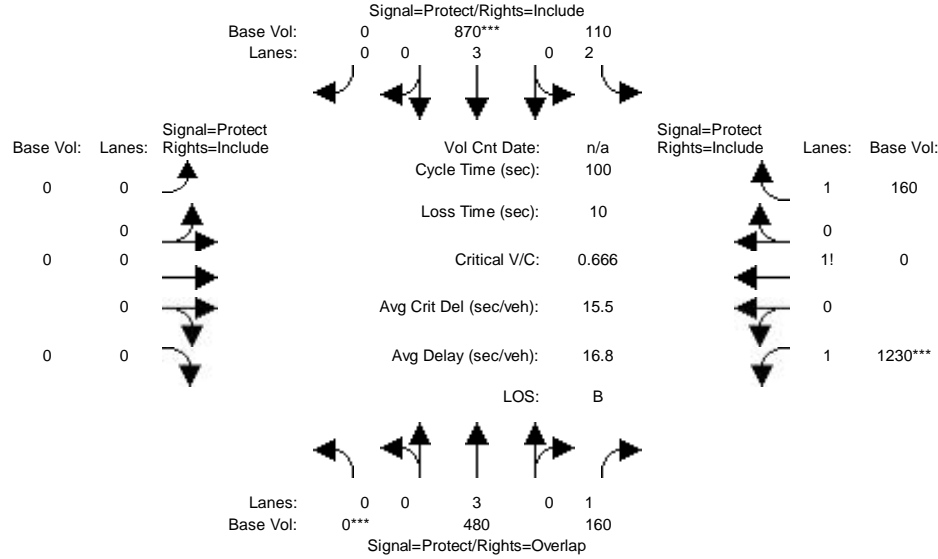


Street Name:	Sr 91 EB Ramps						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	590	0	70	100	220	0	0	240	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	590	0	70	100	220	0	0	240	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	590	0	70	100	220	0	0	240	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	590	0	70	100	220	0	0	240	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	590	0	70	100	220	0	0	240	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.55	0.45
Final Sat.:	0	0	0	1600	0	1600	5760	3200	0	0	2477	723
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.37	0.00	0.04	0.02	0.07	0.00	0.00	0.10	0.10
Crit Moves:				****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Pre-Game

Intersection #11: Avalon Blvd. & SR 91 WB On-Ramp

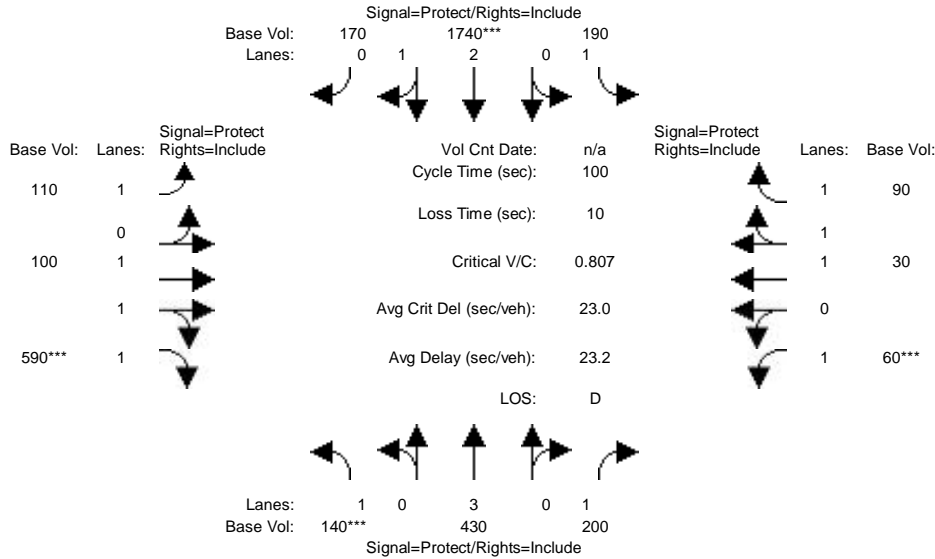


Street Name:	Avalon Blvd.						SR 91 WB On-Ramp						
Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Volume Module:													
Base Vol:	0	480	160	110	870	0	0	0	0	0	1230	160	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	0	480	160	110	870	0	0	0	0	1230	0	160	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:	0	480	160	110	870	0	0	0	0	1230	0	160	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	0	480	160	110	870	0	0	0	0	1230	0	160	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
FinalVolume:	0	480	160	110	870	0	0	0	0	1230	0	160	
OvlAdjVol:	0												
Saturation Flow Module:													
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	3200	0	1600	
Capacity Analysis Module:													
Vol/Sat:	0.00	0.10	0.10	0.02	0.18	0.00	0.00	0.00	0.00	0.00	0.38	0.00	
OvlAdjV/S:	0.00												
Crit Moves:	****	****						****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Pre-Game

Intersection #12: Avalon Blvd. & Albertoni St.

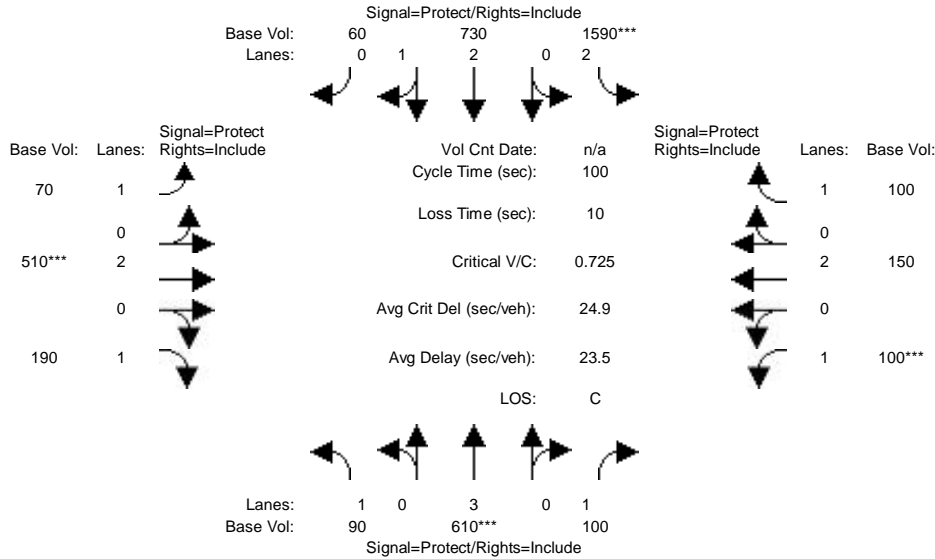


Street Name:	Avalon Blvd.						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	140	430	200	190	1740	170	110	100	590	60	30	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	430	200	190	1740	170	110	100	590	60	30	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	140	430	200	190	1740	170	110	100	590	60	30	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	430	200	190	1740	170	110	100	590	60	30	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	140	430	200	190	1740	170	110	100	590	60	30	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.73	0.27	1.00	1.00	2.00	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	4373	427	1600	1600	3200	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.13	0.12	0.40	0.40	0.07	0.06	0.18	0.04	0.02	0.03
Crit Moves:	****			****			****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Pre-Game

Intersection #13: Avalon Blvd. & Victoria St.

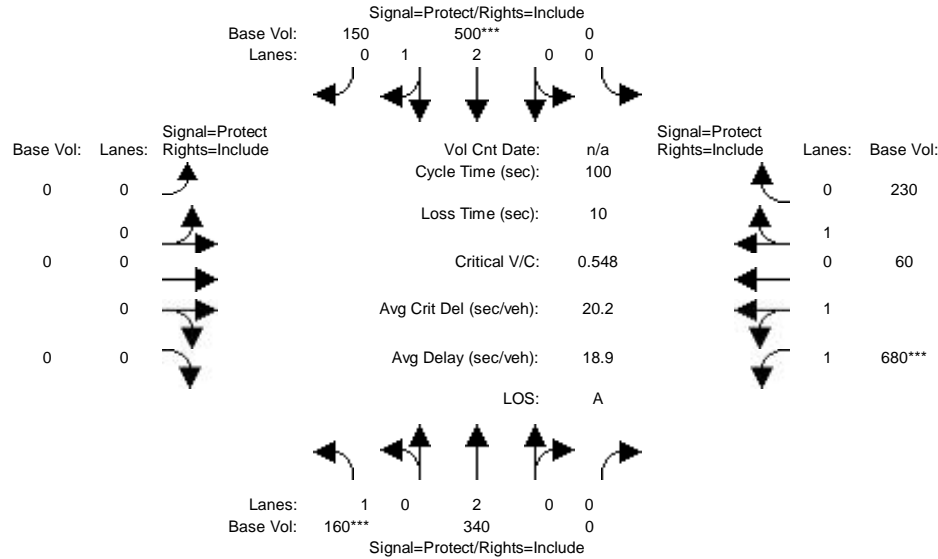


Street Name:	Avalon Blvd.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	90	610	100	1590	730	60	70	510	190	100	150	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	610	100	1590	730	60	70	510	190	100	150	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	610	100	1590	730	60	70	510	190	100	150	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	610	100	1590	730	60	70	510	190	100	150	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	610	100	1590	730	60	70	510	190	100	150	100
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.77	0.23	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4435	365	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.13	0.06	0.28	0.16	0.16	0.04	0.16	0.12	0.06	0.05	0.06
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Pre-Game

Intersection #14: Central Ave. & Artesia Blvd.

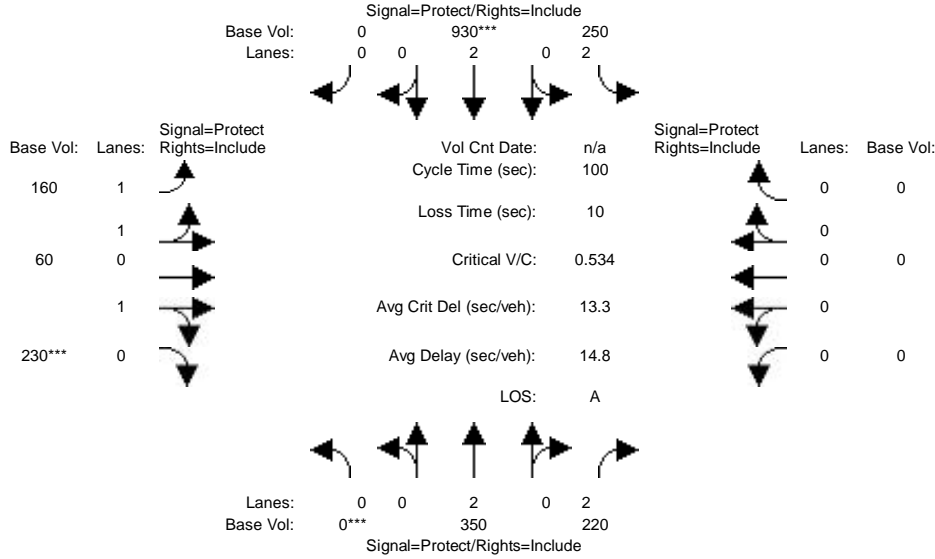


Street Name:	Central Ave.						Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	160	340	0	0	500	150	0	0	0	680	60	230
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	160	340	0	0	500	150	0	0	0	680	60	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	160	340	0	0	500	150	0	0	0	680	60	230
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	340	0	0	500	150	0	0	0	680	60	230
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	160	340	0	0	500	150	0	0	0	680	60	230
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.31	0.69	0.00	0.00	0.00	2.00	0.21	0.79
Final Sat.:	1600	3200	0	0	3692	1108	0	0	0	3200	331	1269
Capacity Analysis Module:												
Vol/Sat:	0.10	0.11	0.00	0.00	0.14	0.14	0.00	0.00	0.00	0.21	0.18	0.18
Crit Moves:	****				****					****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Pre-Game

Intersection #15: Central Ave. & Albertoni St.

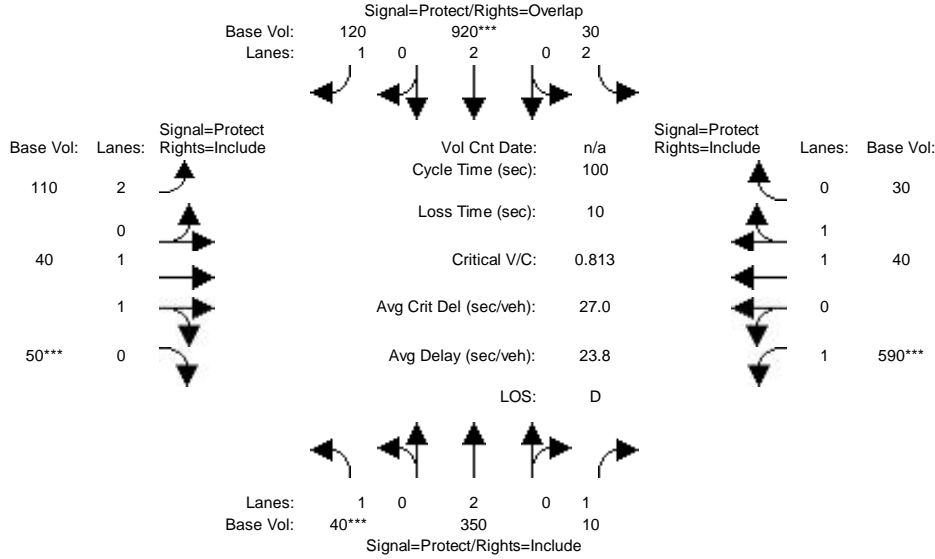


Street Name:	Central Ave.						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	350	220	250	930	0	160	60	230	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	350	220	250	930	0	160	60	230	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	350	220	250	930	0	160	60	230	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	350	220	250	930	0	160	60	230	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	350	220	250	930	0	160	60	230	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.45	0.55	1.00	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	2327	873	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.11	0.07	0.04	0.29	0.00	0.07	0.07	0.14	0.00	0.00	0.00
Crit Moves:	****				****			****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Pre-Game

Intersection #16: Central Ave. & Victoria St.

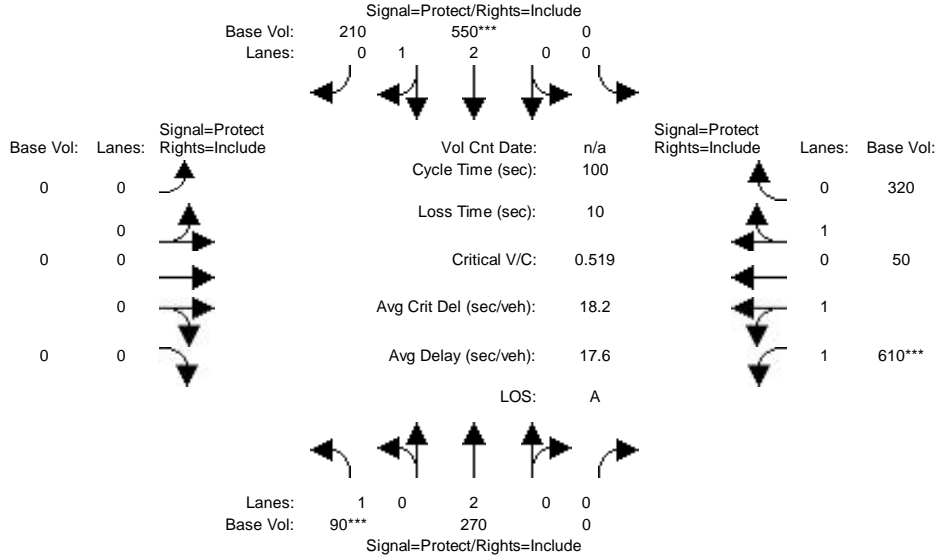


Street Name:	Central Ave.						Victoria St.						
Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Volume Module:													
Base Vol:	40	350	10	30	920	120	110	40	50	590	40	30	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	40	350	10	30	920	120	110	40	50	590	40	30	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:	40	350	10	30	920	120	110	40	50	590	40	30	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	40	350	10	30	920	120	110	40	50	590	40	30	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
FinalVolume:	40	350	10	30	920	120	110	40	50	590	40	30	
OvlAdjVol:	89												
Saturation Flow Module:													
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.00	1.00	1.00	1.14	0.86	
Final Sat.:	1600	3200	1600	5760	3200	1600	5760	1600	1600	1600	1829	1371	
Capacity Analysis Module:													
Vol/Sat:	0.03	0.11	0.01	0.01	0.29	0.08	0.02	0.03	0.03	0.37	0.02	0.02	
OvlAdjV/S:	0.06												
Crit Moves:	****	****						****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Pre-Game

Intersection #17: Wilmington Ave. & Artesia Blvd. WB

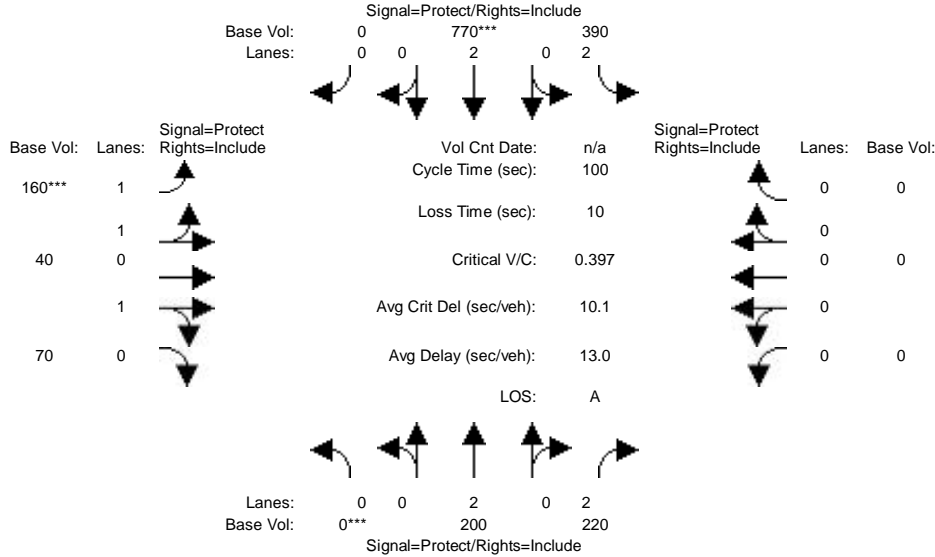


Street Name:	Wilmington Ave.						Artesia Blvd. WB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	90	270	0	0	550	210	0	0	0	610	50	320
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	270	0	0	550	210	0	0	0	610	50	320
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	270	0	0	550	210	0	0	0	610	50	320
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	270	0	0	550	210	0	0	0	610	50	320
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	270	0	0	550	210	0	0	0	610	50	320
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.17	0.83	0.00	0.00	0.00	1.87	0.15	0.98
Final Sat.:	1600	3200	0	0	3474	1326	0	0	0	2980	244	1575
Capacity Analysis Module:												
Vol/Sat:	0.06	0.08	0.00	0.00	0.16	0.16	0.00	0.00	0.00	0.20	0.20	0.20
Crit Moves:	****				****					****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Pre-Game

Intersection #18: Wilmington Ave. & Artesia Blvd. EB

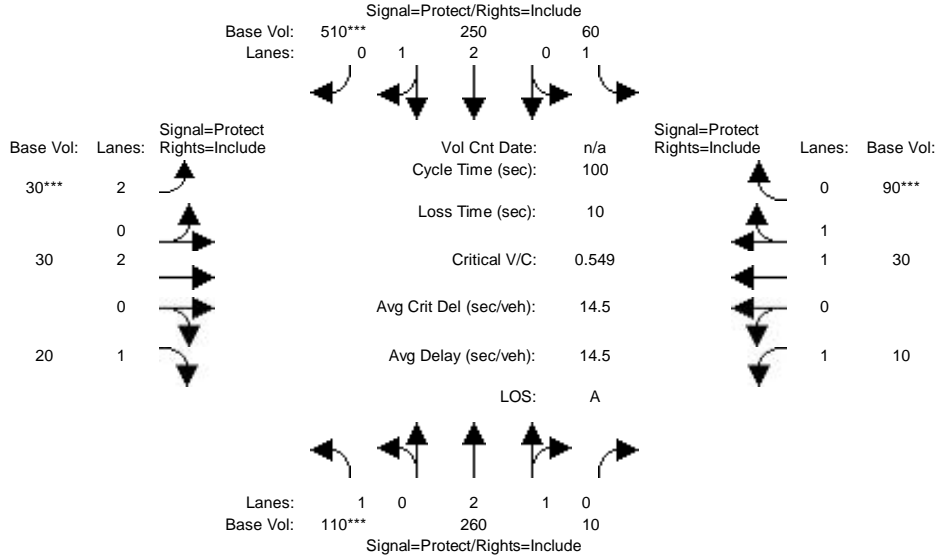


Street Name:	Wilmington Ave.						Artesia Blvd. EB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	200	220	390	770	0	160	40	70	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	200	220	390	770	0	160	40	70	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	200	220	390	770	0	160	40	70	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	200	220	390	770	0	160	40	70	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	200	220	390	770	0	160	40	70	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.78	0.44	0.78	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	2844	711	1244	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.06	0.07	0.07	0.24	0.00	0.06	0.06	0.06	0.00	0.00	0.00
Crit Moves:	****			****		****						

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Pre-Game

Intersection #19: Wilmington Ave. & Victoria St.

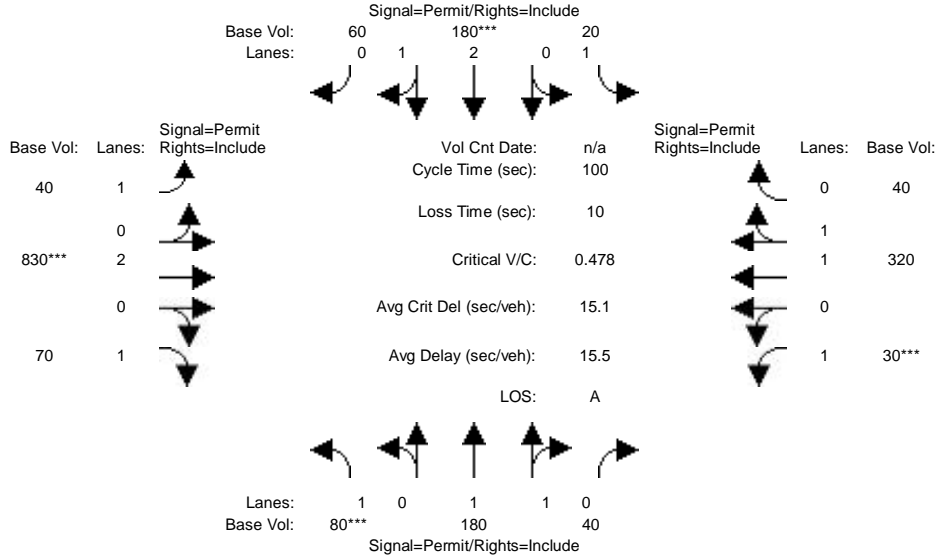


Street Name:	Wilmington Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	110	260	10	60	250	510	30	30	20	10	30	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	260	10	60	250	510	30	30	20	10	30	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	110	260	10	60	250	510	30	30	20	10	30	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	260	10	60	250	510	30	30	20	10	30	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	110	260	10	60	250	510	30	30	20	10	30	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.89	0.11	1.00	2.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	4622	178	1600	3200	1600	5760	3200	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.06	0.06	0.04	0.08	0.32	0.01	0.01	0.01	0.01	0.02	0.06
Crit Moves:	****					****	****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Pre-Game

Intersection #22: Figueroa St. & 190th St./Victoria St.

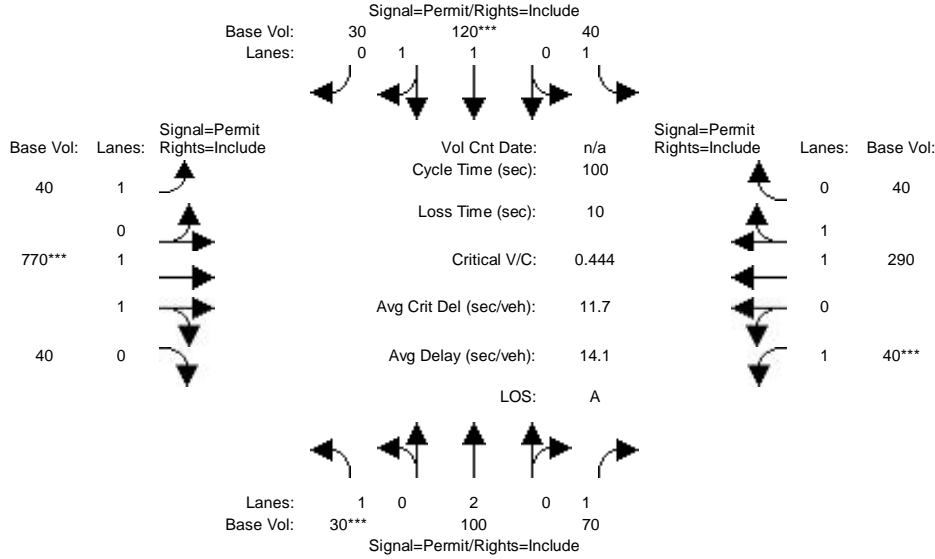


Street Name:	Figueroa St.						190th St./Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	80	180	40	20	180	60	40	830	70	30	320	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	180	40	20	180	60	40	830	70	30	320	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	180	40	20	180	60	40	830	70	30	320	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	180	40	20	180	60	40	830	70	30	320	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	180	40	20	180	60	40	830	70	30	320	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.64	0.36	1.00	2.25	0.75	1.00	2.00	1.00	1.00	1.78	0.22
Final Sat.:	1600	2618	582	1600	3600	1200	1600	3200	1600	1600	2844	356
Capacity Analysis Module:												
Vol/Sat:	0.05	0.07	0.07	0.01	0.05	0.05	0.03	0.26	0.04	0.02	0.11	0.11
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Pre-Game

Intersection #24: Main St. & Victoria St.

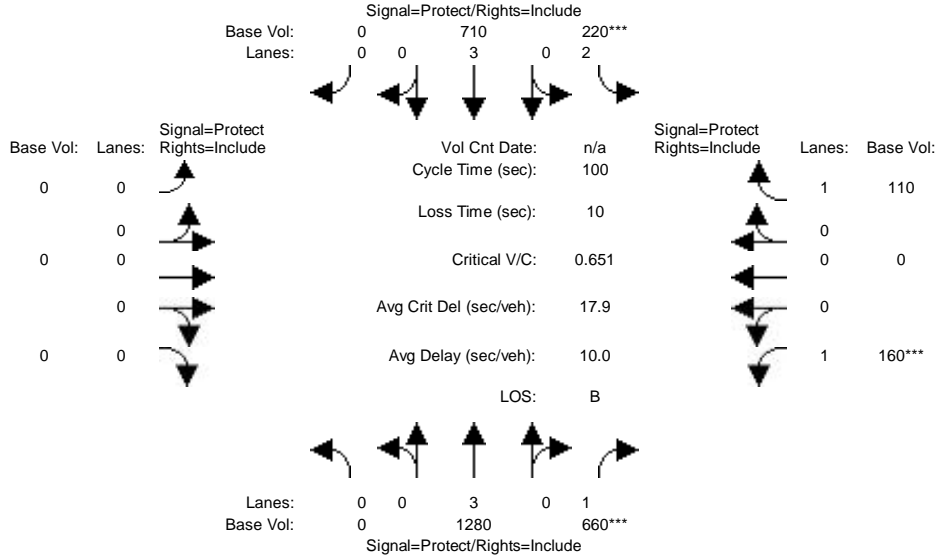


Street Name:	Main St.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	30	100	70	40	120	30	40	770	40	40	290	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	100	70	40	120	30	40	770	40	40	290	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	100	70	40	120	30	40	770	40	40	290	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	100	70	40	120	30	40	770	40	40	290	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	100	70	40	120	30	40	770	40	40	290	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.60	0.40	1.00	1.90	0.10	1.00	1.76	0.24
Final Sat.:	1600	3200	1600	1600	2560	640	1600	3042	158	1600	2812	388
Capacity Analysis Module:												
Vol/Sat:	0.02	0.03	0.04	0.03	0.05	0.05	0.03	0.25	0.25	0.03	0.10	0.10
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Pre-Game

Intersection #25: Avalon Blvd. & University Dr.

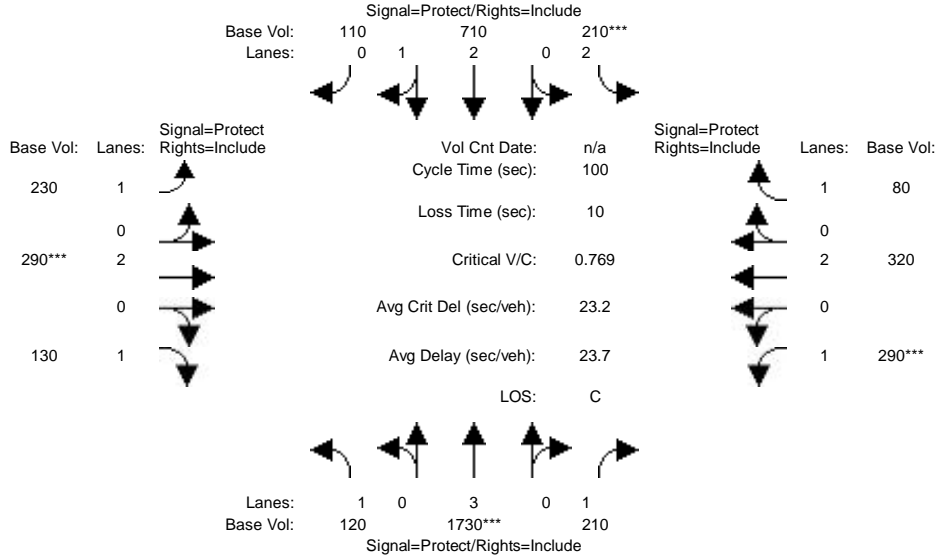


Street Name:	Avalon Blvd.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1280	660	220	710	0	0	0	0	160	0	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1280	660	220	710	0	0	0	0	160	0	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1280	660	220	710	0	0	0	0	160	0	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1280	660	220	710	0	0	0	0	160	0	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1280	660	220	710	0	0	0	0	160	0	110
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.27	0.41	0.04	0.15	0.00	0.00	0.00	0.00	0.00	0.10	0.00
Crit Moves:		****	****							****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Pre-Game

Intersection #26: Avalon Blvd. & Del Amo Blvd.

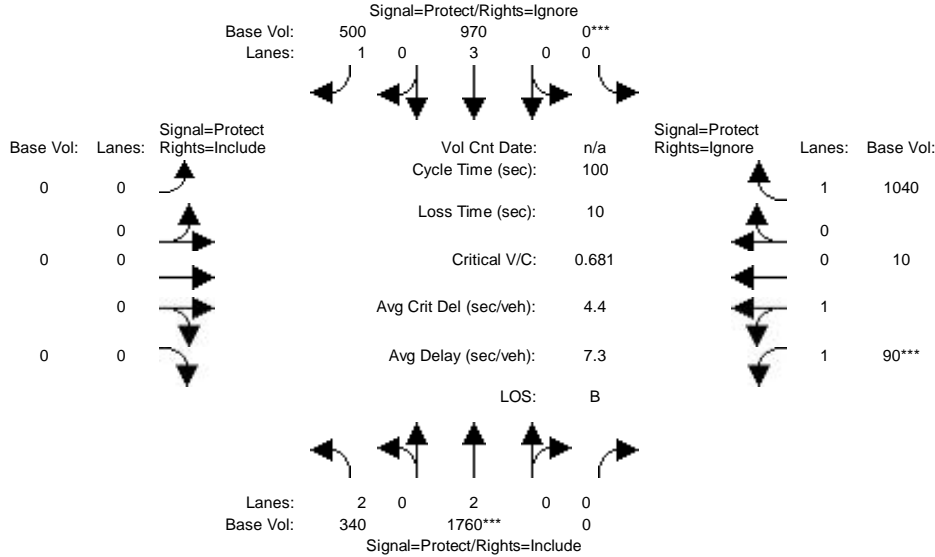


Street Name:	Avalon Blvd.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	120	1730	210	210	710	110	230	290	130	290	320	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	120	1730	210	210	710	110	230	290	130	290	320	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	120	1730	210	210	710	110	230	290	130	290	320	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	1730	210	210	710	110	230	290	130	290	320	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	120	1730	210	210	710	110	230	290	130	290	320	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.60	0.40	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4156	644	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.36	0.13	0.04	0.17	0.17	0.14	0.09	0.08	0.18	0.10	0.05
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Pre-Game

Intersection #27: Avalon Blvd. & I-405 NB Ramps

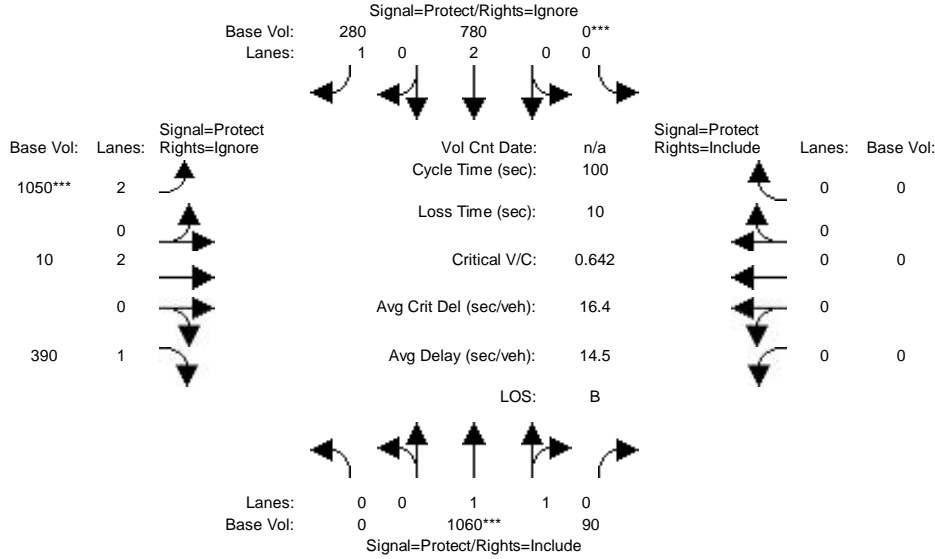


Street Name:	Avalon Blvd.						I-405 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	340	1760	0	0	970	500	0	0	0	90	10	1040
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	340	1760	0	0	970	500	0	0	0	90	10	1040
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	340	1760	0	0	970	0	0	0	0	90	10	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	340	1760	0	0	970	0	0	0	0	90	10	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Volume:	340	1760	0	0	970	0	0	0	0	90	10	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.80	0.20	1.00
Final Sat.:	5760	3200	0	0	4800	1600	0	0	0	2880	320	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.55	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.03	0.03
Crit Moves:	****			****						****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Pre-Game

Intersection #28: Avalon Blvd. & I-405 SB Ramps

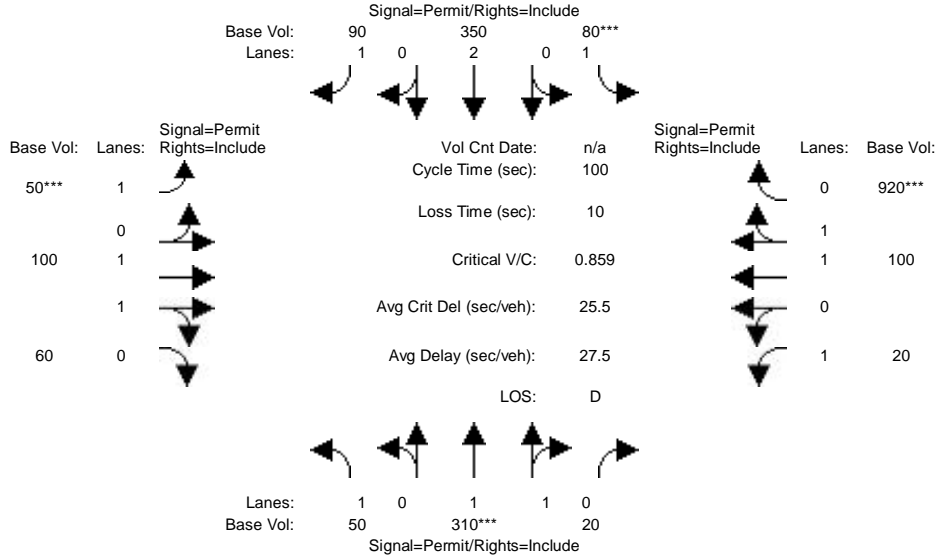


Street Name:	Avalon Blvd.						I-405 SB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1060	90	0	780	280	1050	10	390	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1060	90	0	780	280	1050	10	390	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	1060	90	0	780	0	1050	10	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1060	90	0	780	0	1050	10	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Volume:	0	1060	90	0	780	0	1050	10	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.84	0.16	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	0	2950	250	0	3200	1600	5760	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.36	0.36	0.00	0.24	0.00	0.18	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Pre-Game

Intersection #29: Central Ave. & University Dr.

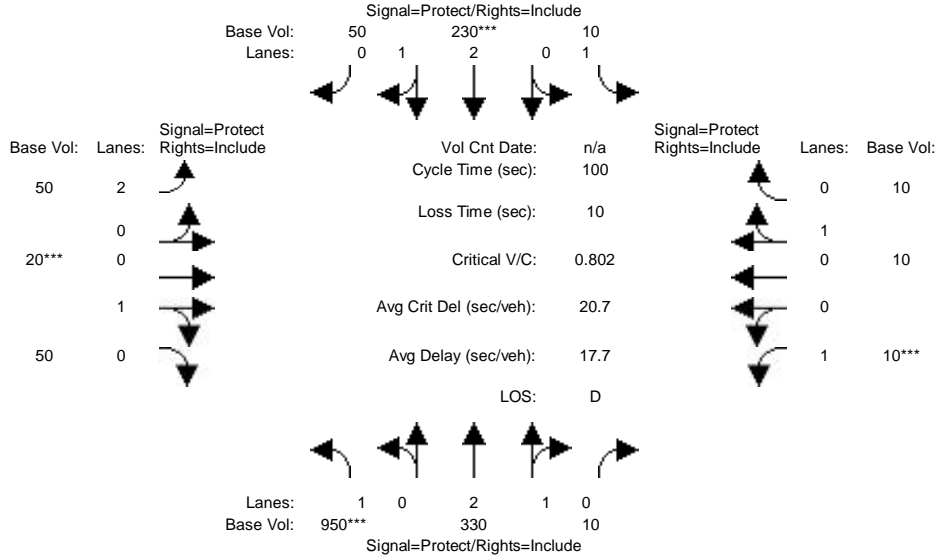


Street Name:	Central Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	50	310	20	80	350	90	50	100	60	20	100	920
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	310	20	80	350	90	50	100	60	20	100	920
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	310	20	80	350	90	50	100	60	20	100	920
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	310	20	80	350	90	50	100	60	20	100	920
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	310	20	80	350	90	50	100	60	20	100	920
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.88	0.12	1.00	2.00	1.00	1.00	1.25	0.75	1.00	1.00	1.00
Final Sat.:	1600	3006	194	1600	3200	1600	1600	2000	1200	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.10	0.10	0.05	0.11	0.06	0.03	0.05	0.05	0.01	0.06	0.57
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Pre-Game

Intersection #30: Wilmington Ave. & University Dr.

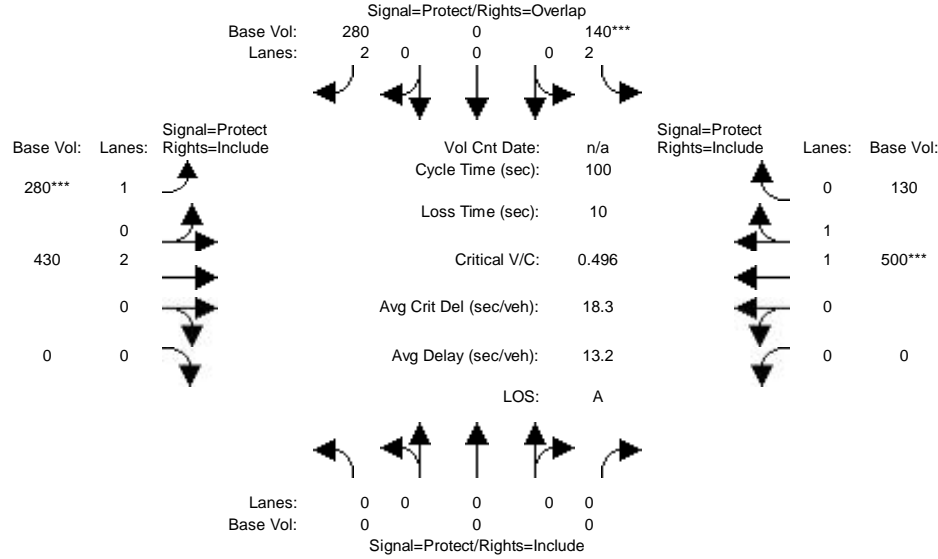


Street Name:	Wilmington Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	950	330	10	10	230	50	50	20	50	10	10	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	950	330	10	10	230	50	50	20	50	10	10	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	950	330	10	10	230	50	50	20	50	10	10	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	950	330	10	10	230	50	50	20	50	10	10	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	950	330	10	10	230	50	50	20	50	10	10	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.91	0.09	1.00	2.46	0.54	2.00	0.29	0.71	1.00	0.50	0.50
Final Sat.:	1600	4659	141	1600	3943	857	5760	457	1143	1600	800	800
Capacity Analysis Module:												
Vol/Sat:	0.59	0.07	0.07	0.01	0.06	0.06	0.01	0.04	0.04	0.01	0.01	0.01
Crit Moves:	****			****			****		****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Pre-Game

Intersection #31: Central Ave. & Del Amo Blvd.

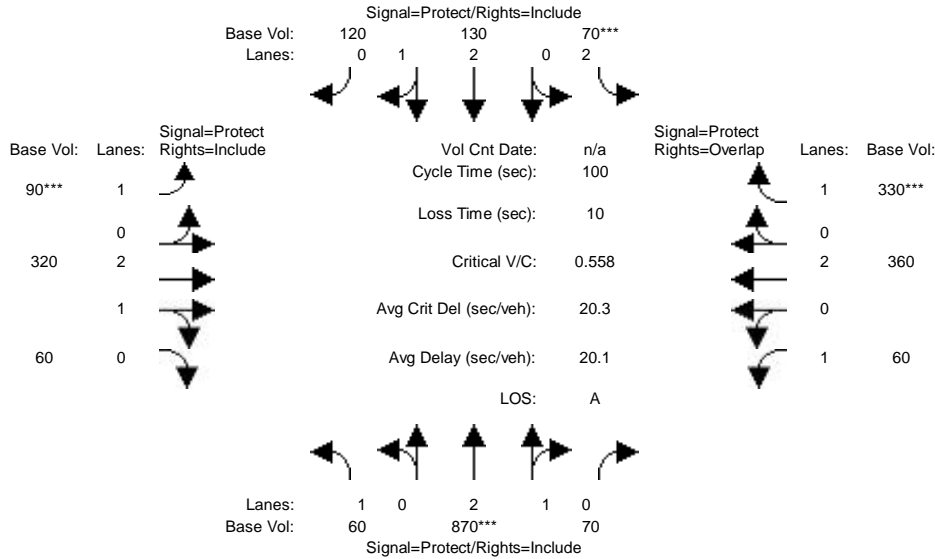


Street Name:	Central Ave.				Del Amo Blvd							
Approach:	North Bound			South Bound			East Bound		West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	140	0	280	280	430	0	0	500	130
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	140	0	280	280	430	0	0	500	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	140	0	280	280	430	0	0	500	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	140	0	280	280	430	0	0	500	130
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	140	0	280	280	430	0	0	500	130
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	2.00	1.00	2.00	0.00	0.00	1.59	0.41
Final Sat.:	0	0	0	5760	0	3200	1600	3200	0	0	2540	660
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.00	0.09	0.17	0.13	0.00	0.00	0.20	0.20
OvlAdjV/S:	0.00											
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Pre-Game

Intersection #32: Wilmington Ave. & Del Amo Blvd.

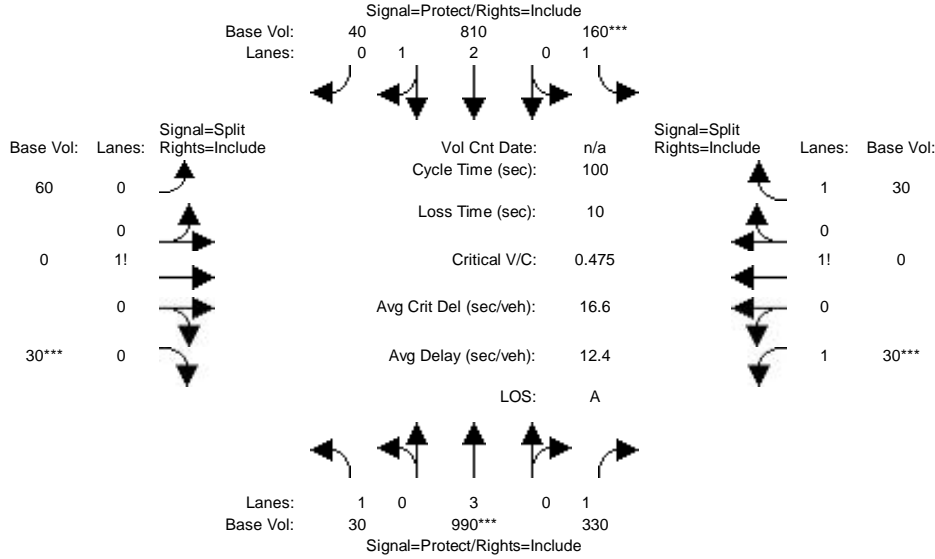


Street Name:	Wilmington Ave.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	60	870	70	70	130	120	90	320	60	60	360	330
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	870	70	70	130	120	90	320	60	60	360	330
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	870	70	70	130	120	90	320	60	60	360	330
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	870	70	70	130	120	90	320	60	60	360	330
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	60	870	70	70	130	120	90	320	60	60	360	330
OvlAdjVol:												311
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.78	0.22	2.00	2.00	1.00	1.00	2.53	0.47	1.00	2.00	1.00
Final Sat.:	1600	4443	357	5760	3200	1600	1600	4042	758	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.20	0.20	0.01	0.04	0.08	0.06	0.08	0.08	0.04	0.11	0.21
OvlAdjV/S:												0.19
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Pre-Game

Intersection #38: Avalon Blvd. & 184th St. - Drive A

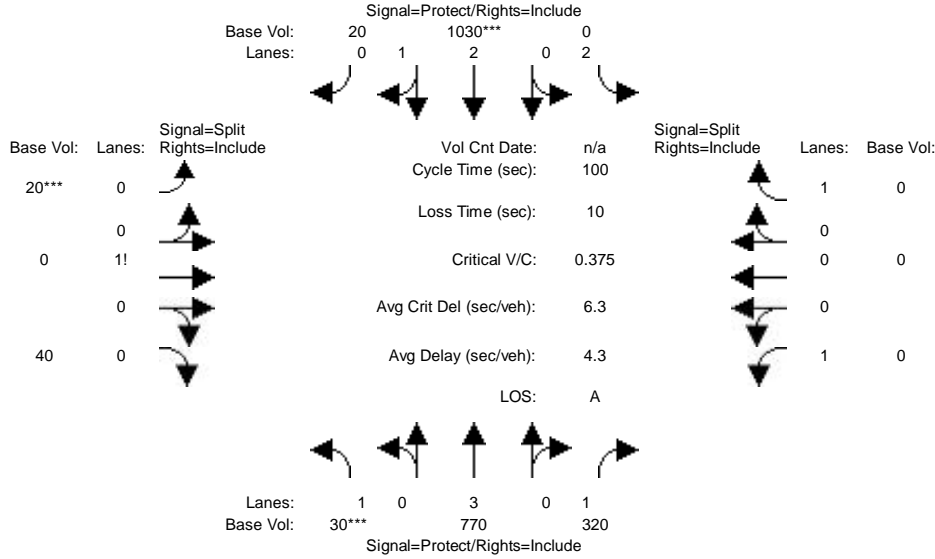


Street Name:	S. Avolon Blvd.						184th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	30	990	330	160	810	40	60	0	30	30	0	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	990	330	160	810	40	60	0	30	30	0	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	990	330	160	810	40	60	0	30	30	0	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	990	330	160	810	40	60	0	30	30	0	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	30	990	330	160	810	40	60	0	30	30	0	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.86	0.14	0.67	0.00	0.33	1.50	0.00	1.50
Final Sat.:	1600	4800	1600	1600	4574	226	1067	0	533	2400	0	2400
Capacity Analysis Module:												
Vol/Sat:	0.02	0.21	0.21	0.10	0.18	0.18	0.06	0.00	0.06	0.01	0.00	0.01
Crit Moves:	****			****			****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Pre-Game

Intersection #39: Avalon Blvd. & 182nd St. - Drive B

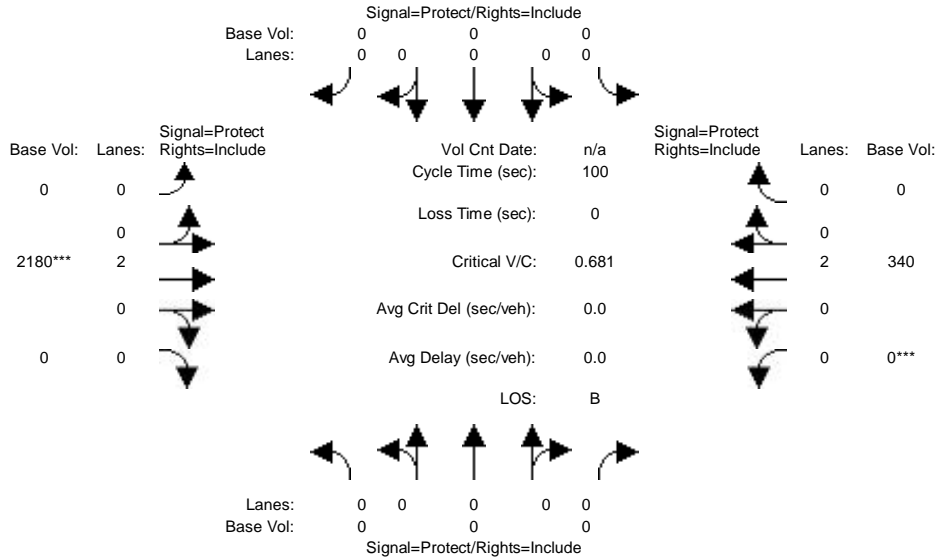


Street Name:	S. Avalon Blvd.				182nd St.							
Approach:	North Bound			South Bound			East Bound		West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	30	770	320	0	1030	20	20	0	40	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	770	320	0	1030	20	20	0	40	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	770	320	0	1030	20	20	0	40	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	770	320	0	1030	20	20	0	40	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	770	320	0	1030	20	20	0	40	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.94	0.06	0.33	0.00	0.67	1.00	0.00	1.00
Final Sat.:	1600	4800	1600	5760	4709	91	533	0	1067	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.16	0.20	0.00	0.22	0.22	0.04	0.00	0.04	0.00	0.00	0.00
Crit Moves:	****			****		****	****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Pre-Game

Intersection #40: Victoria St. & Drive C

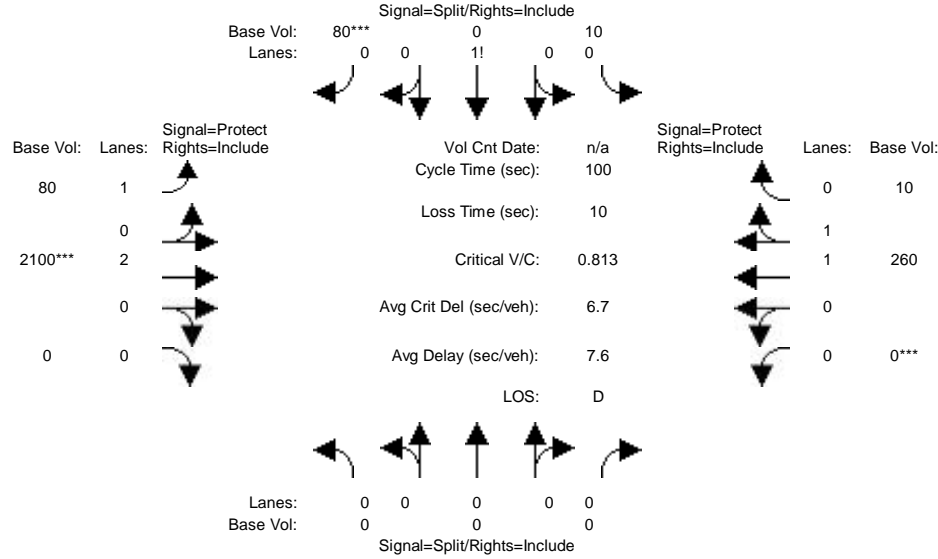


Street Name:	Drive C						E. Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	2180	0	0	340	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	2180	0	0	340	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	0	2180	0	0	340	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	0	2180	0	0	340	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	0	2180	0	0	340	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00
Final Sat.:	0	0	0	0	0	0	0	3200	0	0	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68	0.00	0.00	0.11	0.00
Crit Moves:							****		****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Pre-Game

Intersection #41: Victoria St. & Rainsbury Ave.

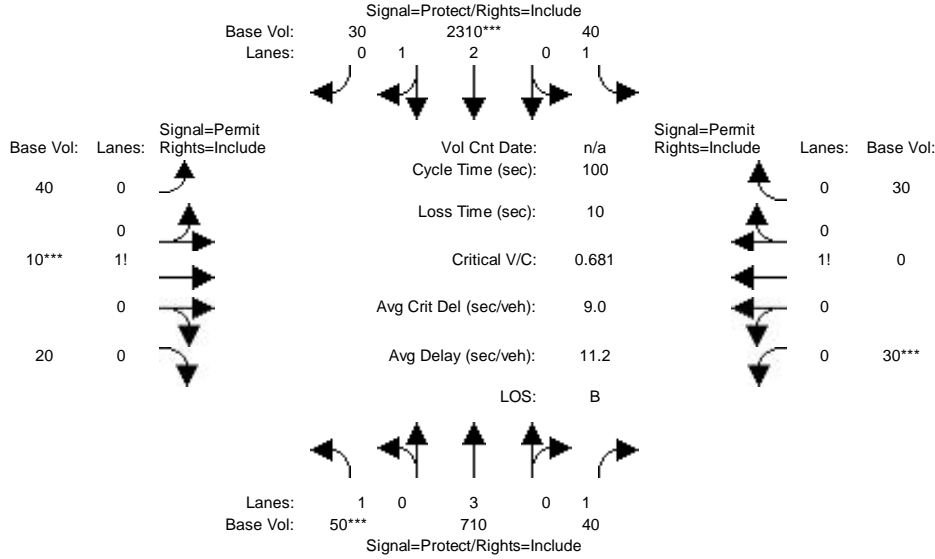


Street Name:	E. Victoria St.						Rainsbury Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	10	0	80	80	2100	0	0	260	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	10	0	80	80	2100	0	0	260	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	10	0	80	80	2100	0	0	260	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	10	0	80	80	2100	0	0	260	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	10	0	80	80	2100	0	0	260	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.11	0.00	0.89	1.00	2.00	0.00	0.00	1.93	0.07
Final Sat.:	0	0	0	178	0	1422	1600	3200	0	0	3081	119
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.06	0.00	0.06	0.05	0.66	0.00	0.00	0.08	0.08
Crit Moves:				****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Pre-Game

Intersection #42: Avalon Blvd. & Harbor Village / Colony Cove

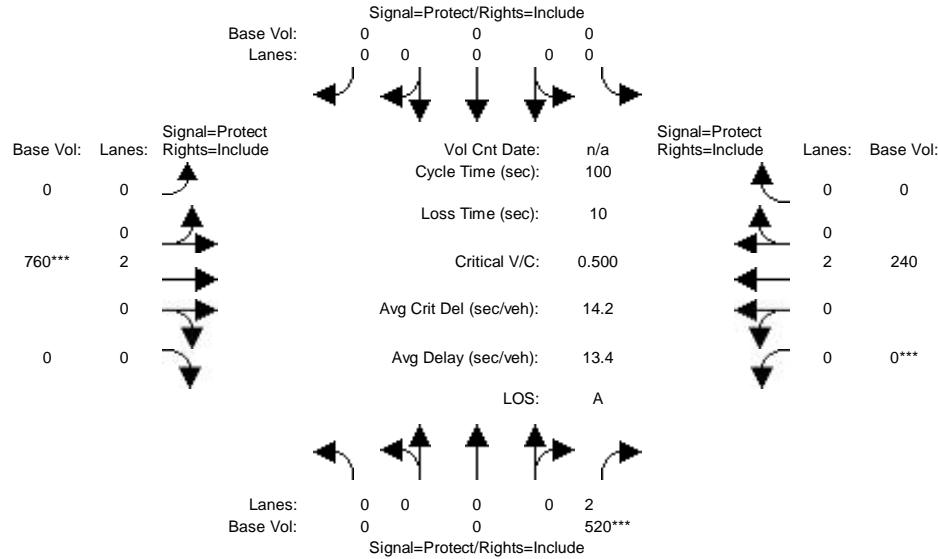


Street Name:	Avalon Blvd.						Harbor Village / Colony Cove					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	50	710	40	40	2310	30	40	10	20	30	0	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	710	40	40	2310	30	40	10	20	30	0	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	710	40	40	2310	30	40	10	20	30	0	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	710	40	40	2310	30	40	10	20	30	0	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	710	40	40	2310	30	40	10	20	30	0	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.96	0.04	0.57	0.14	0.29	0.50	0.00	0.50
Final Sat.:	1600	4800	1600	1600	4738	62	914	229	457	800	0	800
Capacity Analysis Module:												
Vol/Sat:	0.03	0.15	0.03	0.03	0.49	0.49	0.03	0.04	0.04	0.02	0.00	0.04
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Post-Game

Intersection #1: Victoria St. & Drive D

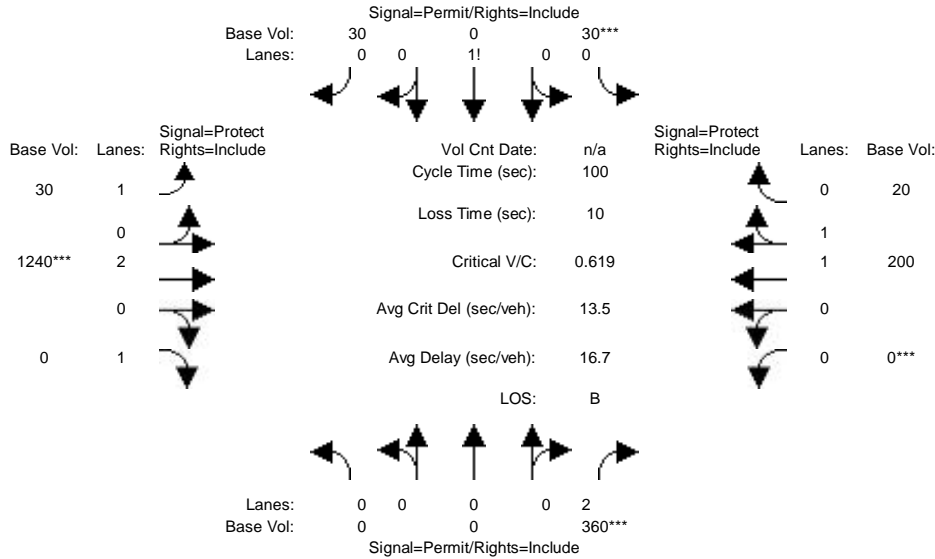


Street Name:	Drive D						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	520	0	0	0	0	760	0	0	240	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	520	0	0	0	0	760	0	0	240	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	520	0	0	0	0	760	0	0	240	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	520	0	0	0	0	760	0	0	240	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	520	0	0	0	0	760	0	0	240	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00
Final Sat.:	0	0	3200	0	0	0	0	3200	0	0	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.08	0.00
Crit Moves:			****				****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Post-Game

Intersection #2: Victoria St & Tamcliff Ave

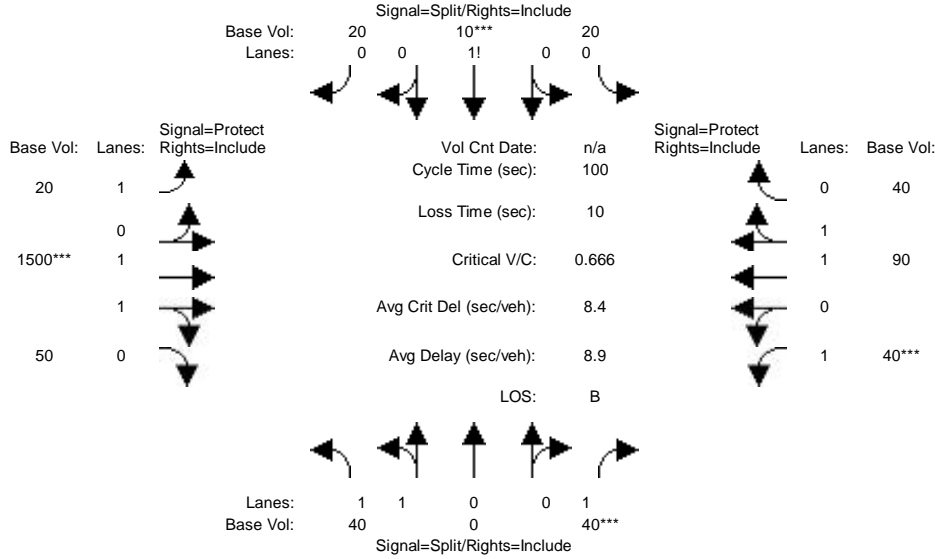


Street Name:	Victoria St						Tamcliff Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	360	30	0	30	30	1240	0	0	200	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	360	30	0	30	30	1240	0	0	200	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	360	30	0	30	30	1240	0	0	200	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	360	30	0	30	30	1240	0	0	200	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	360	30	0	30	30	1240	0	0	200	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	2.00	0.50	0.00	0.50	1.00	2.00	1.00	0.00	1.82	0.18
Final Sat.:	0	0	3200	800	0	800	1600	3200	1600	0	2909	291
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.11	0.02	0.00	0.04	0.02	0.39	0.00	0.00	0.07	0.07
Crit Moves:			****	****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Post-Game

Intersection #3: Victoria St. & Birchknoll Dr.

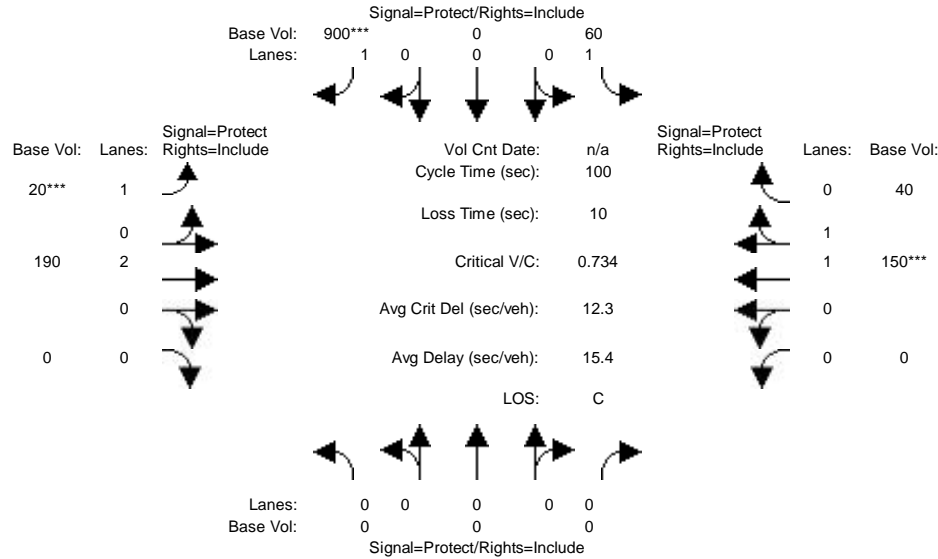


Street Name:	Victoria St.						Birchknoll Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	40	0	40	20	10	20	20	1500	50	40	90	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	0	40	20	10	20	20	1500	50	40	90	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	0	40	20	10	20	20	1500	50	40	90	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	0	40	20	10	20	20	1500	50	40	90	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	0	40	20	10	20	20	1500	50	40	90	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.40	0.20	0.40	1.00	1.94	0.06	1.00	1.38	0.62
Final Sat.:	3200	0	1600	640	320	640	1600	3097	103	1600	2215	985
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.03	0.03	0.03	0.03	0.01	0.48	0.48	0.03	0.04	0.04
Crit Moves:			****	****			****		****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Post-Game

Intersection #9: University Dr. & Toro Center Dr.

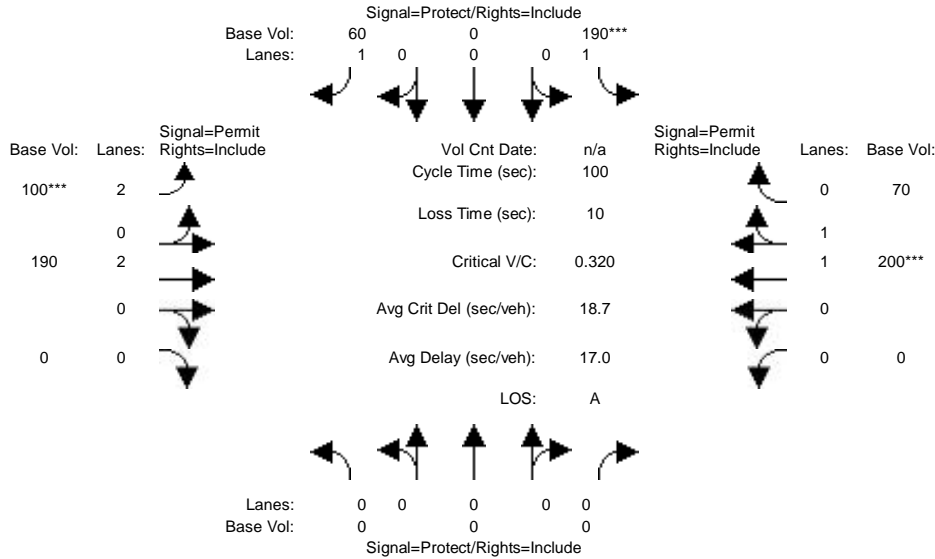


Street Name:	University Dr.						Toro Center Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	60	0	900	20	190	0	0	150	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	60	0	900	20	190	0	0	150	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	60	0	900	20	190	0	0	150	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	60	0	900	20	190	0	0	150	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	60	0	900	20	190	0	0	150	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.58	0.42
Final Sat.:	0	0	0	1600	0	1600	1600	3200	0	0	2526	674
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.04	0.00	0.56	0.01	0.06	0.00	0.00	0.06	0.06
Crit Moves:				****		****				****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Post-Game

Intersection #10: Albertoni St. & SR 91 EB Ramps [Moved from Main St & Albertoni St]

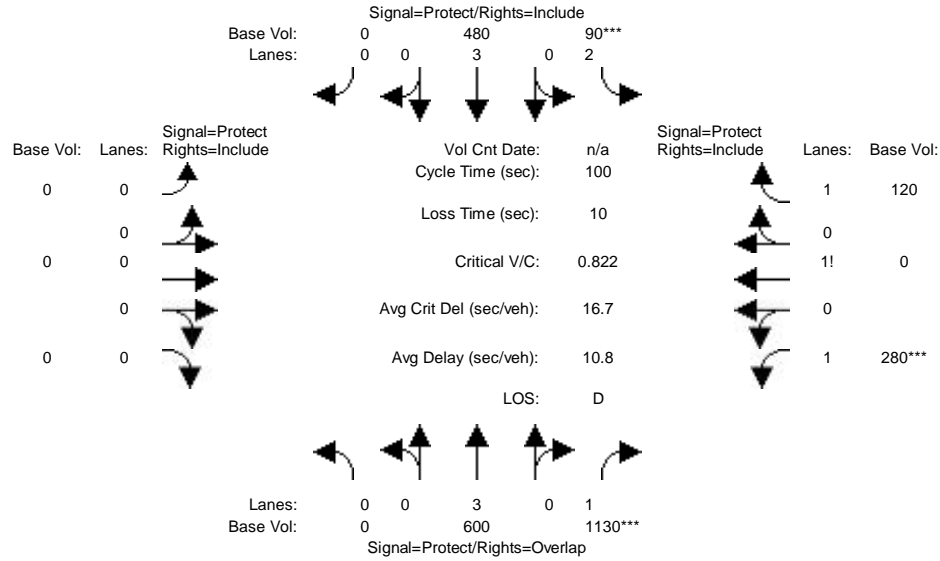


Street Name:	Sr 91 EB Ramps						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	190	0	60	100	190	0	0	200	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	190	0	60	100	190	0	0	200	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	190	0	60	100	190	0	0	200	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	190	0	60	100	190	0	0	200	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	190	0	60	100	190	0	0	200	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.48	0.52
Final Sat.:	0	0	0	1600	0	1600	5760	3200	0	0	2370	830
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.12	0.00	0.04	0.02	0.06	0.00	0.00	0.08	0.08
Crit Moves:				****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Post-Game

Intersection #11: Avalon Blvd. & SR 91 WB On-Ramp

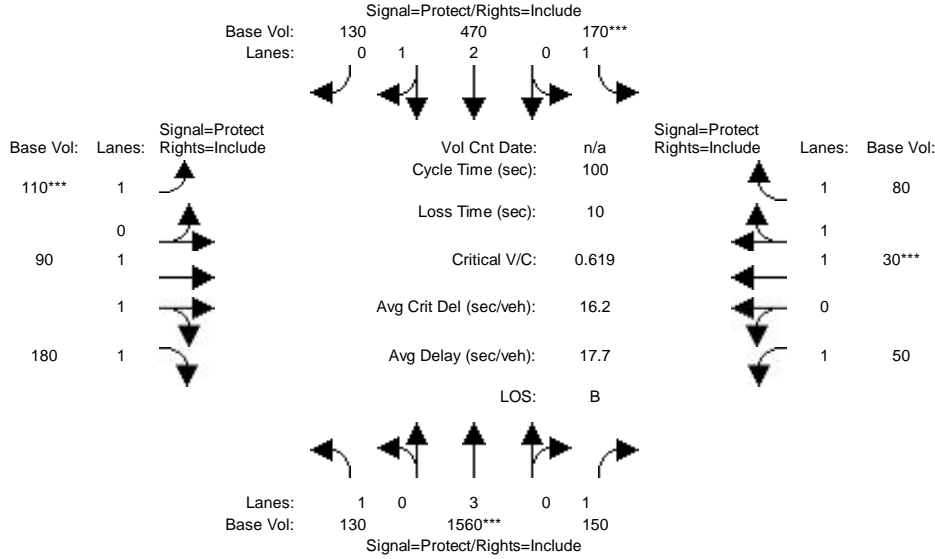


Street Name:	Avalon Blvd.						SR 91 WB On-Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	600	1130	90	480	0	0	0	0	0	280	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	600	1130	90	480	0	0	0	0	0	280	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	600	1130	90	480	0	0	0	0	0	280	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	600	1130	90	480	0	0	0	0	0	280	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	600	1130	90	480	0	0	0	0	0	280	0
OvlAdjVol:	990											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.13	0.71	0.02	0.10	0.00	0.00	0.00	0.00	0.00	0.09	0.00
OvlAdjV/S:	0.62											
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Post-Game

Intersection #12: Avalon Blvd. & Albertoni St.

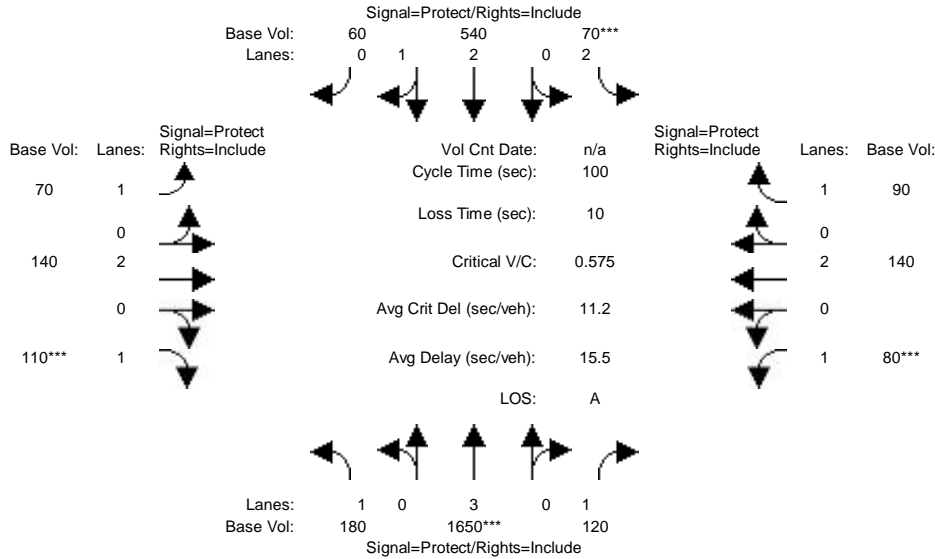


Street Name:	Avalon Blvd.						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	130	1560	150	170	470	130	110	90	180	50	30	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	1560	150	170	470	130	110	90	180	50	30	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	1560	150	170	470	130	110	90	180	50	30	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	1560	150	170	470	130	110	90	180	50	30	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	1560	150	170	470	130	110	90	180	50	30	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.35	0.65	1.00	1.00	2.00	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3760	1040	1600	1600	3200	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.08	0.33	0.09	0.11	0.13	0.13	0.07	0.06	0.06	0.03	0.02	0.03
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Post-Game

Intersection #13: Avalon Blvd. & Victoria St.

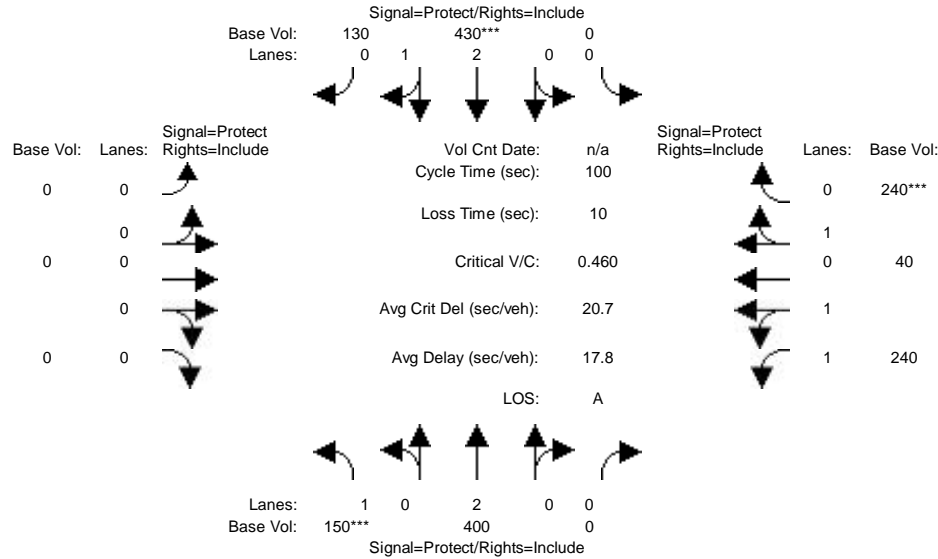


Street Name:	Avalon Blvd.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	180	1650	120	70	540	60	70	140	110	80	140	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	180	1650	120	70	540	60	70	140	110	80	140	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	180	1650	120	70	540	60	70	140	110	80	140	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	180	1650	120	70	540	60	70	140	110	80	140	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	180	1650	120	70	540	60	70	140	110	80	140	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.70	0.30	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4320	480	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.34	0.08	0.01	0.13	0.13	0.04	0.04	0.07	0.05	0.04	0.06
Crit Moves:	****			****			****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Post-Game

Intersection #14: Central Ave. & Artesia Blvd.

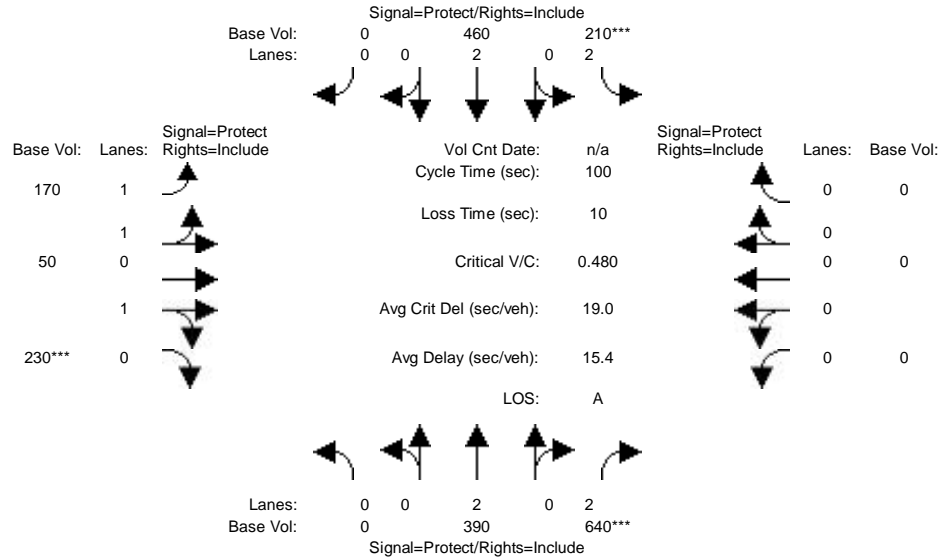


Street Name:	Central Ave.						Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	150	400	0	0	430	130	0	0	0	240	40	240
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	400	0	0	430	130	0	0	0	240	40	240
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	400	0	0	430	130	0	0	0	240	40	240
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	400	0	0	430	130	0	0	0	240	40	240
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	400	0	0	430	130	0	0	0	240	40	240
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.30	0.70	0.00	0.00	0.00	1.71	0.29	1.00
Final Sat.:	1600	3200	0	0	3686	1114	0	0	0	2743	457	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.13	0.00	0.00	0.12	0.12	0.00	0.00	0.00	0.09	0.09	0.15
Crit Moves:	****				****					****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Post-Game

Intersection #15: Central Ave. & Albertoni St.

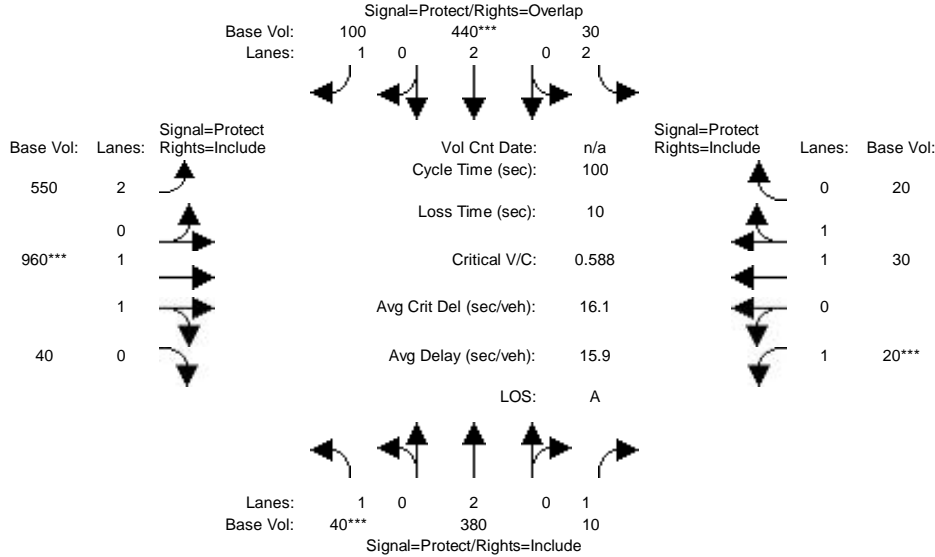


Street Name:	Central Ave.						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	390	640	210	460	0	170	50	230	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	390	640	210	460	0	170	50	230	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	390	640	210	460	0	170	50	230	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	390	640	210	460	0	170	50	230	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	390	640	210	460	0	170	50	230	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.55	0.45	1.00	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	2473	727	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.12	0.20	0.04	0.14	0.00	0.07	0.07	0.14	0.00	0.00	0.00
Crit Moves:		****	****				****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Post-Game

Intersection #16: Central Ave. & Victoria St.

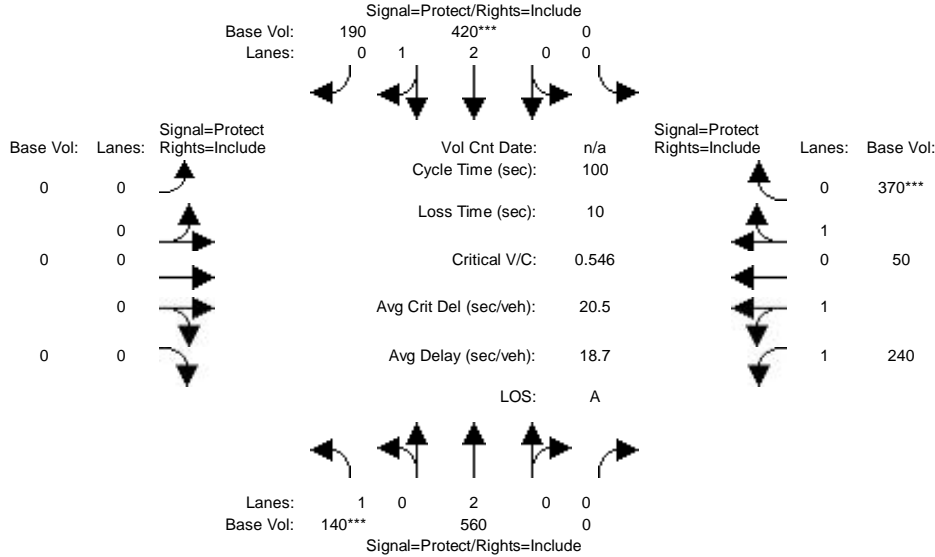


Street Name:	Central Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	40	380	10	30	440	100	550	960	40	20	30	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	380	10	30	440	100	550	960	40	20	30	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	380	10	30	440	100	550	960	40	20	30	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	380	10	30	440	100	550	960	40	20	30	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	380	10	30	440	100	550	960	40	20	30	20
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.92	0.08	1.00	1.20	0.80
Final Sat.:	1600	3200	1600	5760	3200	1600	5760	3072	128	1600	1920	1280
Capacity Analysis Module:												
Vol/Sat:	0.03	0.12	0.01	0.01	0.14	0.06	0.10	0.31	0.31	0.01	0.02	0.02
OvlAdjV/S:	0.00											
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Post-Game

Intersection #17: Wilmington Ave. & Artesia Blvd. WB

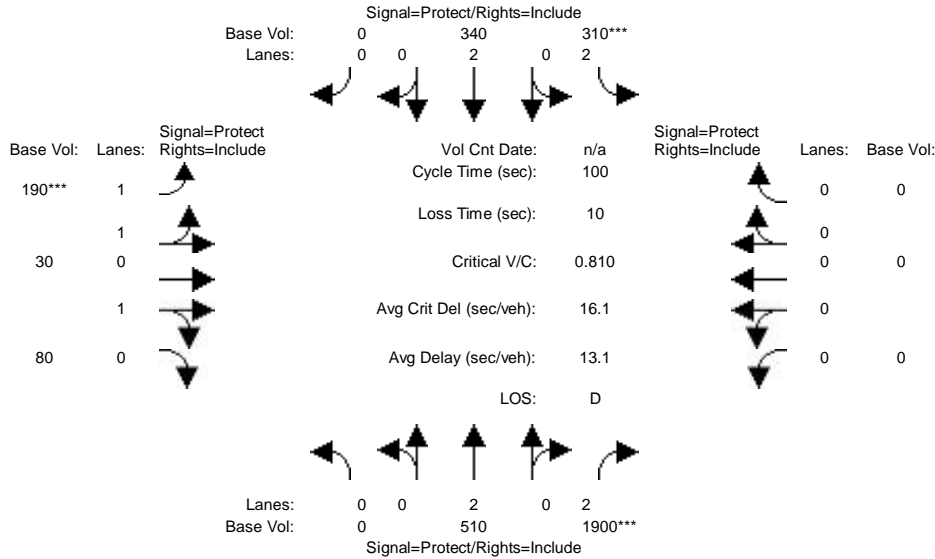


Street Name:	Wilmington Ave.						Artesia Blvd. WB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	140	560	0	0	420	190	0	0	0	240	50	370
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	560	0	0	420	190	0	0	0	240	50	370
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	140	560	0	0	420	190	0	0	0	240	50	370
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	560	0	0	420	190	0	0	0	240	50	370
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	140	560	0	0	420	190	0	0	0	240	50	370
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.07	0.93	0.00	0.00	0.00	1.66	0.34	1.00
Final Sat.:	1600	3200	0	0	3305	1495	0	0	0	2648	552	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.17	0.00	0.00	0.13	0.13	0.00	0.00	0.00	0.09	0.09	0.23
Crit Moves:	****				****					****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Post-Game

Intersection #18: Wilmington Ave. & Artesia Blvd. EB

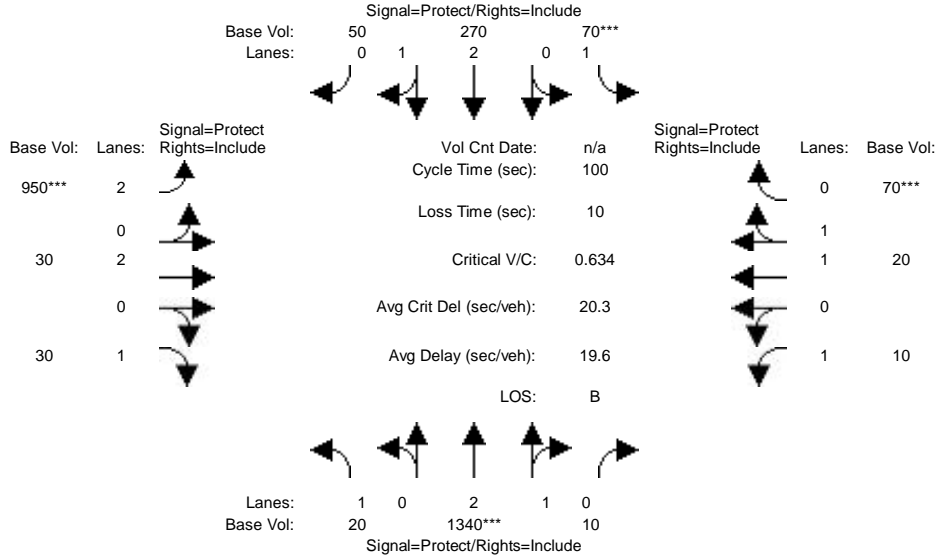


Street Name:	Wilmington Ave.				Artesia Blvd. EB							
Approach:	North Bound			South Bound			East Bound		West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	510	1900	310	340	0	190	30	80	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	510	1900	310	340	0	190	30	80	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	510	1900	310	340	0	190	30	80	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	510	1900	310	340	0	190	30	80	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	510	1900	310	340	0	190	30	80	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.90	0.30	0.80	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	3046	479	1275	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.16	0.59	0.05	0.11	0.00	0.06	0.06	0.06	0.00	0.00	0.00
Crit Moves:		****	****			****						

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Post-Game

Intersection #19: Wilmington Ave. & Victoria St.

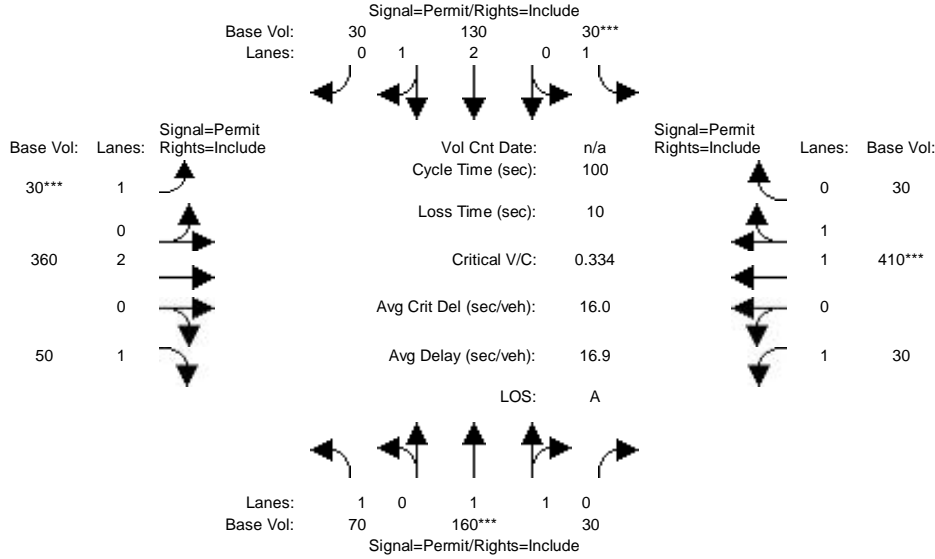


Street Name:	Wilmington Ave.				Victoria St.							
Approach:	North Bound			South Bound			East Bound		West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	20	1340	10	70	270	50	950	30	30	10	20	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	1340	10	70	270	50	950	30	30	10	20	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	1340	10	70	270	50	950	30	30	10	20	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	1340	10	70	270	50	950	30	30	10	20	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	1340	10	70	270	50	950	30	30	10	20	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.98	0.02	1.00	2.53	0.47	2.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	4764	36	1600	4050	750	5760	3200	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.28	0.28	0.04	0.07	0.07	0.16	0.01	0.02	0.01	0.01	0.04
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Post-Game

Intersection #22: Figueroa St. & 190th St./Victoria St.

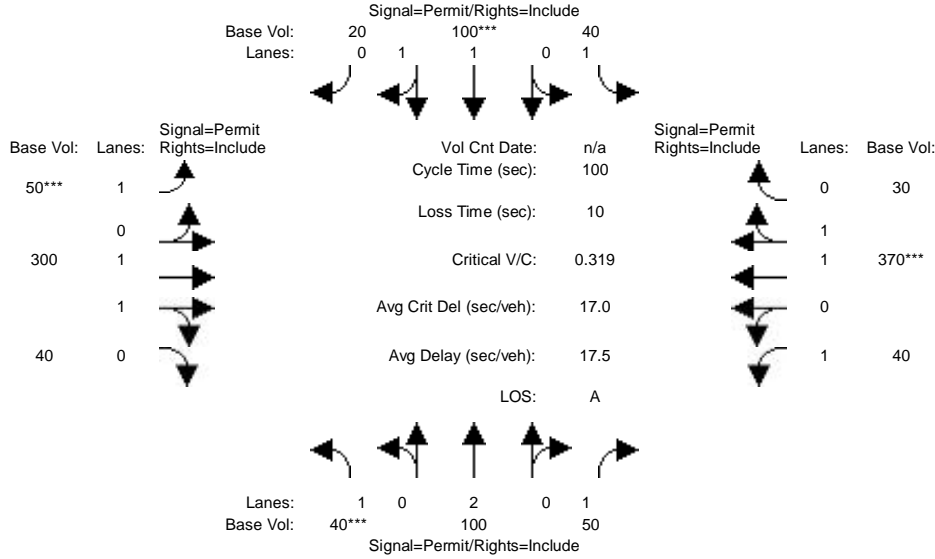


Street Name:	Figueroa St.						190th St./Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	70	160	30	30	130	30	30	360	50	30	410	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	160	30	30	130	30	30	360	50	30	410	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	160	30	30	130	30	30	360	50	30	410	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	160	30	30	130	30	30	360	50	30	410	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	70	160	30	30	130	30	30	360	50	30	410	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.68	0.32	1.00	2.44	0.56	1.00	2.00	1.00	1.00	1.86	0.14
Final Sat.:	1600	2695	505	1600	3900	900	1600	3200	1600	1600	2982	218
Capacity Analysis Module:												
Vol/Sat:	0.04	0.06	0.06	0.02	0.03	0.03	0.02	0.11	0.03	0.02	0.14	0.14
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Post-Game

Intersection #24: Main St. & Victoria St.

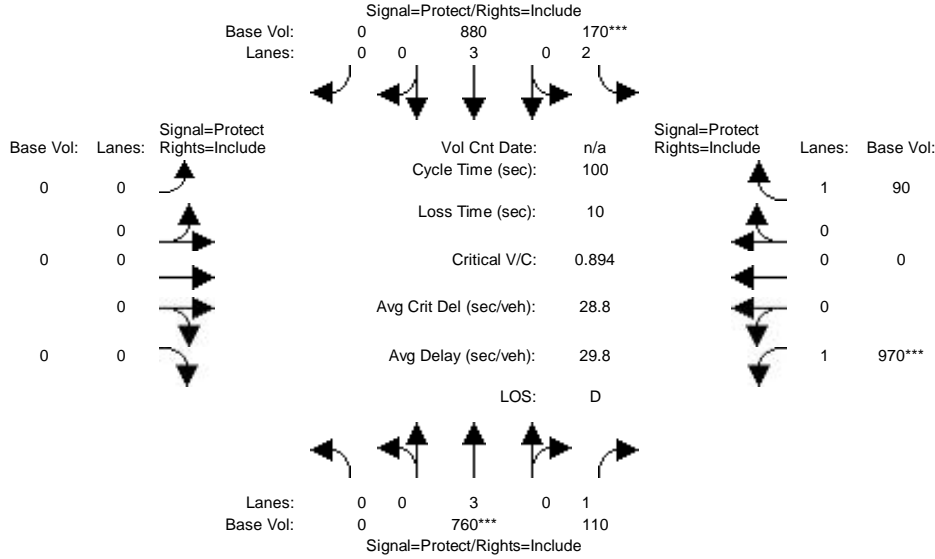


Street Name:	Main St.						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	40	100	50	40	100	20	50	300	40	40	370	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	100	50	40	100	20	50	300	40	40	370	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	100	50	40	100	20	50	300	40	40	370	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	100	50	40	100	20	50	300	40	40	370	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	100	50	40	100	20	50	300	40	40	370	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.67	0.33	1.00	1.76	0.24	1.00	1.85	0.15
Final Sat.:	1600	3200	1600	1600	2667	533	1600	2824	376	1600	2960	240
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.03	0.03	0.04	0.04	0.03	0.11	0.11	0.03	0.13	0.13
Crit Moves:	****			****		****	****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Post-Game

Intersection #25: Avalon Blvd. & University Dr.

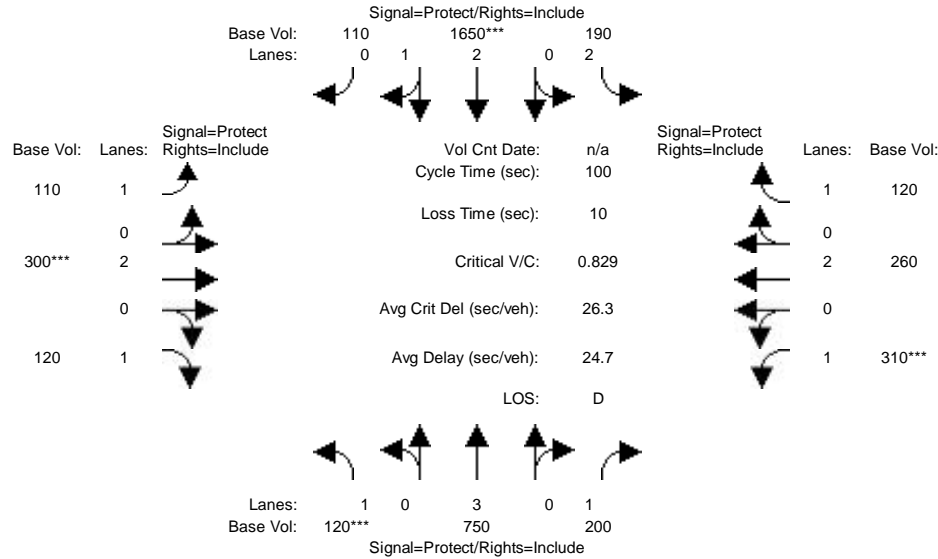


Street Name:	Avalon Blvd.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	760	110	170	880	0	0	0	0	970	0	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	760	110	170	880	0	0	0	0	970	0	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	760	110	170	880	0	0	0	0	970	0	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	760	110	170	880	0	0	0	0	970	0	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	760	110	170	880	0	0	0	0	970	0	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.16	0.07	0.03	0.18	0.00	0.00	0.00	0.00	0.00	0.61	0.00
Crit Moves:	****			****						****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Post-Game

Intersection #26: Avalon Blvd. & Del Amo Blvd.

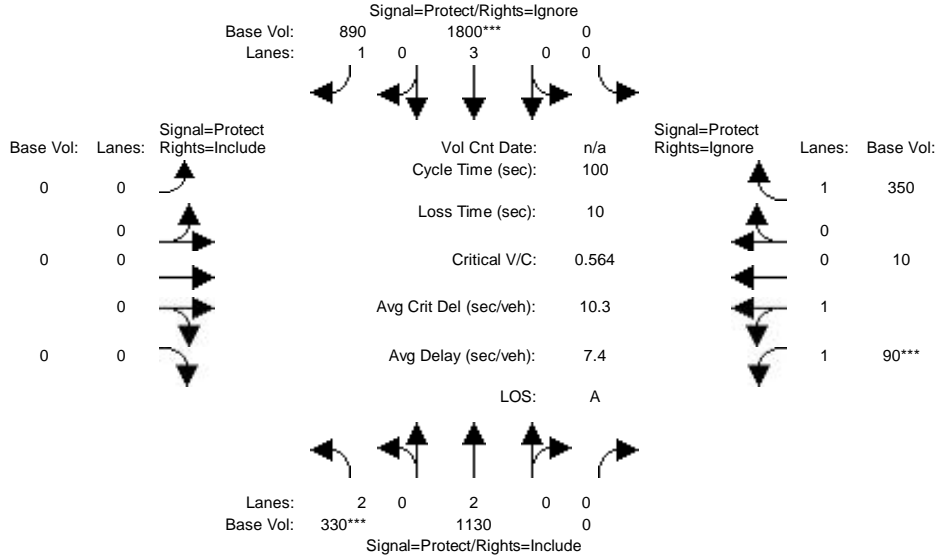


Street Name:	Avalon Blvd.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	120	750	200	190	1650	110	110	300	120	310	260	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	120	750	200	190	1650	110	110	300	120	310	260	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	120	750	200	190	1650	110	110	300	120	310	260	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	750	200	190	1650	110	110	300	120	310	260	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	120	750	200	190	1650	110	110	300	120	310	260	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.81	0.19	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4500	300	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.16	0.13	0.03	0.37	0.37	0.07	0.09	0.08	0.19	0.08	0.08
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Post-Game

Intersection #27: Avalon Blvd. & I-405 NB Ramps

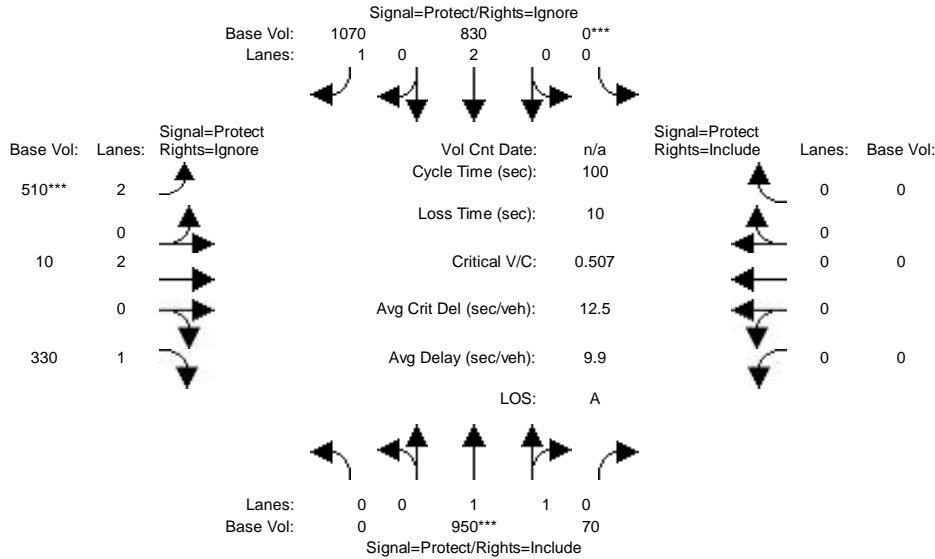


Street Name:	Avalon Blvd.						I-405 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	330	1130	0	0	1800	890	0	0	0	90	10	350
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	330	1130	0	0	1800	890	0	0	0	90	10	350
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	330	1130	0	0	1800	0	0	0	0	90	10	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	330	1130	0	0	1800	0	0	0	0	90	10	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	330	1130	0	0	1800	0	0	0	0	90	10	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.80	0.20	1.00
Final Sat.:	5760	3200	0	0	4800	1600	0	0	0	2880	320	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.35	0.00	0.00	0.38	0.00	0.00	0.00	0.00	0.00	0.03	0.03
Crit Moves:	****				****					****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Post-Game

Intersection #28: Avalon Blvd. & I-405 SB Ramps

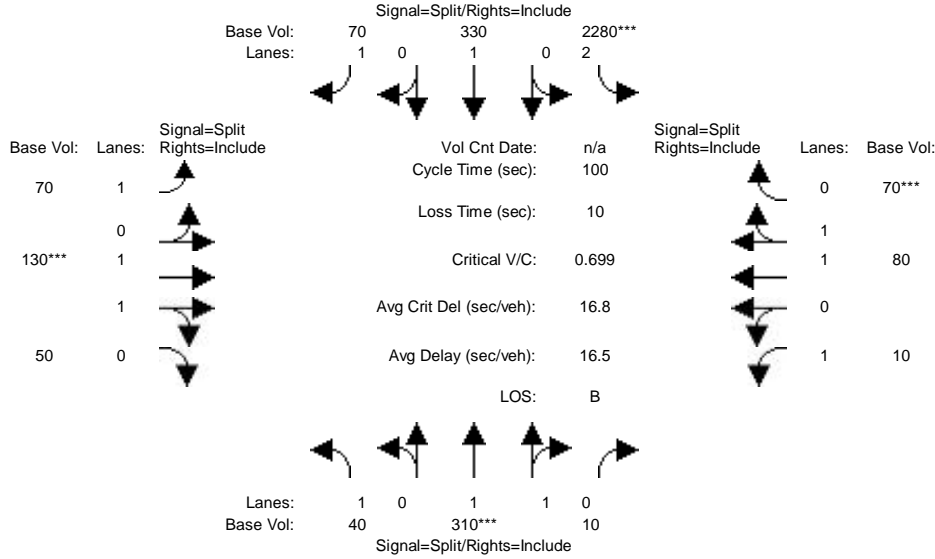


Street Name:	Avalon Blvd.						I-405 SB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	950	70	0	830	1070	510	10	330	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	950	70	0	830	1070	510	10	330	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	950	70	0	830	0	510	10	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	950	70	0	830	0	510	10	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Volume:	0	950	70	0	830	0	510	10	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.86	0.14	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	0	2980	220	0	3200	1600	5760	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.32	0.32	0.00	0.26	0.00	0.09	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Post-Game

Intersection #29: Central Ave. & University Dr.

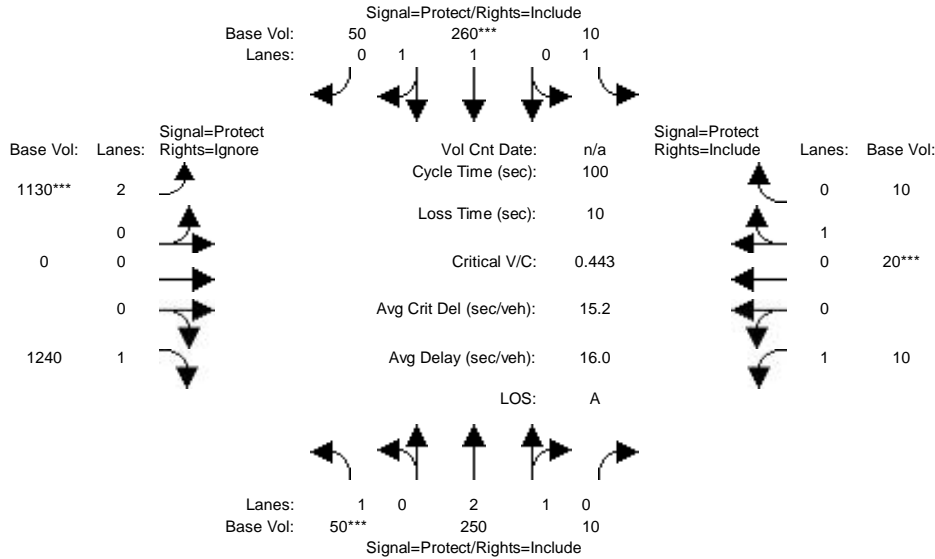


Street Name:	Central Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	40	310	10	2280	330	70	70	130	50	10	80	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	310	10	2280	330	70	70	130	50	10	80	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	310	10	2280	330	70	70	130	50	10	80	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	310	10	2280	330	70	70	130	50	10	80	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	310	10	2280	330	70	70	130	50	10	80	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.94	0.06	2.00	1.00	1.00	1.00	1.44	0.56	1.00	1.07	0.93
Final Sat.:	1600	3100	100	5760	1600	1600	1600	2311	889	1600	1707	1493
Capacity Analysis Module:												
Vol/Sat:	0.03	0.10	0.10	0.40	0.21	0.04	0.04	0.06	0.06	0.01	0.05	0.05
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Post-Game

Intersection #30: Wilmington Ave. & University Dr.

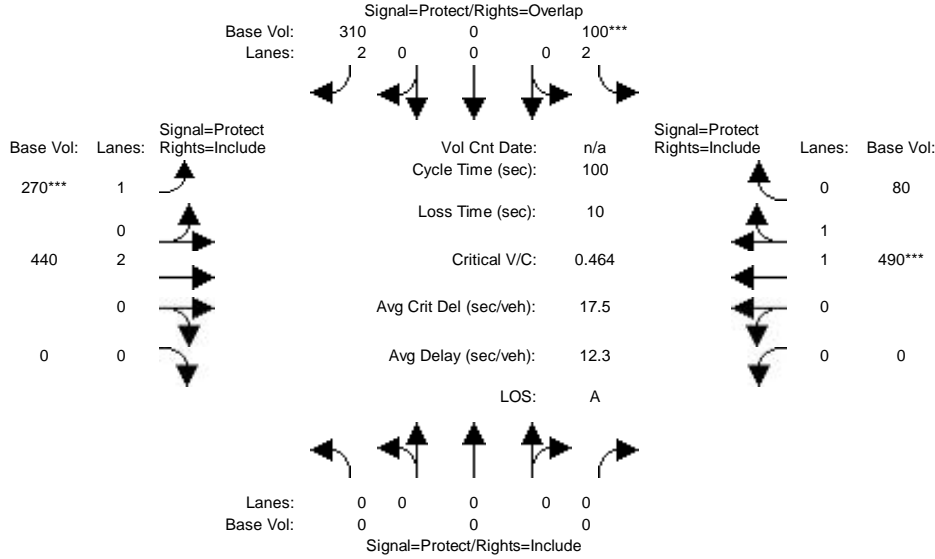


Street Name:	Wilmington Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	50	250	10	10	260	50	1130	0	1240	10	20	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	250	10	10	260	50	1130	0	1240	10	20	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
PHF Volume:	50	250	10	10	260	50	1130	0	0	10	20	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	250	10	10	260	50	1130	0	0	10	20	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
FinalVolume:	50	250	10	10	260	50	1130	0	0	10	20	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.88	0.12	1.00	1.68	0.32	2.00	0.00	1.00	1.00	0.67	0.33
Final Sat.:	1600	4615	185	1600	2684	516	5760	0	1600	1600	1067	533
Capacity Analysis Module:												
Vol/Sat:	0.03	0.05	0.05	0.01	0.10	0.10	0.20	0.00	0.00	0.01	0.02	0.02
Crit Moves:	****			****		****	****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Post-Game

Intersection #31: Central Ave. & Del Amo Blvd.

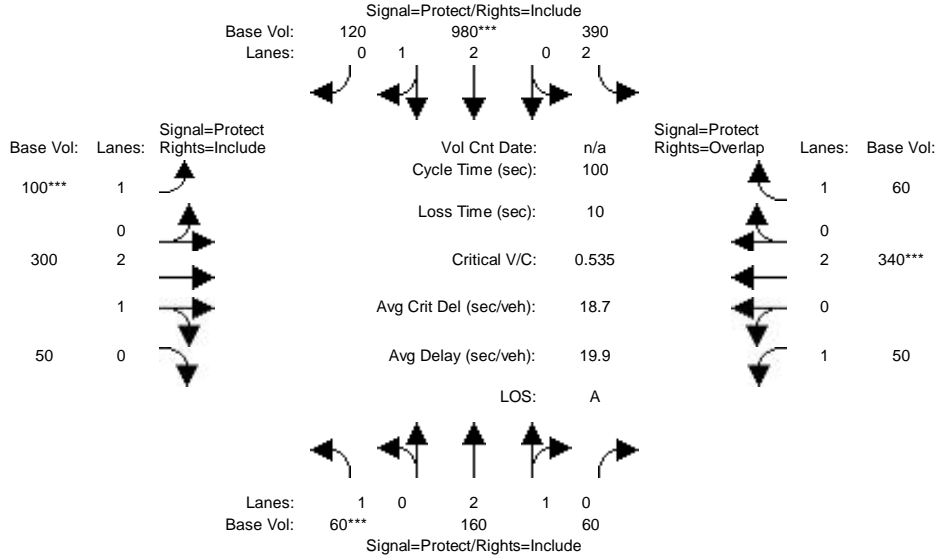


Street Name:	Central Ave.						Del Amo Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	100	0	310	270	440	0	0	490	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	100	0	310	270	440	0	0	490	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	100	0	310	270	440	0	0	490	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	100	0	310	270	440	0	0	490	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	100	0	310	270	440	0	0	490	80
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	2.00	1.00	2.00	0.00	0.00	1.72	0.28
Final Sat.:	0	0	0	5760	0	3200	1600	3200	0	0	2751	449
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.00	0.10	0.17	0.14	0.00	0.00	0.18	0.18
OvlAdjV/S:	0.00											
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Post-Game

Intersection #32: Wilmington Ave. & Del Amo Blvd.

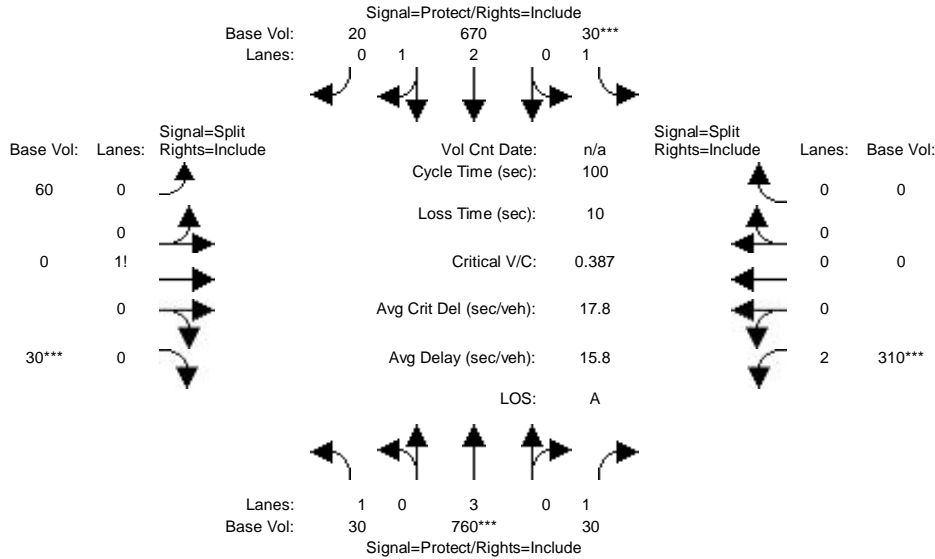


Street Name:	Wilmington Ave.						Del Amo Blvd.						
Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Volume Module:													
Base Vol:	60	160	60	390	980	120	100	300	50	50	340	60	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	60	160	60	390	980	120	100	300	50	50	340	60	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:	60	160	60	390	980	120	100	300	50	50	340	60	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	60	160	60	390	980	120	100	300	50	50	340	60	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
FinalVolume:	60	160	60	390	980	120	100	300	50	50	340	60	
OvlAdjVol:												0	
Saturation Flow Module:													
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Lanes:	1.00	2.18	0.82	2.00	2.67	0.33	1.00	2.57	0.43	1.00	2.00	1.00	
Final Sat.:	1600	3491	1309	5760	4276	524	1600	4114	686	1600	3200	1600	
Capacity Analysis Module:													
Vol/Sat:	0.04	0.05	0.05	0.07	0.23	0.23	0.06	0.07	0.07	0.03	0.11	0.04	
OvlAdjV/S:												0.00	
Crit Moves:	****						****	****					****

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Post-Game

Intersection #38: Avalon Blvd. & 184th St. - Drive A

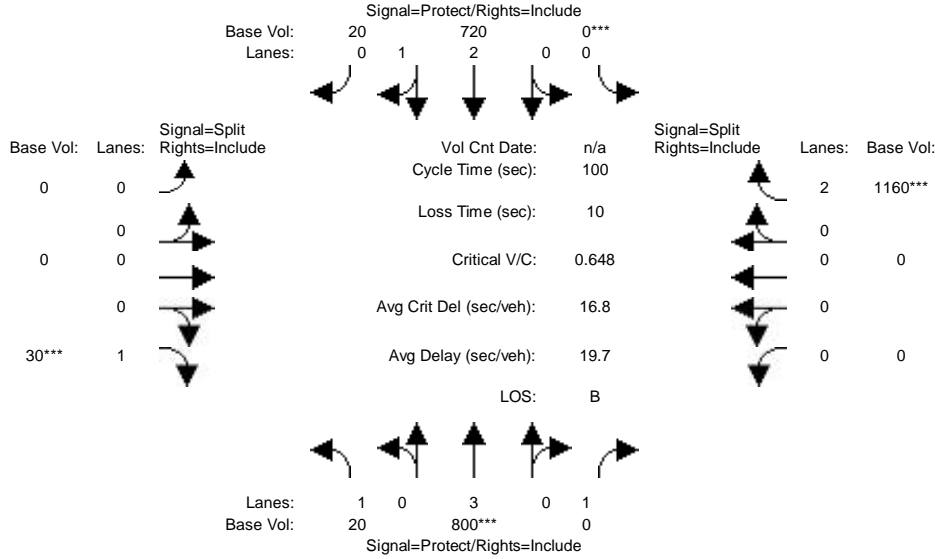


Street Name:	S. Avolon Blvd.				184th St.							
Approach:	North Bound		South Bound		East Bound		West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	30	760	30	30	670	20	60	0	30	310	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	760	30	30	670	20	60	0	30	310	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	760	30	30	670	20	60	0	30	310	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	760	30	30	670	20	60	0	30	310	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	760	30	30	670	20	60	0	30	310	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.91	0.09	0.67	0.00	0.33	2.00	0.00	0.00
Final Sat.:	1600	4800	1600	1600	4661	139	1067	0	533	5760	0	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.16	0.02	0.02	0.14	0.14	0.06	0.00	0.06	0.05	0.00	0.00
Crit Moves:	****			****			****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Post-Game

Intersection #39: Avalon Blvd. & 182nd St. - Drive B

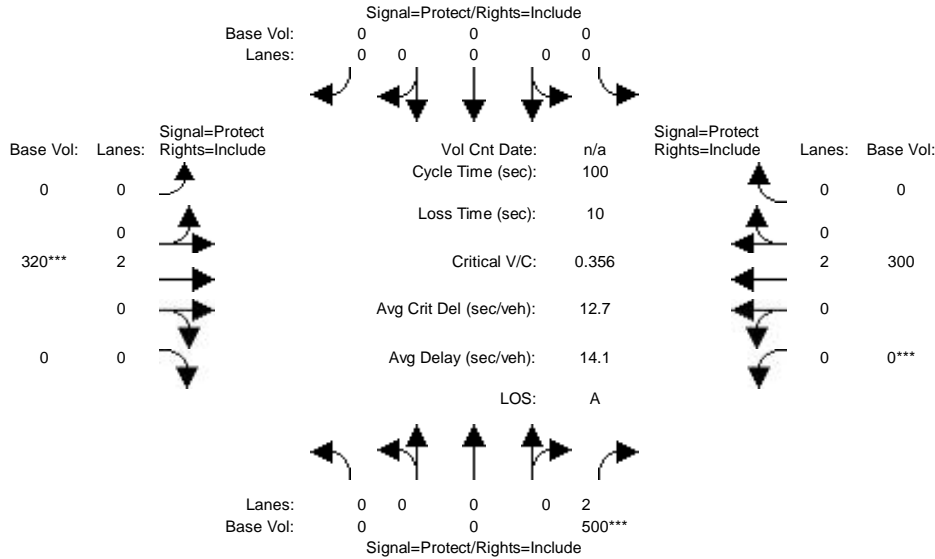


Street Name:	S. Avalon Blvd.						182nd St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	20	800	0	0	720	20	0	0	30	0	0	1160
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	800	0	0	720	20	0	0	30	0	0	1160
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	800	0	0	720	20	0	0	30	0	0	1160
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	800	0	0	720	20	0	0	30	0	0	1160
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	800	0	0	720	20	0	0	30	0	0	1160
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	0.00	2.92	0.08	0.00	0.00	1.00	0.00	0.00	2.00
Final Sat.:	1600	4800	1600	0	4670	130	0	0	1600	0	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.01	0.17	0.00	0.00	0.15	0.15	0.00	0.00	0.02	0.00	0.00	0.36
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Post-Game

Intersection #40: Victoria St. & Drive C

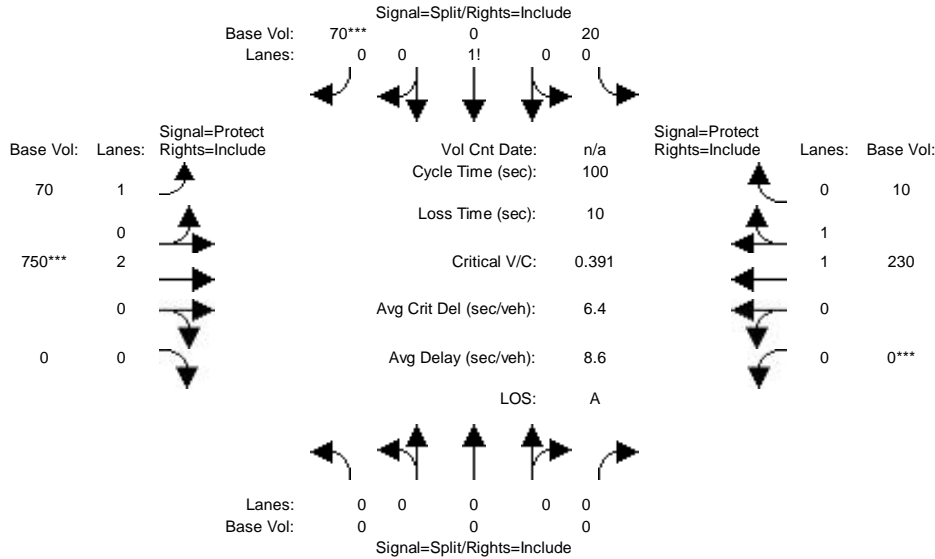


Street Name:	Drive C						E. Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	500	0	0	0	0	320	0	0	0	300
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	500	0	0	0	0	320	0	0	0	300
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	500	0	0	0	0	320	0	0	0	300
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	500	0	0	0	0	320	0	0	0	300
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	500	0	0	0	0	320	0	0	0	300
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	2.00
Final Sat.:	0	0	3200	0	0	0	0	3200	0	0	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.09
Crit Moves:			****				****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Post-Game

Intersection #41: Victoria St. & Rainsbury Ave.

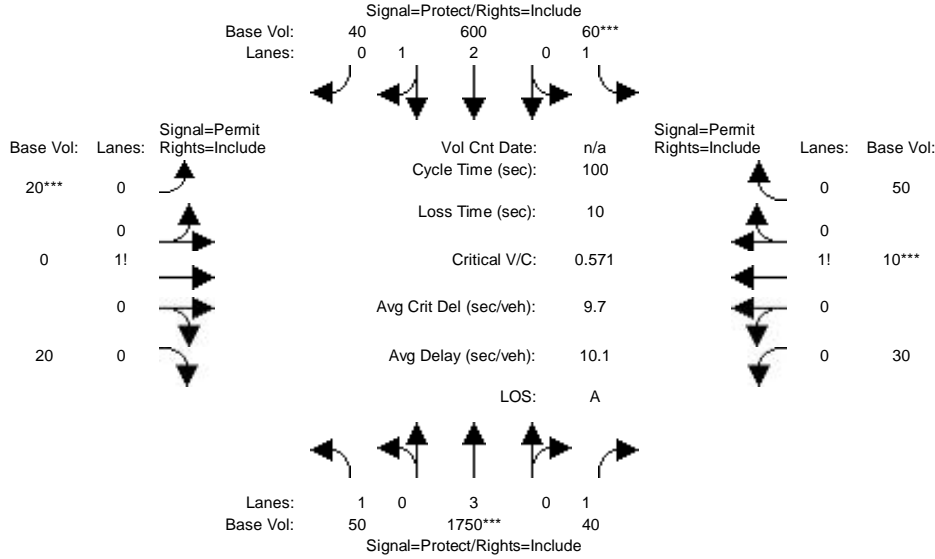


Street Name:	E. Victoria St.				Rainsbury Ave.							
Approach:	North Bound			South Bound			East Bound		West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	20	0	70	70	750	0	0	230	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	20	0	70	70	750	0	0	230	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	20	0	70	70	750	0	0	230	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	20	0	70	70	750	0	0	230	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	20	0	70	70	750	0	0	230	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.22	0.00	0.78	1.00	2.00	0.00	0.00	1.92	0.08
Final Sat.:	0	0	0	356	0	1244	1600	3200	0	0	3067	133
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.06	0.00	0.06	0.04	0.23	0.00	0.00	0.07	0.08
Crit Moves:				****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2019 with 30k-Seat Sunday Post-Game

Intersection #42: Avalon Blvd. & Harbor Village / Colony Cove



Street Name:	Avalon Blvd.						Harbor Village / Colony Cove					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	50	1750	40	60	600	40	20	0	20	30	10	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	1750	40	60	600	40	20	0	20	30	10	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	1750	40	60	600	40	20	0	20	30	10	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	1750	40	60	600	40	20	0	20	30	10	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	1750	40	60	600	40	20	0	20	30	10	50
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.81	0.19	0.50	0.00	0.50	0.33	0.11	0.56
Final Sat.:	1600	4800	1600	1600	4500	300	800	0	800	533	178	889
Capacity Analysis Module:												
Vol/Sat:	0.03	0.36	0.03	0.04	0.13	0.13	0.01	0.00	0.03	0.02	0.06	0.06
Crit Moves:	****			****			****			****		

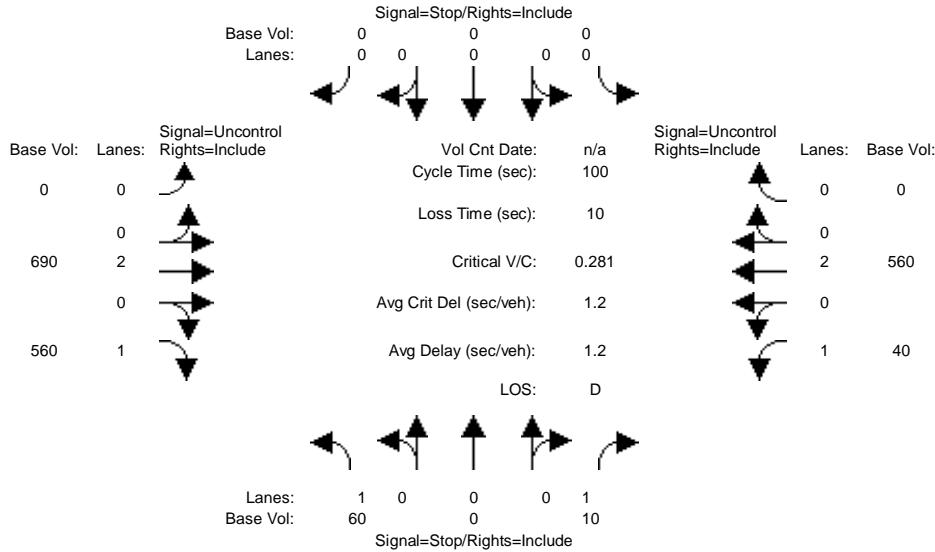
Appendix L

Intersection LOS Worksheets for 2025 Weekday No Project Conditions

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2025 No Project Weekday AM

Intersection #1: Victoria St. & Drive D



Street Name:	Drive D						Victoria St..					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	60	0	10	0	0	0	0	690	560	40	560	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	0	10	0	0	0	0	690	560	40	560	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	0	10	0	0	0	0	690	560	40	560	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	60	0	10	0	0	0	0	690	560	40	560	0
Critical Gap Module:												
Critical Gp:	6.8	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	1050	xxxx	345	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1250	xxxx	xxxxx
Potent Cap.:	226	xxxx	657	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	564	xxxx	xxxxx
Move Cap.:	214	xxxx	657	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	564	xxxx	xxxxx
Volume/Cap:	0.28	xxxx	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.07	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	1.1	xxxx	0.0	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx
Control Del:	28.3	xxxx	10.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	11.9	xxxx	xxxxx
LOS by Move:	D	*	B	*	*	*	*	*	*	B	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	25.8			xxxxxx			xxxxxx			xxxxxx		

ApproachLOS: D * * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #1 Victoria St. & Drive D

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 2 0 1	1 0 2 0 0
Initial Vol:	60 0 10	0 0 0	0 690 560	40 560 0
ApproachDel:	25.8	xxxxxx	xxxxxx	xxxxxx

Approach[northbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.5]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=70]

FAIL - Approach volume less than 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=1920]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #1 Victoria St. & Drive D

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 2 0 1	1 0 2 0 0
Initial Vol:	60 0 10	0 0 0	0 690 560	40 560 0

Major Street Volume: 1850

Minor Approach Volume: 70

Minor Approach Volume Threshold: 110 [less than minimum of 150]

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

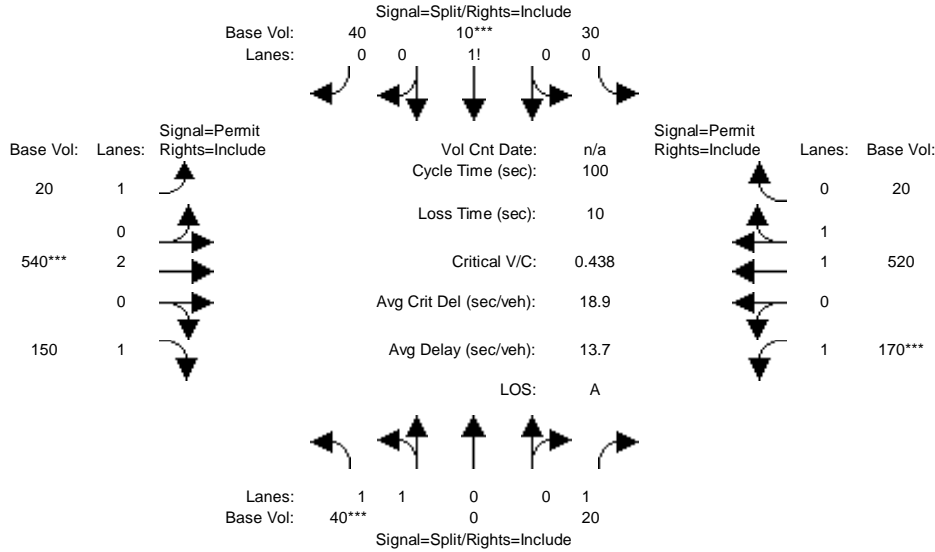
The peak hour warrant analysis in this report is not intended to replace

a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday AM

Intersection #2: Victoria St. & Tamcliff Ave.

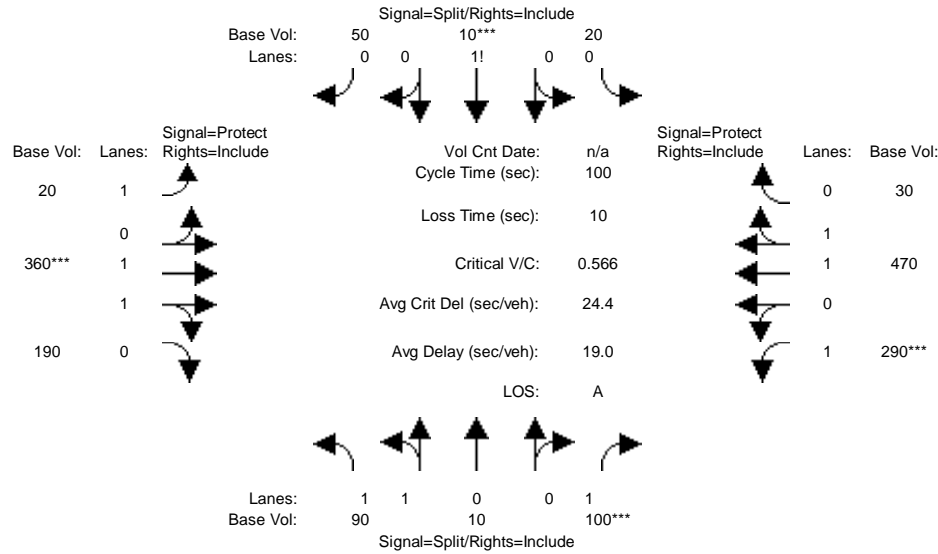


Street Name:	Victoria St.						Tamcliff Ave.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	40	0	20	30	10	40	20	540	150	170	520	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	0	20	30	10	40	20	540	150	170	520	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	0	20	30	10	40	20	540	150	170	520	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	0	20	30	10	40	20	540	150	170	520	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	40	0	20	30	10	40	20	540	150	170	520	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.38	0.12	0.50	1.00	2.00	1.00	1.00	1.93	0.07
Final Sat.:	3200	0	1600	600	200	800	1600	3200	1600	1600	3081	119
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.01	0.05	0.05	0.05	0.01	0.17	0.09	0.11	0.17	0.17
Crit Moves:	***			***	***		***	***		***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday AM

Intersection #3: Victoria St. & Birchknoll Dr.

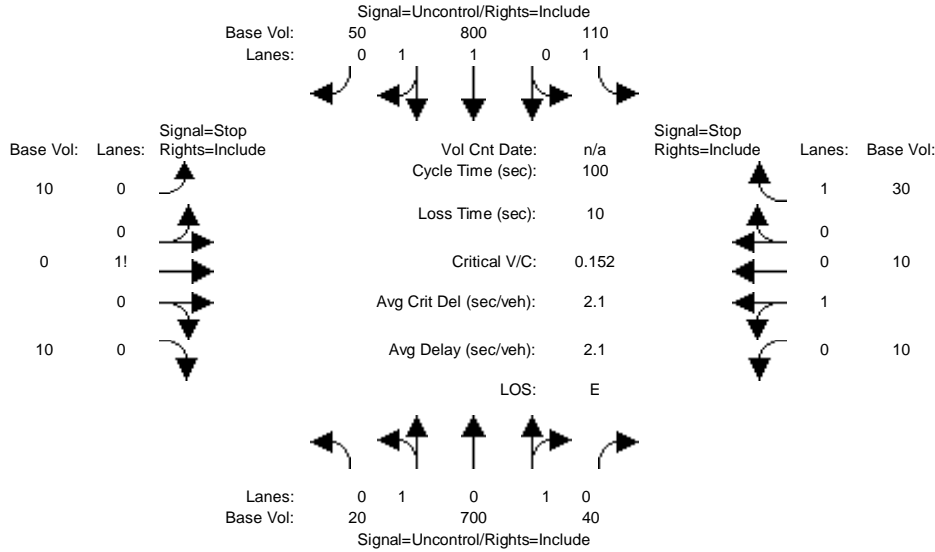


Street Name:	Victoria St.						Birchknoll Dr.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	90	10	100	20	10	50	20	360	190	290	470	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	10	100	20	10	50	20	360	190	290	470	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	10	100	20	10	50	20	360	190	290	470	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	10	100	20	10	50	20	360	190	290	470	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	90	10	100	20	10	50	20	360	190	290	470	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.80	0.20	1.00	0.25	0.12	0.63	1.00	1.31	0.69	1.00	1.88	0.12
Final Sat.:	2880	320	1600	400	200	1000	1600	2095	1105	1600	3008	192
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.06	0.05	0.05	0.05	0.01	0.17	0.17	0.18	0.16	0.16
Crit Moves:			***			***			***			***

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2025 No Project Weekday AM

Intersection #5: Central Ave. & Charles Willard St.



Street Name:	Central Ave.						Charles Willard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	20	700	40	110	800	50	10	0	10	10	10	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	700	40	110	800	50	10	0	10	10	10	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	700	40	110	800	50	10	0	10	10	10	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	20	700	40	110	800	50	10	0	10	10	10	30
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	4.1	xxxx	xxxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxxx	2.2	xxxx	xxxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflct Vol:	850	xxxx	xxxxxx	740	xxxx	xxxxxx	1440	1825	425	1380	1830	370
Potent Cap.:	797	xxxx	xxxxxx	876	xxxx	xxxxxx	95	78	583	105	77	633
Move Cap.:	797	xxxx	xxxxxx	876	xxxx	xxxxxx	71	66	583	92	66	633
Volume/Cap:	0.03	xxxx	xxxxxx	0.13	xxxx	xxxxxx	0.14	0.00	0.02	0.11	0.15	0.05
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxxx	0.4	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	0.1
Control Del:	9.6	xxxx	xxxxxx	9.7	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	11.0
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	B
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	127	xxxxxx	77	xxxx	xxxxxx
Shared Queue:	0.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	0.5	xxxxxx	0.9	xxxx	xxxxxx
Shrd ConDel:	9.6	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	38.6	xxxxxx	67.7	xxxx	xxxxxx
Shared LOS:	A	*	*	*	*	*	*	E	*	F	*	*

ApproachDel: xxxxxxx xxxxxxx 38.6 33.7
 ApproachLOS: * * E D

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #5 Central Ave. & Charles Willard St.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 1 0 1 0	1 0 1 1 0	0 0 1! 0 0	0 1 0 0 1
Initial Vol:	20 700 40	110 800 50	10 0 10	10 10 30
ApproachDel:	xxxxxxx	xxxxxxx	38.6	33.7

Approach[eastbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.2]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=20]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=1790]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Approach[westbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.5]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=50]

FAIL - Approach volume less than 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=1790]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #5 Central Ave. & Charles Willard St.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 1 0 1 0	1 0 1 1 0	0 0 1! 0 0	0 1 0 0 1
Initial Vol:	20 700 40	110 800 50	10 0 10	10 10 30
Major Street Volume:	1720			
Minor Approach Volume:	50			

Minor Approach Volume Threshold: 141 [less than minimum of 150]

SIGNAL WARRANT DISCLAIMER

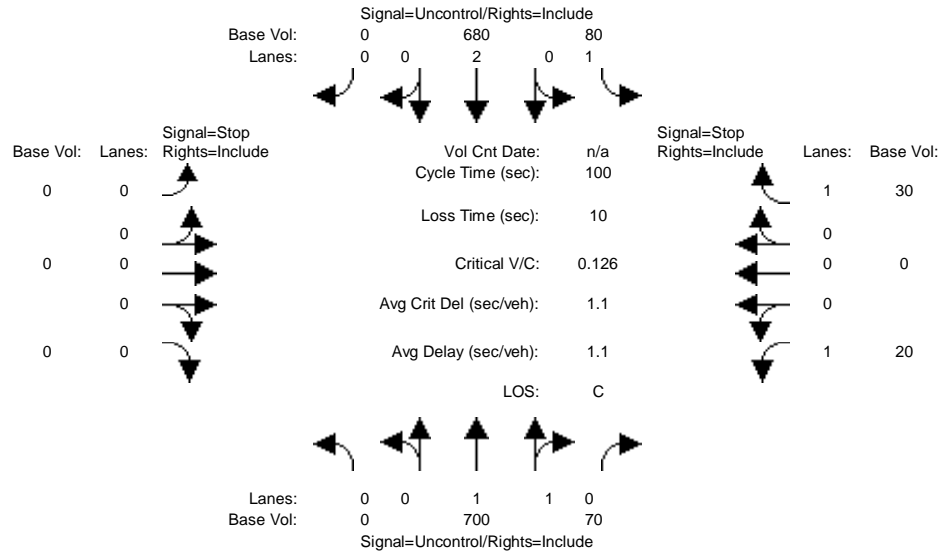
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Transportation Study for CSUDH Campus Master Plan 2018

Level of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
2025 No Project Weekday AM

Intersection #6: Central Ave. & Project Driveway/Beachey Pl.



Street Name:	Central Ave.					Beachey Pl.									
Approach:	North Bound			South Bound		East Bound			West Bound						
Movement:	L	T	R	L	T	R	L	T	R	L	T	R			
Volume Module:															
Base Vol:	0	700	70	80	680	0	0	0	0	20	0	30			
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Initial Bse:	0	700	70	80	680	0	0	0	0	20	0	30			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Volume:	0	700	70	80	680	0	0	0	0	20	0	30			
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0			
FinalVolume:	0	700	70	80	680	0	0	0	0	20	0	30			
Critical Gap Module:															
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	6.8	xxxx	6.9			
FollowUpTim:	xxxxx	xxxx	xxxxxx	2.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	3.5	xxxx	3.3			
Capacity Module:															
Cnflct Vol:	xxxx	xxxx	xxxxxx	770	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	1235	xxxx	385			
Potent Cap.:	xxxx	xxxx	xxxxxx	854	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	171	xxxx	619			
Move Cap.:	xxxx	xxxx	xxxxxx	854	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	159	xxxx	619			
Volume/Cap:	xxxx	xxxx	xxxx	0.09	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	0.13	xxxx	0.05			
Level of Service Module:															
2Way95thQ:	xxxx	xxxx	xxxxxx	0.3	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	0.4	xxxx	0.2			
Control Del:	xxxxx	xxxx	xxxxxx	9.7	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	30.8	xxxx	11.1			
LOS by Move:	*	*	*	A	*	*	*	*	*	D	*	B			
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx			
SharedQueue:	xxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx			
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx			
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*			

ApproachDel: xxxxxx xxxxxx xxxxxx 19.0
 ApproachLOS: * * * C

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #6 Central Ave. & Project Driveway/Beachey Pl.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 0 1 1 0	1 0 2 0 0	0 0 0 0 0	1 0 0 0 1
Initial Vol:	0 700 70	80 680 0	0 0 0 0	20 0 30
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	19.0

-----|-----|-----|-----|-----|

Approach[westbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.3]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=50]

FAIL - Approach volume less than 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=1580]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #6 Central Ave. & Project Driveway/Beachey Pl.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 0 1 1 0	1 0 2 0 0	0 0 0 0 0	1 0 0 0 1
Initial Vol:	0 700 70	80 680 0	0 0 0 0	20 0 30

-----|-----|-----|-----|-----|

Major Street Volume: 1530
 Minor Approach Volume: 50
 Minor Approach Volume Threshold: 191

SIGNAL WARRANT DISCLAIMER

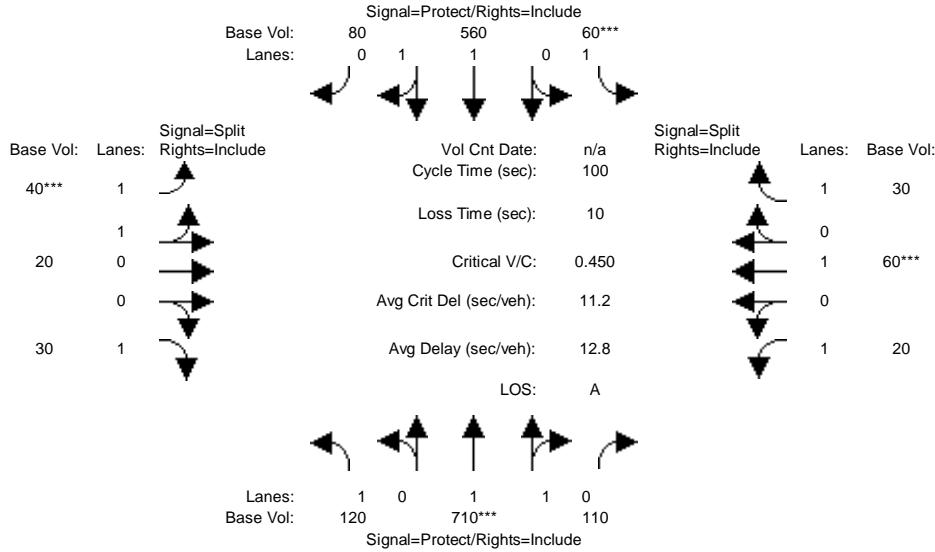
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday AM

Intersection #7: Central Ave. & Glenn Curtiss St.

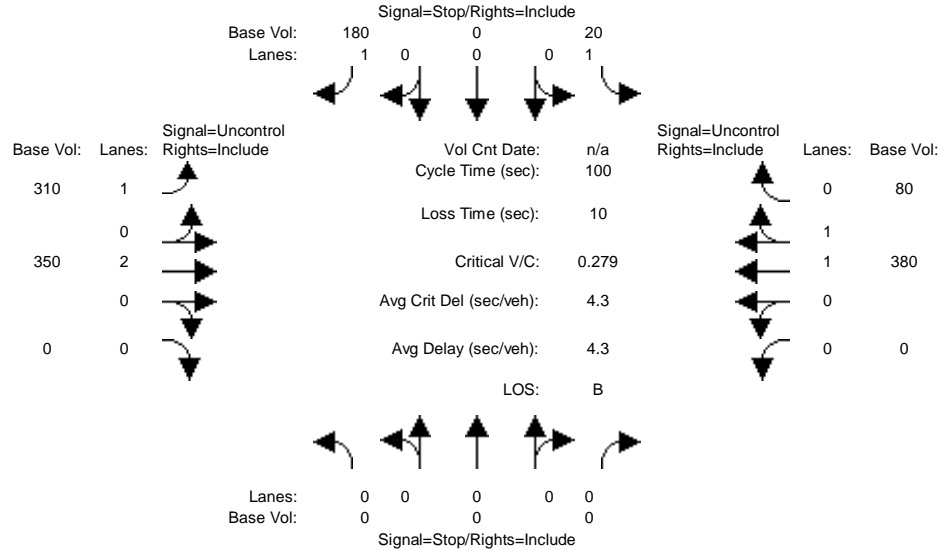


Street Name:	Central Ave.						Glenn Curtiss St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	120	710	110	60	560	80	40	20	30	20	60	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	120	710	110	60	560	80	40	20	30	20	60	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	120	710	110	60	560	80	40	20	30	20	60	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	710	110	60	560	80	40	20	30	20	60	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	120	710	110	60	560	80	40	20	30	20	60	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.73	0.27	1.00	1.75	0.25	1.33	0.67	1.00	1.00	1.00	1.00
Final Sat.:	1600	2771	429	1600	2800	400	2133	1067	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.26	0.26	0.04	0.20	0.20	0.02	0.02	0.02	0.01	0.04	0.02
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2025 No Project Weekday AM

Intersection #9: University Dr. & Toro Center Dr.



Street Name:	University Dr.						Toro Center Dr.						
Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Volume Module:													
Base Vol:	0	0	0	20	0	180	310	350	0	0	0	380	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	20	0	180	310	350	0	0	0	380	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	20	0	180	310	350	0	0	0	380	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	20	0	180	310	350	0	0	0	380	80
Critical Gap Module:													
Critical Gp:	xxxxx	xxxx	xxxxx	6.8	xxxx	6.9	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
Capacity Module:													
Cnflct Vol:	xxxx	xxxx	xxxxx	1215	xxxx	230	460	xxxx	xxxxx	xxxx	xxxx	xxxxx	
Potent Cap.:	xxxx	xxxx	xxxxx	177	xxxx	779	1112	xxxx	xxxxx	xxxx	xxxx	xxxxx	
Move Cap.:	xxxx	xxxx	xxxxx	139	xxxx	779	1112	xxxx	xxxxx	xxxx	xxxx	xxxxx	
Volume/Cap:	xxxx	xxxx	xxxx	0.14	xxxx	0.23	0.28	xxxx	xxxx	xxxx	xxxx	xxxx	
Level Of Service Module:													
2Way95thQ:	xxxx	xxxx	xxxxx	0.5	xxxx	0.9	1.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	35.3	xxxx	11.0	9.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
LOS by Move:	*	*	*	E	*	B	A	*	*	*	*	*	
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*	

ApproachDel:	xxxxxx	13.4	xxxxxx	xxxxxx
ApproachLOS:	*	B	*	*

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #9 University Dr. & Toro Center Dr.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 0	1 0 0 0 1	1 0 2 0 0	0 0 1 1 0
Initial Vol:	0 0 0 0	20 0 180	310 350 0	0 380 80
ApproachDel:	xxxxxx	13.4	xxxxxx	xxxxxx

Approach[southbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.7]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=200]

SUCCEED - Approach volume >= 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=1320]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #9 University Dr. & Toro Center Dr.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 0	1 0 0 0 1	1 0 2 0 0	0 0 1 1 0
Initial Vol:	0 0 0 0	20 0 180	310 350 0	0 380 80

Major Street Volume: 1120

Minor Approach Volume: 200

Minor Approach Volume Threshold: 325

SIGNAL WARRANT DISCLAIMER

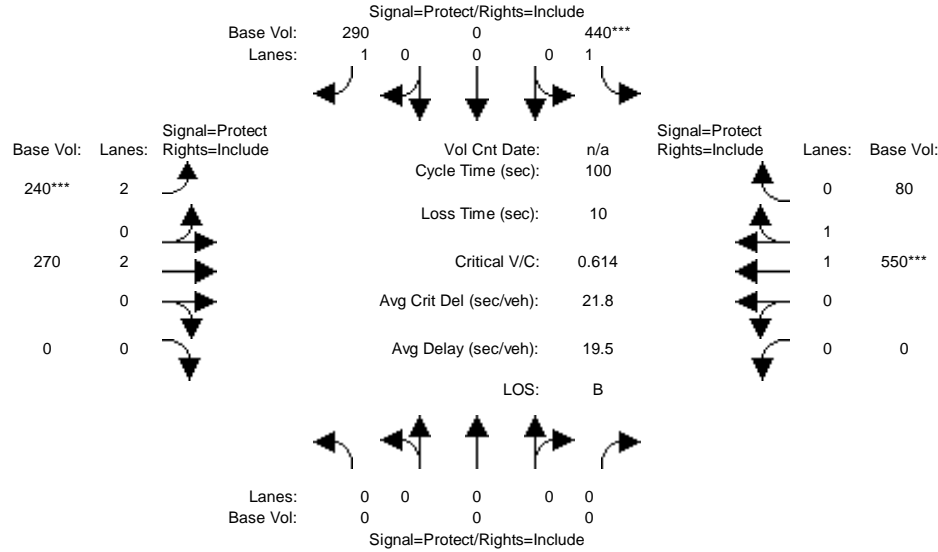
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday AM

Intersection #10: Albertoni St. & SR 91 EB Ramps

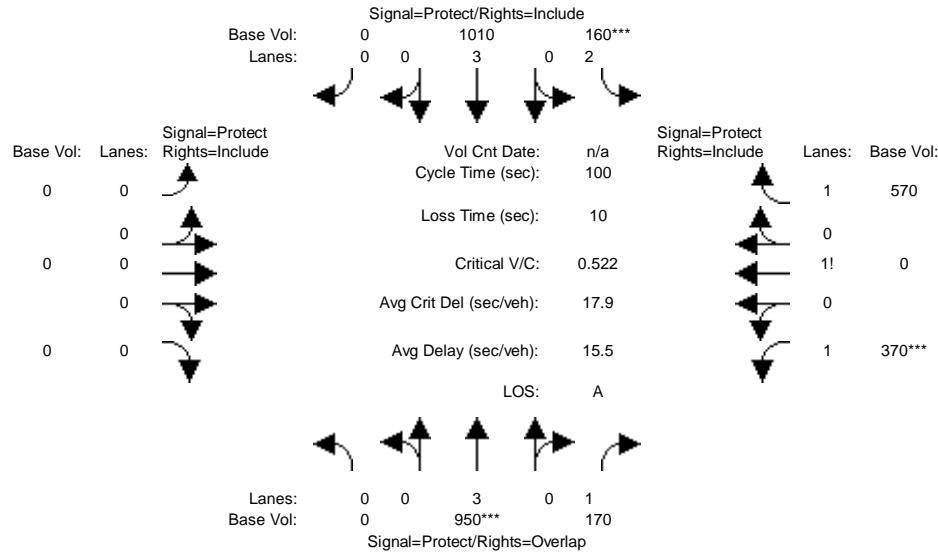


Street Name:	Albertoni St.						SR 91 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	440	0	290	240	270	0	0	550	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	440	0	290	240	270	0	0	550	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	440	0	290	240	270	0	0	550	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	440	0	290	240	270	0	0	550	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	440	0	290	240	270	0	0	550	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.75	0.25
Final Sat.:	0	0	0	1600	0	1600	5760	3200	0	0	2794	406
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.28	0.00	0.18	0.04	0.08	0.00	0.00	0.20	0.20
Crit Moves:				***			***				***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday AM

Intersection #11: Avalon Blvd. & SR 91 WB On-Ramp

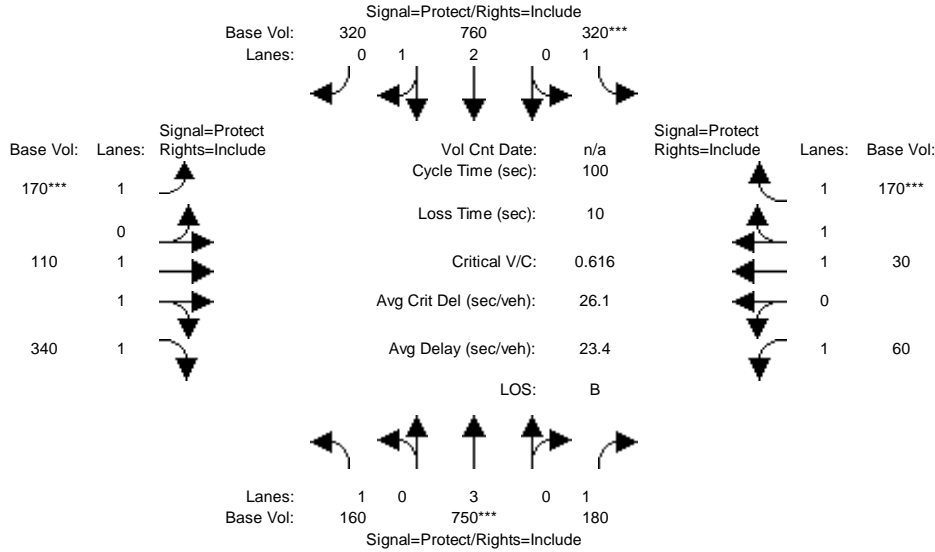


Street Name:	Avalon Blvd.						SR 91 WB On-Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	950	170	160	1010	0	0	0	0	370	0	570
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	950	170	160	1010	0	0	0	0	370	0	570
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	950	170	160	1010	0	0	0	0	370	0	570
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	950	170	160	1010	0	0	0	0	370	0	570
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	950	170	160	1010	0	0	0	0	370	0	570
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.18	xxxx	1.82
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	1889	0	2911
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.11	0.03	0.21	0.00	0.00	0.00	0.00	0.20	0.00	0.20
OvlAdjV/S:	0.00											
Crit Moves:	****			****						****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday AM

Intersection #12: Avalon Blvd. & Albertoni St.

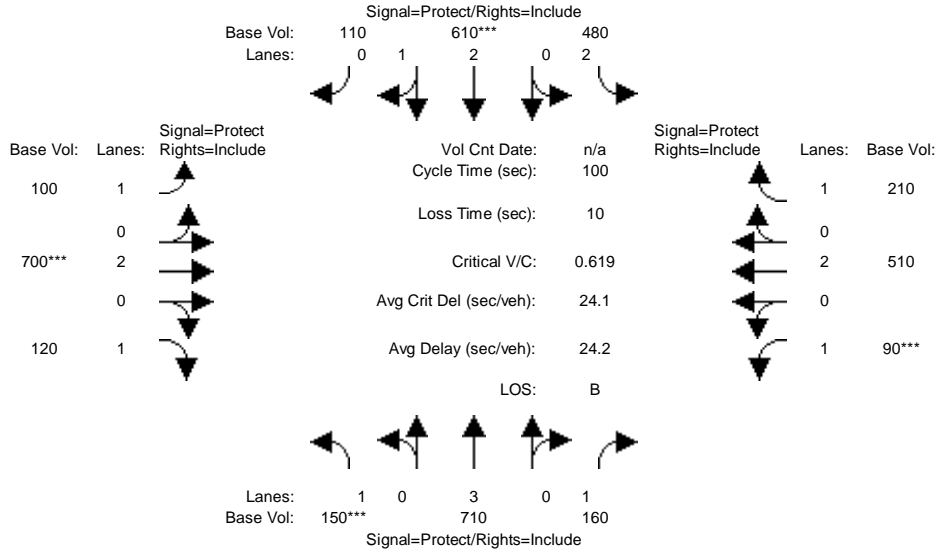


Street Name:	Avalon Blvd.						Albertoni St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	160	750	180	320	760	320	170	110	340	60	30	170
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	160	750	180	320	760	320	170	110	340	60	30	170
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	160	750	180	320	760	320	170	110	340	60	30	170
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	750	180	320	760	320	170	110	340	60	30	170
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	160	750	180	320	760	320	170	110	340	60	30	170
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.11	0.89	1.00	1.00	2.00	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3378	1422	1600	1600	3200	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.10	0.16	0.11	0.20	0.22	0.23	0.11	0.07	0.11	0.04	0.02	0.05
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday AM

Intersection #13: Avalon Blvd. & Victoria St.

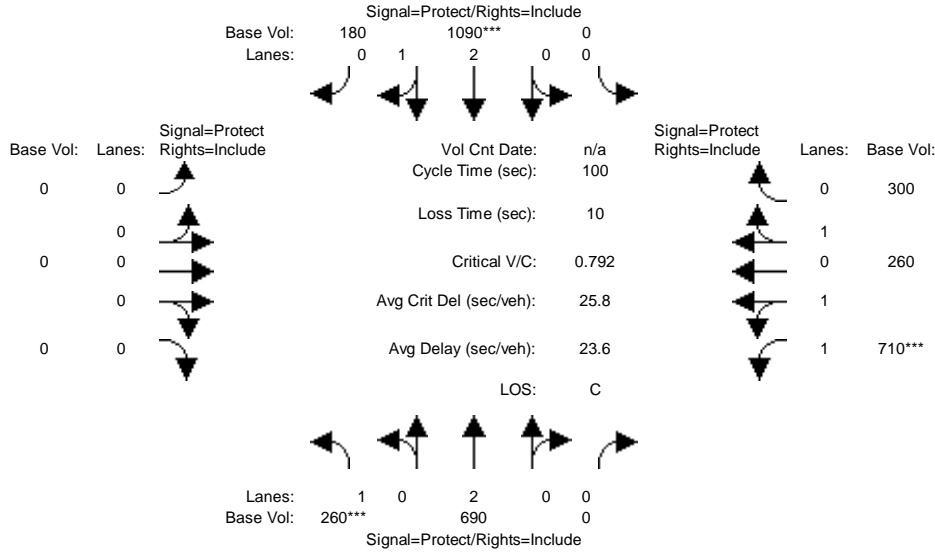


Street Name:	Avalon Blvd.						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	150	710	160	480	610	110	100	700	120	90	510	210
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	710	160	480	610	110	100	700	120	90	510	210
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	710	160	480	610	110	100	700	120	90	510	210
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	710	160	480	610	110	100	700	120	90	510	210
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	150	710	160	480	610	110	100	700	120	90	510	210
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.54	0.46	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4067	733	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.15	0.10	0.08	0.15	0.15	0.06	0.22	0.08	0.06	0.16	0.13
Crit Moves:	***			***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday AM

Intersection #14: Central Ave. & Artesia Blvd.

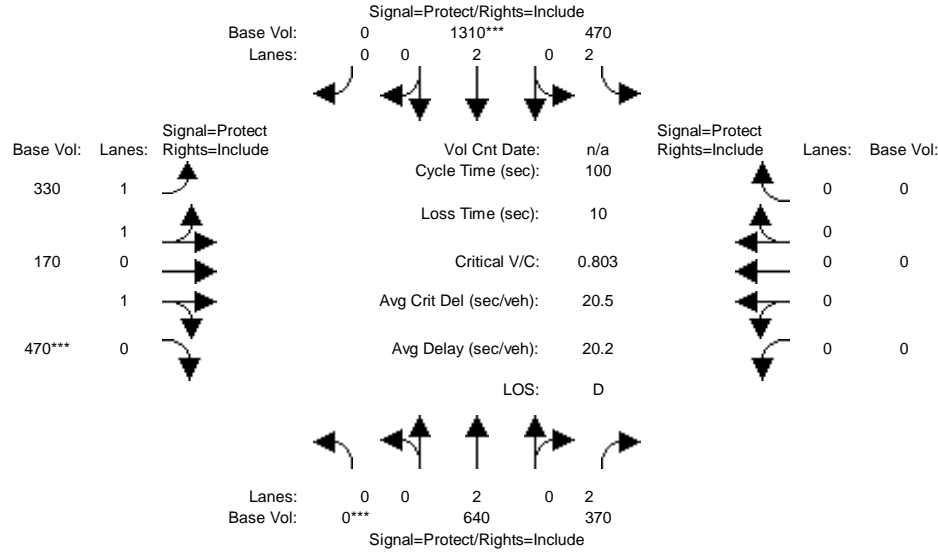


Street Name:	Central Ave.						Artesia Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	260	690	0	0	1090	180	0	0	0	710	260	300
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	260	690	0	0	1090	180	0	0	0	710	260	300
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	260	690	0	0	1090	180	0	0	0	710	260	300
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	260	690	0	0	1090	180	0	0	0	710	260	300
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	260	690	0	0	1090	180	0	0	0	710	260	300
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.57	0.43	0.00	0.00	0.00	1.68	0.61	0.71
Final Sat.:	1600	3200	0	0	4120	680	0	0	0	2680	983	1137
Capacity Analysis Module:												
Vol/Sat:	0.16	0.22	0.00	0.00	0.26	0.26	0.00	0.00	0.00	0.26	0.26	0.26
Crit Moves:	***				***	***				***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday AM

Intersection #15: Central Ave. & Albertoni St./Artesia Blvd. EB

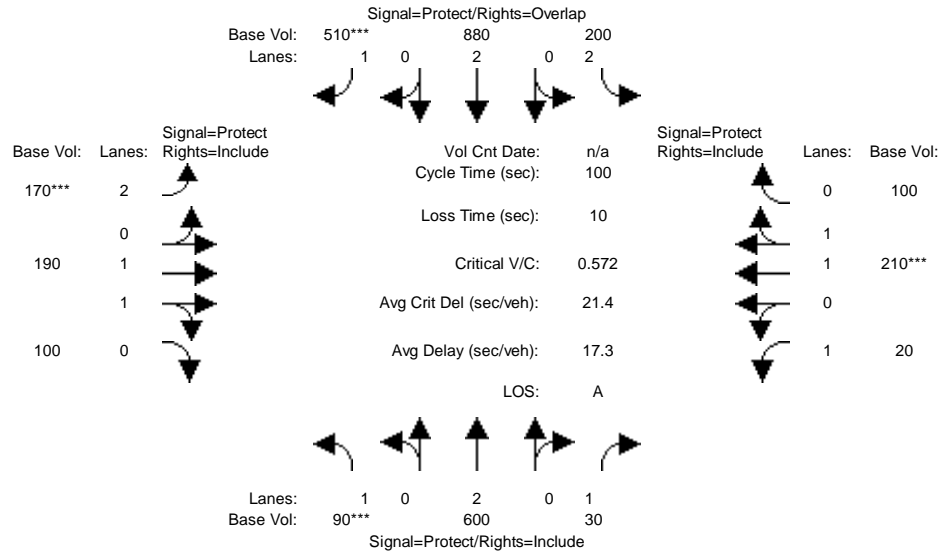


Street Name:	Central Ave.						Albertoni St./Artesia Blvd. EB					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	640	370	470	1310	0	330	170	470	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	640	370	470	1310	0	330	170	470	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	640	370	470	1310	0	330	170	470	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	640	370	470	1310	0	330	170	470	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	640	370	470	1310	0	330	170	470	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.32	0.68	1.00	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	2112	1088	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.12	0.08	0.41	0.00	0.16	0.16	0.29	0.00	0.00	0.00
Crit Moves:	***				***				***			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday AM

Intersection #16: Central Ave. & Victoria St.

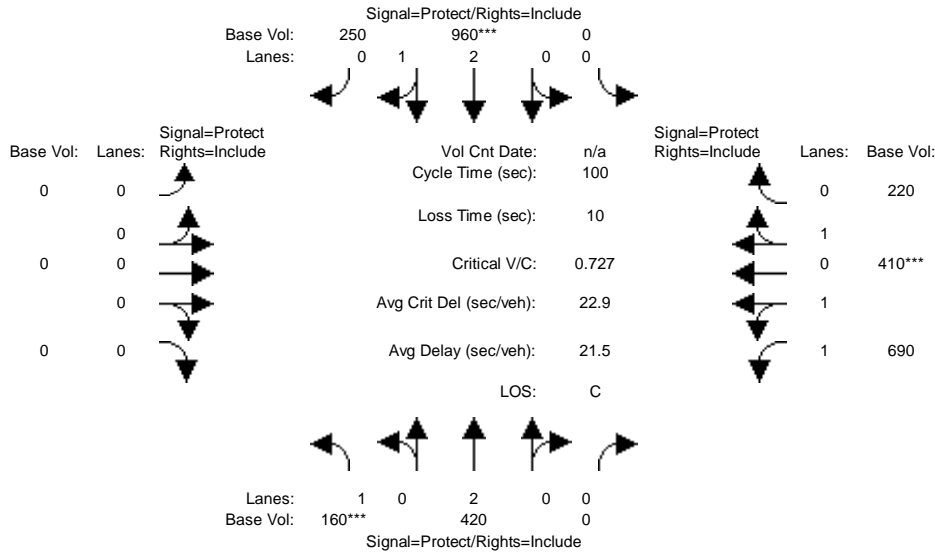


Street Name:	Central Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	90	600	30	200	880	510	170	190	100	20	210	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	600	30	200	880	510	170	190	100	20	210	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	600	30	200	880	510	170	190	100	20	210	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	600	30	200	880	510	170	190	100	20	210	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	90	600	30	200	880	510	170	190	100	20	210	100
OvlAdjVol:	463											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.31	0.69	1.00	1.35	0.65
Final Sat.:	1600	3200	1600	5760	3200	1600	5760	2097	1103	1600	2168	1032
Capacity Analysis Module:												
Vol/Sat:	0.06	0.19	0.02	0.03	0.28	0.32	0.03	0.09	0.09	0.01	0.10	0.10
OvlAdjV/S:	0.29											
Crit Moves:	***					***	***					***

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday AM

Intersection #17: Wilmington Ave. & Artesia Blvd. WB

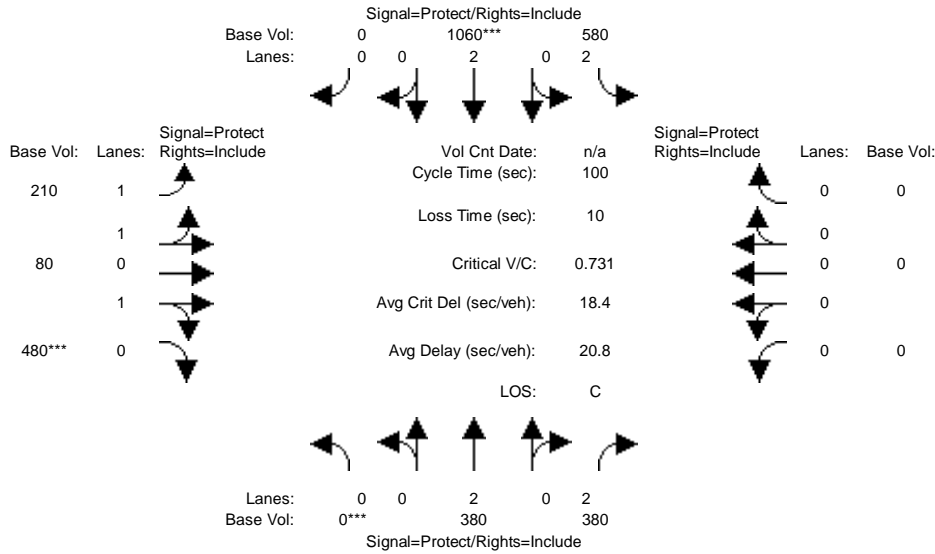


Street Name:	Wilmington Ave.						Artesia Blvd. WB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	160	420	0	0	960	250	0	0	0	690	410	220
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	160	420	0	0	960	250	0	0	0	690	410	220
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	160	420	0	0	960	250	0	0	0	690	410	220
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	420	0	0	960	250	0	0	0	690	410	220
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	160	420	0	0	960	250	0	0	0	690	410	220
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.38	0.62	0.00	0.00	0.00	1.57	0.93	0.50
Final Sat.:	1600	3200	0	0	3808	992	0	0	0	2513	1489	797
Capacity Analysis Module:												
Vol/Sat:	0.10	0.13	0.00	0.00	0.25	0.25	0.00	0.00	0.00	0.27	0.28	0.28
Crit Moves:	***				***						***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday AM

Intersection #18: Wilmington Ave. & Artesia Blvd. EB

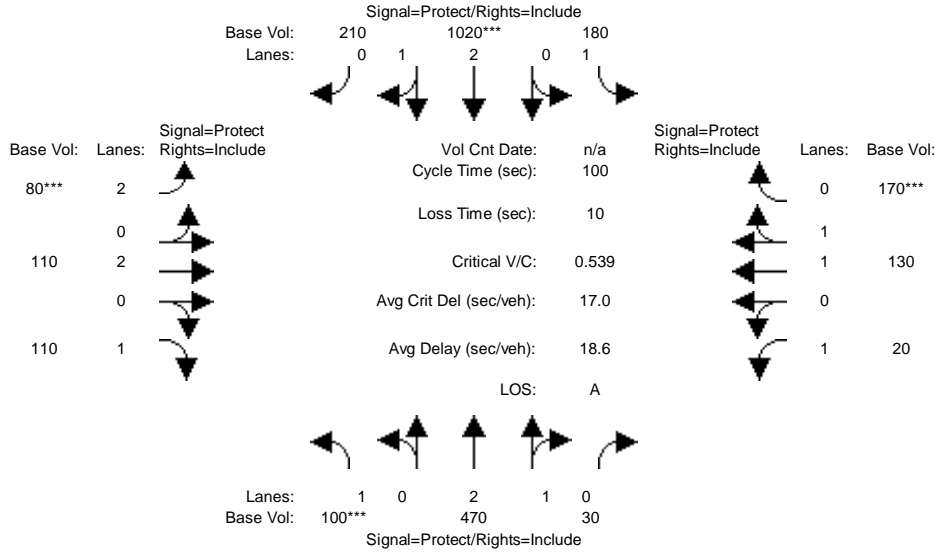


Street Name:	Wilmington Ave.						Artesia Blvd. EB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	380	380	580	1060	0	210	80	480	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	380	380	580	1060	0	210	80	480	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	380	380	580	1060	0	210	80	480	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	380	380	580	1060	0	210	80	480	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	380	380	580	1060	0	210	80	480	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.45	0.55	1.00	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	2317	883	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.12	0.12	0.10	0.33	0.00	0.09	0.09	0.30	0.00	0.00	0.00
Crit Moves:	***				***				***			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday AM

Intersection #19: Wilmington Ave. & Victoria St.

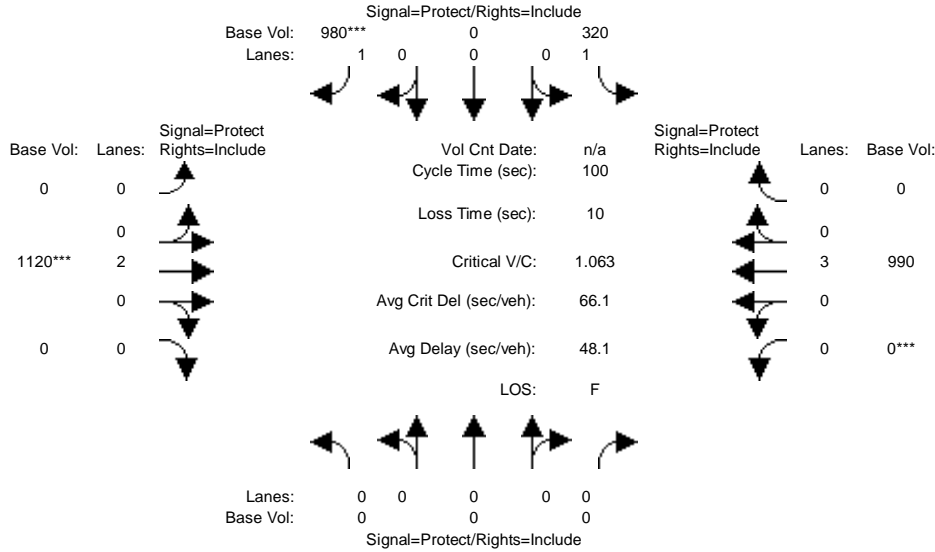


Street Name:	Wilmington Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	100	470	30	180	1020	210	80	110	110	20	130	170
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	100	470	30	180	1020	210	80	110	110	20	130	170
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	100	470	30	180	1020	210	80	110	110	20	130	170
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	100	470	30	180	1020	210	80	110	110	20	130	170
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	100	470	30	180	1020	210	80	110	110	20	130	170
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.82	0.18	1.00	2.49	0.51	2.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	4512	288	1600	3980	820	5760	3200	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.10	0.10	0.11	0.26	0.26	0.01	0.03	0.07	0.01	0.08	0.11
Crit Moves:	***				***		***				***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday AM

Intersection #20: I-110 SB Off-Ramp & 190th St.

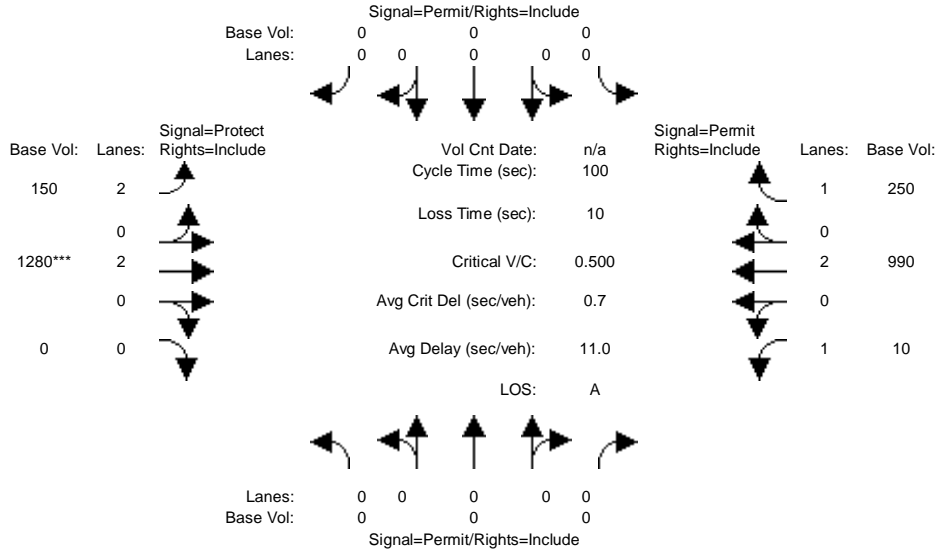


Street Name:	I-110 SB Off-Ramp						190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	320	0	980	0	1120	0	0	990	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	320	0	980	0	1120	0	0	990	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	320	0	980	0	1120	0	0	990	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	320	0	980	0	1120	0	0	990	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	320	0	980	0	1120	0	0	990	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.20	0.00	0.61	0.00	0.35	0.00	0.00	0.21	0.00
Crit Moves:						***		***			***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday AM

Intersection #21: I-110 NB On-Ramp & 190th St.

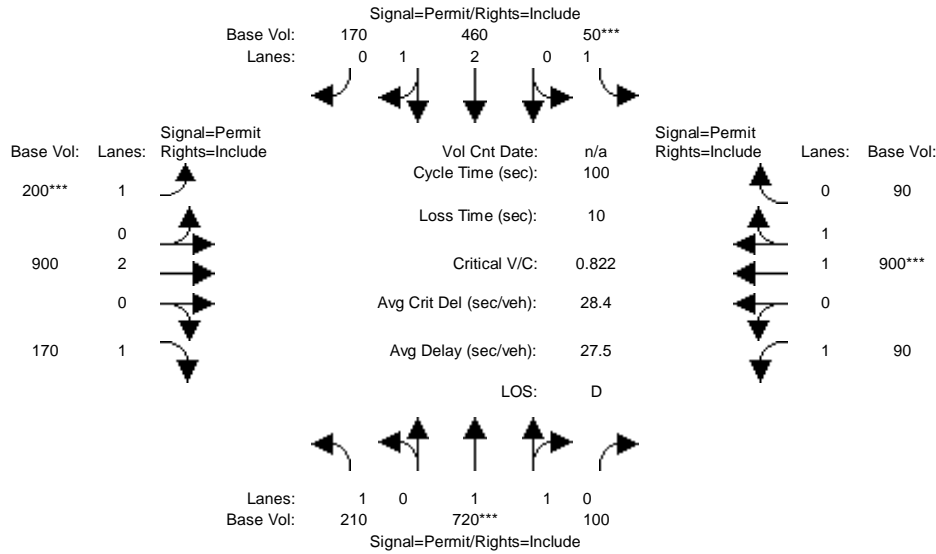


Street Name:	I-110 NB On-Ramp						190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	0	0	0	150	1280	0	10	990	250
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	150	1280	0	10	990	250
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	150	1280	0	10	990	250
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	150	1280	0	10	990	250
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	0	0	0	150	1280	0	10	990	250
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	0	0	0	0	0	5760	3200	0	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.40	0.00	0.01	0.31	0.16
Crit Moves:	***											

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday AM

Intersection #22: Figueroa St. & 190th St./Victoria St.

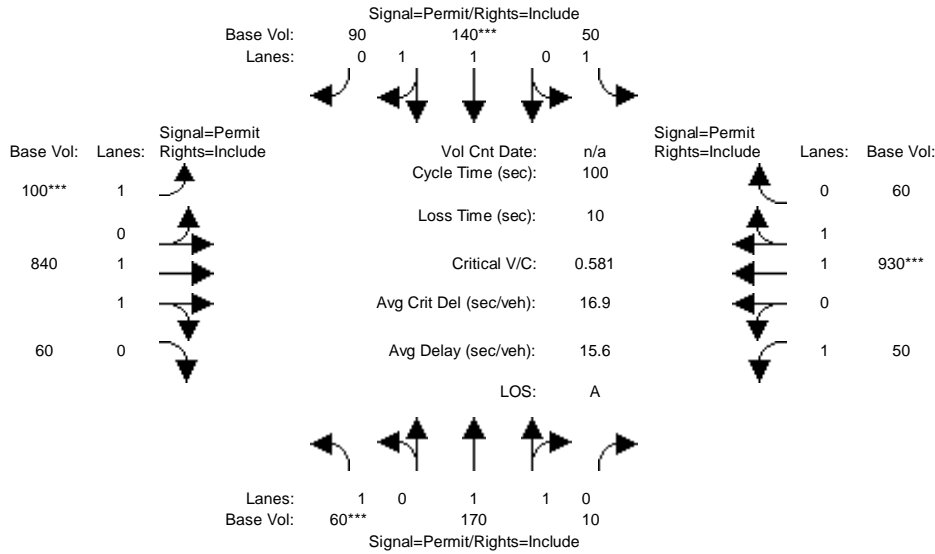


Street Name:	Figueroa St.						190th St./Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	210	720	100	50	460	170	200	900	170	90	900	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	210	720	100	50	460	170	200	900	170	90	900	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	210	720	100	50	460	170	200	900	170	90	900	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	210	720	100	50	460	170	200	900	170	90	900	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	210	720	100	50	460	170	200	900	170	90	900	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.76	0.24	1.00	2.19	0.81	1.00	2.00	1.00	1.00	1.82	0.18
Final Sat.:	1600	2810	390	1600	3505	1295	1600	3200	1600	1600	2909	291
Capacity Analysis Module:												
Vol/Sat:	0.13	0.26	0.26	0.03	0.13	0.13	0.13	0.28	0.11	0.06	0.31	0.31
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday AM

Intersection #23: Broadway & Victoria St.

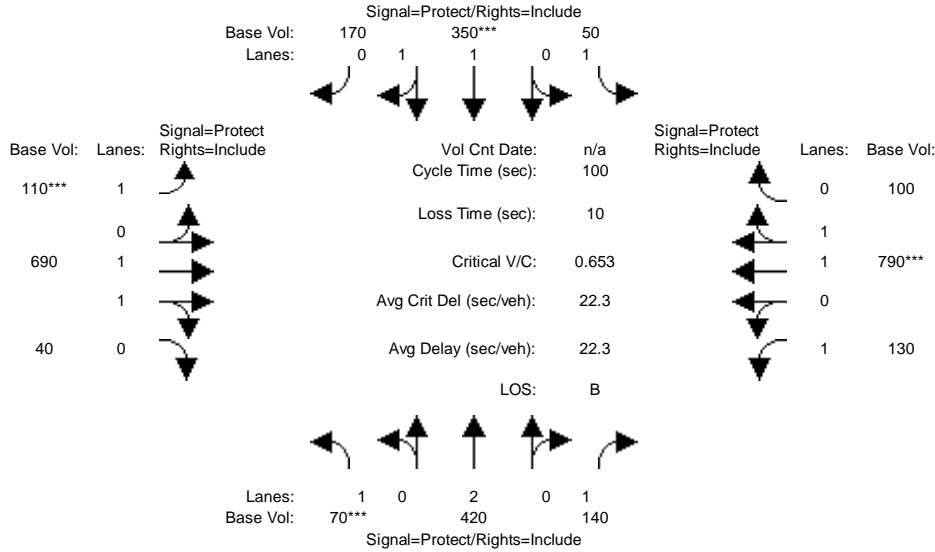


Street Name:	Broadway						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	60	170	10	50	140	90	100	840	60	50	930	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	170	10	50	140	90	100	840	60	50	930	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	170	10	50	140	90	100	840	60	50	930	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	170	10	50	140	90	100	840	60	50	930	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	60	170	10	50	140	90	100	840	60	50	930	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.89	0.11	1.00	1.22	0.78	1.00	1.87	0.13	1.00	1.88	0.12
Final Sat.:	1600	3022	178	1600	1948	1252	1600	2987	213	1600	3006	194
Capacity Analysis Module:												
Vol/Sat:	0.04	0.06	0.06	0.03	0.07	0.07	0.06	0.28	0.28	0.03	0.31	0.31
Crit Moves:	***				***		***				***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday AM

Intersection #24: Main St. & Victoria St.

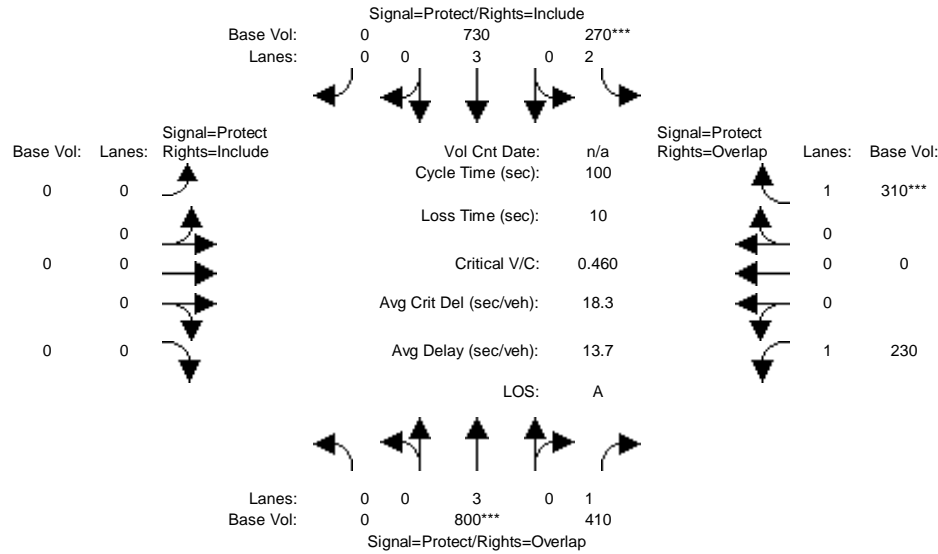


Street Name:	Main St.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	70	420	140	50	350	170	110	690	40	130	790	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	420	140	50	350	170	110	690	40	130	790	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	420	140	50	350	170	110	690	40	130	790	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	420	140	50	350	170	110	690	40	130	790	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	70	420	140	50	350	170	110	690	40	130	790	100
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.35	0.65	1.00	1.89	0.11	1.00	1.78	0.22
Final Sat.:	1600	3200	1600	1600	2154	1046	1600	3025	175	1600	2840	360
Capacity Analysis Module:												
Vol/Sat:	0.04	0.13	0.09	0.03	0.16	0.16	0.07	0.23	0.23	0.08	0.28	0.28
Crit Moves:	***				***		***				***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday AM

Intersection #25: Avalon Blvd. & University Dr.

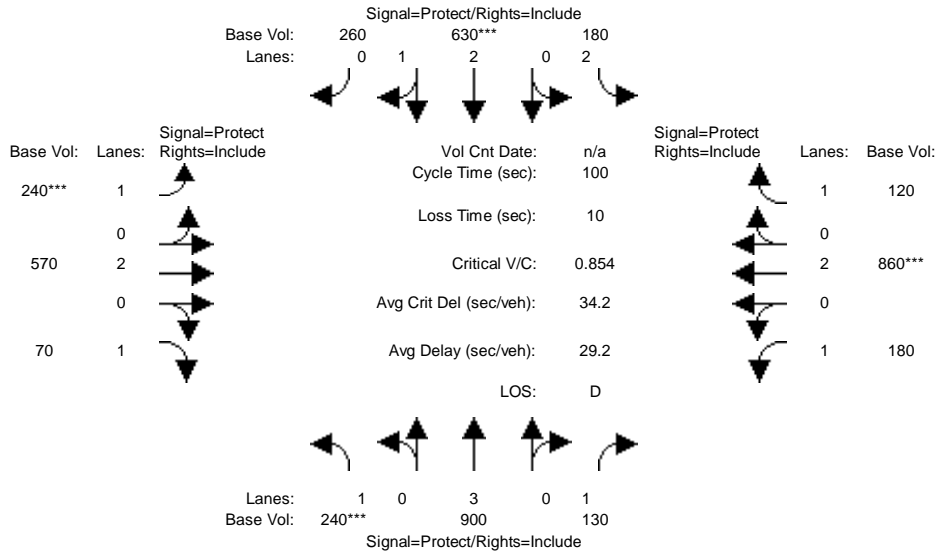


Street Name:	Avalon Blvd.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	800	410	270	730	0	0	0	0	230	0	310
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	800	410	270	730	0	0	0	0	230	0	310
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	800	410	270	730	0	0	0	0	230	0	310
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	800	410	270	730	0	0	0	0	230	0	310
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	800	410	270	730	0	0	0	0	230	0	310
OvlAdjVol:	180									235		
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.17	0.26	0.05	0.15	0.00	0.00	0.00	0.00	0.14	0.00	0.19
OvlAdjV/S:	0.11									0.15		
Crit Moves:	****			****						****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday AM

Intersection #26: Avalon Blvd. & Del Amo Blvd.

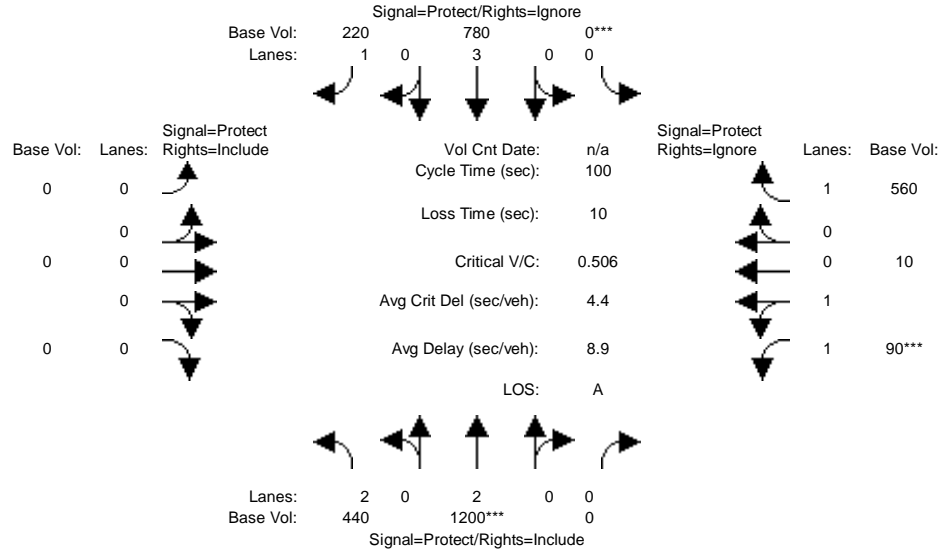


Street Name:	Avalon Blvd.						Del Amo Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	240	900	130	180	630	260	240	570	70	180	860	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	240	900	130	180	630	260	240	570	70	180	860	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	240	900	130	180	630	260	240	570	70	180	860	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	240	900	130	180	630	260	240	570	70	180	860	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	240	900	130	180	630	260	240	570	70	180	860	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.12	0.88	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	3398	1402	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.15	0.19	0.08	0.03	0.19	0.19	0.15	0.18	0.04	0.11	0.27	0.08
Crit Moves:	***				***		***				***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday AM

Intersection #27: Avalon Blvd. & I-405 NB Ramps

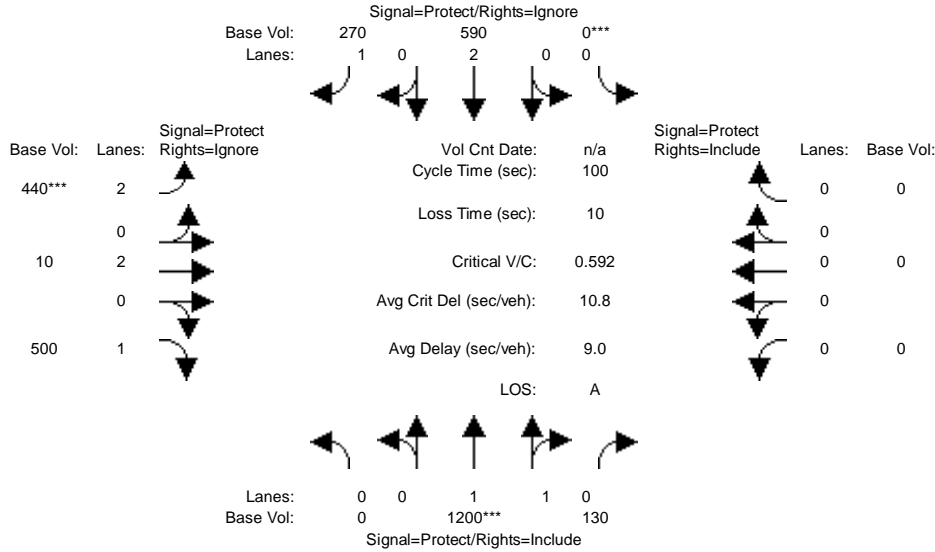


Street Name:	Avalon Blvd.						I-405 NB Ramps					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	440	1200	0	0	780	220	0	0	0	90	10	560
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	440	1200	0	0	780	220	0	0	0	90	10	560
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	440	1200	0	0	780	0	0	0	0	90	10	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	440	1200	0	0	780	0	0	0	0	90	10	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Volume:	440	1200	0	0	780	0	0	0	0	90	10	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.80	0.20	1.00
Final Sat.:	5760	3200	0	0	4800	1600	0	0	0	2880	320	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.38	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.03	0.03	0.00
Crit Moves:	****			****						****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday AM

Intersection #28: Avalon Blvd. & I-405 SB Ramps

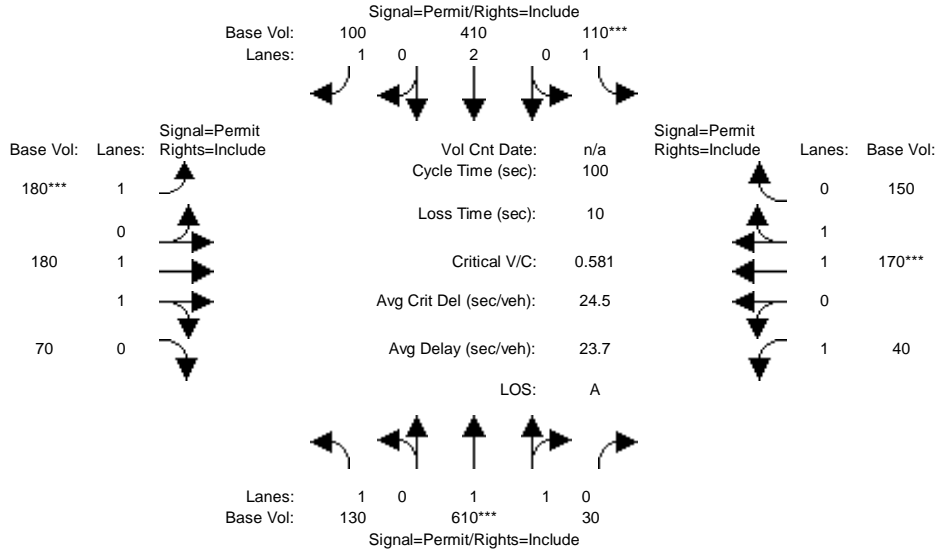


Street Name:	Avalon Blvd.						I-405 SB Ramps					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1200	130	0	590	270	440	10	500	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1200	130	0	590	270	440	10	500	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	1200	130	0	590	0	440	10	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1200	130	0	590	0	440	10	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Volume:	0	1200	130	0	590	0	440	10	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.80	0.20	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	0	2887	313	0	3200	1600	5760	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.42	0.42	0.00	0.18	0.00	0.08	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday AM

Intersection #29: Central Ave. & University Dr.

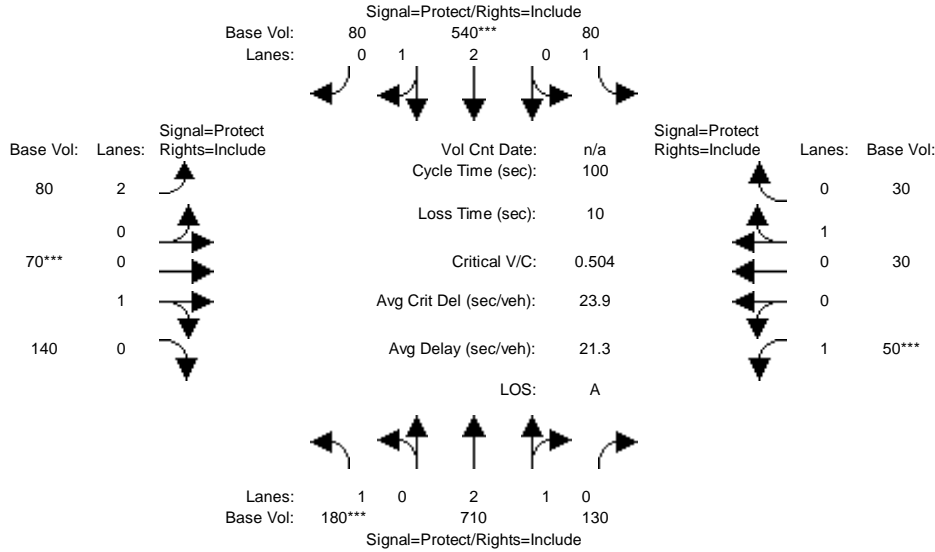


Street Name:	Central Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	130	610	30	110	410	100	180	180	70	40	170	150
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	610	30	110	410	100	180	180	70	40	170	150
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	610	30	110	410	100	180	180	70	40	170	150
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	610	30	110	410	100	180	180	70	40	170	150
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	130	610	30	110	410	100	180	180	70	40	170	150
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.91	0.09	1.00	2.00	1.00	1.00	1.44	0.56	1.00	1.06	0.94
Final Sat.:	1600	3050	150	1600	3200	1600	1600	2304	896	1600	1700	1500
Capacity Analysis Module:												
Vol/Sat:	0.08	0.20	0.20	0.07	0.13	0.06	0.11	0.08	0.08	0.03	0.10	0.10
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday AM

Intersection #30: Wilmington Ave. & University Dr.

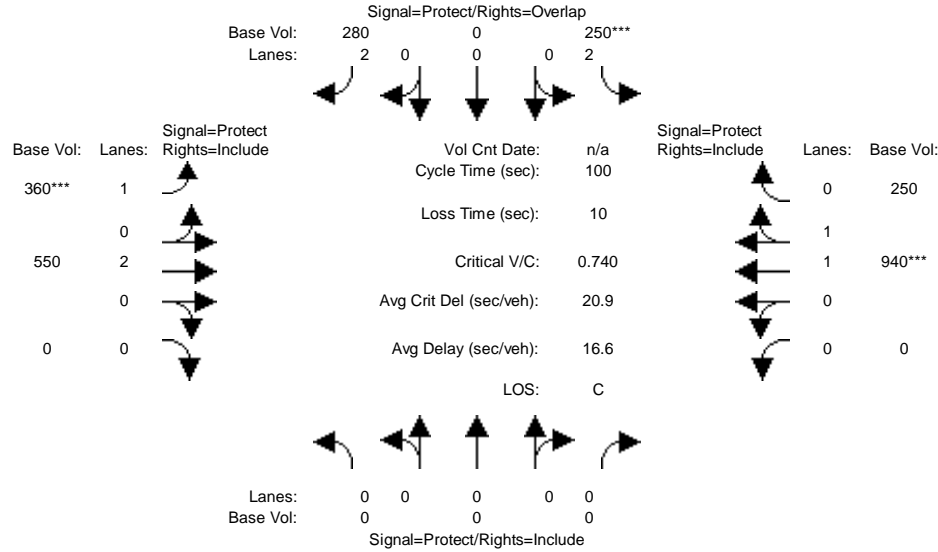


Street Name:	Wilmington Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	180	710	130	80	540	80	80	70	140	50	30	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	180	710	130	80	540	80	80	70	140	50	30	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	180	710	130	80	540	80	80	70	140	50	30	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	180	710	130	80	540	80	80	70	140	50	30	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	180	710	130	80	540	80	80	70	140	50	30	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.54	0.46	1.00	2.61	0.39	2.00	0.33	0.67	1.00	0.50	0.50
Final Sat.:	1600	4057	743	1600	4181	619	5760	533	1067	1600	800	800
Capacity Analysis Module:												
Vol/Sat:	0.11	0.17	0.18	0.05	0.13	0.13	0.01	0.13	0.13	0.03	0.04	0.04
Crit Moves:	***				***			***			***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday AM

Intersection #31: Central Ave. & Del Amo Blvd.

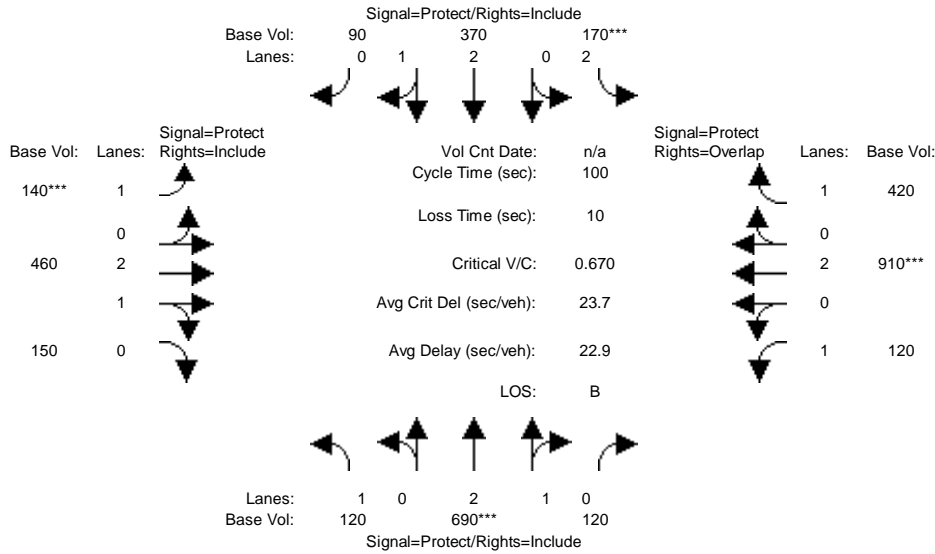


Street Name:	Central Ave.						Del Amo Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	250	0	280	360	550	0	0	940	250
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	250	0	280	360	550	0	0	940	250
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	250	0	280	360	550	0	0	940	250
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	250	0	280	360	550	0	0	940	250
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	250	0	280	360	550	0	0	940	250
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	2.00	1.00	2.00	0.00	0.00	1.58	0.42
Final Sat.:	0	0	0	5760	0	3200	1600	3200	0	0	2528	672
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.04	0.00	0.09	0.23	0.17	0.00	0.00	0.37	0.37
OvlAdjV/S:	0.00											
Crit Moves:				****				****				****

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday AM

Intersection #32: Wilmington Ave. & Del Amo Blvd.

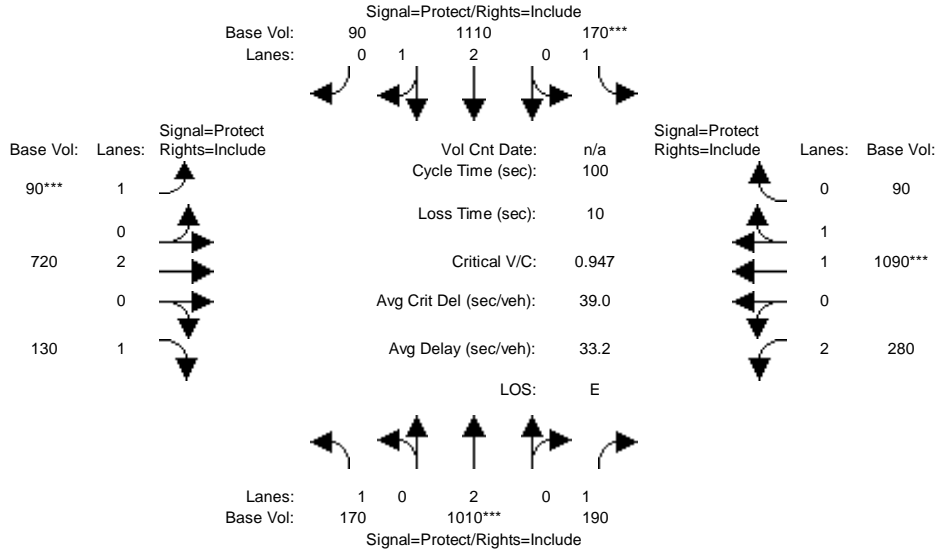


Street Name:	Wilmington Ave.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	120	690	120	170	370	90	140	460	150	120	910	420
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	120	690	120	170	370	90	140	460	150	120	910	420
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	120	690	120	170	370	90	140	460	150	120	910	420
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	690	120	170	370	90	140	460	150	120	910	420
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	120	690	120	170	370	90	140	460	150	120	910	420
OvlAdjVol:												373
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.56	0.44	2.00	2.41	0.59	1.00	2.26	0.74	1.00	2.00	1.00
Final Sat.:	1600	4089	711	5760	3861	939	1600	3620	1180	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.17	0.17	0.03	0.10	0.10	0.09	0.13	0.13	0.08	0.28	0.26
OvlAdjV/S:												0.23
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday AM

Intersection #33: W. Artesia Blvd. & Crenshaw Blvd.

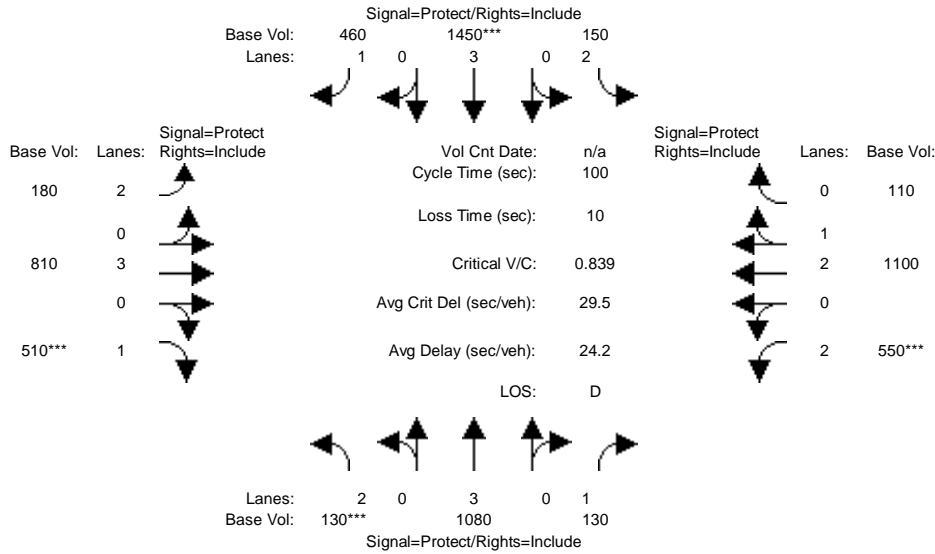


Street Name:	Crenshaw Blvd.						W. Artesia Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	170	1010	190	170	1110	90	90	720	130	280	1090	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	170	1010	190	170	1110	90	90	720	130	280	1090	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	170	1010	190	170	1110	90	90	720	130	280	1090	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	170	1010	190	170	1110	90	90	720	130	280	1090	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	170	1010	190	170	1110	90	90	720	130	280	1090	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.78	0.22	1.00	2.00	1.00	2.00	1.85	0.15
Final Sat.:	1600	3200	1600	1600	4440	360	1600	3200	1600	5760	2956	244
Capacity Analysis Module:												
Vol/Sat:	0.11	0.32	0.12	0.11	0.25	0.25	0.06	0.23	0.08	0.05	0.37	0.37
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday AM

Intersection #34: W 190th St. & South Western Ave.

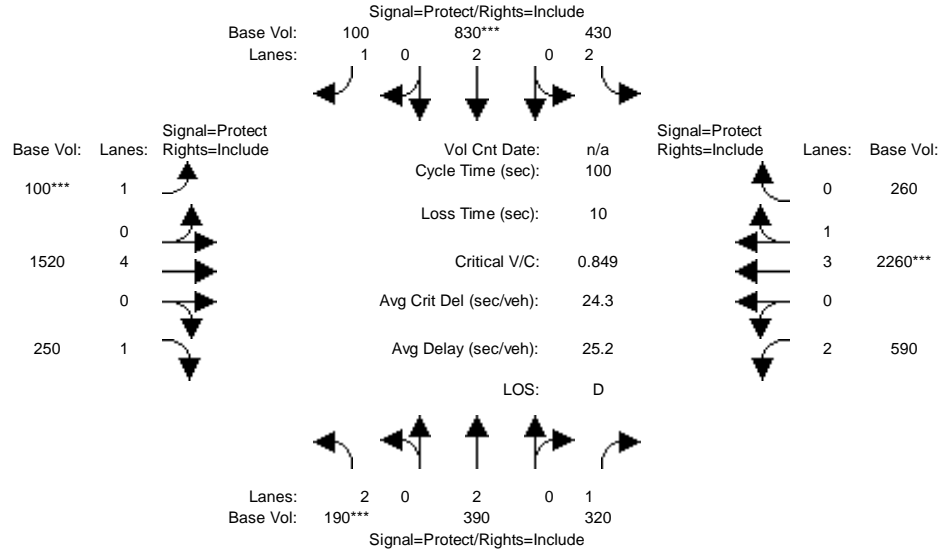


Street Name:	S. Western Ave.						W. 190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	130	1080	130	150	1450	460	180	810	510	550	1100	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	1080	130	150	1450	460	180	810	510	550	1100	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	1080	130	150	1450	460	180	810	510	550	1100	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	1080	130	150	1450	460	180	810	510	550	1100	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	130	1080	130	150	1450	460	180	810	510	550	1100	110
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.73	0.27
Final Sat.:	5760	4800	1600	5760	4800	1600	5760	4800	1600	5760	4364	436
Capacity Analysis Module:												
Vol/Sat:	0.02	0.23	0.08	0.03	0.30	0.29	0.03	0.17	0.32	0.10	0.25	0.25
Crit Moves:	***			***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday AM

Intersection #35: W. Artesia Blvd. & Vermont Av.e

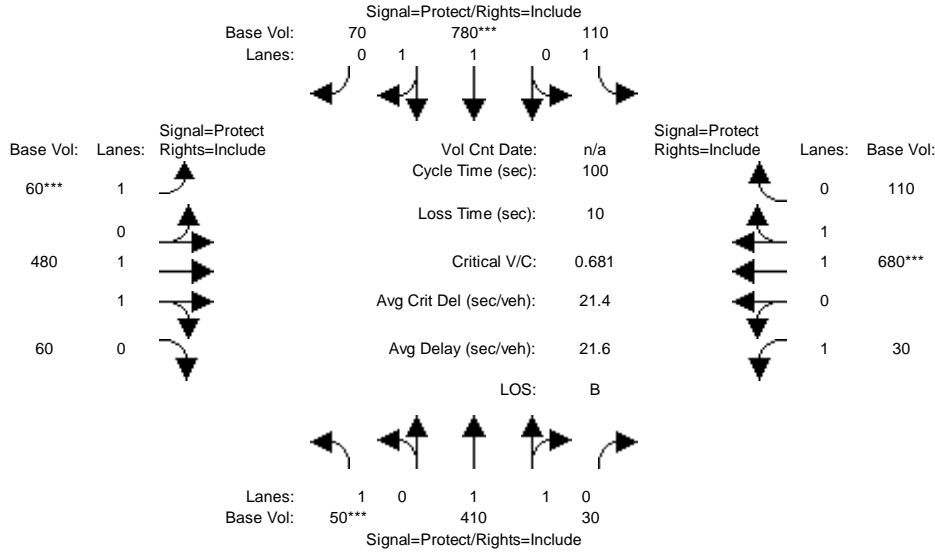


Street Name:	Vermont Ave.						W. Artesia Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	190	390	320	430	830	100	100	1520	250	590	2260	260
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	190	390	320	430	830	100	100	1520	250	590	2260	260
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	190	390	320	430	830	100	100	1520	250	590	2260	260
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	190	390	320	430	830	100	100	1520	250	590	2260	260
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	190	390	320	430	830	100	100	1520	250	590	2260	260
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	1.00	4.00	1.00	2.00	3.59	0.41
Final Sat.:	5760	3200	1600	5760	3200	1600	1600	6400	1600	5760	5740	660
Capacity Analysis Module:												
Vol/Sat:	0.03	0.12	0.20	0.07	0.26	0.06	0.06	0.24	0.16	0.10	0.39	0.39
Crit Moves:	***				***		***				***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday AM

Intersection #36: Alameda St. & Compton Blvd.

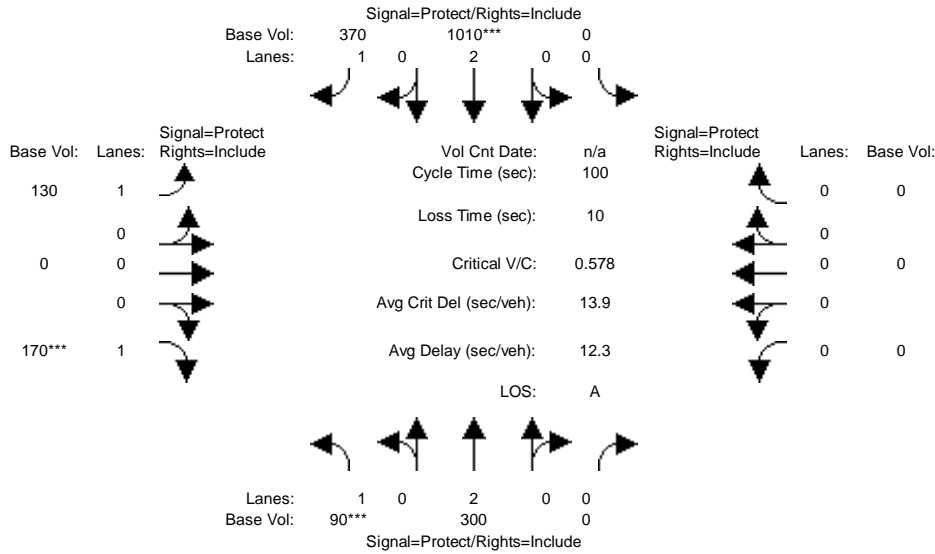


Street Name:	Alameda St.						Compton Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	50	410	30	110	780	70	60	480	60	30	680	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	410	30	110	780	70	60	480	60	30	680	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	410	30	110	780	70	60	480	60	30	680	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	410	30	110	780	70	60	480	60	30	680	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	50	410	30	110	780	70	60	480	60	30	680	110
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.86	0.14	1.00	1.84	0.16	1.00	1.78	0.22	1.00	1.72	0.28
Final Sat.:	1600	2982	218	1600	2936	264	1600	2844	356	1600	2754	446
Capacity Analysis Module:												
Vol/Sat:	0.03	0.14	0.14	0.07	0.27	0.27	0.04	0.17	0.17	0.02	0.25	0.25
Crit Moves:	***				***		***				***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday AM

Intersection #37: Alameda St. & SR 91 EB Ramps

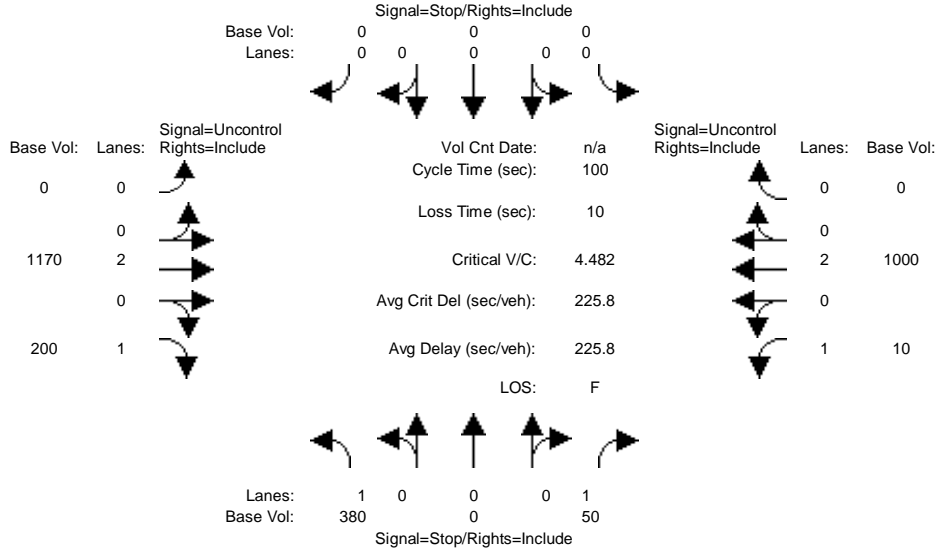


Street Name:	Alameda St.						SR 91 EB Ramps					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	90	300	0	0	1010	370	130	0	170	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	300	0	0	1010	370	130	0	170	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	300	0	0	1010	370	130	0	170	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	300	0	0	1010	370	130	0	170	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	90	300	0	0	1010	370	130	0	170	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	3200	0	0	3200	1600	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.09	0.00	0.00	0.32	0.23	0.08	0.00	0.11	0.00	0.00	0.00
Crit Moves:	***				***				***			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2025 No Project Weekday PM

Intersection #1: Victoria St. & Drive D



Street Name:	Drive D						Victoria St..					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	380	0	50	0	0	0	0	1170	200	10	1000	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	380	0	50	0	0	0	0	1170	200	10	1000	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	380	0	50	0	0	0	0	1170	200	10	1000	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	380	0	50	0	0	0	0	1170	200	10	1000	0
Critical Gap Module:												
Critical Gp:	6.8	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	1690	xxxx	585	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1370	xxxx	xxxxx
Potent Cap.:	86	xxxx	459	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	508	xxxx	xxxxx
Move Cap.:	85	xxxx	459	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	508	xxxx	xxxxx
Volume/Cap:	4.48	xxxx	0.11	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.02	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	40.4	xxxx	0.4	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	1667	xxxx	13.8	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	12.2	xxxx	xxxxx
LOS by Move:	F	*	B	*	*	*	*	*	*	B	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	1475.1			xxxxxxx			xxxxxxx			xxxxxxx		

ApproachLOS: F * * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #1 Victoria St. & Drive D

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 2 0 1	1 0 2 0 0
Initial Vol:	380 0 50	0 0 0	0 1170 200	10 1000 0
ApproachDel:	1475.1	xxxxxx	xxxxxx	xxxxxx

Approach[northbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=176.2]

SUCCEED - Vehicle-hours >= 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=430]

SUCCEED - Approach volume >= 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=2810]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #1 Victoria St. & Drive D

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 2 0 1	1 0 2 0 0
Initial Vol:	380 0 50	0 0 0	0 1170 200	10 1000 0

Major Street Volume: 2380

Minor Approach Volume: 430

Minor Approach Volume Threshold: 1 [less than minimum of 150]

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

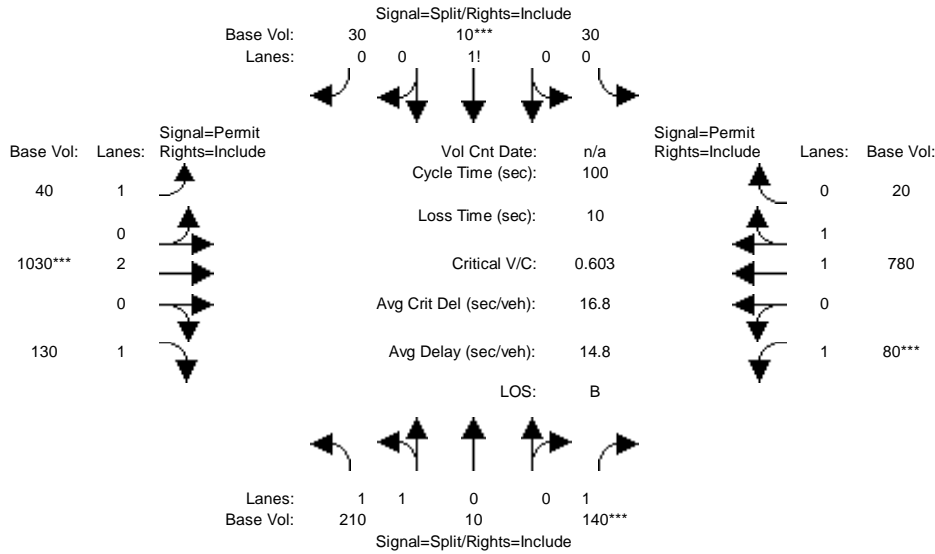
The peak hour warrant analysis in this report is not intended to replace

a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday PM

Intersection #2: Victoria St. & Tamcliff Ave.

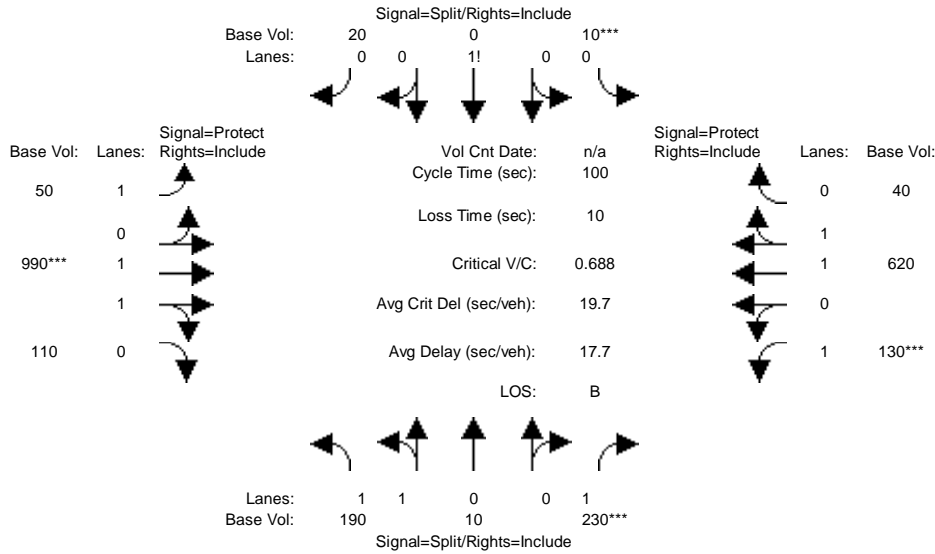


Street Name:	Victoria St.						Tamcliff Ave.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	210	10	140	30	10	30	40	1030	130	80	780	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	210	10	140	30	10	30	40	1030	130	80	780	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	210	10	140	30	10	30	40	1030	130	80	780	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	210	10	140	30	10	30	40	1030	130	80	780	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	210	10	140	30	10	30	40	1030	130	80	780	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.91	0.09	1.00	0.43	0.14	0.43	1.00	2.00	1.00	1.00	1.95	0.05
Final Sat.:	3055	145	1600	686	229	686	1600	3200	1600	1600	3120	80
Capacity Analysis Module:												
Vol/Sat:	0.07	0.07	0.09	0.04	0.04	0.04	0.03	0.32	0.08	0.05	0.25	0.25
Crit Moves:			***			***			***			***

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday PM

Intersection #3: Victoria St. & Birchknoll Dr.

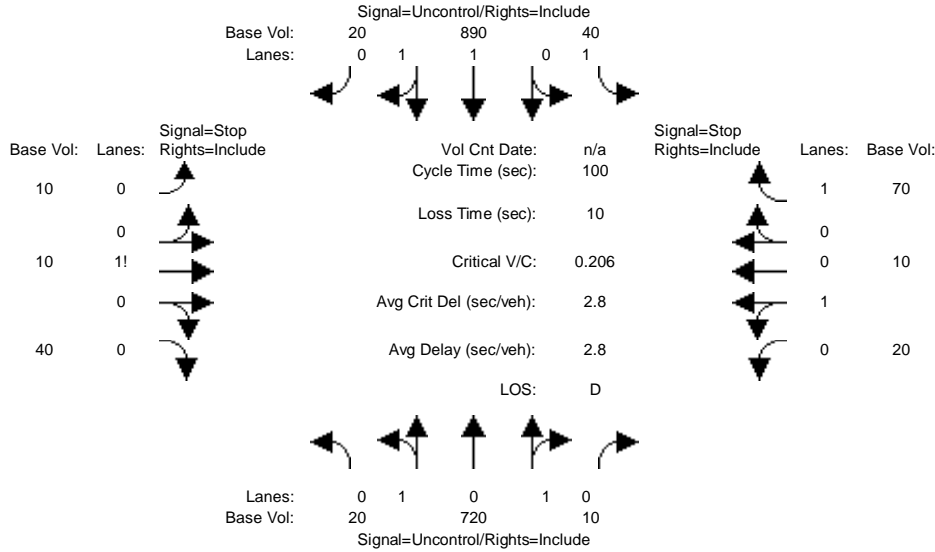


Street Name:	Victoria St.						Birchknoll Dr.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	190	10	230	10	0	20	50	990	110	130	620	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	190	10	230	10	0	20	50	990	110	130	620	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	190	10	230	10	0	20	50	990	110	130	620	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	190	10	230	10	0	20	50	990	110	130	620	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	190	10	230	10	0	20	50	990	110	130	620	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.90	0.10	1.00	0.33	0.00	0.67	1.00	1.80	0.20	1.00	1.88	0.12
Final Sat.:	3040	160	1600	533	0	1067	1600	2880	320	1600	3006	194
Capacity Analysis Module:												
Vol/Sat:	0.06	0.06	0.14	0.02	0.00	0.02	0.03	0.34	0.34	0.08	0.21	0.21
Crit Moves:			***	***				***	***	***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2025 No Project Weekday PM

Intersection #5: Central Ave. & Charles Willard St.



Street Name:	Central Ave.						Charles Willard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	20	720	10	40	890	20	10	10	40	20	10	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	720	10	40	890	20	10	10	40	20	10	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	720	10	40	890	20	10	10	40	20	10	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	20	720	10	40	890	20	10	10	40	20	10	70
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	4.1	xxxx	xxxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxxx	2.2	xxxx	xxxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflct Vol:	910	xxxx	xxxxxx	730	xxxx	xxxxxx	1385	1750	455	1295	1755	365
Potent Cap.:	757	xxxx	xxxxxx	883	xxxx	xxxxxx	105	87	558	122	86	638
Move Cap.:	757	xxxx	xxxxxx	883	xxxx	xxxxxx	80	81	558	97	80	638
Volume/Cap:	0.03	xxxx	xxxx	0.05	xxxx	xxxx	0.13	0.12	0.07	0.21	0.13	0.11
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxxx	0.1	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	0.4
Control Del:	9.9	xxxx	xxxxxx	9.3	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	11.3
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	B
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	187	xxxxxx	90	xxxx	xxxxxx
Shared Queue:	0.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	1.3	xxxxxx	1.3	xxxx	xxxxxx
Shrd ConDel:	9.9	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	33.2	xxxxxx	63.4	xxxx	xxxxxx
Shared LOS:	A	*	*	*	*	*	*	D	*	F	*	*

ApproachDel:	xxxxxx	xxxxxx	33.2	27.0
ApproachLOS:	*	*	D	D

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #5 Central Ave. & Charles Willard St.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 1 0 1 0	1 0 1 1 0	0 0 1! 0 0	0 1 0 0 1
Initial Vol:	20 720 10	40 890 20	10 10 40	20 10 70
ApproachDel:	xxxxxx	xxxxxx	33.2	27.0

Approach[eastbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.6]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=60]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=1860]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Approach[westbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.7]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=100]

FAIL - Approach volume less than 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=1860]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #5 Central Ave. & Charles Willard St.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 1 0 1 0	1 0 1 1 0	0 0 1! 0 0	0 1 0 0 1
Initial Vol:	20 720 10	40 890 20	10 10 40	20 10 70
Major Street Volume:	1700			
Minor Approach Volume:	100			

Minor Approach Volume Threshold: 146 [less than minimum of 150]

SIGNAL WARRANT DISCLAIMER

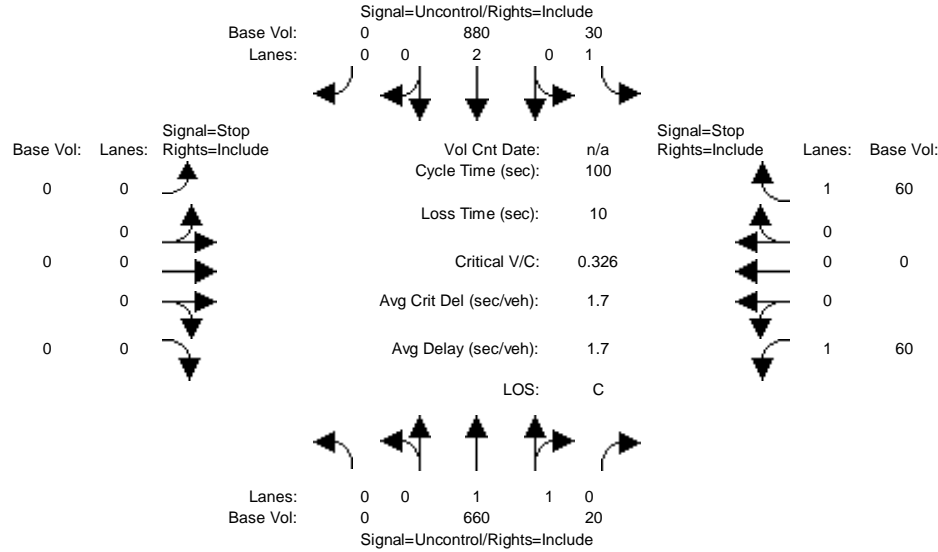
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Transportation Study for CSUDH Campus Master Plan 2018

Level of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2025 No Project Weekday PM

Intersection #6: Central Ave. & Project Driveway/Beachey Pl.



Street Name:	Central Ave.					Beachey Pl.						
Approach:	North Bound			South Bound		East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	660	20	30	880	0	0	0	0	60	0	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	660	20	30	880	0	0	0	0	60	0	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	660	20	30	880	0	0	0	0	60	0	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	0	660	20	30	880	0	0	0	0	60	0	60
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	6.8	xxxx	6.9
FollowUpTim:	xxxxx	xxxx	xxxxxx	2.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	3.5	xxxx	3.3
Capacity Module:												
Cnflct Vol:	xxxx	xxxx	xxxxxx	680	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	1170	xxxx	340
Potent Cap.:	xxxx	xxxx	xxxxxx	922	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	189	xxxx	662
Move Cap.:	xxxx	xxxx	xxxxxx	922	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	184	xxxx	662
Volume/Cap:	xxxx	xxxx	xxxx	0.03	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	0.33	xxxx	0.09
Level of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxxx	0.1	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	1.3	xxxx	0.3
Control Del:	xxxxx	xxxx	xxxxxx	9.0	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	33.7	xxxx	11.0
LOS by Move:	*	*	*	A	*	*	*	*	*	D	*	B
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Shared Queue:	xxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*

ApproachDel:	xxxxxx	xxxxxx	xxxxxx	22.3
ApproachLOS:	*	*	*	C

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #6 Central Ave. & Project Driveway/Beachey Pl.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 0 1 1 0	1 0 2 0 0	0 0 0 0 0	1 0 0 0 1
Initial Vol:	0 660 20	30 880 0	0 0 0 0	60 0 60
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	22.3

-----|-----|-----|-----|-----|

Approach[westbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.7]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=120]

FAIL - Approach volume less than 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=1710]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #6 Central Ave. & Project Driveway/Beachey Pl.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 0 1 1 0	1 0 2 0 0	0 0 0 0 0	1 0 0 0 1
Initial Vol:	0 660 20	30 880 0	0 0 0 0	60 0 60

-----|-----|-----|-----|-----|

Major Street Volume: 1590
 Minor Approach Volume: 120
 Minor Approach Volume Threshold: 175

SIGNAL WARRANT DISCLAIMER

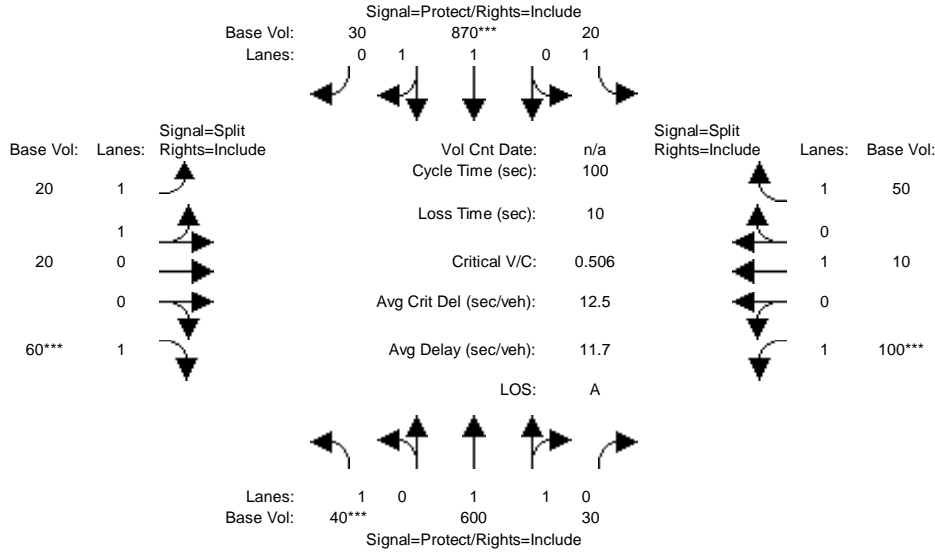
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday PM

Intersection #7: Central Ave. & Glenn Curtiss St.

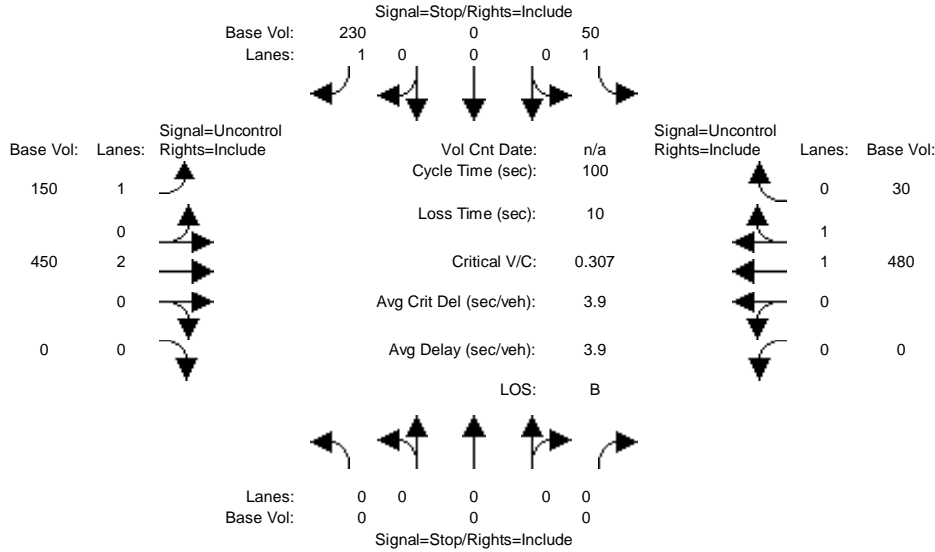


Street Name:	Central Ave.						Glenn Curtiss St.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	40	600	30	20	870	30	20	20	60	100	10	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	600	30	20	870	30	20	20	60	100	10	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	600	30	20	870	30	20	20	60	100	10	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	600	30	20	870	30	20	20	60	100	10	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	40	600	30	20	870	30	20	20	60	100	10	50
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.90	0.10	1.00	1.93	0.07	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	3048	152	1600	3093	107	1600	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.20	0.20	0.01	0.28	0.28	0.01	0.01	0.04	0.06	0.01	0.03
Crit Moves:	***			***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
2025 No Project Weekday PM

Intersection #9: University Dr. & Toro Center Dr.



Street Name:	University Dr.						Toro Center Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	50	0	230	150	450	0	0	480	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	50	0	230	150	450	0	0	480	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	50	0	230	150	450	0	0	480	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	50	0	230	150	450	0	0	480	30
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.8	xxxx	6.9	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	xxxx	xxxx	xxxxx	1020	xxxx	255	510	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	236	xxxx	750	1065	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	211	xxxx	750	1065	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.24	xxxx	0.31	0.14	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.9	xxxx	1.3	0.5	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	27.3	xxxxx	11.9	8.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	D	*	B	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*

ApproachDel: xxxxxx 14.7 xxxxxx xxxxxx
 ApproachLOS: * B * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #9 University Dr. & Toro Center Dr.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0	0	0	0	0	0	1	0	2	0	0	1
Initial Vol:	0	0	0	50	0	230	150	450	0	0	480	30
ApproachDel:	xxxxxx			14.7			xxxxxx			xxxxxx		

Approach[southbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=1.1]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=280]

SUCCEED - Approach volume >= 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=1390]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #9 University Dr. & Toro Center Dr.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0	0	0	0	0	0	1	0	2	0	0	1
Initial Vol:	0	0	0	50	0	230	150	450	0	0	480	30

Major Street Volume: 1110

Minor Approach Volume: 280

Minor Approach Volume Threshold: 329

SIGNAL WARRANT DISCLAIMER

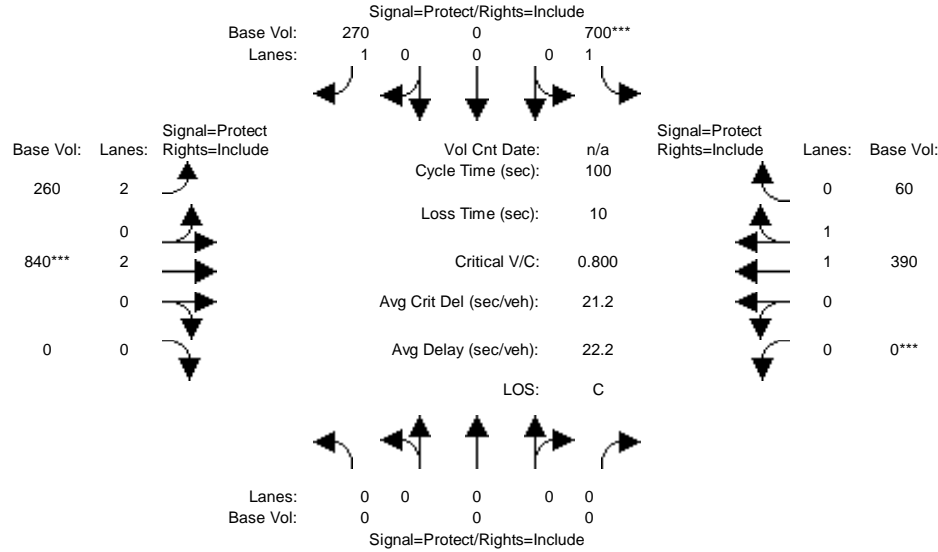
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday PM

Intersection #10: Albertoni St. & SR 91 EB Ramps

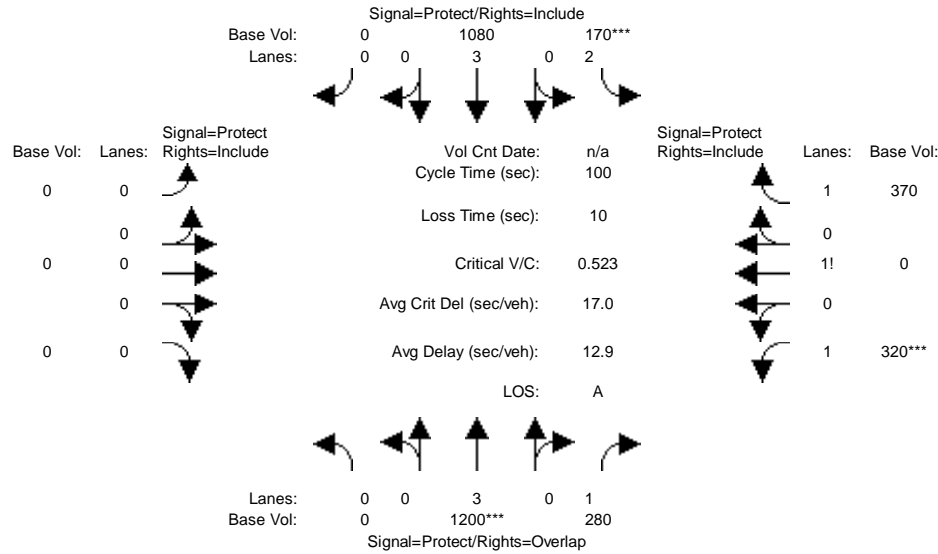


Street Name:	Albertoni St.						SR 91 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	700	0	270	260	840	0	0	390	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	700	0	270	260	840	0	0	390	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	700	0	270	260	840	0	0	390	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	700	0	270	260	840	0	0	390	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	700	0	270	260	840	0	0	390	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.73	0.27
Final Sat.:	0	0	0	1600	0	1600	5760	3200	0	0	2773	427
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.44	0.00	0.17	0.05	0.26	0.00	0.00	0.14	0.14
Crit Moves:				***				***		***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday PM

Intersection #11: Avalon Blvd. & SR 91 WB On-Ramp

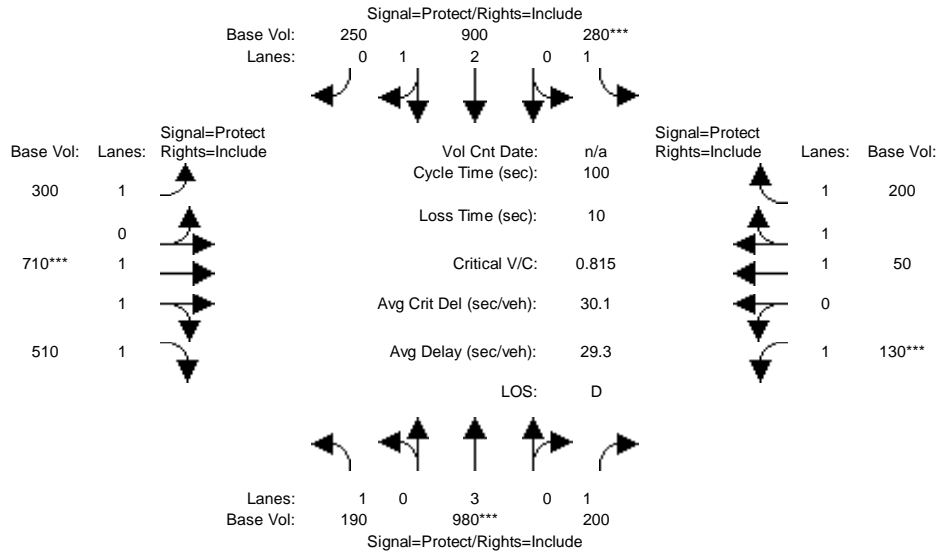


Street Name:	Avalon Blvd.						SR 91 WB On-Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1200	280	170	1080	0	0	0	0	320	0	370
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1200	280	170	1080	0	0	0	0	320	0	370
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1200	280	170	1080	0	0	0	0	320	0	370
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1200	280	170	1080	0	0	0	0	320	0	370
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	1200	280	170	1080	0	0	0	0	320	0	370
OvlAdjVol:	50											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.39	0.00	1.61
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	2226	0	2574
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.17	0.03	0.23	0.00	0.00	0.00	0.00	0.14	0.00	0.14
OvlAdjV/S:	0.03											
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday PM

Intersection #12: Avalon Blvd. & Albertoni St.

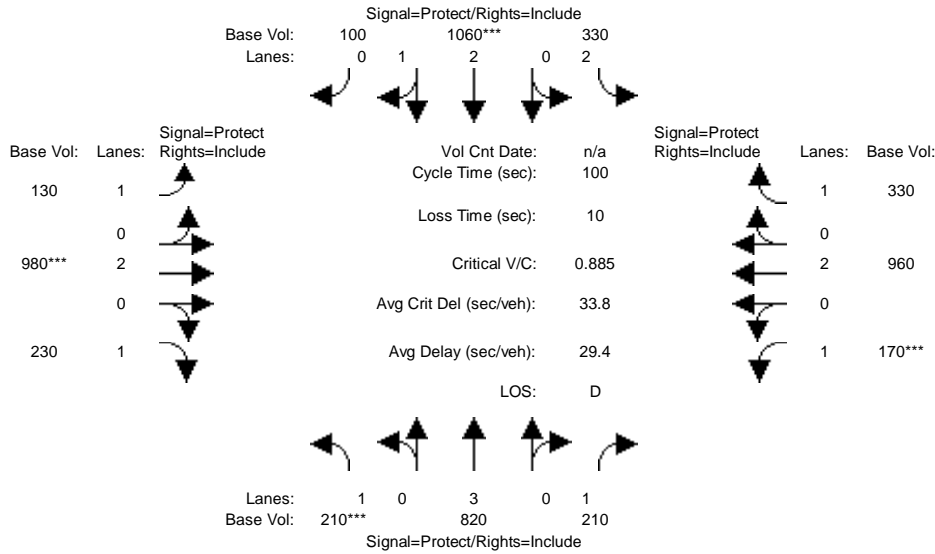


Street Name:	Avalon Blvd.						Albertoni St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	190	980	200	280	900	250	300	710	510	130	50	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	190	980	200	280	900	250	300	710	510	130	50	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	190	980	200	280	900	250	300	710	510	130	50	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	190	980	200	280	900	250	300	710	510	130	50	200
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	190	980	200	280	900	250	300	710	510	130	50	200
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.35	0.65	1.00	1.75	1.25	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3757	1043	1600	2793	2007	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.12	0.20	0.13	0.17	0.24	0.24	0.19	0.25	0.25	0.08	0.03	0.06
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday PM

Intersection #13: Avalon Blvd. & Victoria St.

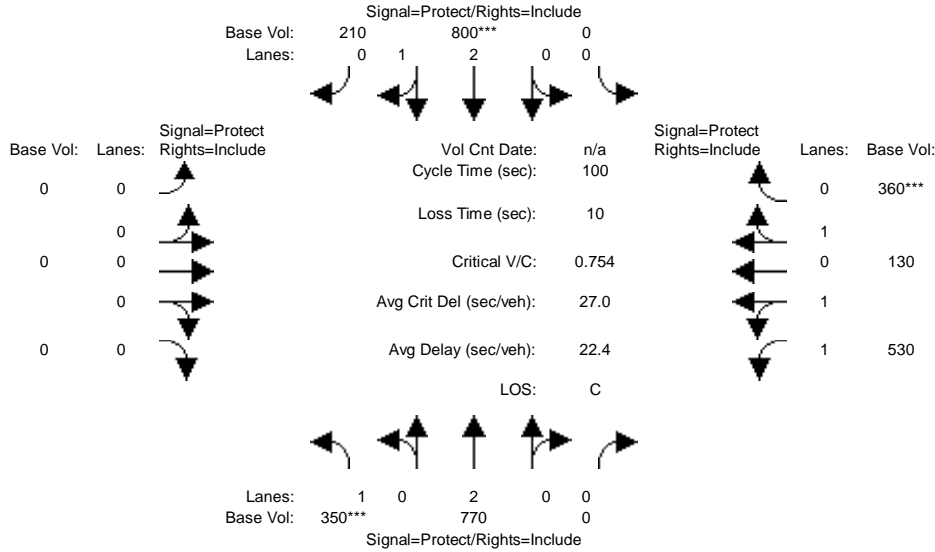


Street Name:	Avalon Blvd.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	210	820	210	330	1060	100	130	980	230	170	960	330
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	210	820	210	330	1060	100	130	980	230	170	960	330
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	210	820	210	330	1060	100	130	980	230	170	960	330
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	210	820	210	330	1060	100	130	980	230	170	960	330
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	210	820	210	330	1060	100	130	980	230	170	960	330
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.74	0.26	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4386	414	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.13	0.17	0.13	0.06	0.24	0.24	0.08	0.31	0.14	0.11	0.30	0.21
Crit Moves:	***			***	***		***	***		***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday PM

Intersection #14: Central Ave. & Artesia Blvd.

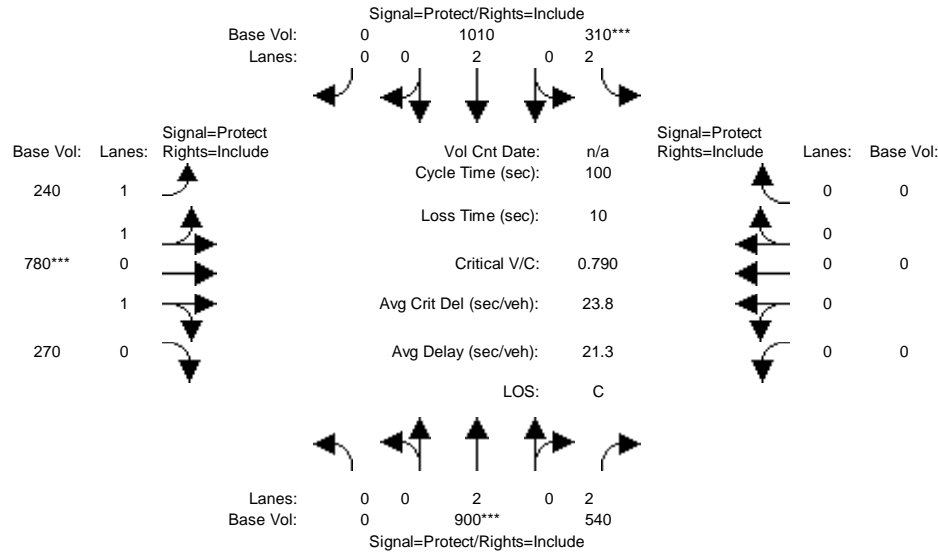


Street Name:	Central Ave.						Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	350	770	0	0	800	210	0	0	0	530	130	360
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	350	770	0	0	800	210	0	0	0	530	130	360
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	350	770	0	0	800	210	0	0	0	530	130	360
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	350	770	0	0	800	210	0	0	0	530	130	360
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	350	770	0	0	800	210	0	0	0	530	130	360
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.38	0.62	0.00	0.00	0.00	1.61	0.39	1.00
Final Sat.:	1600	3200	0	0	3802	998	0	0	0	2570	630	1600
Capacity Analysis Module:												
Vol/Sat:	0.22	0.24	0.00	0.00	0.21	0.21	0.00	0.00	0.00	0.21	0.21	0.23
Crit Moves:	***				***						***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday PM

Intersection #15: Central Ave. & Albertoni St./Artesia Blvd. EB



Street Name: Central Ave. Albertoni St./Artesia Blvd. EB

Approach: North Bound South Bound East Bound West Bound

Movement:	North Bound			South Bound			East Bound			West Bound		
	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0

Volume Module:

Base Vol:	0	900	540	310	1010	0	240	780	270	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	900	540	310	1010	0	240	780	270	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	900	540	310	1010	0	240	780	270	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	900	540	310	1010	0	240	780	270	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	900	540	310	1010	0	240	780	270	0	0	0

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.00	1.38	0.62	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	1600	2201	999	0	0	0

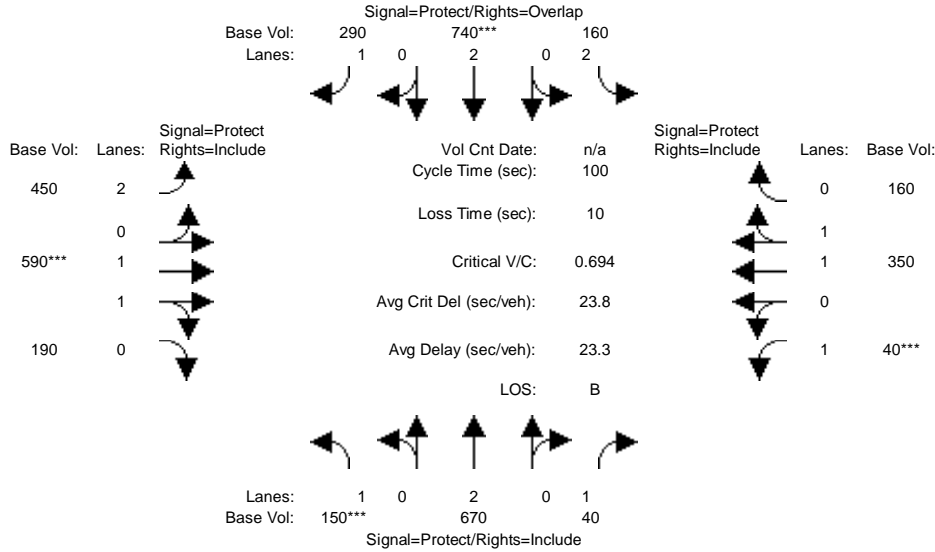
Capacity Analysis Module:

Vol/Sat:	0.00	0.28	0.17	0.05	0.32	0.00	0.15	0.35	0.27	0.00	0.00	0.00
Crit Moves:		****		****				****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday PM

Intersection #16: Central Ave. & Victoria St.

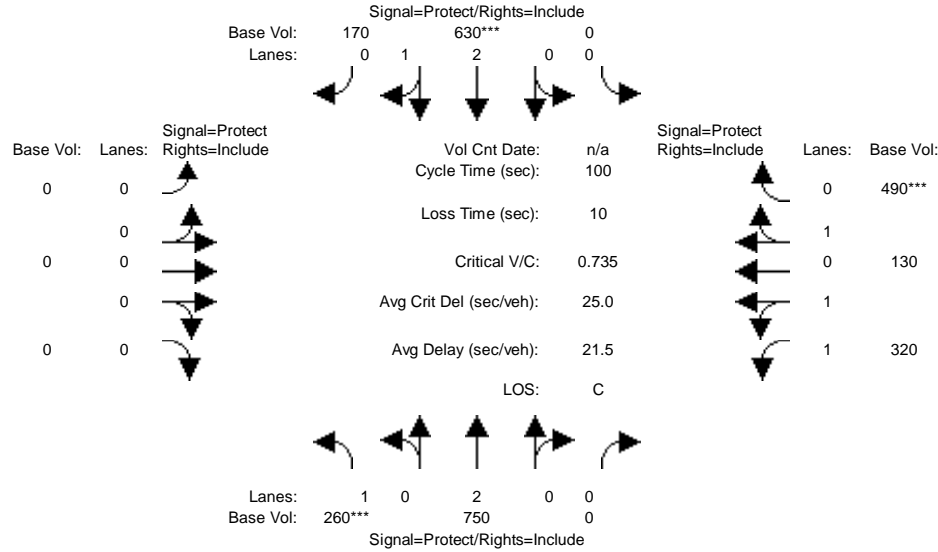


Street Name:	Central Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	150	670	40	160	740	290	450	590	190	40	350	160
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	670	40	160	740	290	450	590	190	40	350	160
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	670	40	160	740	290	450	590	190	40	350	160
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	670	40	160	740	290	450	590	190	40	350	160
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	150	670	40	160	740	290	450	590	190	40	350	160
OvlAdjVol:	165											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.51	0.49	1.00	1.37	0.63
Final Sat.:	1600	3200	1600	5760	3200	1600	5760	2421	779	1600	2196	1004
Capacity Analysis Module:												
Vol/Sat:	0.09	0.21	0.03	0.03	0.23	0.18	0.08	0.24	0.24	0.03	0.16	0.16
OvlAdjV/S:	0.10											
Crit Moves:	***			***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday PM

Intersection #17: Wilmington Ave. & Artesia Blvd. WB

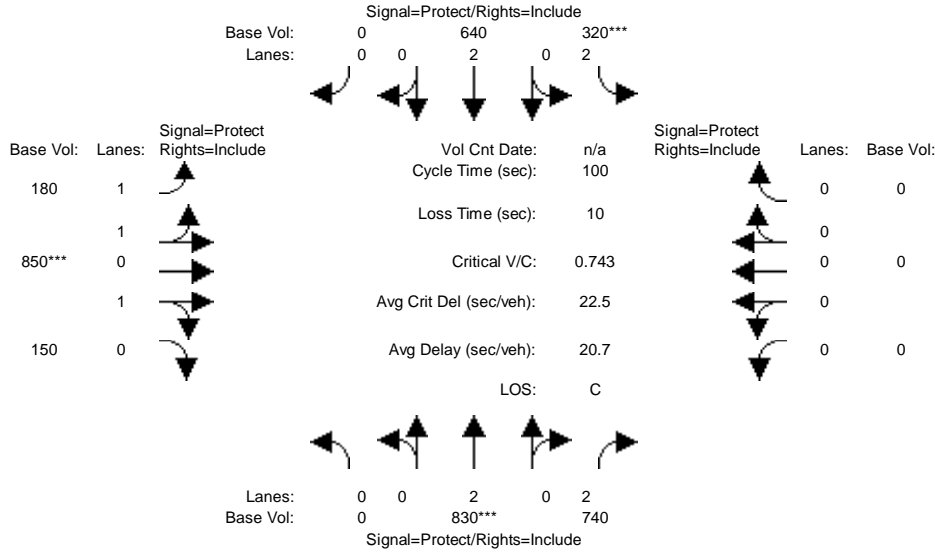


Street Name:	Wilmington Ave.						Artesia Blvd. WB					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	260	750	0	0	630	170	0	0	0	320	130	490
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	260	750	0	0	630	170	0	0	0	320	130	490
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	260	750	0	0	630	170	0	0	0	320	130	490
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	260	750	0	0	630	170	0	0	0	320	130	490
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	260	750	0	0	630	170	0	0	0	320	130	490
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.36	0.64	0.00	0.00	0.00	1.42	0.58	1.00
Final Sat.:	1600	3200	0	0	3780	1020	0	0	0	2276	924	1600
Capacity Analysis Module:												
Vol/Sat:	0.16	0.23	0.00	0.00	0.17	0.17	0.00	0.00	0.00	0.14	0.14	0.31
Crit Moves:	***				***							***

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday PM

Intersection #18: Wilmington Ave. & Artesia Blvd. EB

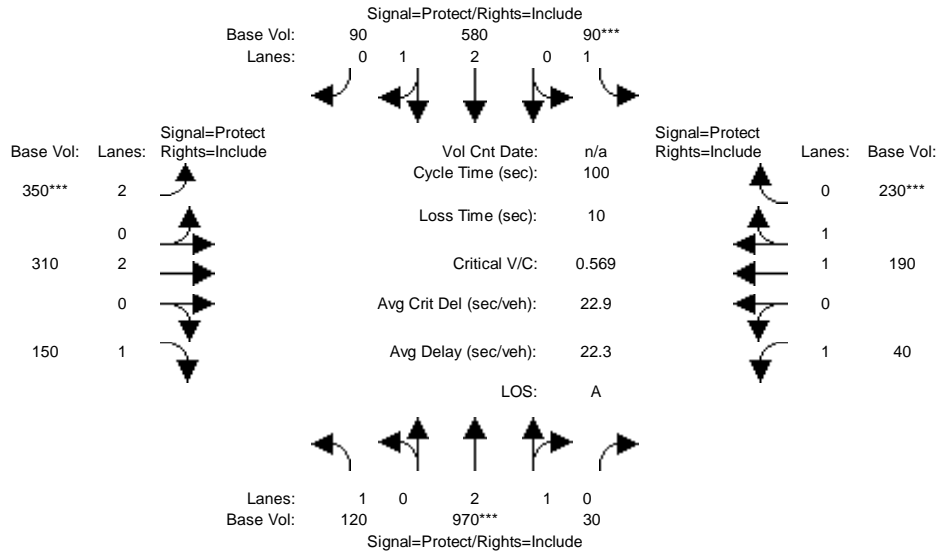


Street Name:	Wilmington Ave.						Artesia Blvd. EB					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	830	740	320	640	0	180	850	150	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	830	740	320	640	0	180	850	150	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	830	740	320	640	0	180	850	150	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	830	740	320	640	0	180	850	150	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	830	740	320	640	0	180	850	150	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.00	1.62	0.38	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	1600	2593	607	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.23	0.06	0.20	0.00	0.11	0.33	0.25	0.00	0.00	0.00
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday PM

Intersection #19: Wilmington Ave. & Victoria St.

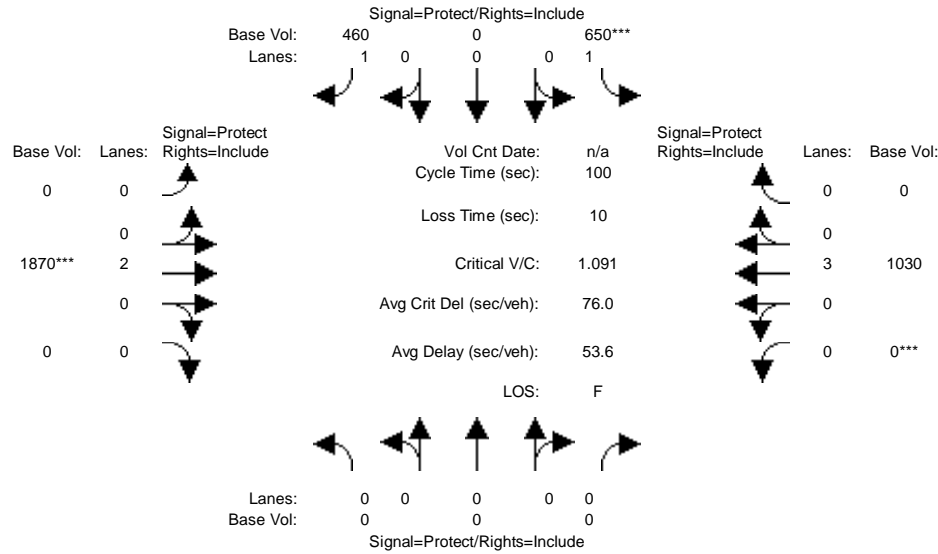


Street Name:	Wilmington Ave.						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	120	970	30	90	580	90	350	310	150	40	190	230
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	120	970	30	90	580	90	350	310	150	40	190	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	120	970	30	90	580	90	350	310	150	40	190	230
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	970	30	90	580	90	350	310	150	40	190	230
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	120	970	30	90	580	90	350	310	150	40	190	230
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.91	0.09	1.00	2.60	0.40	2.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	4656	144	1600	4155	645	5760	3200	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.21	0.21	0.06	0.14	0.14	0.06	0.10	0.09	0.03	0.12	0.14
Crit Moves:	****			****			****					****

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday PM

Intersection #20: I-110 SB Off-Ramp & 190th St.

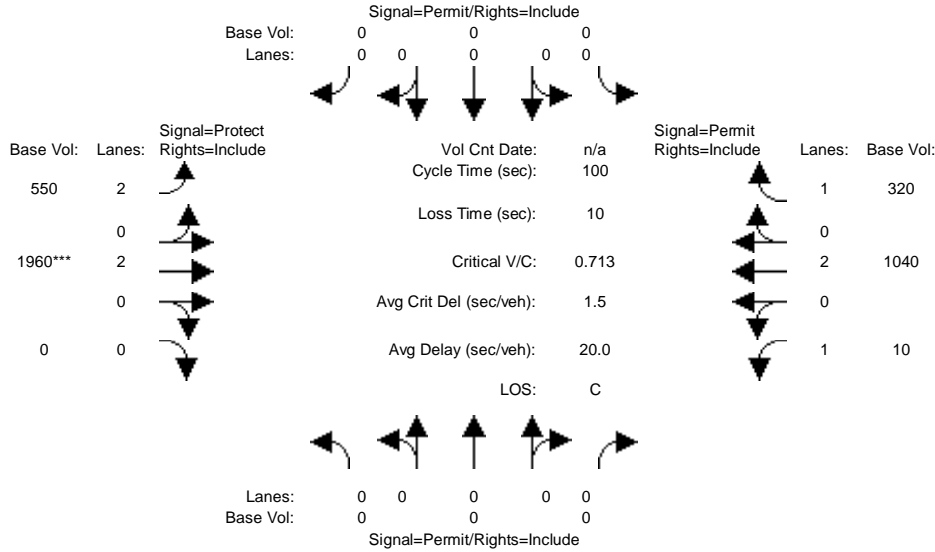


Street Name:	I-110 SB Off-Ramp						190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	650	0	460	0	1870	0	0	1030	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	650	0	460	0	1870	0	0	1030	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	650	0	460	0	1870	0	0	1030	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	650	0	460	0	1870	0	0	1030	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	650	0	460	0	1870	0	0	1030	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.41	0.00	0.29	0.00	0.58	0.00	0.00	0.21	0.00
Crit Moves:				***				***			***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday PM

Intersection #21: I-110 NB On-Ramp & 190th St.

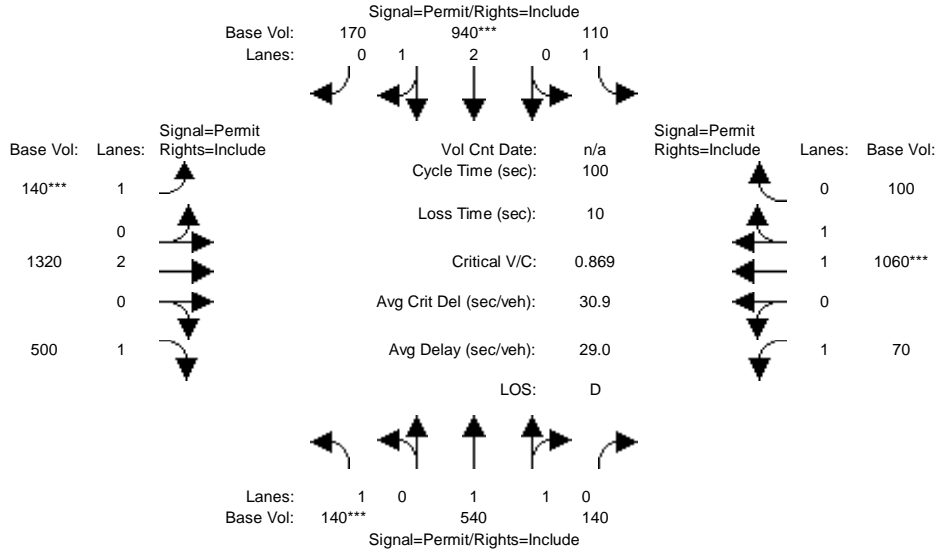


Street Name:	I-110 NB On-Ramp						190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	0	0	0	550	1960	0	10	1040	320
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	550	1960	0	10	1040	320
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	550	1960	0	10	1040	320
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	550	1960	0	10	1040	320
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	0	0	0	550	1960	0	10	1040	320
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	0	0	0	0	0	5760	3200	0	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.61	0.00	0.01	0.33	0.20
Crit Moves:							***					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday PM

Intersection #22: Figueroa St. & 190th St./Victoria St.

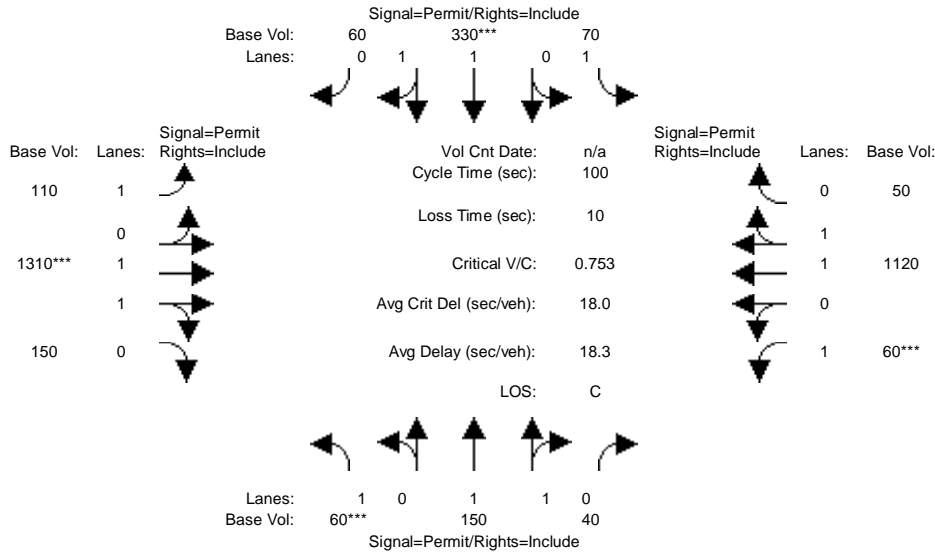


Street Name:	Figueroa St.						190th St./Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	140	540	140	110	940	170	140	1320	500	70	1060	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	540	140	110	940	170	140	1320	500	70	1060	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	140	540	140	110	940	170	140	1320	500	70	1060	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	540	140	110	940	170	140	1320	500	70	1060	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	140	540	140	110	940	170	140	1320	500	70	1060	100
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.59	0.41	1.00	2.54	0.46	1.00	2.00	1.00	1.00	1.83	0.17
Final Sat.:	1600	2541	659	1600	4065	735	1600	3200	1600	1600	2924	276
Capacity Analysis Module:												
Vol/Sat:	0.09	0.21	0.21	0.07	0.23	0.23	0.09	0.41	0.31	0.04	0.36	0.36
Crit Moves:	***				***		***				***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday PM

Intersection #23: Broadway & Victoria St.

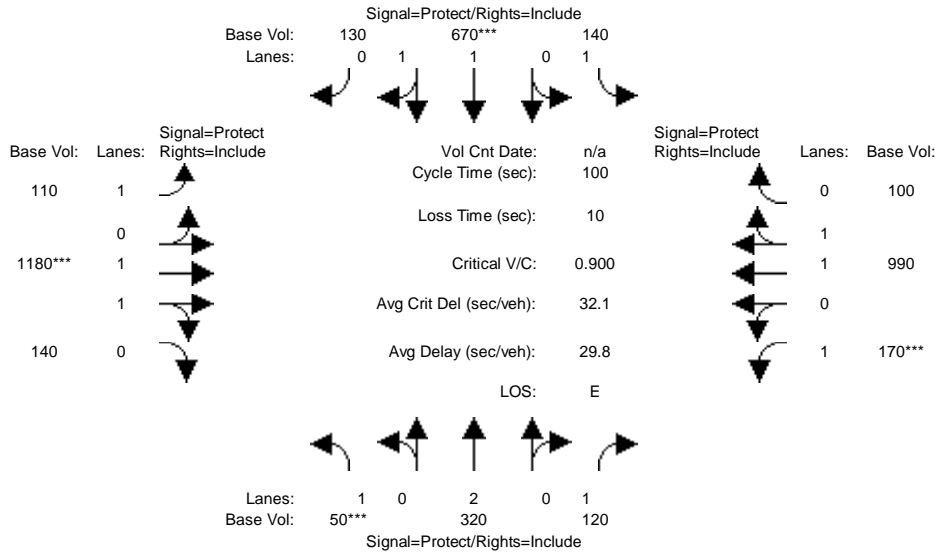


Street Name:	Broadway						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	60	150	40	70	330	60	110	1310	150	60	1120	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	150	40	70	330	60	110	1310	150	60	1120	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	150	40	70	330	60	110	1310	150	60	1120	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	150	40	70	330	60	110	1310	150	60	1120	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	60	150	40	70	330	60	110	1310	150	60	1120	50
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.58	0.42	1.00	1.69	0.31	1.00	1.79	0.21	1.00	1.91	0.09
Final Sat.:	1600	2526	674	1600	2708	492	1600	2871	329	1600	3063	137
Capacity Analysis Module:												
Vol/Sat:	0.04	0.06	0.06	0.04	0.12	0.12	0.07	0.46	0.46	0.04	0.37	0.37
Crit Moves:	***			***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday PM

Intersection #24: Main St. & Victoria St.

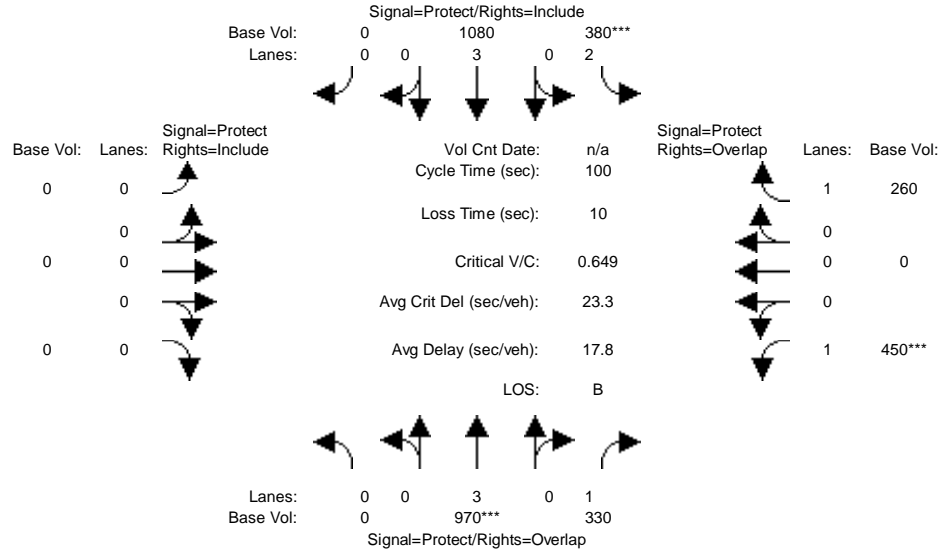


Street Name:	Main St.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	50	320	120	140	670	130	110	1180	140	170	990	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	320	120	140	670	130	110	1180	140	170	990	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	320	120	140	670	130	110	1180	140	170	990	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	320	120	140	670	130	110	1180	140	170	990	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	50	320	120	140	670	130	110	1180	140	170	990	100
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.68	0.32	1.00	1.79	0.21	1.00	1.82	0.18
Final Sat.:	1600	3200	1600	1600	2680	520	1600	2861	339	1600	2906	294
Capacity Analysis Module:												
Vol/Sat:	0.03	0.10	0.08	0.09	0.25	0.25	0.07	0.41	0.41	0.11	0.34	0.34
Crit Moves:	***				***			***			***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday PM

Intersection #25: Avalon Blvd. & University Dr.

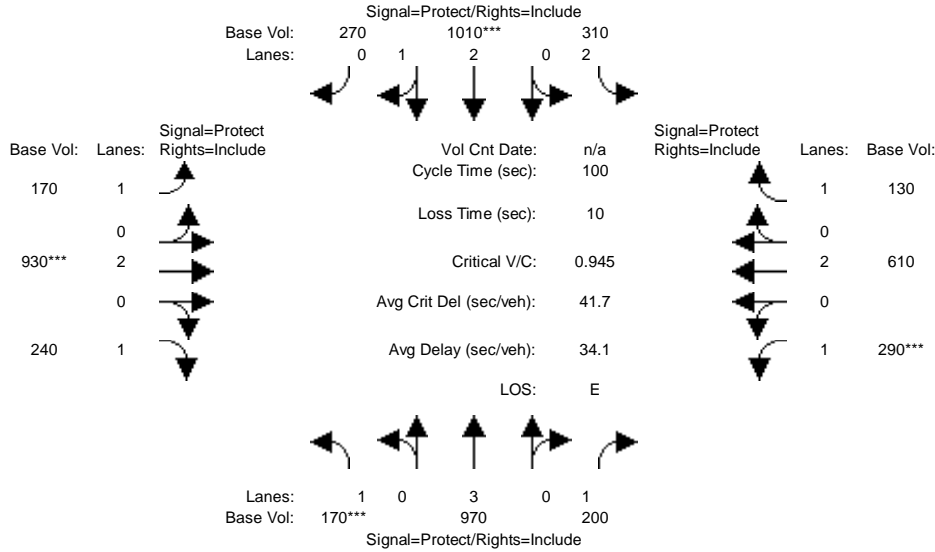


Street Name:	Avalon Blvd.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	970	330	380	1080	0	0	0	0	450	0	260
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	970	330	380	1080	0	0	0	0	450	0	260
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	970	330	380	1080	0	0	0	0	450	0	260
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	970	330	380	1080	0	0	0	0	450	0	260
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	970	330	380	1080	0	0	0	0	450	0	260
OvlAdjVol:												154
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.21	0.07	0.23	0.00	0.00	0.00	0.00	0.28	0.00	0.16
OvlAdjV/S:												0.10
Crit Moves:	****			****						****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday PM

Intersection #26: Avalon Blvd. & Del Amo Blvd.

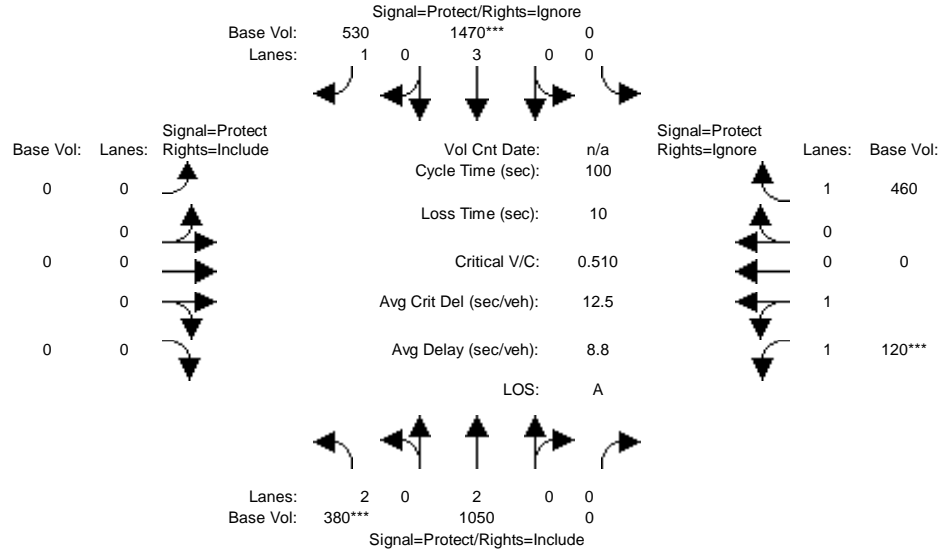


Street Name:	Avalon Blvd.						Del Amo Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	170	970	200	310	1010	270	170	930	240	290	610	130
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	170	970	200	310	1010	270	170	930	240	290	610	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	170	970	200	310	1010	270	170	930	240	290	610	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	170	970	200	310	1010	270	170	930	240	290	610	130
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	170	970	200	310	1010	270	170	930	240	290	610	130
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.37	0.63	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	3788	1013	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.20	0.13	0.05	0.27	0.27	0.11	0.29	0.15	0.18	0.19	0.08
Crit Moves:	***			***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday PM

Intersection #27: Avalon Blvd. & I-405 NB Ramps

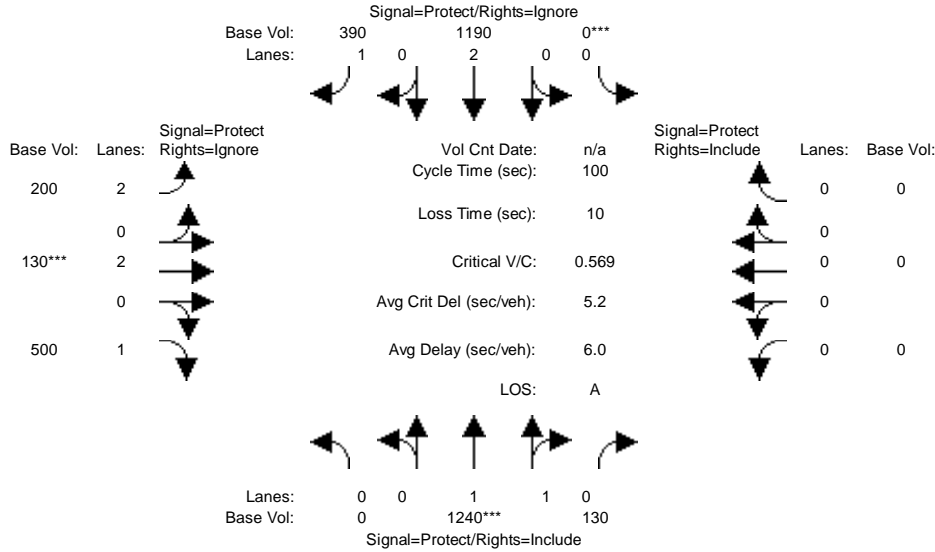


Street Name:	Avalon Blvd.						I-405 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	380	1050	0	0	1470	530	0	0	0	120	0	460
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	380	1050	0	0	1470	530	0	0	0	120	0	460
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	380	1050	0	0	1470	0	0	0	0	120	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	380	1050	0	0	1470	0	0	0	0	120	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Volume:	380	1050	0	0	1470	0	0	0	0	120	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	5760	3200	0	0	4800	1600	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.33	0.00	0.00	0.31	0.00	0.00	0.00	0.00	0.04	0.00	0.00
Crit Moves:	***				***					***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday PM

Intersection #28: Avalon Blvd. & I-405 SB Ramps

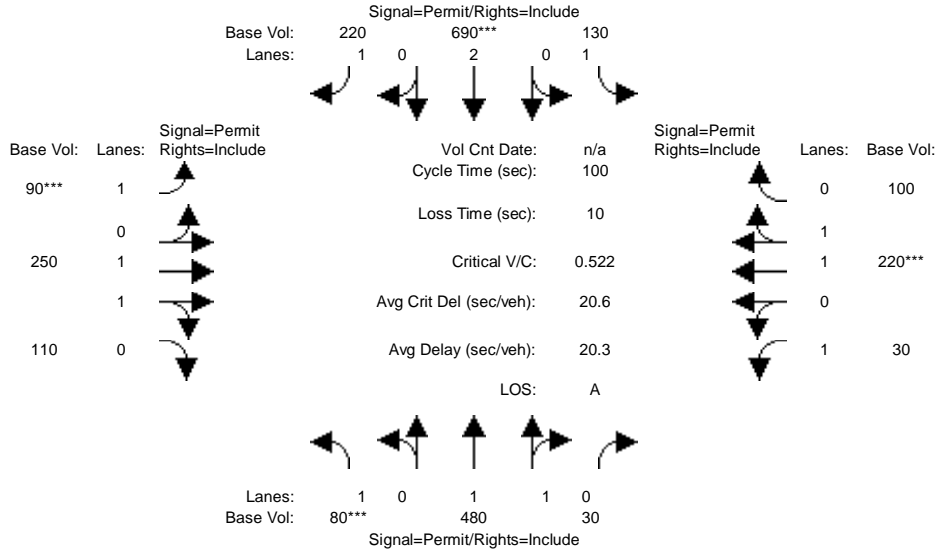


Street Name:	Avalon Blvd.						I-405 SB Ramps					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1240	130	0	1190	390	200	130	500	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1240	130	0	1190	390	200	130	500	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	1240	130	0	1190	0	200	130	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1240	130	0	1190	0	200	130	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Volume:	0	1240	130	0	1190	0	200	130	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.81	0.19	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	0	2896	304	0	3200	1600	5760	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.43	0.43	0.00	0.37	0.00	0.03	0.04	0.00	0.00	0.00	0.00
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday PM

Intersection #29: Central Ave. & University Dr.

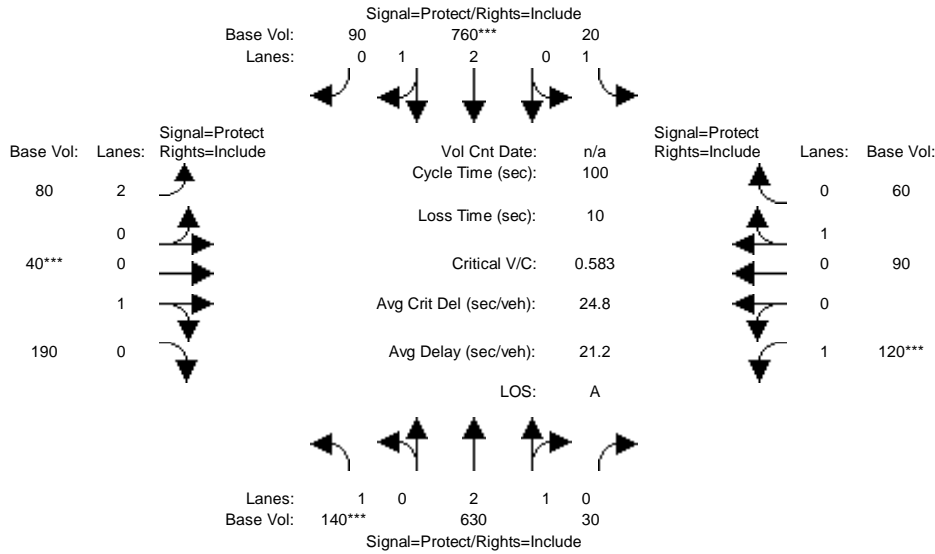


Street Name:	Central Ave.						University Dr.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	80	480	30	130	690	220	90	250	110	30	220	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	480	30	130	690	220	90	250	110	30	220	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	480	30	130	690	220	90	250	110	30	220	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	480	30	130	690	220	90	250	110	30	220	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	80	480	30	130	690	220	90	250	110	30	220	100
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.88	0.12	1.00	2.00	1.00	1.00	1.39	0.61	1.00	1.38	0.62
Final Sat.:	1600	3012	188	1600	3200	1600	1600	2222	978	1600	2200	1000
Capacity Analysis Module:												
Vol/Sat:	0.05	0.16	0.16	0.08	0.22	0.14	0.06	0.11	0.11	0.02	0.10	0.10
Crit Moves:	***				***		***				***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday PM

Intersection #30: Wilmington Ave. & University Dr.

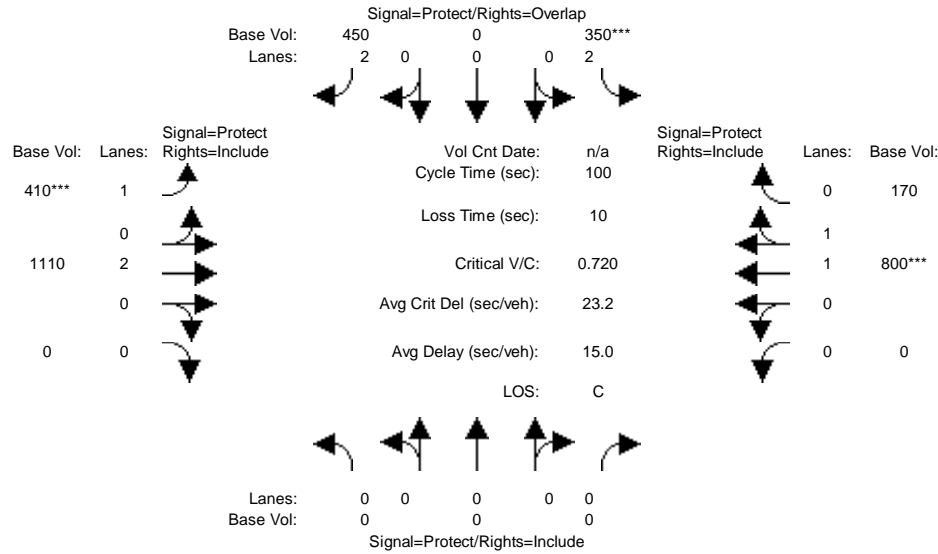


Street Name:	Wilmington Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	140	630	30	20	760	90	80	40	190	120	90	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	630	30	20	760	90	80	40	190	120	90	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	140	630	30	20	760	90	80	40	190	120	90	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	630	30	20	760	90	80	40	190	120	90	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	140	630	30	20	760	90	80	40	190	120	90	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.86	0.14	1.00	2.68	0.32	2.00	0.17	0.83	1.00	0.60	0.40
Final Sat.:	1600	4582	218	1600	4292	508	5760	278	1322	1600	960	640
Capacity Analysis Module:												
Vol/Sat:	0.09	0.14	0.14	0.01	0.18	0.18	0.01	0.14	0.14	0.08	0.09	0.09
Crit Moves:	***				***			***		***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday PM

Intersection #31: Central Ave. & Del Amo Blvd.

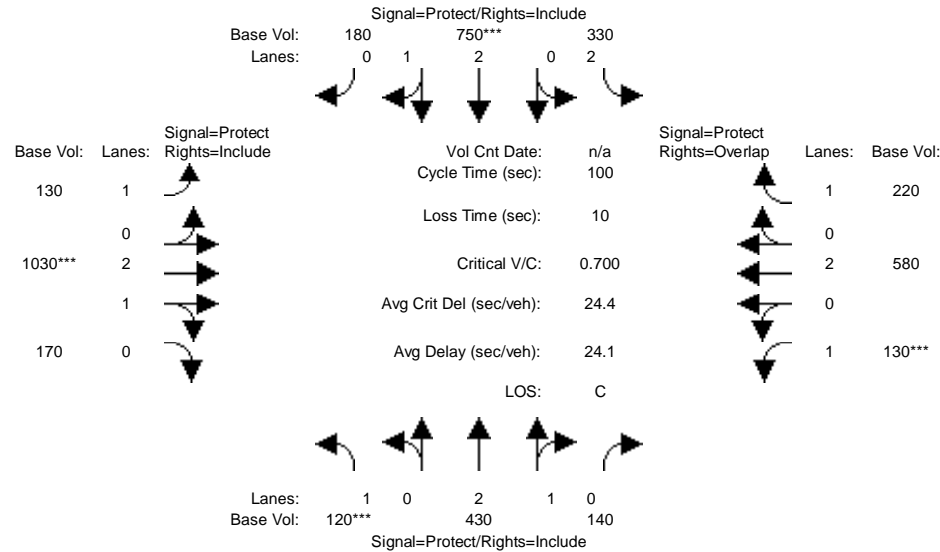


Street Name:	Central Ave.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	350	0	450	410	1110	0	0	800	170
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	350	0	450	410	1110	0	0	800	170
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	350	0	450	410	1110	0	0	800	170
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	350	0	450	410	1110	0	0	800	170
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	350	0	450	410	1110	0	0	800	170
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	2.00	1.00	2.00	0.00	0.00	1.65	0.35
Final Sat.:	0	0	0	5760	0	3200	1600	3200	0	0	2639	561
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.06	0.00	0.14	0.26	0.35	0.00	0.00	0.30	0.30
OvlAdjV/S:	0.00											
Crit Moves:				****				****				****

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday PM

Intersection #32: Wilmington Ave. & Del Amo Blvd.

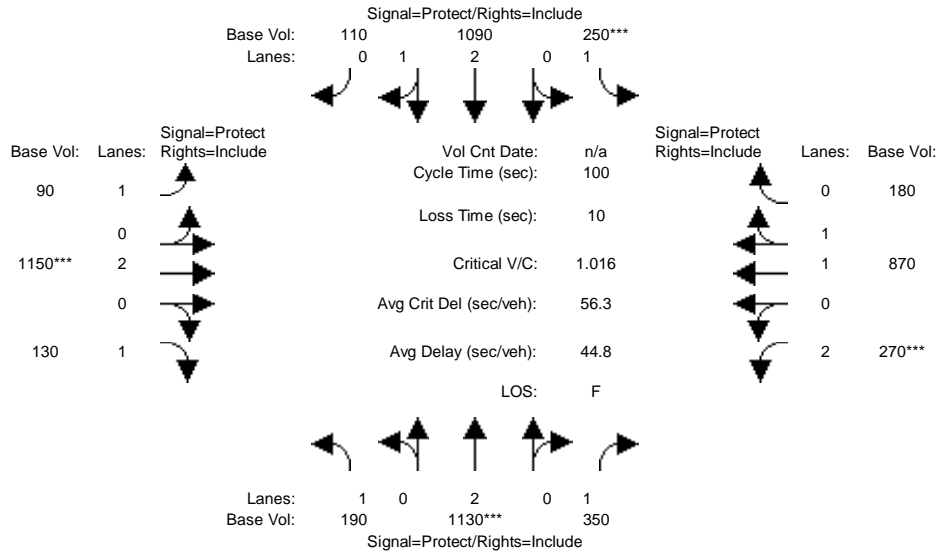


Street Name:	Wilmington Ave.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	120	430	140	330	750	180	130	1030	170	130	580	220
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	120	430	140	330	750	180	130	1030	170	130	580	220
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	120	430	140	330	750	180	130	1030	170	130	580	220
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	430	140	330	750	180	130	1030	170	130	580	220
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	120	430	140	330	750	180	130	1030	170	130	580	220
OvlAdjVol:												128
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.26	0.74	2.00	2.42	0.58	1.00	2.58	0.42	1.00	2.00	1.00
Final Sat.:	1600	3621	1179	5760	3871	929	1600	4120	680	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.12	0.12	0.06	0.19	0.19	0.08	0.25	0.25	0.08	0.18	0.14
OvlAdjV/S:												0.08
Crit Moves:	***			***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday PM

Intersection #33: W. Artesia Blvd. & Crenshaw Blvd.

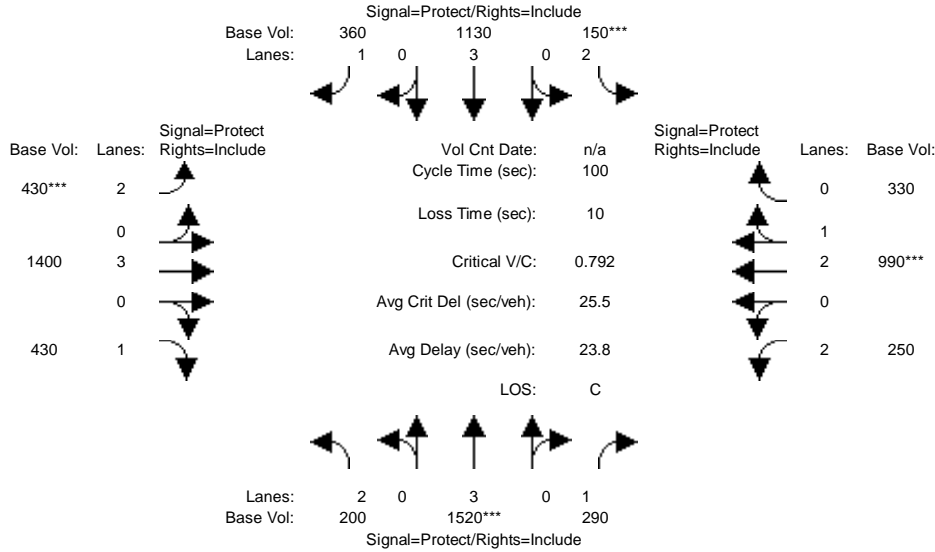


Street Name:	Crenshaw Blvd.						W. Artesia Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	190	1130	350	250	1090	110	90	1150	130	270	870	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	190	1130	350	250	1090	110	90	1150	130	270	870	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	190	1130	350	250	1090	110	90	1150	130	270	870	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	190	1130	350	250	1090	110	90	1150	130	270	870	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	190	1130	350	250	1090	110	90	1150	130	270	870	180
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.72	0.28	1.00	2.00	1.00	2.00	1.66	0.34
Final Sat.:	1600	3200	1600	1600	4360	440	1600	3200	1600	5760	2651	549
Capacity Analysis Module:												
Vol/Sat:	0.12	0.35	0.22	0.16	0.25	0.25	0.06	0.36	0.08	0.05	0.33	0.33
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday PM

Intersection #34: W 190th St. & South Western Ave.

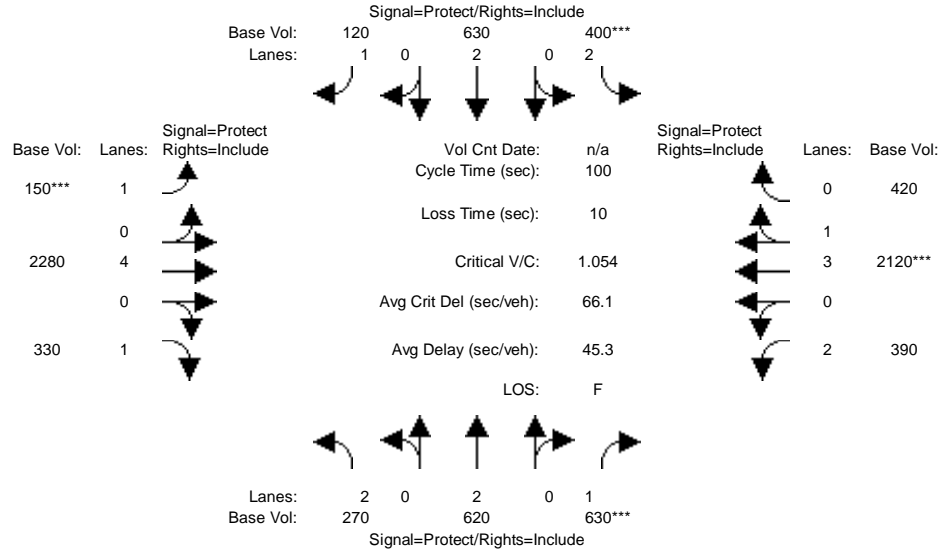


Street Name:	S. Western Ave.						W. 190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	200	1520	290	150	1130	360	430	1400	430	250	990	330
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	200	1520	290	150	1130	360	430	1400	430	250	990	330
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	200	1520	290	150	1130	360	430	1400	430	250	990	330
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	200	1520	290	150	1130	360	430	1400	430	250	990	330
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	200	1520	290	150	1130	360	430	1400	430	250	990	330
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.25	0.75
Final Sat.:	5760	4800	1600	5760	4800	1600	5760	4800	1600	5760	3600	1200
Capacity Analysis Module:												
Vol/Sat:	0.03	0.32	0.18	0.03	0.24	0.23	0.07	0.29	0.27	0.04	0.28	0.28
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday PM

Intersection #35: W. Artesia Blvd. & Vermont Av.e

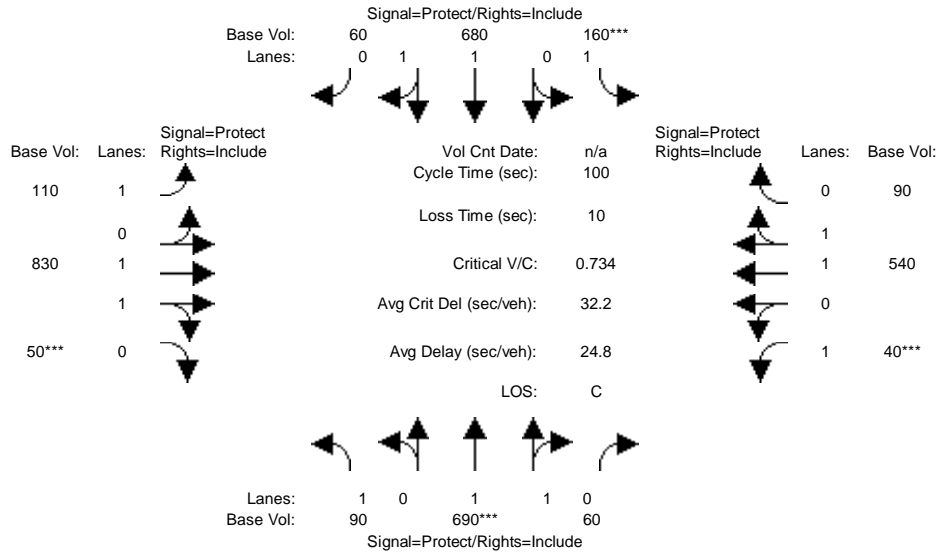


Street Name:	Vermont Ave.						W. Artesia Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	270	620	630	400	630	120	150	2280	330	390	2120	420
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	270	620	630	400	630	120	150	2280	330	390	2120	420
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	270	620	630	400	630	120	150	2280	330	390	2120	420
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	270	620	630	400	630	120	150	2280	330	390	2120	420
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	270	620	630	400	630	120	150	2280	330	390	2120	420
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	1.00	4.00	1.00	2.00	3.34	0.66
Final Sat.:	5760	3200	1600	5760	3200	1600	1600	6400	1600	5760	5342	1058
Capacity Analysis Module:												
Vol/Sat:	0.05	0.19	0.39	0.07	0.20	0.08	0.09	0.36	0.21	0.07	0.40	0.40
Crit Moves:			***	***			***				***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday PM

Intersection #36: Alameda St. & Compton Blvd.

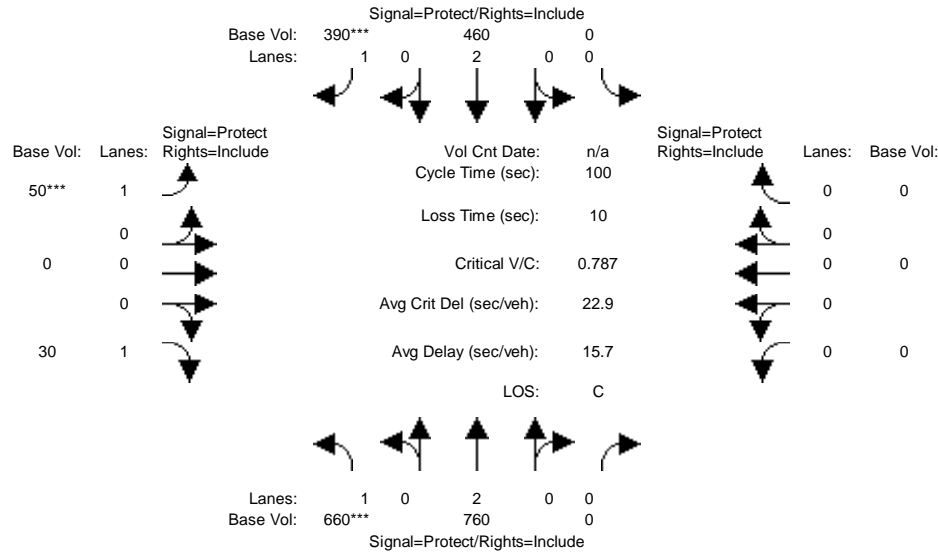


Street Name:	Alameda St.						Compton Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	90	690	60	160	680	60	110	830	50	40	540	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	690	60	160	680	60	110	830	50	40	540	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	690	60	160	680	60	110	830	50	40	540	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	690	60	160	680	60	110	830	50	40	540	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	90	690	60	160	680	60	110	830	50	40	540	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.84	0.16	1.00	1.84	0.16	1.00	1.89	0.11	1.00	1.71	0.29
Final Sat.:	1600	2944	256	1600	2941	259	1600	3018	182	1600	2743	457
Capacity Analysis Module:												
Vol/Sat:	0.06	0.23	0.23	0.10	0.23	0.23	0.07	0.27	0.28	0.03	0.20	0.20
Crit Moves:	****			****					****	****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 No Project Weekday PM

Intersection #37: Alameda St. & SR 91 EB Ramps



Street Name:	Alameda St.						SR 91 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	660	760	0	0	460	390	50	0	30	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	660	760	0	0	460	390	50	0	30	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	660	760	0	0	460	390	50	0	30	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	660	760	0	0	460	390	50	0	30	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	660	760	0	0	460	390	50	0	30	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	3200	0	0	3200	1600	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.41	0.24	0.00	0.00	0.14	0.24	0.03	0.00	0.02	0.00	0.00	0.00
Crit Moves:	***					***	***					

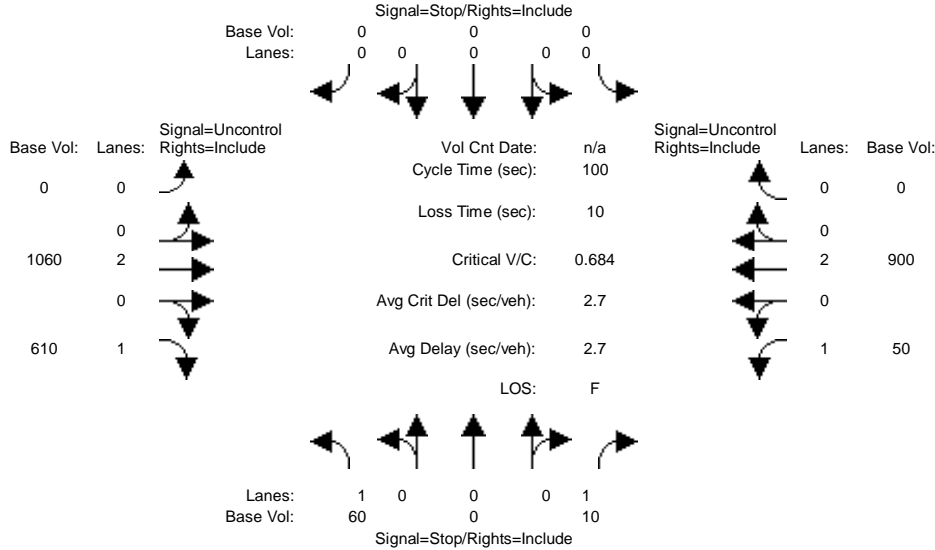
Appendix M

Intersection LOS Worksheets for 2025 Weekday Plus Project Alternative 1 Conditions

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2025 Plus Project Weekday AM

Intersection #1: Victoria St. & Drive D



Street Name:	Drive D					Victoria St..						
Approach:	North Bound			South Bound		East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	60	0	10	0	0	0	0	1060	610	50	900	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	0	10	0	0	0	0	1060	610	50	900	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	0	10	0	0	0	0	1060	610	50	900	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	60	0	10	0	0	0	0	1060	610	50	900	0
Critical Gap Module:												
Critical Gp:	6.8	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	1610	xxxx	530	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1670	xxxx	xxxxx
Potent Cap.:	97	xxxx	499	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	390	xxxx	xxxxx
Move Cap.:	88	xxxx	499	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	390	xxxx	xxxxx
Volume/Cap:	0.68	xxxx	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.13	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	3.3	xxxx	0.1	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.4	xxxx	xxxxx
Control Del:	108.0	xxxx	12.4	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	15.6	xxxx	xxxxx
LOS by Move:	F	*	B	*	*	*	*	*	*	C	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	94.3			xxxxxxx			xxxxxxx			xxxxxxx		

ApproachLOS: F * * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #1 Victoria St. & Drive D

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 2 0 1	1 0 2 0 0
Initial Vol:	60 0 10	0 0 0	0 1060 610	50 900 0
ApproachDel:	94.3	xxxxxx	xxxxxx	xxxxxx

Approach[northbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=1.8]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=70]

FAIL - Approach volume less than 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=2690]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #1 Victoria St. & Drive D

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 2 0 1	1 0 2 0 0
Initial Vol:	60 0 10	0 0 0	0 1060 610	50 900 0

Major Street Volume: 2620

Minor Approach Volume: 70

Minor Approach Volume Threshold: -40 [less than minimum of 150]

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

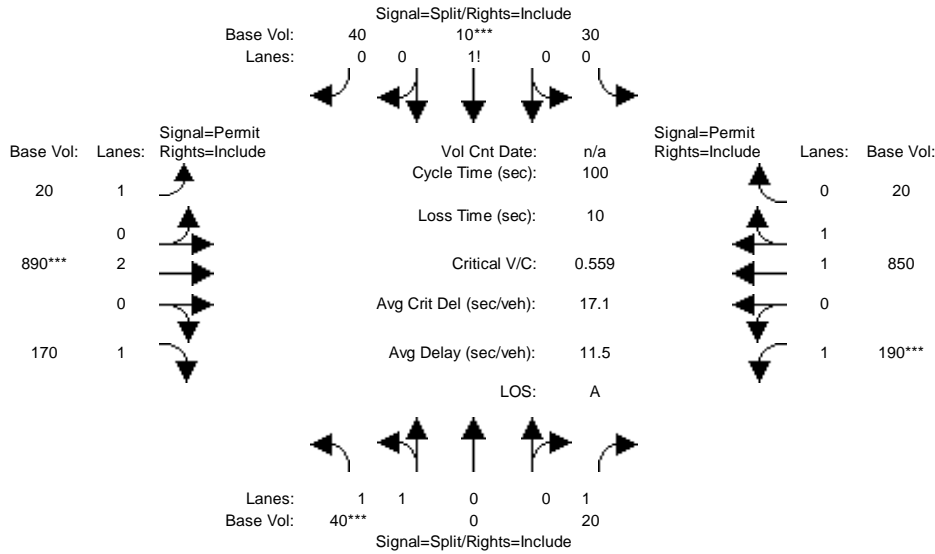
The peak hour warrant analysis in this report is not intended to replace

a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM

Intersection #2: Victoria St. & Tamcliff Ave.

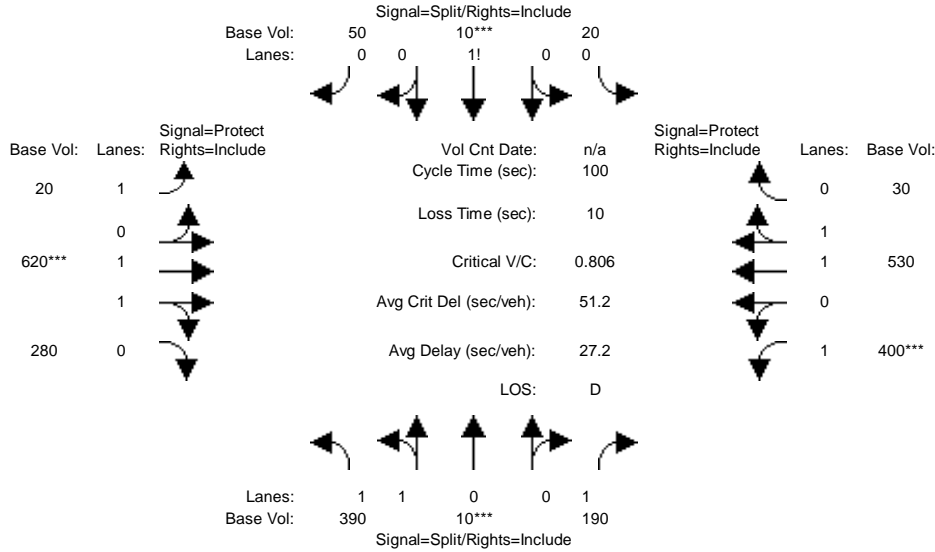


Street Name:	Victoria St.						Tamcliff Ave.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	40	0	20	30	10	40	20	890	170	190	850	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	0	20	30	10	40	20	890	170	190	850	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	0	20	30	10	40	20	890	170	190	850	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	0	20	30	10	40	20	890	170	190	850	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	40	0	20	30	10	40	20	890	170	190	850	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.38	0.12	0.50	1.00	2.00	1.00	1.00	1.95	0.05
Final Sat.:	3200	0	1600	600	200	800	1600	3200	1600	1600	3126	74
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.01	0.05	0.05	0.05	0.01	0.28	0.11	0.12	0.27	0.27
Crit Moves:	***				***			***			***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM

Intersection #3: Victoria St. & Birchknoll Dr.

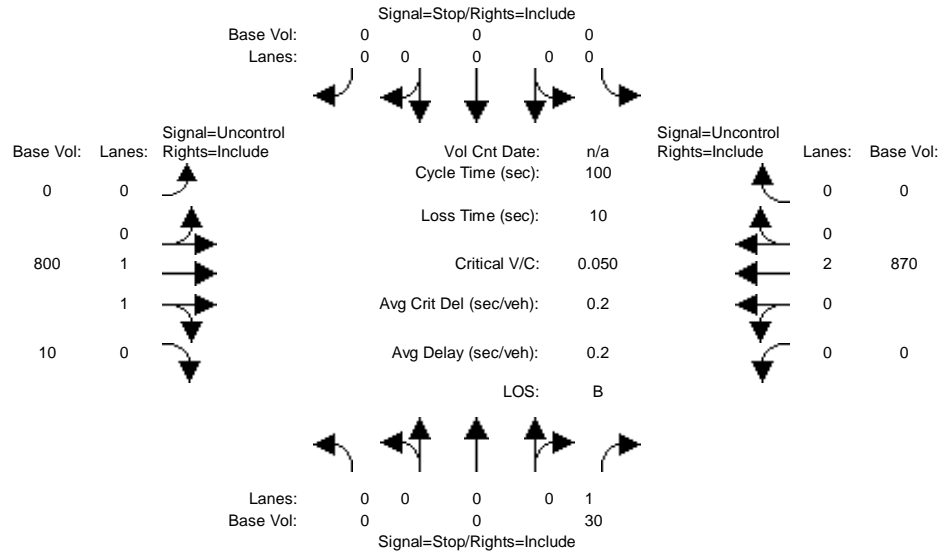


Street Name:	Victoria St.						Birchknoll Dr.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	390	10	190	20	10	50	20	620	280	400	530	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	390	10	190	20	10	50	20	620	280	400	530	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	390	10	190	20	10	50	20	620	280	400	530	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	390	10	190	20	10	50	20	620	280	400	530	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	390	10	190	20	10	50	20	620	280	400	530	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.95	0.05	1.00	0.25	0.12	0.63	1.00	1.38	0.62	1.00	1.89	0.11
Final Sat.:	3120	80	1600	400	200	1000	1600	2204	996	1600	3029	171
Capacity Analysis Module:												
Vol/Sat:	0.13	0.13	0.12	0.05	0.05	0.05	0.01	0.28	0.28	0.25	0.17	0.18
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2025 Plus Project Weekday AM

Intersection #4: Victoria St. & Project Service Rd.



Street Name:	Project Service Rd.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	30	0	0	0	0	800	10	0	870	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	30	0	0	0	0	800	10	0	870	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	30	0	0	0	0	800	10	0	870	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	30	0	0	0	0	800	10	0	870	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	xxxx	xxxx	405	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	601	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	601	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.05	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	0.2	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	11.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	B	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*

ApproachDel: 11.3 xxxxxxx xxxxxxx xxxxxxx
 ApproachLOS: B * * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #4 Victoria St. & Project Service Rd.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0	0	0	0	0	0	0	0	1	0	0	2
Initial Vol:	0	0	30	0	0	0	0	800	10	0	870	0
ApproachDel:	11.3			xxxxxxx			xxxxxxx			xxxxxxx		

Approach[northbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.1]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=30]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=1710]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #4 Victoria St. & Project Service Rd.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0	0	0	0	0	0	0	0	1	0	0	2
Initial Vol:	0	0	30	0	0	0	0	800	10	0	870	0

Major Street Volume: 1680

Minor Approach Volume: 30

Minor Approach Volume Threshold: 106

SIGNAL WARRANT DISCLAIMER

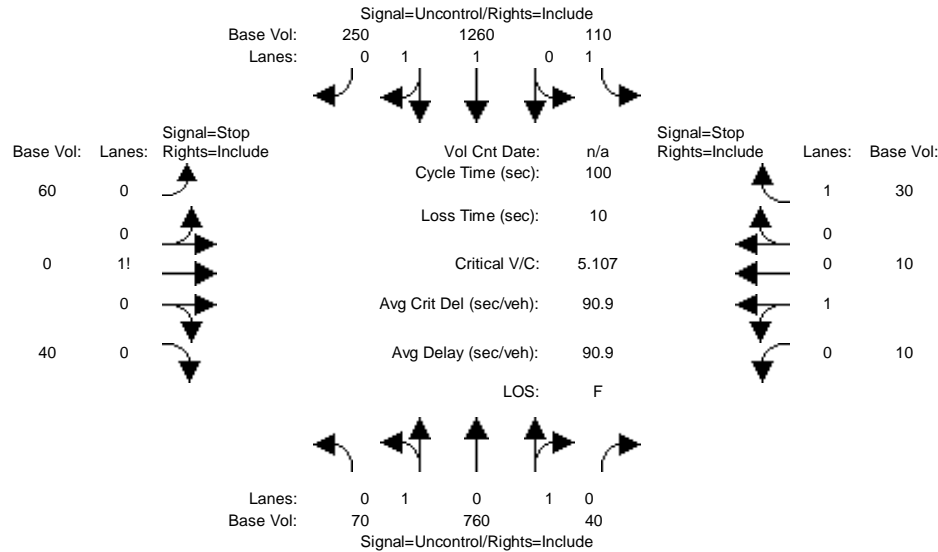
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2025 Plus Project Weekday AM

Intersection #5: Central Ave. & Charles Willard St.



Street Name:	Central Ave.						Charles Willard St.								
Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R			
Volume Module:															
Base Vol:	70	760	40	110	1260	250	60	0	40	10	10	30			
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Initial Bse:	70	760	40	110	1260	250	60	0	40	10	10	30			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Volume:	70	760	40	110	1260	250	60	0	40	10	10	30			
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0			
Final Volume:	70	760	40	110	1260	250	60	0	40	10	10	30			
Critical Gap Module:															
Critical Gp:	4.1	xxxx	xxxxxx	4.1	xxxx	xxxxxx	7.5	6.5	6.9	7.5	6.5	6.9			
FollowUpTim:	2.2	xxxx	xxxxxx	2.2	xxxx	xxxxxx	3.5	4.0	3.3	3.5	4.0	3.3			
Capacity Module:															
Cnflct Vol:	1510	xxxx	xxxxxx	800	xxxx	xxxxxx	2130	2545	755	1770	2650	400			
Potent Cap.:	449	xxxx	xxxxxx	832	xxxx	xxxxxx	29	27	356	54	23	605			
Move Cap.:	449	xxxx	xxxxxx	832	xxxx	xxxxxx	12	20	356	38	17	605			
Volume/Cap:	0.16	xxxx	xxxx	0.13	xxxx	xxxx	5.11	0.00	0.11	0.27	0.59	0.05			
Level Of Service Module:															
2Way95thQ:	0.5	xxxx	xxxxxx	0.5	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	0.2			
Control Del:	14.5	xxxx	xxxxxx	10.0	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	11.3			
LOS by Move:	B	*	*	A	*	*	*	*	*	*	*	B			
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	19	xxxxxx	23	xxxx	xxxxxx			
Shared Queue:	0.5	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	13.0	xxxxxx	2.5	xxxx	xxxxxx			
Shrd ConDel:	14.5	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	2301	xxxxxx	372.9	xxxx	xxxxxx			
Shared LOS:	B	*	*	*	*	*	*	F	*	F	*	*			

```

ApproachDel:      xxxxxx          xxxxxx          2301.2          155.9
ApproachLOS:      *              *              F              F

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Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #5 Central Ave. & Charles Willard St.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 1 0 1 0	1 0 1 1 0	0 0 1! 0 0	0 1 0 0 1
Initial Vol:	70 760 40	110 1260 250	60 0 40	10 10 30
ApproachDel:	xxxxxx	xxxxxx	2301.2	155.9

-----|-----|-----|-----|-----|

Approach[eastbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=63.9]

SUCCEED - Vehicle-hours greater than or equal to 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=100]

SUCCEED - Approach volume greater than or equal to 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=2640]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

-----|-----|-----|-----|-----|

Approach[westbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=2.2]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=50]

FAIL - Approach volume less than 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=2640]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

-----|-----|-----|-----|-----|

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #5 Central Ave. & Charles Willard St.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 1 0 1 0	1 0 1 1 0	0 0 1! 0 0	0 1 0 0 1
Initial Vol:	70 760 40	110 1260 250	60 0 40	10 10 30

Major Street Volume: 2490

Minor Approach Volume: 100

Minor Approach Volume Threshold: -29 [less than minimum of 100]

SIGNAL WARRANT DISCLAIMER

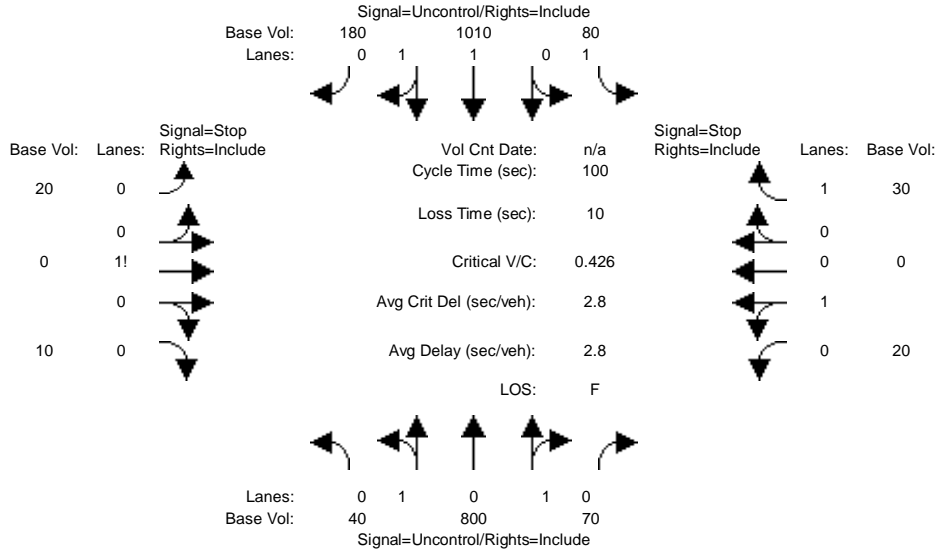
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2025 Plus Project Weekday AM

Intersection #6: Central Ave. & Project Driveway/Beachey Pl.



Street Name:	Central Ave.						Beachey Pl.								
Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R			
Volume Module:															
Base Vol:	40	800	70	80	1010	180	20	0	10	20	0	30			
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Initial Bse:	40	800	70	80	1010	180	20	0	10	20	0	30			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Volume:	40	800	70	80	1010	180	20	0	10	20	0	30			
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0			
FinalVolume:	40	800	70	80	1010	180	20	0	10	20	0	30			
Critical Gap Module:															
Critical Gp:	4.1	xxxx	xxxxxx	4.1	xxxx	xxxxxx	7.5	6.5	6.9	7.5	6.5	6.9			
FollowUpTim:	2.2	xxxx	xxxxxx	2.2	xxxx	xxxxxx	3.5	4.0	3.3	3.5	4.0	3.3			
Capacity Module:															
Cnflct Vol:	1190	xxxx	xxxxxx	870	xxxx	xxxxxx	1740	2210	595	1580	2265	435			
Potent Cap.:	594	xxxx	xxxxxx	783	xxxx	xxxxxx	57	45	452	75	41	575			
Move Cap.:	594	xxxx	xxxxxx	783	xxxx	xxxxxx	47	37	452	64	34	575			
Volume/Cap:	0.07	xxxx	xxxx	0.10	xxxx	xxxx	0.43	0.00	0.02	0.31	0.00	0.05			
Level Of Service Module:															
2Way95thQ:	0.2	xxxx	xxxxxx	0.3	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	0.2			
Control Del:	11.5	xxxx	xxxxxx	10.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	11.6			
LOS by Move:	B	*	*	B	*	*	*	*	*	*	*	B			
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	67	xxxxxx	64	xxxx	xxxxxx			
SharedQueue:	0.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	1.8	xxxxxx	1.1	xxxx	xxxxxx			
Shrd ConDel:	11.5	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	96.6	xxxxxx	85.2	xxxx	xxxxxx			
Shared LOS:	B	*	*	*	*	*	*	F	*	F	*	*			

ApproachDel:	xxxxxx	xxxxxx	96.6	41.1
ApproachLOS:	*	*	F	E

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #6 Central Ave. & Project Driveway/Beachey Pl.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 1 0 1 0	1 0 1 1 0	0 0 1 0 0	0 1 0 0 1
Initial Vol:	40 800 70	80 1010 180	20 0 10	20 0 30
ApproachDel:	xxxxxx	xxxxxx	96.6	41.1

Approach[eastbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.8]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=30]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=2260]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Approach[westbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.6]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=50]

FAIL - Approach volume less than 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=2260]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #6 Central Ave. & Project Driveway/Beachey Pl.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 1 0 1 0	1 0 1 1 0	0 0 1 0 0	0 1 0 0 1
Initial Vol:	40 800 70	80 1010 180	20 0 10	20 0 30
Major Street Volume:	2180			
Minor Approach Volume:	50			

Minor Approach Volume Threshold: 39 [less than minimum of 150]

SIGNAL WARRANT DISCLAIMER

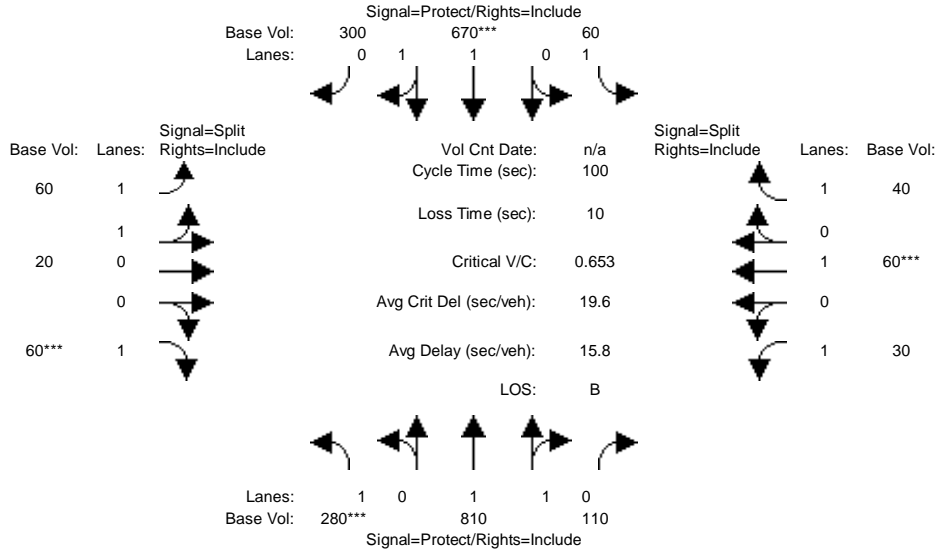
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM

Intersection #7: Central Ave. & Glenn Curtiss St.

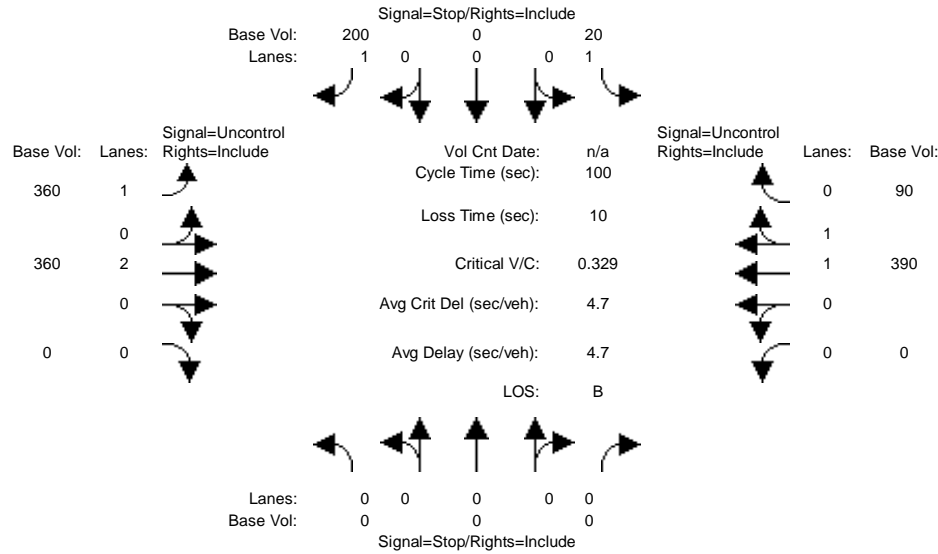


Street Name:	Central Ave.						Glenn Curtiss St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	280	810	110	60	670	300	60	20	60	30	60	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	280	810	110	60	670	300	60	20	60	30	60	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	280	810	110	60	670	300	60	20	60	30	60	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	280	810	110	60	670	300	60	20	60	30	60	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	280	810	110	60	670	300	60	20	60	30	60	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.76	0.24	1.00	1.38	0.62	1.50	0.50	1.00	1.00	1.00	1.00
Final Sat.:	1600	2817	383	1600	2210	990	2400	800	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.17	0.29	0.29	0.04	0.30	0.30	0.03	0.03	0.04	0.02	0.04	0.03
Crit Moves:	***			***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2025 Plus Project Weekday AM

Intersection #9: University Dr. & Toro Center Dr.



Street Name:	University Dr.						Toro Center Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	20	0	200	360	360	0	0	390	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	20	0	200	360	360	0	0	390	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	20	0	200	360	360	0	0	390	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	20	0	200	360	360	0	0	390	90
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.8	xxxx	6.9	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	xxxx	xxxx	xxxxx	1335	xxxx	240	480	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	148	xxxx	767	1093	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	110	xxxx	767	1093	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.18	xxxx	0.26	0.33	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.6	xxxx	1.0	1.5	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	44.9	xxxxx	11.3	9.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	E	*	B	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*

ApproachDel:	xxxxxx	14.4	xxxxxx	xxxxxx
ApproachLOS:	*	B	*	*

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #9 University Dr. & Toro Center Dr.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 0	1 0 0 0 1	1 0 2 0 0	0 0 1 1 0
Initial Vol:	0 0 0 0	20 0 200	360 360 0	0 390 90
ApproachDel:	xxxxxx	14.4	xxxxxx	xxxxxx

Approach[southbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.9]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=220]

SUCCEED - Approach volume >= 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=1420]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #9 University Dr. & Toro Center Dr.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 0	1 0 0 0 1	1 0 2 0 0	0 0 1 1 0
Initial Vol:	0 0 0 0	20 0 200	360 360 0	0 390 90

Major Street Volume: 1200

Minor Approach Volume: 220

Minor Approach Volume Threshold: 296

SIGNAL WARRANT DISCLAIMER

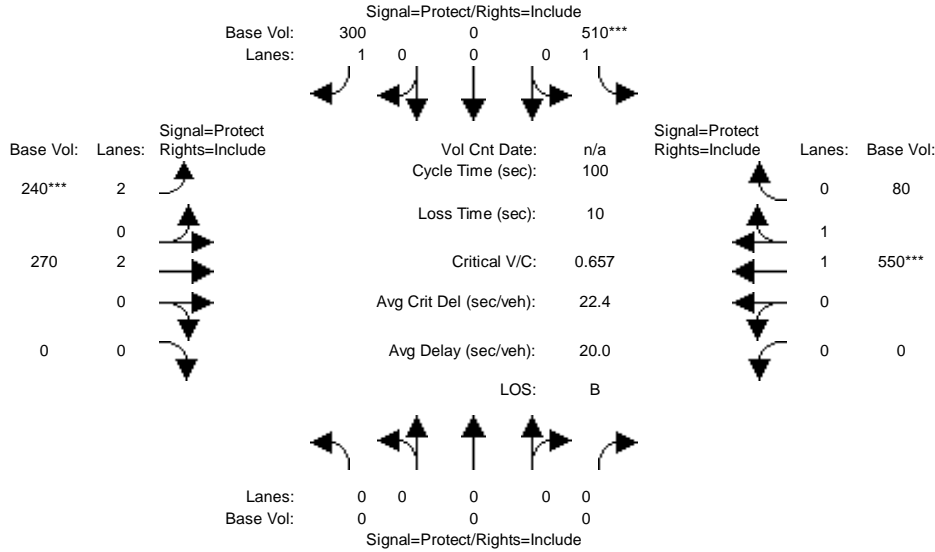
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM

Intersection #10: Albertoni St. & SR 91 EB Ramps

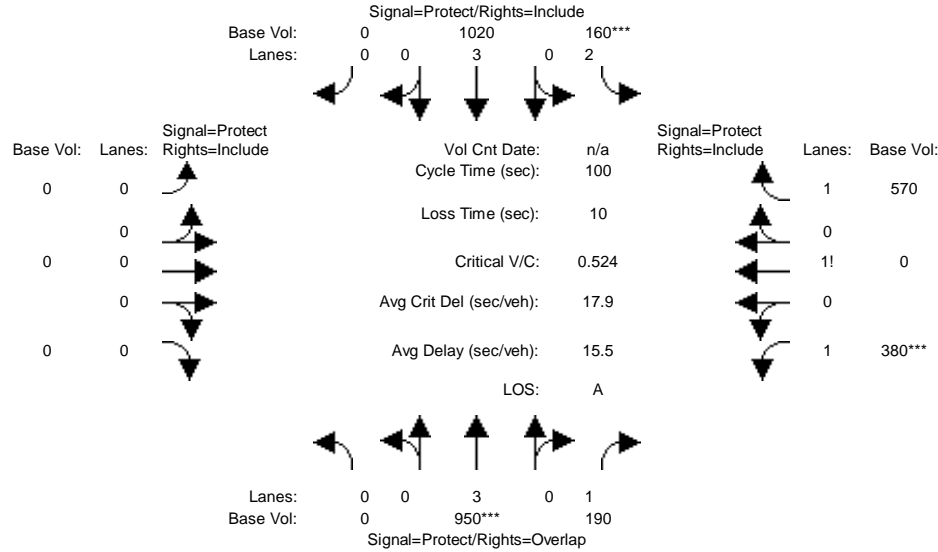


Street Name:	Albertoni St.						SR 91 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	510	0	300	240	270	0	0	550	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	510	0	300	240	270	0	0	550	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	510	0	300	240	270	0	0	550	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	510	0	300	240	270	0	0	550	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	510	0	300	240	270	0	0	550	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.75	0.25
Final Sat.:	0	0	0	1600	0	1600	5760	3200	0	0	2794	406
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.32	0.00	0.19	0.04	0.08	0.00	0.00	0.20	0.20
Crit Moves:				***			***				***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM

Intersection #11: Avalon Blvd. & SR 91 WB On-Ramp

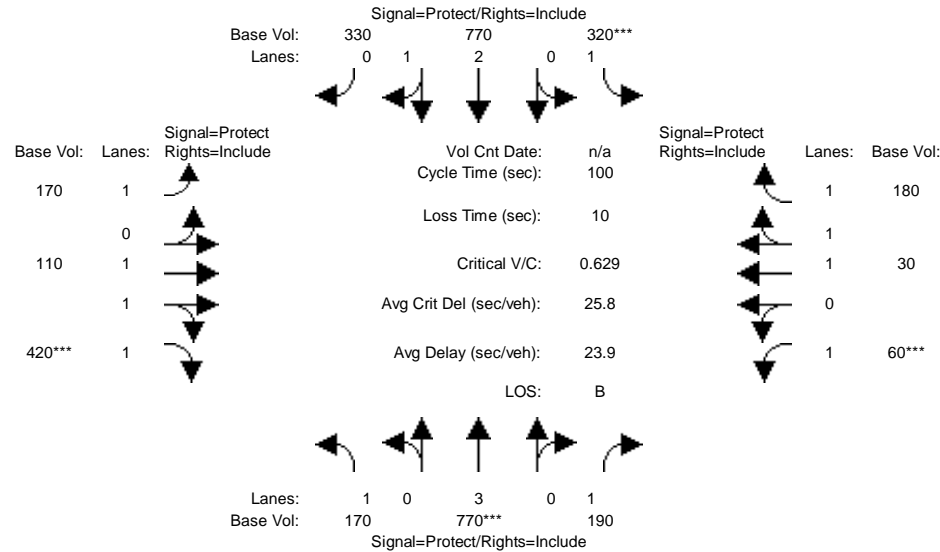


Street Name:	Avalon Blvd.						SR 91 WB On-Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	950	190	160	1020	0	0	0	0	380	0	570
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	950	190	160	1020	0	0	0	0	380	0	570
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	950	190	160	1020	0	0	0	0	380	0	570
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	950	190	160	1020	0	0	0	0	380	0	570
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	950	190	160	1020	0	0	0	0	380	0	570
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.20	0.01	1.79
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	1920	0	2880
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.12	0.03	0.21	0.00	0.00	0.00	0.00	0.20	0.00	0.20
OvlAdjV/S:	0.00											
Crit Moves:	****			****						****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM

Intersection #12: Avalon Blvd. & Albertoni St.

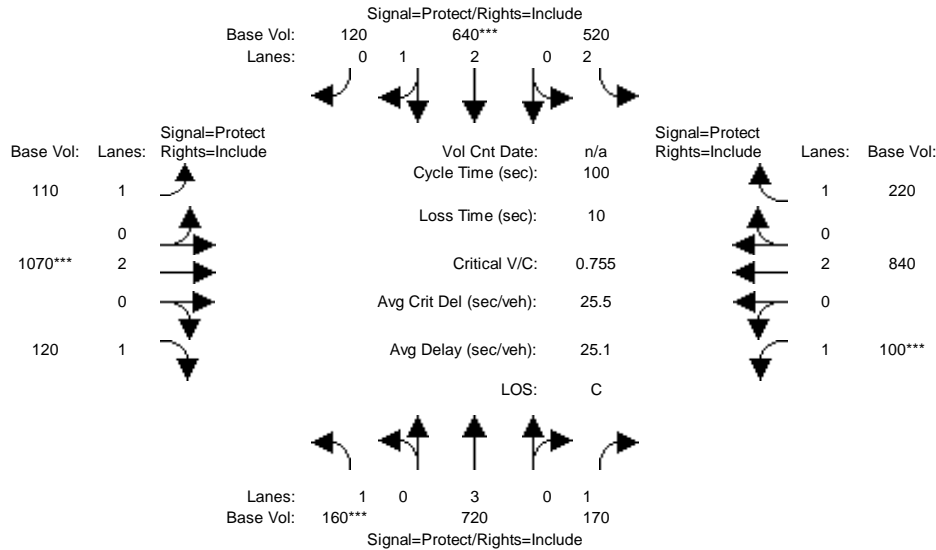


Street Name:	Avalon Blvd.						Albertoni St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	170	770	190	320	770	330	170	110	420	60	30	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	170	770	190	320	770	330	170	110	420	60	30	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	170	770	190	320	770	330	170	110	420	60	30	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	170	770	190	320	770	330	170	110	420	60	30	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	170	770	190	320	770	330	170	110	420	60	30	180
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.10	0.90	1.00	1.00	2.00	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3360	1440	1600	1600	3200	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.11	0.16	0.12	0.20	0.23	0.23	0.11	0.07	0.13	0.04	0.02	0.06
Crit Moves:	****			****					****	****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM

Intersection #13: Avalon Blvd. & Victoria St.

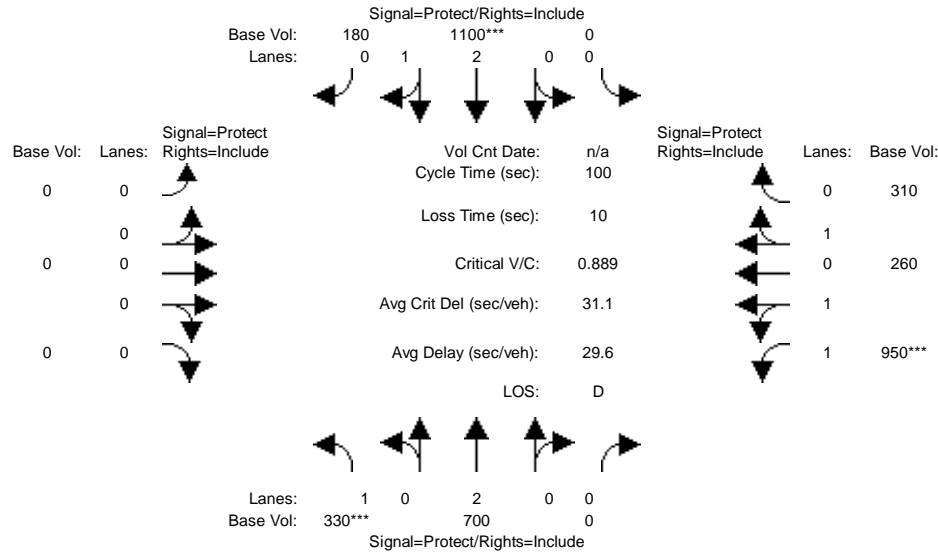


Street Name:	Avalon Blvd.						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	160	720	170	520	640	120	110	1070	120	100	840	220
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	160	720	170	520	640	120	110	1070	120	100	840	220
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	160	720	170	520	640	120	110	1070	120	100	840	220
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	720	170	520	640	120	110	1070	120	100	840	220
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	160	720	170	520	640	120	110	1070	120	100	840	220
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.53	0.47	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4042	758	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.15	0.11	0.09	0.16	0.16	0.07	0.33	0.08	0.06	0.26	0.14
Crit Moves:	***				***			***			***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM

Intersection #14: Central Ave. & Artesia Blvd.

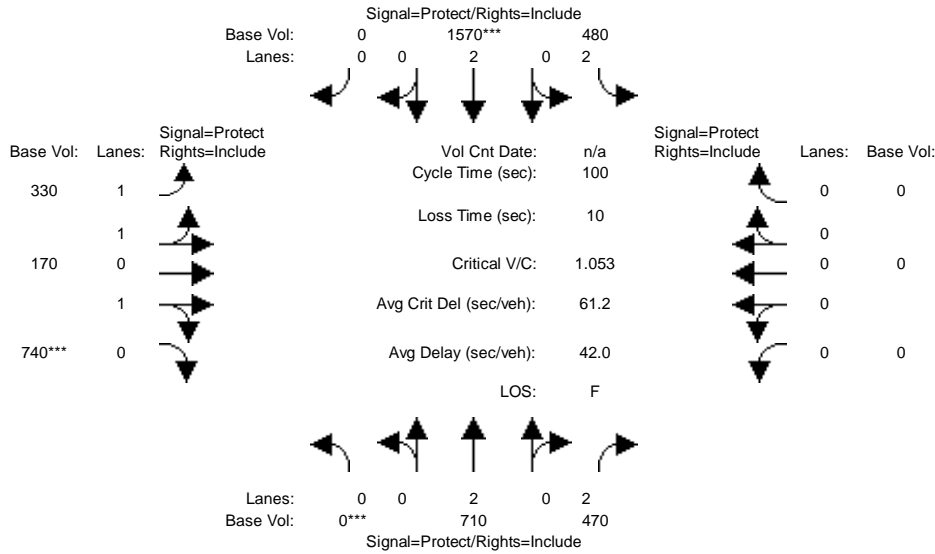


Street Name:	Central Ave.						Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	330	700	0	0	1100	180	0	0	0	950	260	310
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	330	700	0	0	1100	180	0	0	0	950	260	310
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	330	700	0	0	1100	180	0	0	0	950	260	310
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	330	700	0	0	1100	180	0	0	0	950	260	310
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	330	700	0	0	1100	180	0	0	0	950	260	310
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.58	0.42	0.00	0.00	0.00	1.88	0.51	0.61
Final Sat.:	1600	3200	0	0	4125	675	0	0	0	3003	820	977
Capacity Analysis Module:												
Vol/Sat:	0.21	0.22	0.00	0.00	0.27	0.27	0.00	0.00	0.00	0.32	0.32	0.32
Crit Moves:	***				***	***				***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM

Intersection #15: Central Ave. & Albertoni St./Artesia Blvd. EB



Street Name: Central Ave. Albertoni St./Artesia Blvd. EB

Approach: North Bound South Bound East Bound West Bound

Movement:	North Bound			South Bound			East Bound			West Bound		
	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0

Volume Module:

Base Vol:	0	710	470	480	1570	0	330	170	740	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	710	470	480	1570	0	330	170	740	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	710	470	480	1570	0	330	170	740	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	710	470	480	1570	0	330	170	740	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	710	470	480	1570	0	330	170	740	0	0	0

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.32	0.68	1.00	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	2112	1088	1600	0	0	0

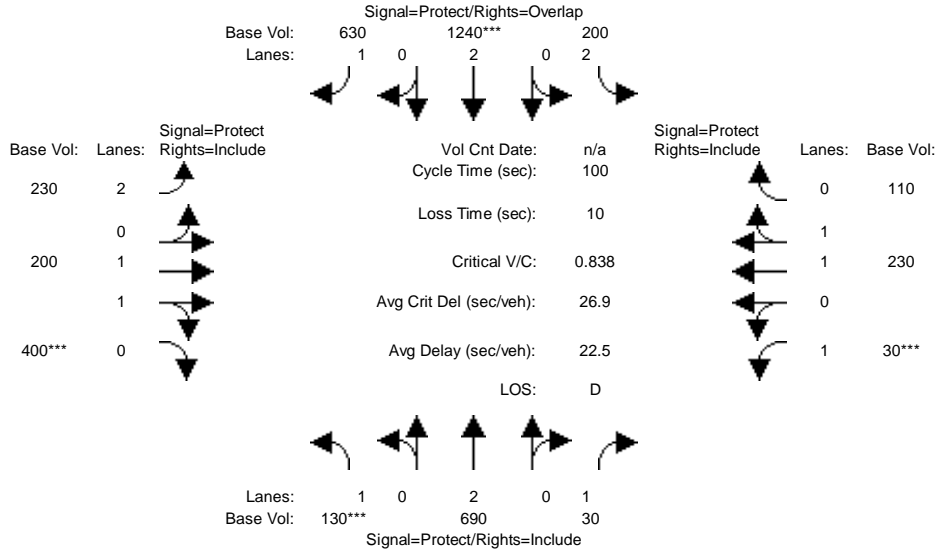
Capacity Analysis Module:

Vol/Sat:	0.00	0.22	0.15	0.08	0.49	0.00	0.16	0.16	0.46	0.00	0.00	0.00
Crit Moves:	***				****				****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM

Intersection #16: Central Ave. & Victoria St.

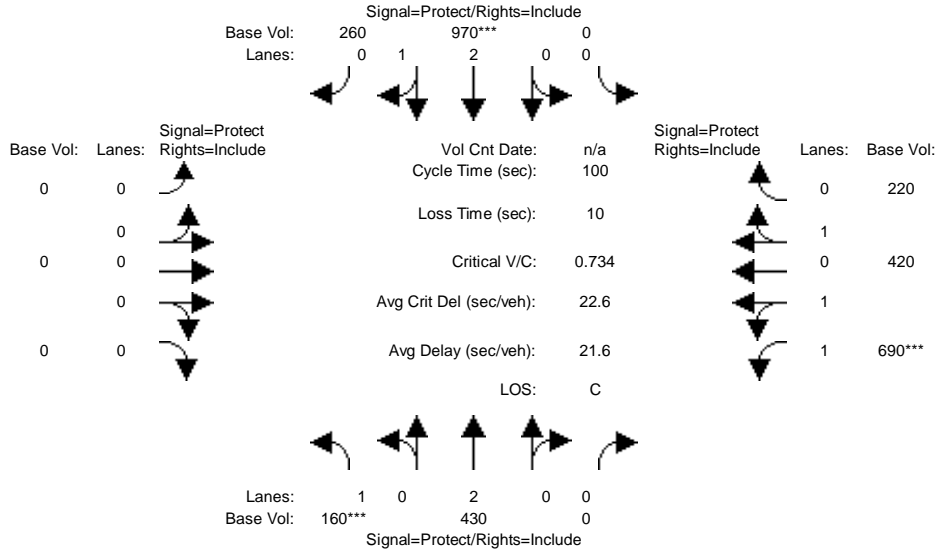


Street Name:	Central Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	130	690	30	200	1240	630	230	200	400	30	230	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	690	30	200	1240	630	230	200	400	30	230	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	690	30	200	1240	630	230	200	400	30	230	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	690	30	200	1240	630	230	200	400	30	230	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	130	690	30	200	1240	630	230	200	400	30	230	110
OvlAdjVol:												566
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.00	1.00	1.00	1.35	0.65
Final Sat.:	1600	3200	1600	5760	3200	1600	5760	1600	1600	1600	2165	1035
Capacity Analysis Module:												
Vol/Sat:	0.08	0.22	0.02	0.03	0.39	0.39	0.04	0.13	0.25	0.02	0.11	0.11
OvlAdjV/S:												0.35
Crit Moves:	***			***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM

Intersection #17: Wilmington Ave. & Artesia Blvd. WB

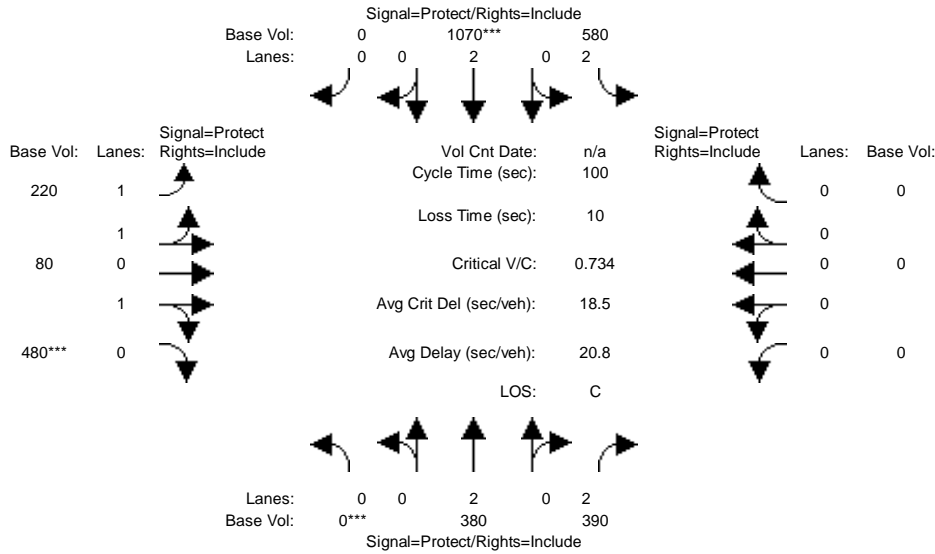


Street Name:	Wilmington Ave.						Artesia Blvd. WB					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	160	430	0	0	970	260	0	0	0	690	420	220
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	160	430	0	0	970	260	0	0	0	690	420	220
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	160	430	0	0	970	260	0	0	0	690	420	220
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	430	0	0	970	260	0	0	0	690	420	220
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	160	430	0	0	970	260	0	0	0	690	420	220
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.37	0.63	0.00	0.00	0.00	1.55	0.95	0.50
Final Sat.:	1600	3200	0	0	3785	1015	0	0	0	2488	1517	795
Capacity Analysis Module:												
Vol/Sat:	0.10	0.13	0.00	0.00	0.26	0.26	0.00	0.00	0.00	0.28	0.28	0.28
Crit Moves:	***				***					***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM

Intersection #18: Wilmington Ave. & Artesia Blvd. EB

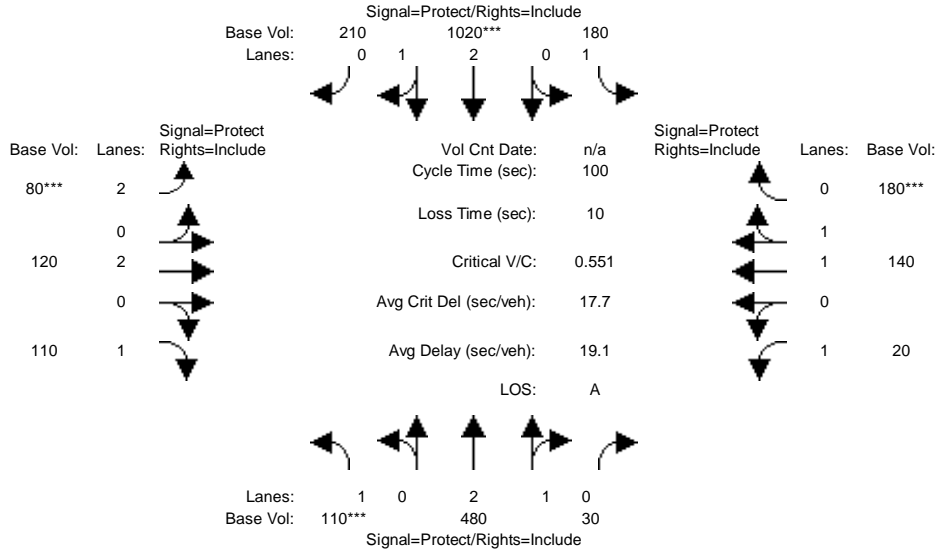


Street Name:	Wilmington Ave.						Artesia Blvd. EB					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	380	390	580	1070	0	220	80	480	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	380	390	580	1070	0	220	80	480	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	380	390	580	1070	0	220	80	480	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	380	390	580	1070	0	220	80	480	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	380	390	580	1070	0	220	80	480	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.47	0.53	1.00	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	2347	853	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.12	0.12	0.10	0.33	0.00	0.09	0.09	0.30	0.00	0.00	0.00
Crit Moves:	***			***	***				***			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM

Intersection #19: Wilmington Ave. & Victoria St.

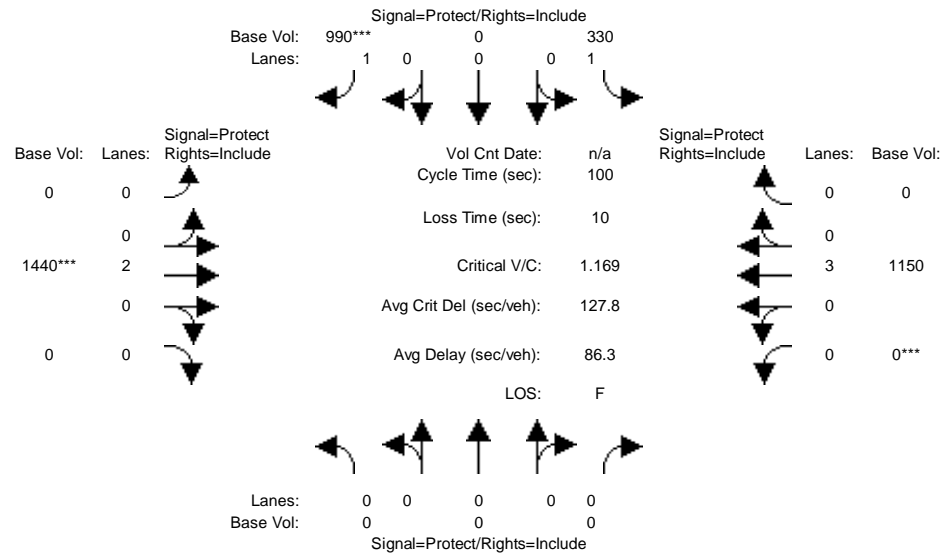


Street Name:	Wilmington Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	110	480	30	180	1020	210	80	120	110	20	140	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	480	30	180	1020	210	80	120	110	20	140	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	110	480	30	180	1020	210	80	120	110	20	140	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	480	30	180	1020	210	80	120	110	20	140	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	110	480	30	180	1020	210	80	120	110	20	140	180
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.82	0.18	1.00	2.49	0.51	2.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	4518	282	1600	3980	820	5760	3200	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.11	0.11	0.11	0.26	0.26	0.01	0.04	0.07	0.01	0.09	0.11
Crit Moves:	***				***		***				***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM

Intersection #20: I-110 SB Off-Ramp & 190th St.

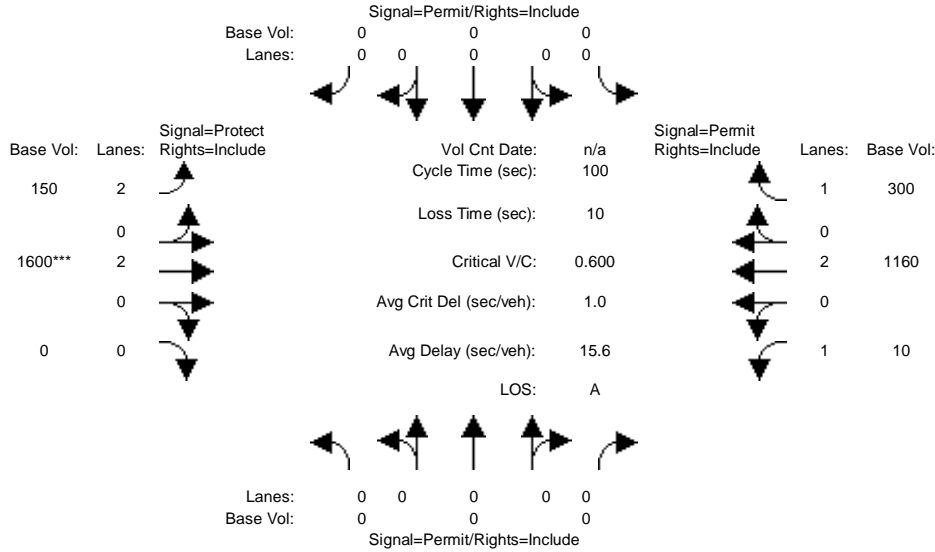


Street Name:	I-110 SB Off-Ramp						190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	330	0	990	0	1440	0	0	1150	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	330	0	990	0	1440	0	0	1150	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	330	0	990	0	1440	0	0	1150	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	330	0	990	0	1440	0	0	1150	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	330	0	990	0	1440	0	0	1150	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.21	0.00	0.62	0.00	0.45	0.00	0.00	0.24	0.00
Crit Moves:						***		***			***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM

Intersection #21: I-110 NB On-Ramp & 190th St.

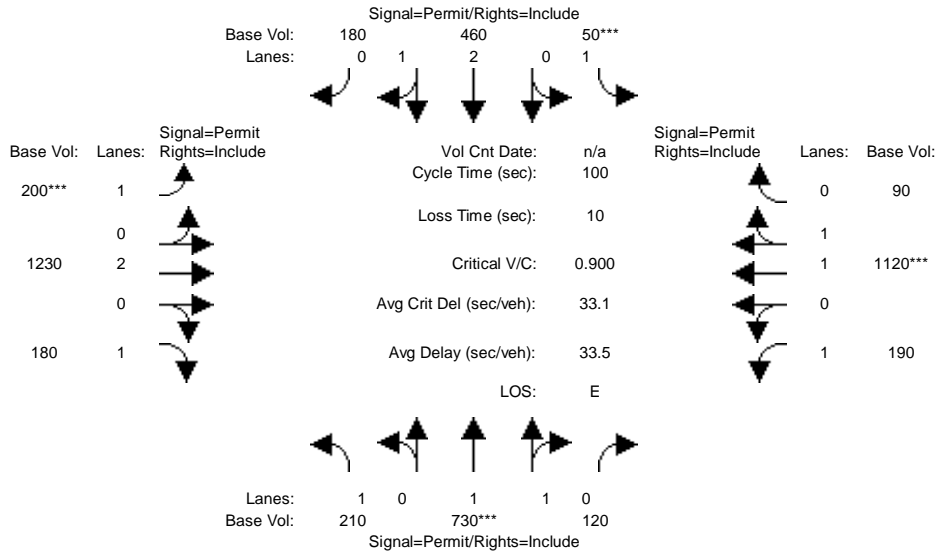


Street Name:	I-110 NB On-Ramp						190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	0	0	0	150	1600	0	10	1160	300
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	150	1600	0	10	1160	300
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	150	1600	0	10	1160	300
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	150	1600	0	10	1160	300
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	0	0	0	150	1600	0	10	1160	300
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	0	0	0	0	0	5760	3200	0	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.50	0.00	0.01	0.36	0.19
Crit Moves:	***											

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM

Intersection #22: Figueroa St. & 190th St./Victoria St.

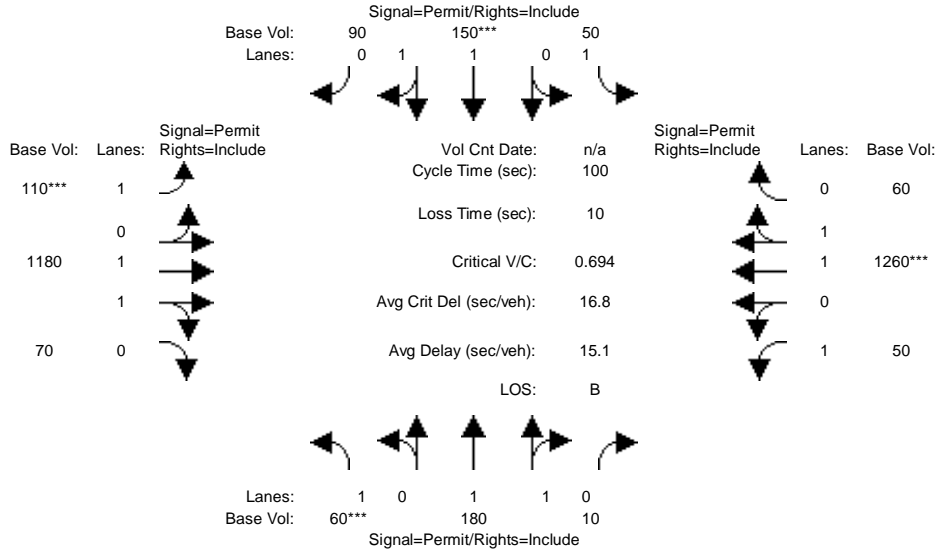


Street Name:	Figueroa St.						190th St./Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	210	730	120	50	460	180	200	1230	180	190	1120	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	210	730	120	50	460	180	200	1230	180	190	1120	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	210	730	120	50	460	180	200	1230	180	190	1120	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	210	730	120	50	460	180	200	1230	180	190	1120	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	210	730	120	50	460	180	200	1230	180	190	1120	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.72	0.28	1.00	2.16	0.84	1.00	2.00	1.00	1.00	1.85	0.15
Final Sat.:	1600	2748	452	1600	3450	1350	1600	3200	1600	1600	2962	238
Capacity Analysis Module:												
Vol/Sat:	0.13	0.27	0.27	0.03	0.13	0.13	0.13	0.38	0.11	0.12	0.38	0.38
Crit Moves:		****		****			****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM

Intersection #23: Broadway & Victoria St.

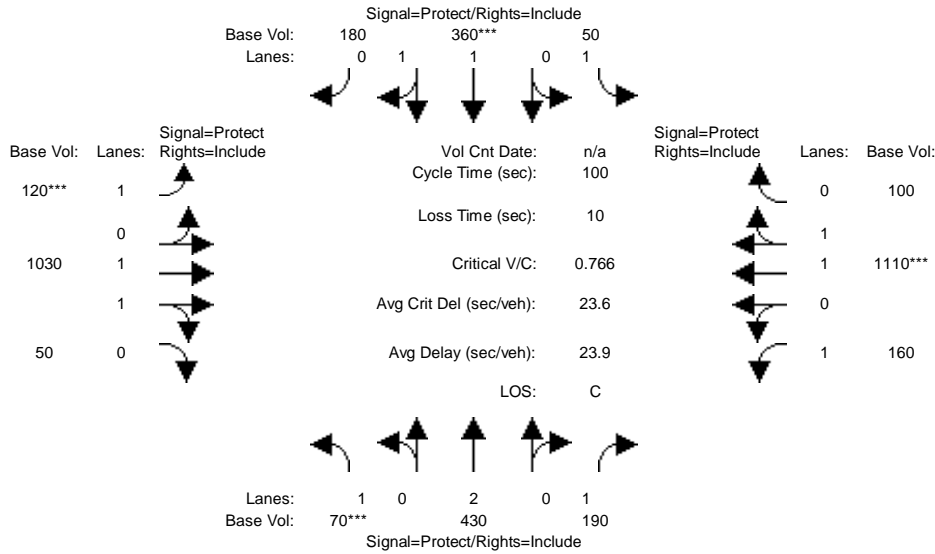


Street Name:	Broadway						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	60	180	10	50	150	90	110	1180	70	50	1260	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	180	10	50	150	90	110	1180	70	50	1260	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	180	10	50	150	90	110	1180	70	50	1260	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	180	10	50	150	90	110	1180	70	50	1260	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	60	180	10	50	150	90	110	1180	70	50	1260	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.89	0.11	1.00	1.25	0.75	1.00	1.89	0.11	1.00	1.91	0.09
Final Sat.:	1600	3032	168	1600	2000	1200	1600	3021	179	1600	3055	145
Capacity Analysis Module:												
Vol/Sat:	0.04	0.06	0.06	0.03	0.08	0.08	0.07	0.39	0.39	0.03	0.41	0.41
Crit Moves:	***				***		***				***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM

Intersection #24: Main St. & Victoria St.

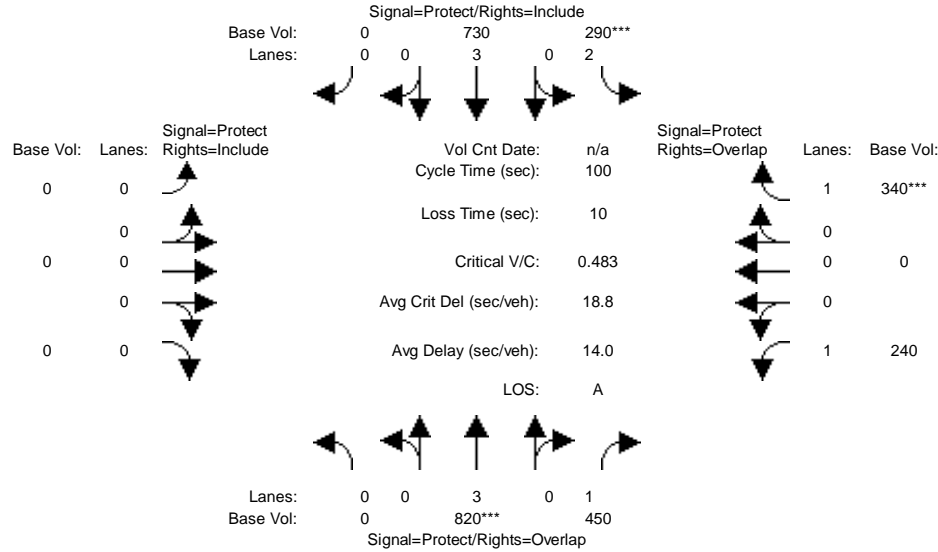


Street Name:	Main St.						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	70	430	190	50	360	180	120	1030	50	160	1110	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	430	190	50	360	180	120	1030	50	160	1110	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	430	190	50	360	180	120	1030	50	160	1110	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	430	190	50	360	180	120	1030	50	160	1110	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	70	430	190	50	360	180	120	1030	50	160	1110	100
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.33	0.67	1.00	1.91	0.09	1.00	1.83	0.17
Final Sat.:	1600	3200	1600	1600	2133	1067	1600	3052	148	1600	2936	264
Capacity Analysis Module:												
Vol/Sat:	0.04	0.13	0.12	0.03	0.17	0.17	0.08	0.34	0.34	0.10	0.38	0.38
Crit Moves:	***				***		***				***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM

Intersection #25: Avalon Blvd. & University Dr.

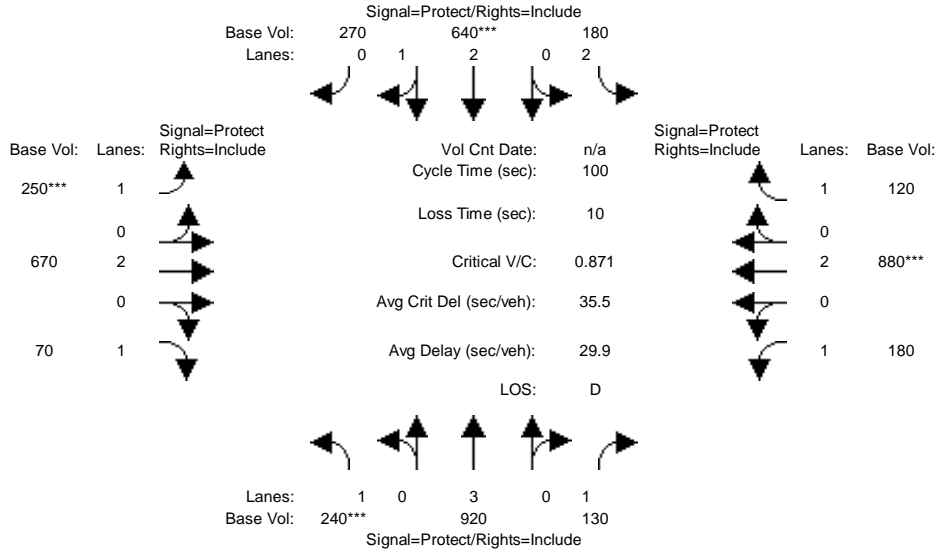


Street Name:	Avalon Blvd.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	820	450	290	730	0	0	0	0	240	0	340
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	820	450	290	730	0	0	0	0	240	0	340
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	820	450	290	730	0	0	0	0	240	0	340
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	820	450	290	730	0	0	0	0	240	0	340
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	820	450	290	730	0	0	0	0	240	0	340
OvlAdjVol:	210									259		
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.17	0.28	0.05	0.15	0.00	0.00	0.00	0.00	0.15	0.00	0.21
OvlAdjV/S:	0.13									0.16		
Crit Moves:	****			****						****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM

Intersection #26: Avalon Blvd. & Del Amo Blvd.

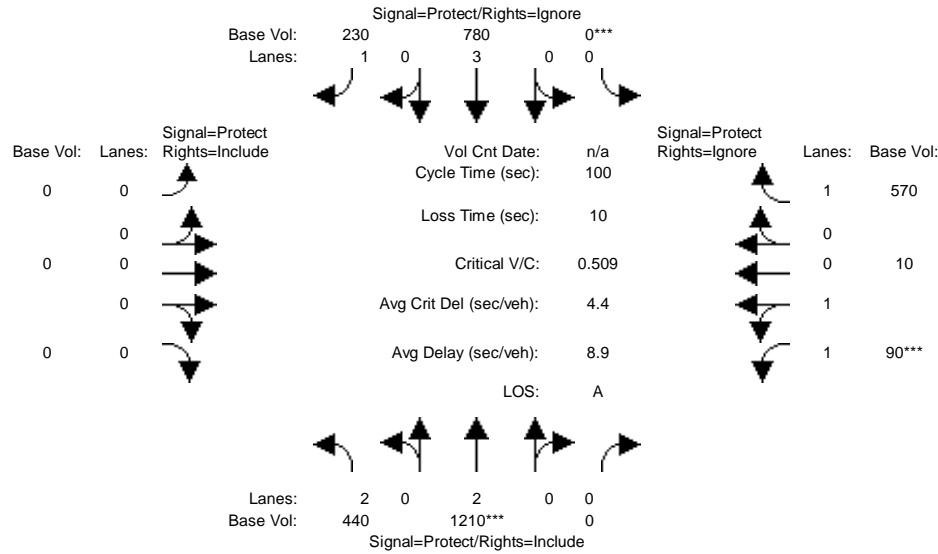


Street Name:	Avalon Blvd.						Del Amo Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	240	920	130	180	640	270	250	670	70	180	880	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	240	920	130	180	640	270	250	670	70	180	880	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	240	920	130	180	640	270	250	670	70	180	880	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	240	920	130	180	640	270	250	670	70	180	880	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	240	920	130	180	640	270	250	670	70	180	880	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.11	0.89	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	3376	1424	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.15	0.19	0.08	0.03	0.19	0.19	0.16	0.21	0.04	0.11	0.28	0.08
Crit Moves:	***				***		***				***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM

Intersection #27: Avalon Blvd. & I-405 NB Ramps

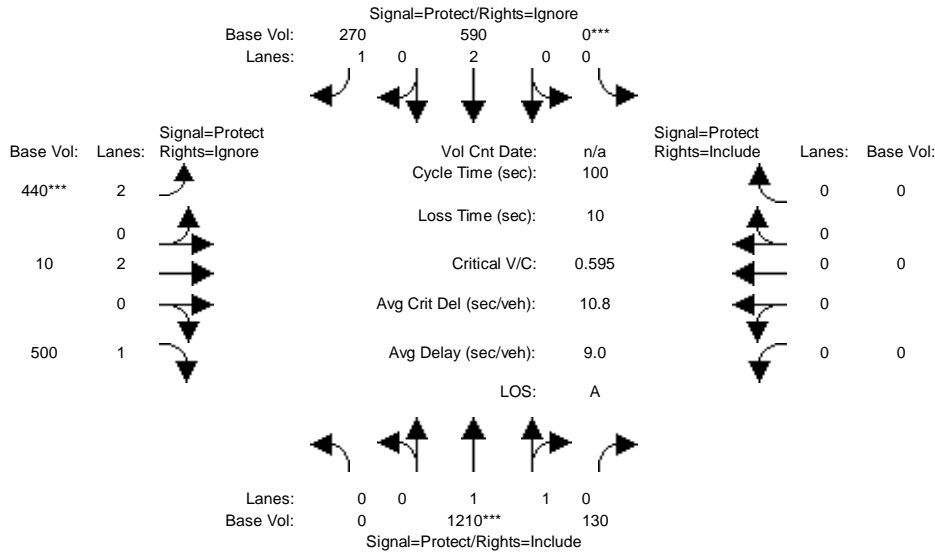


Street Name:	Avalon Blvd.						I-405 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	440	1210	0	0	780	230	0	0	0	90	10	570
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	440	1210	0	0	780	230	0	0	0	90	10	570
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	440	1210	0	0	780	0	0	0	0	90	10	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	440	1210	0	0	780	0	0	0	0	90	10	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Volume:	440	1210	0	0	780	0	0	0	0	90	10	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.80	0.20	1.00
Final Sat.:	5760	3200	0	0	4800	1600	0	0	0	2880	320	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.38	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.03	0.03	0.00
Crit Moves:	****			****						****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM

Intersection #28: Avalon Blvd. & I-405 SB Ramps

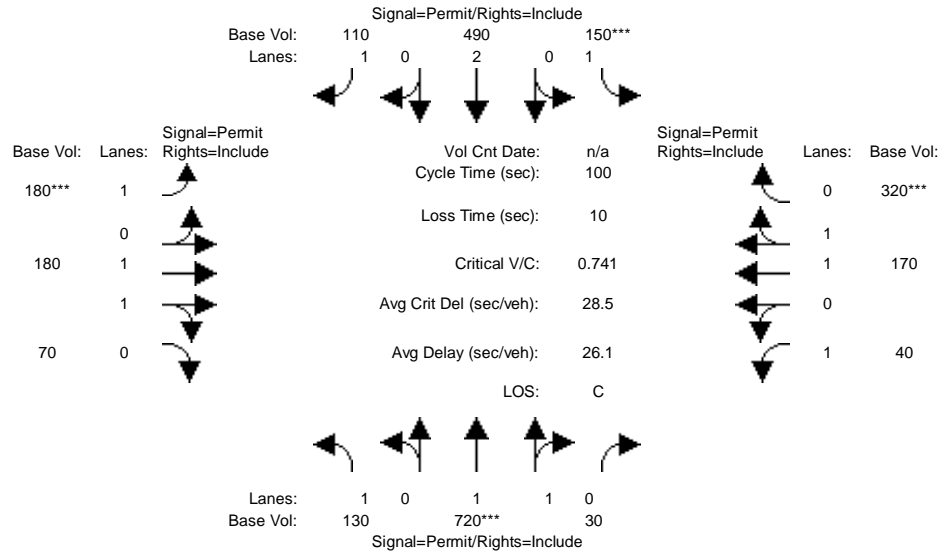


Street Name:	Avalon Blvd.						I-405 SB Ramps					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1210	130	0	590	270	440	10	500	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1210	130	0	590	270	440	10	500	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	1210	130	0	590	0	440	10	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1210	130	0	590	0	440	10	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Volume:	0	1210	130	0	590	0	440	10	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.81	0.19	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	0	2890	310	0	3200	1600	5760	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.42	0.42	0.00	0.18	0.00	0.08	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM

Intersection #29: Central Ave. & University Dr.

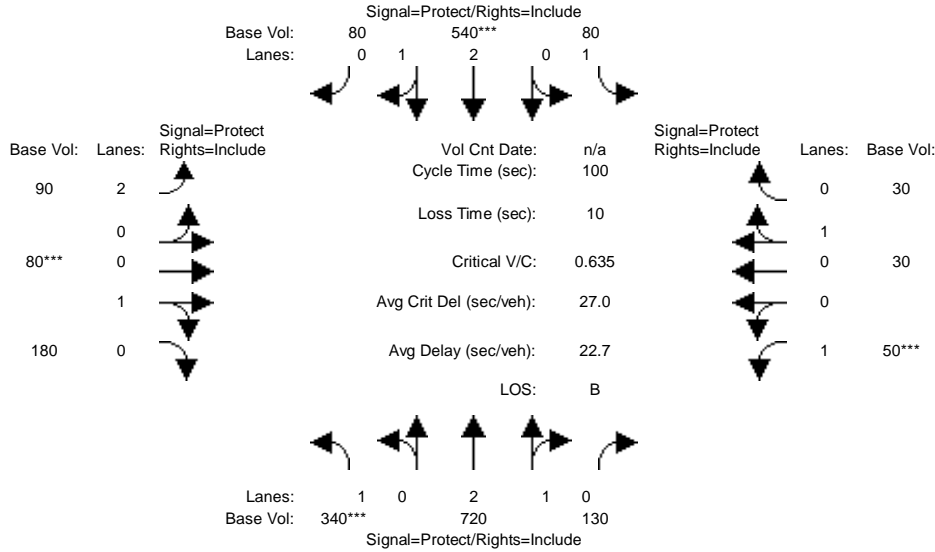


Street Name:	Central Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	130	720	30	150	490	110	180	180	70	40	170	320
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	720	30	150	490	110	180	180	70	40	170	320
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	720	30	150	490	110	180	180	70	40	170	320
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	720	30	150	490	110	180	180	70	40	170	320
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	130	720	30	150	490	110	180	180	70	40	170	320
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.92	0.08	1.00	2.00	1.00	1.00	1.44	0.56	1.00	1.00	1.00
Final Sat.:	1600	3072	128	1600	3200	1600	1600	2304	896	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.23	0.23	0.09	0.15	0.07	0.11	0.08	0.08	0.03	0.11	0.20
Crit Moves:		****		****			****					****

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM

Intersection #30: Wilmington Ave. & University Dr.

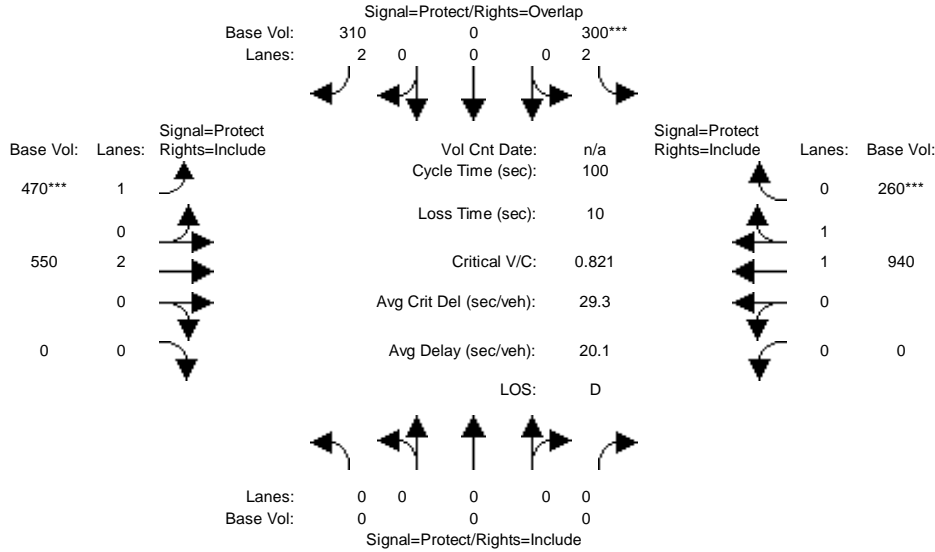


Street Name:	Wilmington Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	340	720	130	80	540	80	90	80	180	50	30	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	340	720	130	80	540	80	90	80	180	50	30	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	340	720	130	80	540	80	90	80	180	50	30	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	340	720	130	80	540	80	90	80	180	50	30	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	340	720	130	80	540	80	90	80	180	50	30	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.54	0.46	1.00	2.61	0.39	2.00	0.31	0.69	1.00	0.50	0.50
Final Sat.:	1600	4066	734	1600	4181	619	5760	492	1108	1600	800	800
Capacity Analysis Module:												
Vol/Sat:	0.21	0.18	0.18	0.05	0.13	0.13	0.02	0.16	0.16	0.03	0.04	0.04
Crit Moves:	***				***			***			***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM

Intersection #31: Central Ave. & Del Amo Blvd.

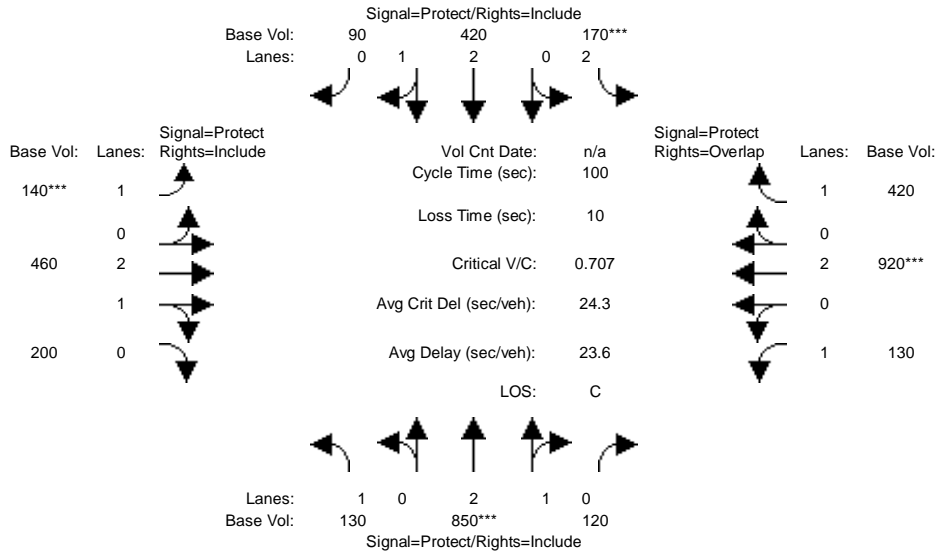


Street Name:	Central Ave.						Del Amo Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	300	0	310	470	550	0	0	940	260
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	300	0	310	470	550	0	0	940	260
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	300	0	310	470	550	0	0	940	260
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	300	0	310	470	550	0	0	940	260
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	300	0	310	470	550	0	0	940	260
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	2.00	1.00	2.00	0.00	0.00	1.57	0.43
Final Sat.:	0	0	0	5760	0	3200	1600	3200	0	0	2507	693
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.05	0.00	0.10	0.29	0.17	0.00	0.00	0.37	0.38
OvlAdjV/S:	0.00											
Crit Moves:				****				****				****

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM

Intersection #32: Wilmington Ave. & Del Amo Blvd.

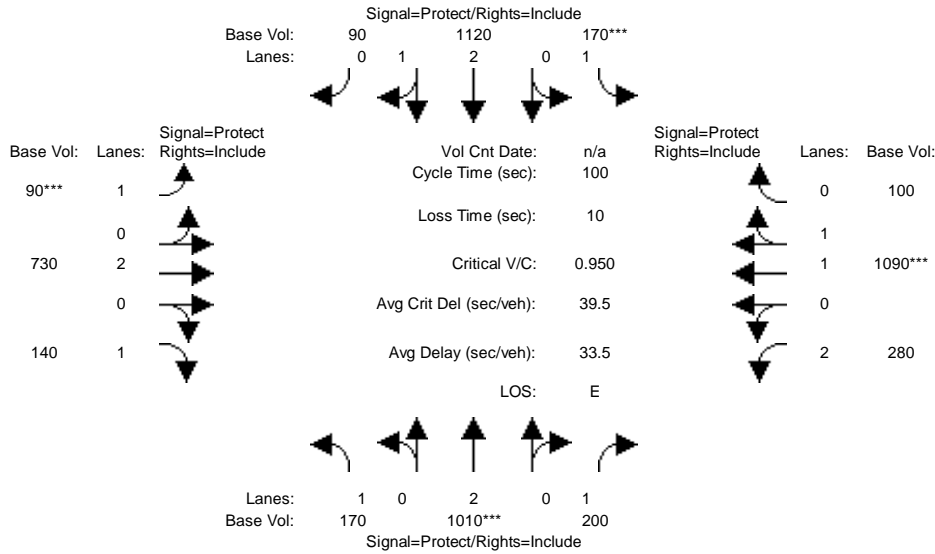


Street Name:	Wilmington Ave.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	130	850	120	170	420	90	140	460	200	130	920	420
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	850	120	170	420	90	140	460	200	130	920	420
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	850	120	170	420	90	140	460	200	130	920	420
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	850	120	170	420	90	140	460	200	130	920	420
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	130	850	120	170	420	90	140	460	200	130	920	420
OvlAdjVol:												373
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.63	0.37	2.00	2.47	0.53	1.00	2.09	0.91	1.00	2.00	1.00
Final Sat.:	1600	4206	594	5760	3953	847	1600	3345	1455	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.20	0.20	0.03	0.11	0.11	0.09	0.14	0.14	0.08	0.29	0.26
OvlAdjV/S:												0.23
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM

Intersection #33: W. Artesia Blvd. & Crenshaw Blvd.

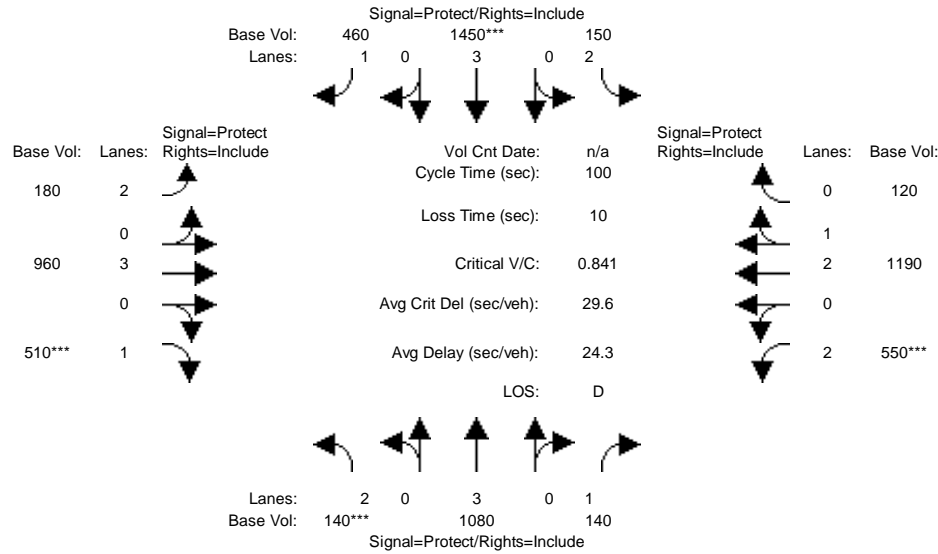


Street Name:	Crenshaw Blvd.						W. Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	170	1010	200	170	1120	90	90	730	140	280	1090	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	170	1010	200	170	1120	90	90	730	140	280	1090	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	170	1010	200	170	1120	90	90	730	140	280	1090	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	170	1010	200	170	1120	90	90	730	140	280	1090	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	170	1010	200	170	1120	90	90	730	140	280	1090	100
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.78	0.22	1.00	2.00	1.00	2.00	1.83	0.17
Final Sat.:	1600	3200	1600	1600	4443	357	1600	3200	1600	5760	2931	269
Capacity Analysis Module:												
Vol/Sat:	0.11	0.32	0.13	0.11	0.25	0.25	0.06	0.23	0.09	0.05	0.37	0.37
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM

Intersection #34: W 190th St. & South Western Ave.

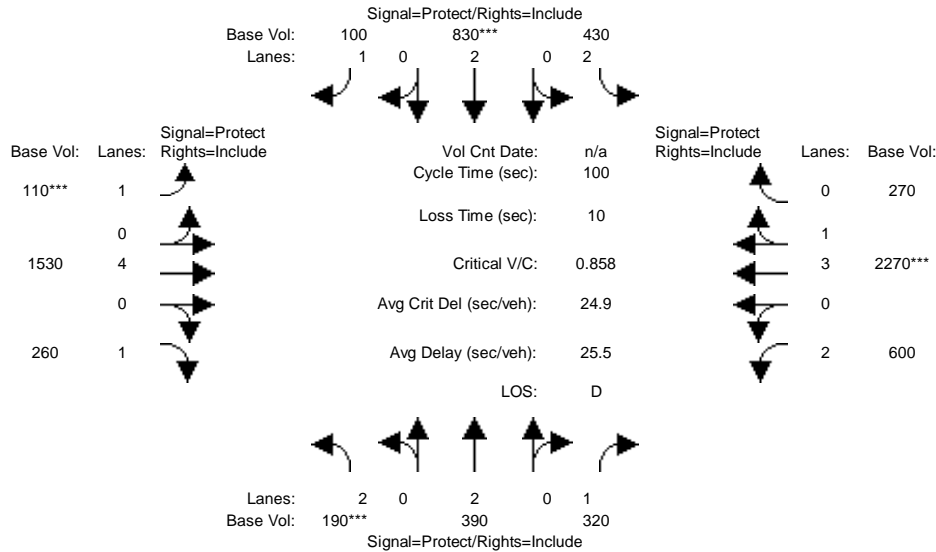


Street Name:	S. Western Ave.						W. 190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	140	1080	140	150	1450	460	180	960	510	550	1190	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	1080	140	150	1450	460	180	960	510	550	1190	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	140	1080	140	150	1450	460	180	960	510	550	1190	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	1080	140	150	1450	460	180	960	510	550	1190	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	140	1080	140	150	1450	460	180	960	510	550	1190	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.73	0.27
Final Sat.:	5760	4800	1600	5760	4800	1600	5760	4800	1600	5760	4360	440
Capacity Analysis Module:												
Vol/Sat:	0.02	0.23	0.09	0.03	0.30	0.29	0.03	0.20	0.32	0.10	0.27	0.27
Crit Moves:	***			***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM

Intersection #35: W. Artesia Blvd. & Vermont Av.e

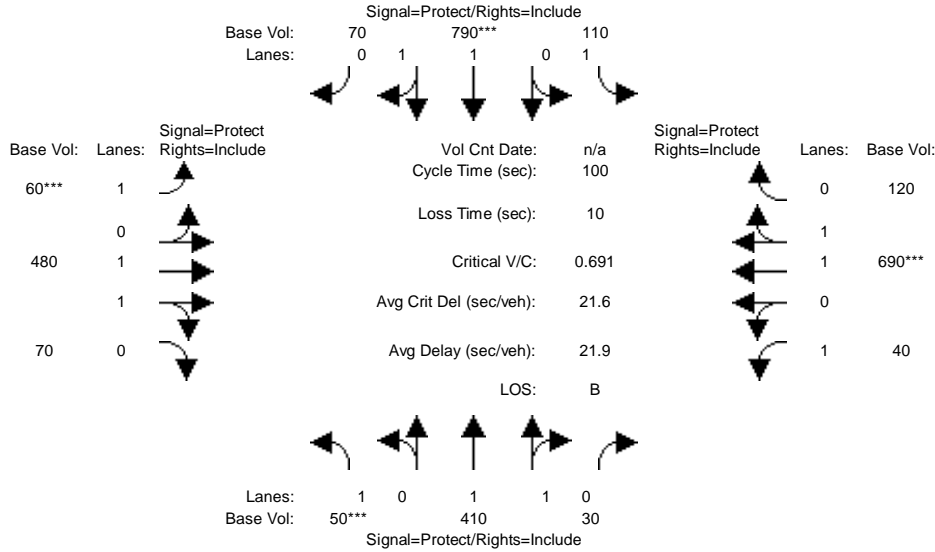


Street Name:	Vermont Ave.						W. Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	190	390	320	430	830	100	110	1530	260	600	2270	270
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	190	390	320	430	830	100	110	1530	260	600	2270	270
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	190	390	320	430	830	100	110	1530	260	600	2270	270
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	190	390	320	430	830	100	110	1530	260	600	2270	270
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	190	390	320	430	830	100	110	1530	260	600	2270	270
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	1.00	4.00	1.00	2.00	3.57	0.43
Final Sat.:	5760	3200	1600	5760	3200	1600	1600	6400	1600	5760	5720	680
Capacity Analysis Module:												
Vol/Sat:	0.03	0.12	0.20	0.07	0.26	0.06	0.07	0.24	0.16	0.10	0.40	0.40
Crit Moves:	***			***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM

Intersection #36: Alameda St. & Compton Blvd.

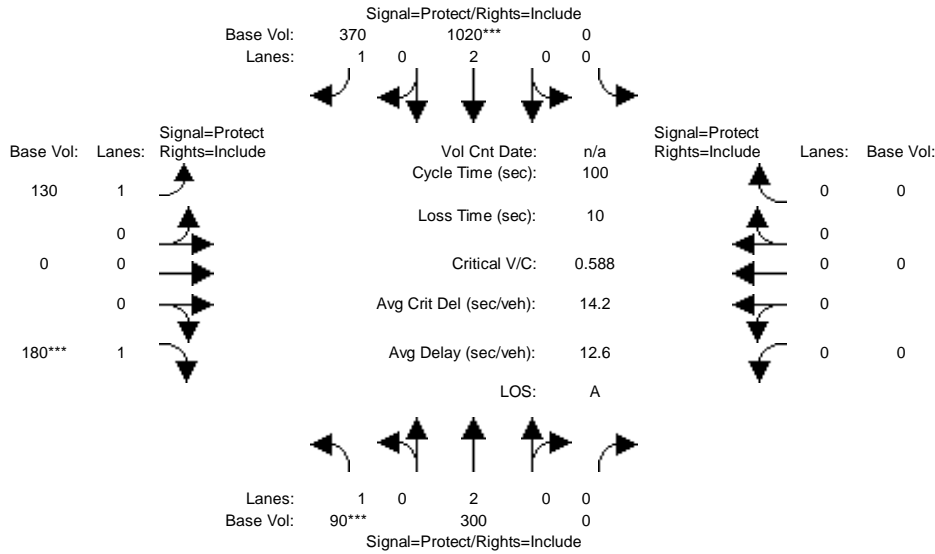


Street Name:	Alameda St.						Compton Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	50	410	30	110	790	70	60	480	70	40	690	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	410	30	110	790	70	60	480	70	40	690	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	410	30	110	790	70	60	480	70	40	690	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	410	30	110	790	70	60	480	70	40	690	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	50	410	30	110	790	70	60	480	70	40	690	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.86	0.14	1.00	1.84	0.16	1.00	1.75	0.25	1.00	1.70	0.30
Final Sat.:	1600	2982	218	1600	2940	260	1600	2793	407	1600	2726	474
Capacity Analysis Module:												
Vol/Sat:	0.03	0.14	0.14	0.07	0.27	0.27	0.04	0.17	0.17	0.03	0.25	0.25
Crit Moves:	***				***		***				***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM

Intersection #37: Alameda St. & SR 91 EB Ramps

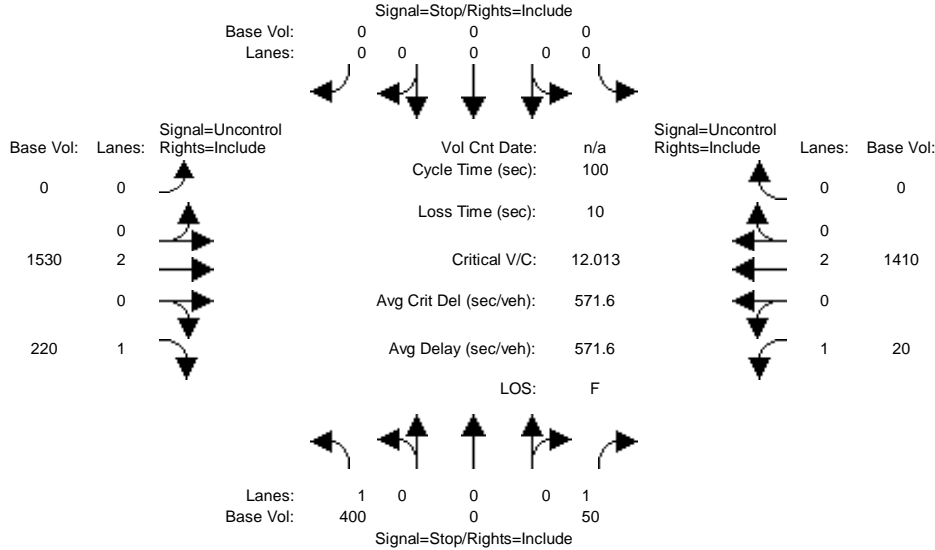


Street Name:	Alameda St.						SR 91 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	90	300	0	0	1020	370	130	0	180	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	300	0	0	1020	370	130	0	180	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	300	0	0	1020	370	130	0	180	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	300	0	0	1020	370	130	0	180	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	90	300	0	0	1020	370	130	0	180	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	3200	0	0	3200	1600	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.09	0.00	0.00	0.32	0.23	0.08	0.00	0.11	0.00	0.00	0.00
Crit Moves:	***				***				***			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
2025 Plus Project Weekday PM

Intersection #1: Victoria St. & Drive D



Street Name:	Drive D						Victoria St..					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	400	0	50	0	0	0	0	1530	220	20	1410	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	400	0	50	0	0	0	0	1530	220	20	1410	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	400	0	50	0	0	0	0	1530	220	20	1410	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	400	0	50	0	0	0	0	1530	220	20	1410	0
Critical Gap Module:												
Critical Gp:	6.8	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	2275	xxxx	765	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1750	xxxx	xxxxx
Potent Cap.:	35	xxxx	350	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	363	xxxx	xxxxx
Move Cap.:	33	xxxx	350	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	363	xxxx	xxxxx
Volume/Cap:	12.01	xxxx	0.14	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.06	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	48.9	xxxx	0.5	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx
Control Del:	5184	xxxx	17.0	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	15.5	xxxx	xxxxx
LOS by Move:	F	*	C	*	*	*	*	*	*	C	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	4610.0			xxxxxxx			xxxxxxx			xxxxxxx		

ApproachLOS: F * * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #1 Victoria St. & Drive D

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 2 0 1	1 0 2 0 0
Initial Vol:	400 0 50	0 0 0	0 1530 220	20 1410 0
ApproachDel:	4610.0	xxxxxx	xxxxxx	xxxxxx

Approach[northbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=576.3]

SUCCEED - Vehicle-hours >= 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=450]

SUCCEED - Approach volume >= 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=3630]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #1 Victoria St. & Drive D

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 2 0 1	1 0 2 0 0
Initial Vol:	400 0 50	0 0 0	0 1530 220	20 1410 0

Major Street Volume: 3180

Minor Approach Volume: 450

Minor Approach Volume Threshold: -123 [less than minimum of 150]

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

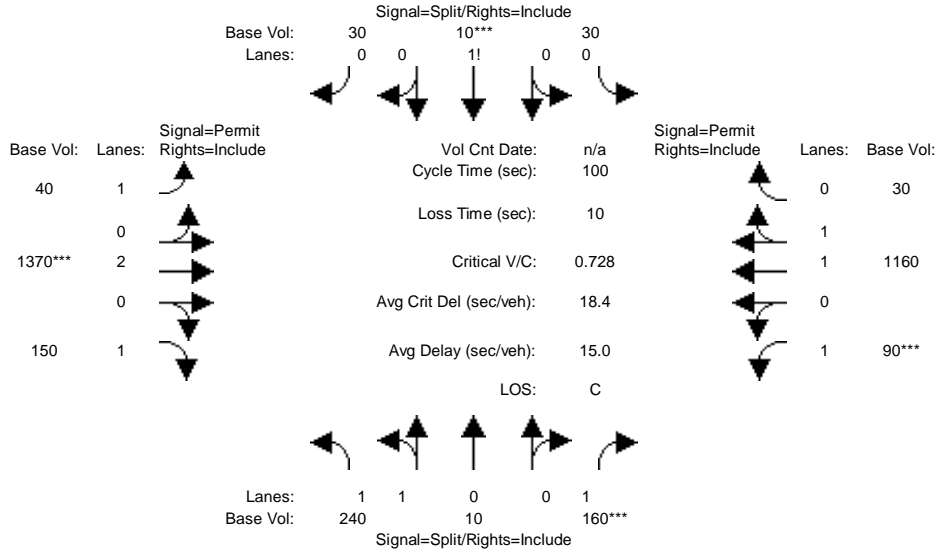
The peak hour warrant analysis in this report is not intended to replace

a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM

Intersection #2: Victoria St. & Tamcliff Ave.

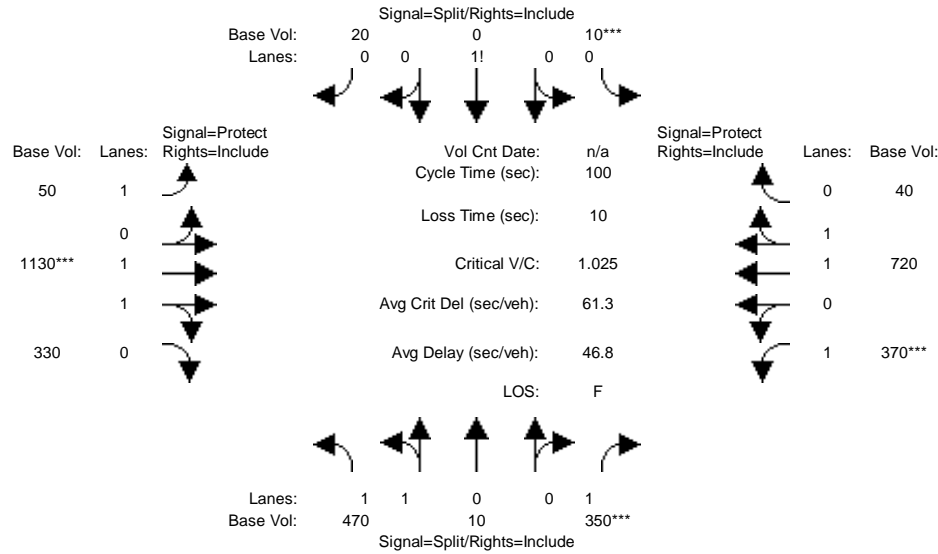


Street Name:	Victoria St.						Tamcliff Ave.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Movement:												
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	240	10	160	30	10	30	40	1370	150	90	1160	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	240	10	160	30	10	30	40	1370	150	90	1160	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	240	10	160	30	10	30	40	1370	150	90	1160	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	240	10	160	30	10	30	40	1370	150	90	1160	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	240	10	160	30	10	30	40	1370	150	90	1160	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.92	0.08	1.00	0.43	0.14	0.43	1.00	2.00	1.00	1.00	1.95	0.05
Final Sat.:	3072	128	1600	686	229	686	1600	3200	1600	1600	3119	81
Capacity Analysis Module:												
Vol/Sat:	0.08	0.08	0.10	0.04	0.04	0.04	0.03	0.43	0.09	0.06	0.37	0.37
Crit Moves:			***			***		***			***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM

Intersection #3: Victoria St. & Birchknoll Dr.

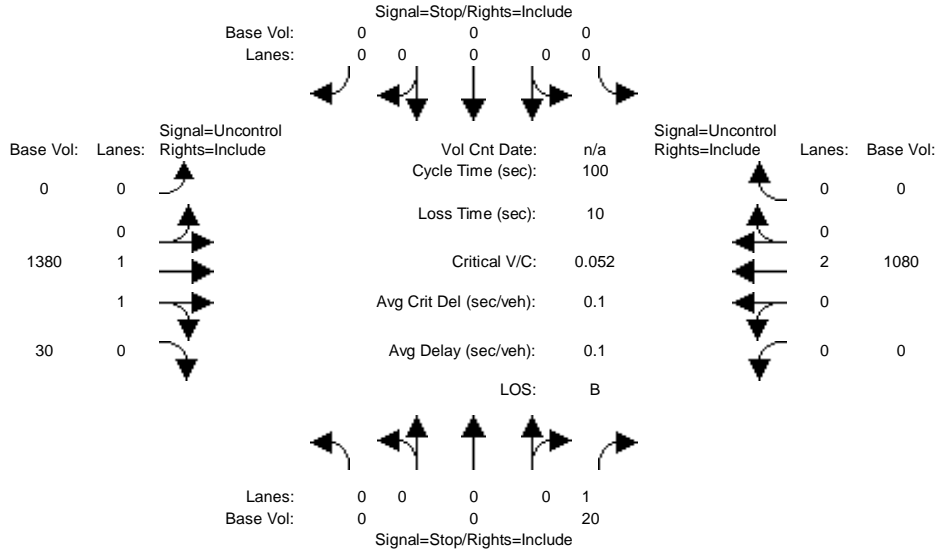


Street Name:	Victoria St.						Birchknoll Dr.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	470	10	350	10	0	20	50	1130	330	370	720	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	470	10	350	10	0	20	50	1130	330	370	720	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	470	10	350	10	0	20	50	1130	330	370	720	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	470	10	350	10	0	20	50	1130	330	370	720	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	470	10	350	10	0	20	50	1130	330	370	720	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.96	0.04	1.00	0.33	0.00	0.67	1.00	1.55	0.45	1.00	1.89	0.11
Final Sat.:	3133	67	1600	533	0	1067	1600	2477	723	1600	3032	168
Capacity Analysis Module:												
Vol/Sat:	0.15	0.15	0.22	0.02	0.00	0.02	0.03	0.46	0.46	0.23	0.24	0.24
Crit Moves:			***	***				***		***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
2025 Plus Project Weekday PM

Intersection #4: Victoria St. & Project Service Rd.



Street Name:	Project Service Rd.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	20	0	0	0	0	1380	30	0	1080	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	20	0	0	0	0	1380	30	0	1080	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	20	0	0	0	0	1380	30	0	1080	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	20	0	0	0	0	1380	30	0	1080	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	xxxx	xxxx	705	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	383	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	383	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.05	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	0.2	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	14.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	B	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*

ApproachDel: 14.9 xxxxxxx xxxxxxx xxxxxxx
 ApproachLOS: B * * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #4 Victoria St. & Project Service Rd.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 1	0 0 0 0 0	0 0 1 1 0	0 0 2 0 0
Initial Vol:	0 0 20	0 0 0	0 1380 30	0 1080 0
ApproachDel:	14.9	xxxxxxx	xxxxxxx	xxxxxxx

Approach[northbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.1]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=20]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=2510]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #4 Victoria St. & Project Service Rd.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 1	0 0 0 0 0	0 0 1 1 0	0 0 2 0 0
Initial Vol:	0 0 20	0 0 0	0 1380 30	0 1080 0

Major Street Volume: 2490

Minor Approach Volume: 20

Minor Approach Volume Threshold: -29 [less than minimum of 100]

SIGNAL WARRANT DISCLAIMER

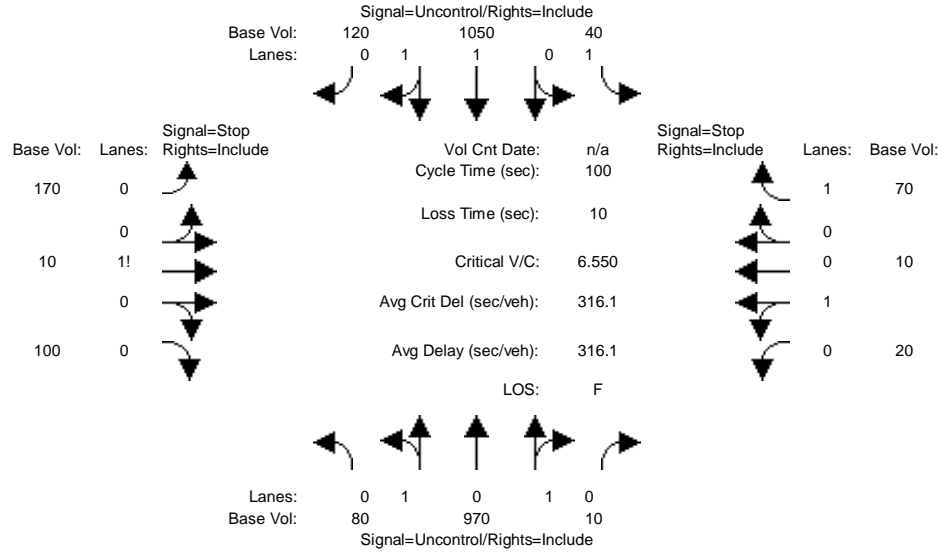
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2025 Plus Project Weekday PM

Intersection #5: Central Ave. & Charles Willard St.



Street Name:	Central Ave.						Charles Willard St.								
Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R			
Volume Module:															
Base Vol:	80	970	10	40	1050	120	170	10	100	20	10	70			
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Initial Bse:	80	970	10	40	1050	120	170	10	100	20	10	70			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Volume:	80	970	10	40	1050	120	170	10	100	20	10	70			
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0			
FinalVolume:	80	970	10	40	1050	120	170	10	100	20	10	70			
Critical Gap Module:															
Critical Gp:	4.1	xxxx	xxxxxx	4.1	xxxx	xxxxxx	7.5	6.5	6.9	7.5	6.5	6.9			
FollowUpTim:	2.2	xxxx	xxxxxx	2.2	xxxx	xxxxxx	3.5	4.0	3.3	3.5	4.0	3.3			
Capacity Module:															
Cnflct Vol:	1170	xxxx	xxxxxx	980	xxxx	xxxxxx	1840	2330	585	1745	2385	490			
Potent Cap.:	604	xxxx	xxxxxx	712	xxxx	xxxxxx	48	38	459	56	35	529			
Move Cap.:	604	xxxx	xxxxxx	712	xxxx	xxxxxx	26	30	459	28	28	529			
Volume/Cap:	0.13	xxxx	xxxx	0.06	xxxx	xxxx	6.55	0.33	0.22	0.70	0.36	0.13			
Level Of Service Module:															
2Way95thQ:	0.5	xxxx	xxxxxx	0.2	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	0.5			
Control Del:	11.9	xxxx	xxxxxx	10.4	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	12.8			
LOS by Move:	B	*	*	B	*	*	*	*	*	*	*	B			
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	39	xxxxxx	28	xxxx	xxxxxx			
SharedQueue:	0.5	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	33.2	xxxxxx	3.5	xxxx	xxxxxx			
Shrd ConDel:	11.9	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	2942	xxxxxx	392.5	xxxx	xxxxxx			
Shared LOS:	B	*	*	*	*	*	*	F	*	F	*	*			

ApproachDel:	xxxxxx	xxxxxx	2941.7	126.7
ApproachLOS:	*	*	F	F

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #5 Central Ave. & Charles Willard St.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 1 0 1 0	1 0 1 1 0	0 0 1! 0 0	0 1 0 0 1
Initial Vol:	80 970 10	40 1050 120	170 10 100	20 10 70
ApproachDel:	xxxxxx	xxxxxx	2941.7	126.7

Approach[eastbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=228.8]

SUCCEED - Vehicle-hours greater than or equal to 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=280]

SUCCEED - Approach volume greater than or equal to 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=2650]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Approach[westbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=3.5]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=100]

FAIL - Approach volume less than 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=2650]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #5 Central Ave. & Charles Willard St.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 1 0 1 0	1 0 1 1 0	0 0 1! 0 0	0 1 0 0 1
Initial Vol:	80 970 10	40 1050 120	170 10 100	20 10 70
Major Street Volume:	2270			
Minor Approach Volume:	280			

Minor Approach Volume Threshold: 2 [less than minimum of 100]

SIGNAL WARRANT DISCLAIMER

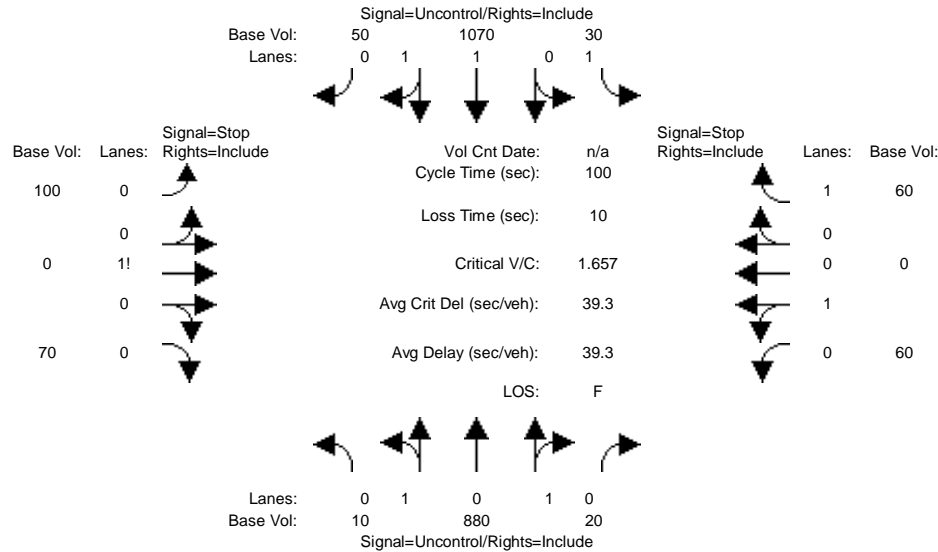
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2025 Plus Project Weekday PM

Intersection #6: Centrral Ave. & Project Driveway/Beachey Pl.



Street Name:	Central Ave.						Beachey Pl.								
Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R			
Volume Module:															
Base Vol:	10	880	20	30	1070	50	100	0	70	60	0	60			
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Initial Bse:	10	880	20	30	1070	50	100	0	70	60	0	60			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Volume:	10	880	20	30	1070	50	100	0	70	60	0	60			
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0			
FinalVolume:	10	880	20	30	1070	50	100	0	70	60	0	60			
Critical Gap Module:															
Critical Gp:	4.1	xxxx	xxxxxx	4.1	xxxx	xxxxxx	7.5	6.5	6.9	7.5	6.5	6.9			
FollowUpTim:	2.2	xxxx	xxxxxx	2.2	xxxx	xxxxxx	3.5	4.0	3.3	3.5	4.0	3.3			
Capacity Module:															
Cnflct Vol:	1120	xxxx	xxxxxx	900	xxxx	xxxxxx	1615	2075	560	1505	2090	450			
Potent Cap.:	631	xxxx	xxxxxx	763	xxxx	xxxxxx	71	54	477	85	53	562			
Move Cap.:	631	xxxx	xxxxxx	763	xxxx	xxxxxx	60	51	477	70	50	562			
Volume/Cap:	0.02	xxxx	xxxx	0.04	xxxx	xxxx	1.66	0.00	0.15	0.86	0.00	0.11			
Level Of Service Module:															
2Way95thQ:	0.0	xxxx	xxxxxx	0.1	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	0.4			
Control Del:	10.8	xxxx	xxxxxx	9.9	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	12.2			
LOS by Move:	B	*	*	A	*	*	*	*	*	*	*	B			
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	94	xxxxxx	70	xxxx	xxxxxx			
SharedQueue:	0.0	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	14.0	xxxxxx	4.2	xxxx	xxxxxx			
Shrd ConDel:	10.8	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	477	xxxxxx	170.7	xxxx	xxxxxx			
Shared LOS:	B	*	*	*	*	*	*	F	*	F	*	*			

ApproachDel: xxxxxxx xxxxxxx 476.6 91.4
 ApproachLOS: * * F F

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #6 Central Ave. & Project Driveway/Beachey Pl.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 1 0 1 0	1 0 1 1 0	0 0 1 0 0	0 1 0 0 1
Initial Vol:	10 880 20	30 1070 50	100 0 70	60 0 60
ApproachDel:	xxxxxxx	xxxxxxx	476.6	91.4

-----|-----|-----|-----|-----|

Approach[eastbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=22.5]

SUCCEED - Vehicle-hours greater than or equal to 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=170]

SUCCEED - Approach volume greater than or equal to 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=2350]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

-----|-----|-----|-----|-----|

Approach[westbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=3.0]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=120]

FAIL - Approach volume less than 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=2350]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

-----|-----|-----|-----|-----|

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #6 Central Ave. & Project Driveway/Beachey Pl.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 1 0 1 0	1 0 1 1 0	0 0 1 0 0	0 1 0 0 1
Initial Vol:	10 880 20	30 1070 50	100 0 70	60 0 60

Major Street Volume: 2060

Minor Approach Volume: 170

Minor Approach Volume Threshold: 36 [less than minimum of 100]

SIGNAL WARRANT DISCLAIMER

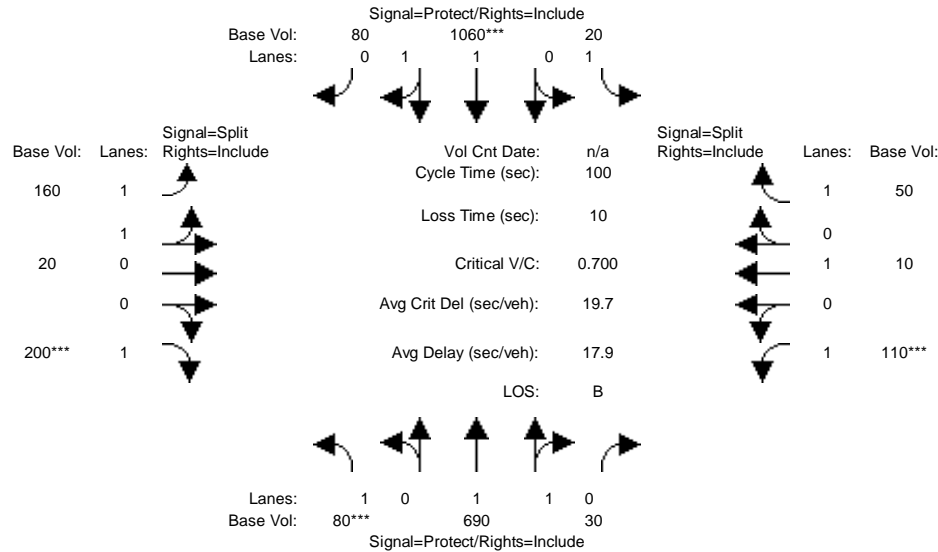
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM

Intersection #7: Central Ave. & Glenn Curtiss St.

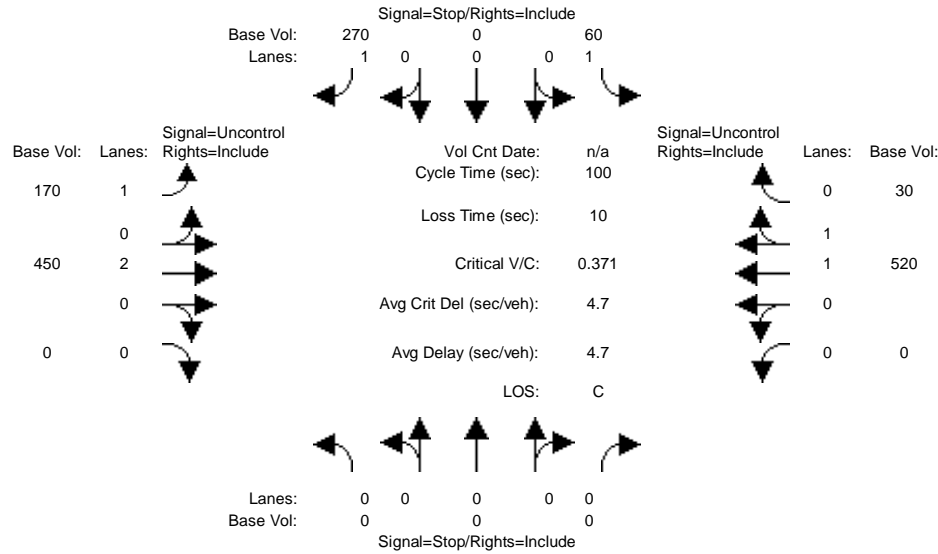


Street Name:	Central Ave.						Glenn Curtiss St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Movement:												
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	80	690	30	20	1060	80	160	20	200	110	10	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	690	30	20	1060	80	160	20	200	110	10	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	690	30	20	1060	80	160	20	200	110	10	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	690	30	20	1060	80	160	20	200	110	10	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	80	690	30	20	1060	80	160	20	200	110	10	50
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.92	0.08	1.00	1.86	0.14	1.78	0.22	1.00	1.00	1.00	1.00
Final Sat.:	1600	3067	133	1600	2975	225	2844	356	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.22	0.23	0.01	0.36	0.36	0.06	0.06	0.13	0.07	0.01	0.03
Crit Moves:	***				***				***	***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
2025 Plus Project Weekday PM

Intersection #9: University Dr. & Toro Center Dr.



Street Name:	University Dr.						Toro Center Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	60	0	270	170	450	0	0	520	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	60	0	270	170	450	0	0	520	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	60	0	270	170	450	0	0	520	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	0	0	0	60	0	270	170	450	0	0	520	30
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.8	xxxx	6.9	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	xxxx	xxxx	xxxxx	1100	xxxx	275	550	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	210	xxxx	729	1030	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	183	xxxx	729	1030	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.33	xxxx	0.37	0.17	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	1.3	xxxx	1.7	0.6	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	34.0	xxxxx	12.8	9.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	D	*	B	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shared Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*

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ApproachDel:   xxxxxx          16.7          xxxxxx          xxxxxx
ApproachLOS:   *              C              *              *

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Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #9 University Dr. & Toro Center Dr.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 0	1 0 0 0 1	1 0 2 0 0	0 0 1 1 0
Initial Vol:	0 0 0 0	60 0 270	170 450 0	0 520 30
ApproachDel:	xxxxxx	16.7	xxxxxx	xxxxxx

Approach[southbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=1.5]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=330]

SUCCEED - Approach volume >= 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=1500]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #9 University Dr. & Toro Center Dr.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 0	1 0 0 0 1	1 0 2 0 0	0 0 1 1 0
Initial Vol:	0 0 0 0	60 0 270	170 450 0	0 520 30

Major Street Volume: 1170

Minor Approach Volume: 330

Minor Approach Volume Threshold: 307

SIGNAL WARRANT DISCLAIMER

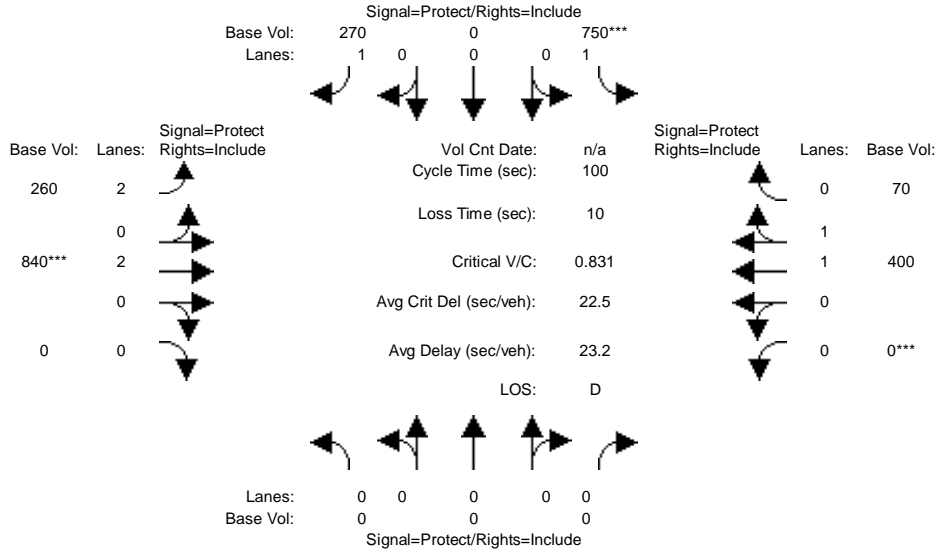
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM

Intersection #10: Albertoni St. & SR 91 EB Ramps

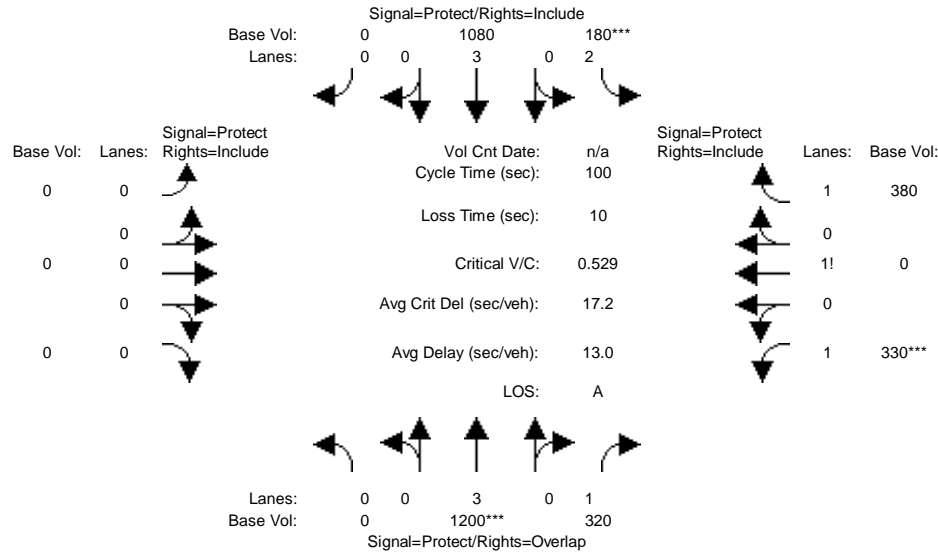


Street Name:	Albertoni St.						SR 91 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	750	0	270	260	840	0	0	400	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	750	0	270	260	840	0	0	400	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	750	0	270	260	840	0	0	400	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	750	0	270	260	840	0	0	400	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	750	0	270	260	840	0	0	400	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.70	0.30
Final Sat.:	0	0	0	1600	0	1600	5760	3200	0	0	2723	477
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.47	0.00	0.17	0.05	0.26	0.00	0.00	0.15	0.15
Crit Moves:				***				***		***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM

Intersection #11: Avalon Blvd. & SR 91 WB On-Ramp

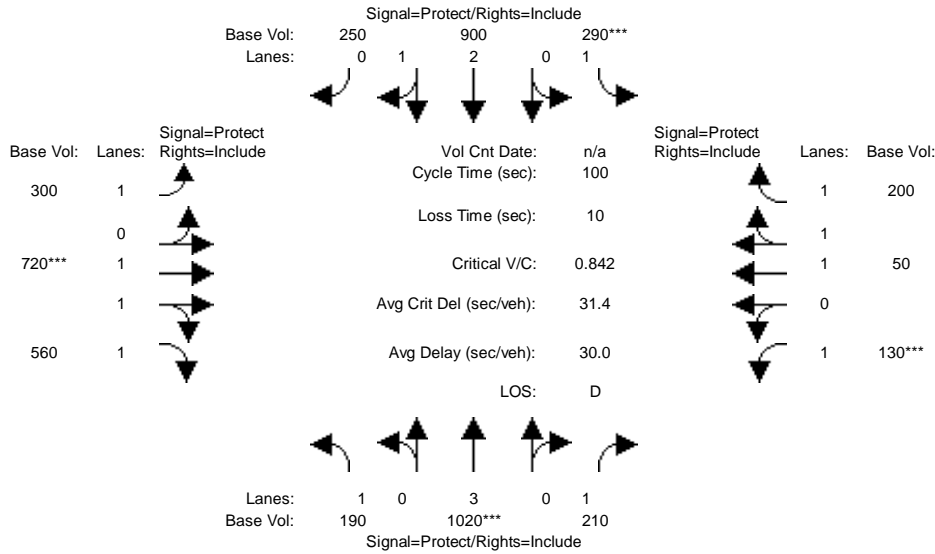


Street Name:	Avalon Blvd.						SR 91 WB On-Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1200	320	180	1080	0	0	0	0	330	0	380
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1200	320	180	1080	0	0	0	0	330	0	380
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1200	320	180	1080	0	0	0	0	330	0	380
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1200	320	180	1080	0	0	0	0	330	0	380
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	1200	320	180	1080	0	0	0	0	330	0	380
OvlAdjVol:	83											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.39	0.00	1.61
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	2231	0	2569
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.20	0.03	0.23	0.00	0.00	0.00	0.00	0.15	0.00	0.15
OvlAdjV/S:	0.05											
Crit Moves:	****			****						****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM

Intersection #12: Avalon Blvd. & Albertoni St.

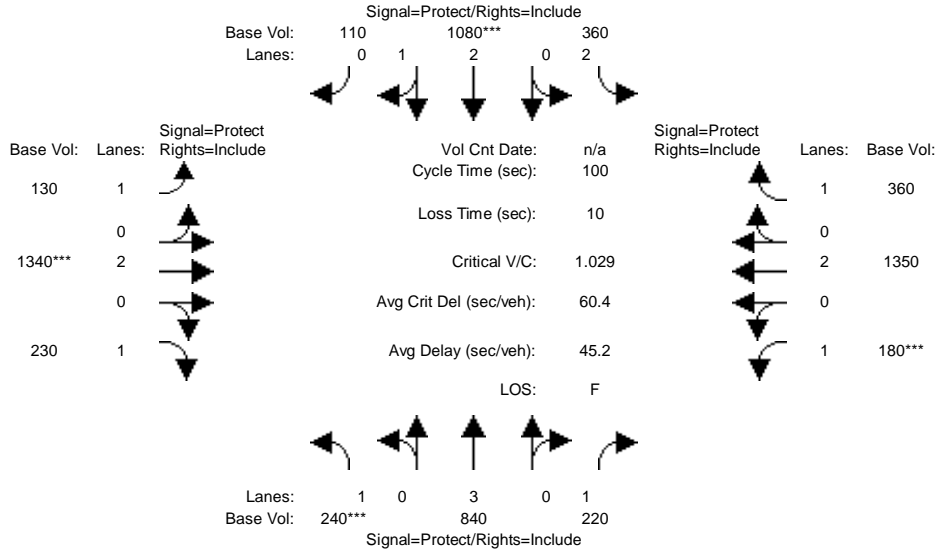


Street Name:	Avalon Blvd.						Albertoni St.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	190	1020	210	290	900	250	300	720	560	130	50	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	190	1020	210	290	900	250	300	720	560	130	50	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	190	1020	210	290	900	250	300	720	560	130	50	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	190	1020	210	290	900	250	300	720	560	130	50	200
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	190	1020	210	290	900	250	300	720	560	130	50	200
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.35	0.65	1.00	1.69	1.31	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3757	1043	1600	2700	2100	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.12	0.21	0.13	0.18	0.24	0.24	0.19	0.27	0.27	0.08	0.03	0.06
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM

Intersection #13: Avalon Blvd. & Victoria St.

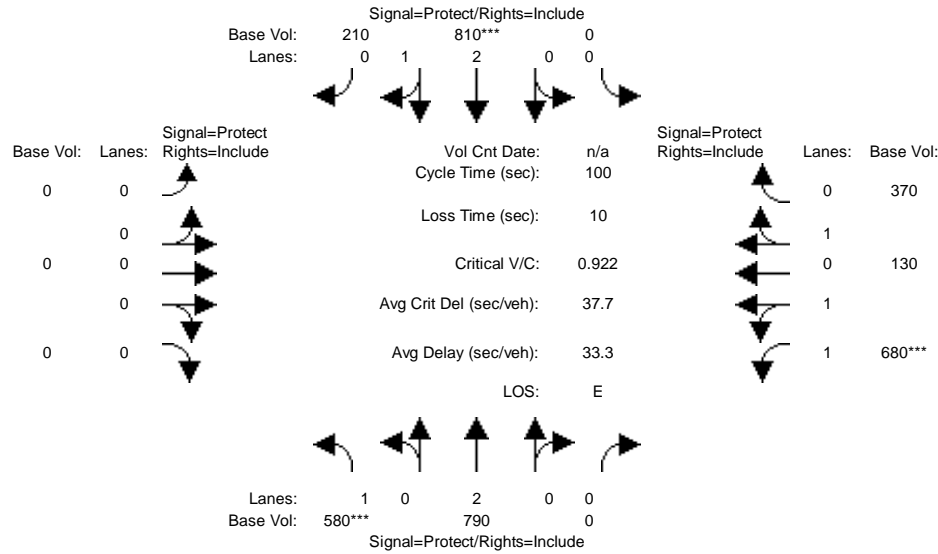


Street Name:	Avalon Blvd.						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	240	840	220	360	1080	110	130	1340	230	180	1350	360
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	240	840	220	360	1080	110	130	1340	230	180	1350	360
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	240	840	220	360	1080	110	130	1340	230	180	1350	360
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	240	840	220	360	1080	110	130	1340	230	180	1350	360
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	240	840	220	360	1080	110	130	1340	230	180	1350	360
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.72	0.28	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4356	444	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.15	0.17	0.14	0.06	0.25	0.25	0.08	0.42	0.14	0.11	0.42	0.23
Crit Moves:	***				***			***			***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM

Intersection #14: Central Ave. & Artesia Blvd.

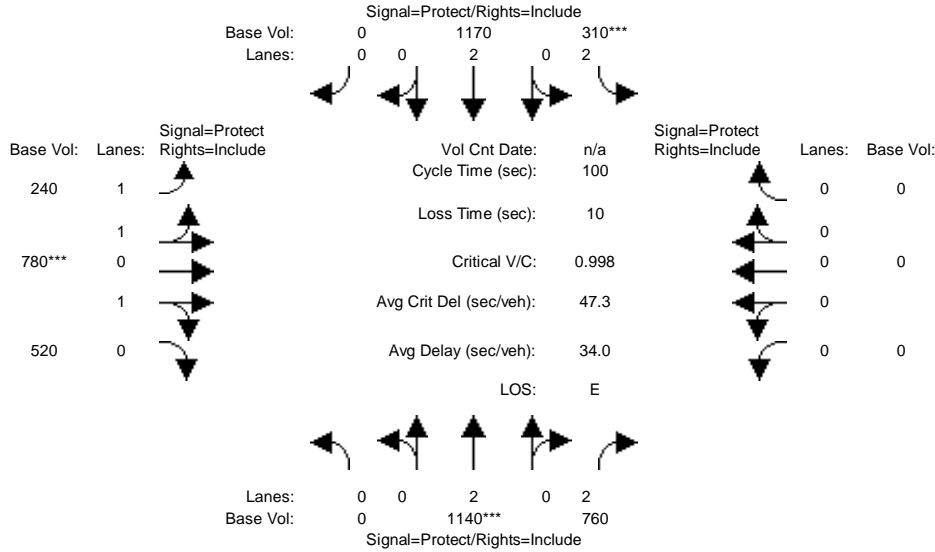


Street Name:	Central Ave.						Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	580	790	0	0	810	210	0	0	0	680	130	370
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	580	790	0	0	810	210	0	0	0	680	130	370
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	580	790	0	0	810	210	0	0	0	680	130	370
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	580	790	0	0	810	210	0	0	0	680	130	370
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	580	790	0	0	810	210	0	0	0	680	130	370
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.38	0.62	0.00	0.00	0.00	1.72	0.33	0.95
Final Sat.:	1600	3200	0	0	3812	988	0	0	0	2757	528	1515
Capacity Analysis Module:												
Vol/Sat:	0.36	0.25	0.00	0.00	0.21	0.21	0.00	0.00	0.00	0.25	0.25	0.24
Crit Moves:	***				***	***				***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM

Intersection #15: Central Ave. & Albertoni St./Artesia Blvd. EB

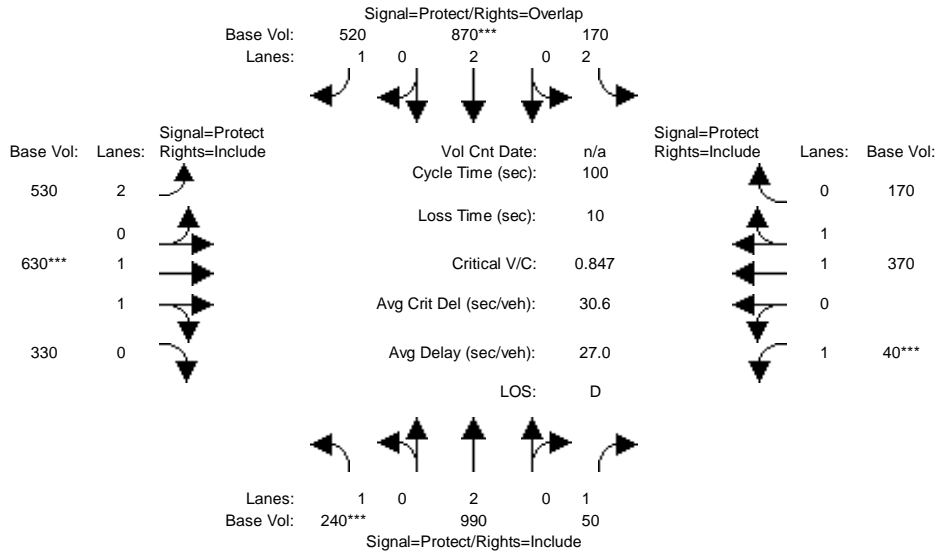


Street Name:	Central Ave.						Albertoni St./Artesia Blvd. EB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1140	760	310	1170	0	240	780	520	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1140	760	310	1170	0	240	780	520	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1140	760	310	1170	0	240	780	520	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1140	760	310	1170	0	240	780	520	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	1140	760	310	1170	0	240	780	520	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	1600	1600	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.36	0.24	0.05	0.37	0.00	0.15	0.49	0.33	0.00	0.00	0.00
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM

Intersection #16: Central Ave. & Victoria St.

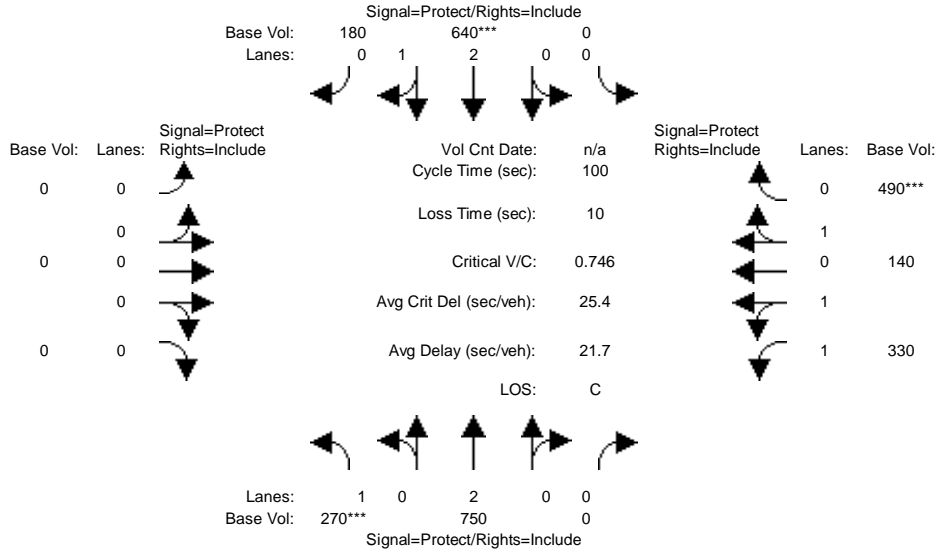


Street Name:	Central Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	240	990	50	170	870	520	530	630	330	40	370	170
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	240	990	50	170	870	520	530	630	330	40	370	170
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	240	990	50	170	870	520	530	630	330	40	370	170
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	240	990	50	170	870	520	530	630	330	40	370	170
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	240	990	50	170	870	520	530	630	330	40	370	170
OvlAdjVol:	373											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.31	0.69	1.00	1.37	0.63
Final Sat.:	1600	3200	1600	5760	3200	1600	5760	2100	1100	1600	2193	1007
Capacity Analysis Module:												
Vol/Sat:	0.15	0.31	0.03	0.03	0.27	0.33	0.09	0.30	0.30	0.03	0.17	0.17
OvlAdjV/S:	0.23											
Crit Moves:	***			***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM

Intersection #17: Wilmington Ave. & Artesia Blvd. WB

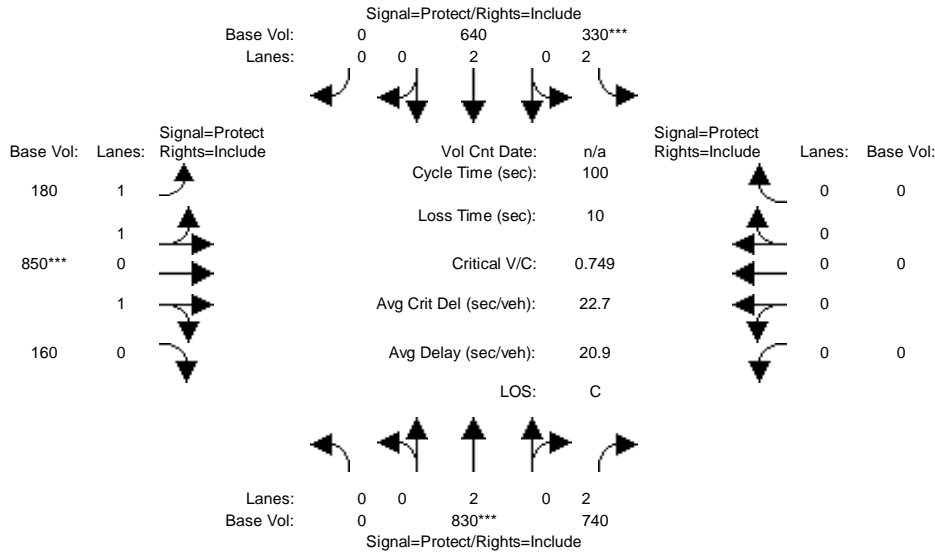


Street Name:	Wilmington Ave.						Artesia Blvd. WB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	270	750	0	0	640	180	0	0	0	330	140	490
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	270	750	0	0	640	180	0	0	0	330	140	490
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	270	750	0	0	640	180	0	0	0	330	140	490
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	270	750	0	0	640	180	0	0	0	330	140	490
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	270	750	0	0	640	180	0	0	0	330	140	490
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.34	0.66	0.00	0.00	0.00	1.40	0.60	1.00
Final Sat.:	1600	3200	0	0	3746	1054	0	0	0	2247	953	1600
Capacity Analysis Module:												
Vol/Sat:	0.17	0.23	0.00	0.00	0.17	0.17	0.00	0.00	0.00	0.15	0.15	0.31
Crit Moves:	***				***							***

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM

Intersection #18: Wilmington Ave. & Artesia Blvd. EB

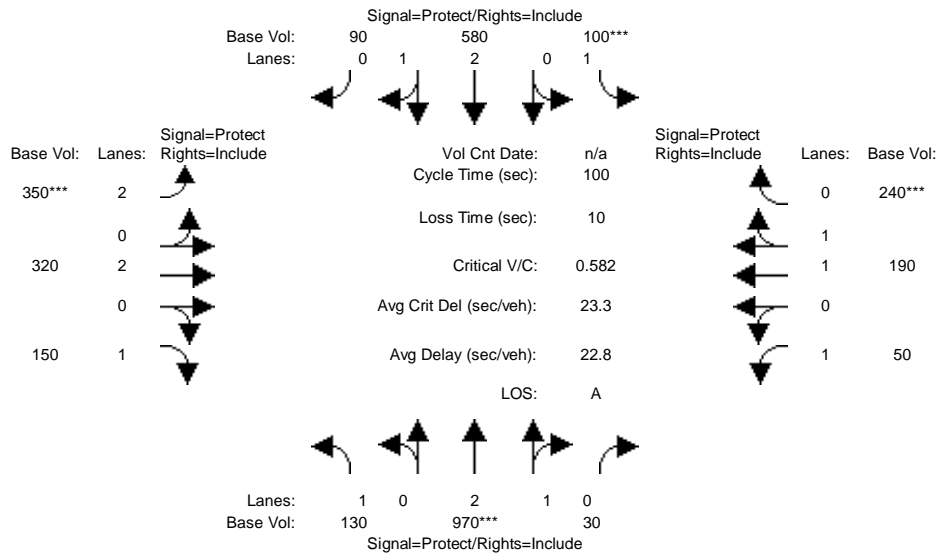


Street Name:	Wilmington Ave.						Artesia Blvd. EB					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	830	740	330	640	0	180	850	160	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	830	740	330	640	0	180	850	160	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	830	740	330	640	0	180	850	160	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	830	740	330	640	0	180	850	160	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	830	740	330	640	0	180	850	160	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.00	1.60	0.40	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	1600	2557	643	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.23	0.06	0.20	0.00	0.11	0.33	0.25	0.00	0.00	0.00
Crit Moves:		****		****				****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM

Intersection #19: Wilmington Ave. & Victoria St.

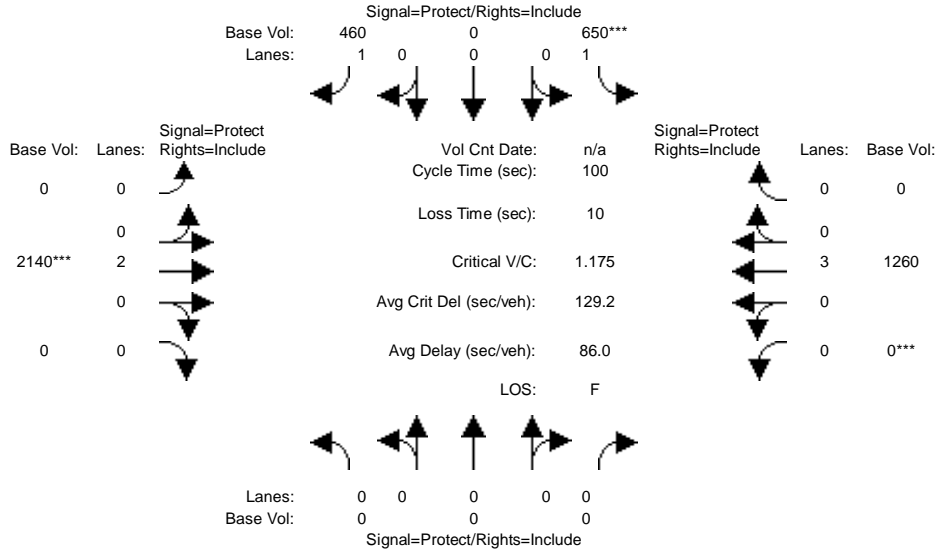


Street Name:	Wilmington Ave.						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	130	970	30	100	580	90	350	320	150	50	190	240
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	970	30	100	580	90	350	320	150	50	190	240
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	970	30	100	580	90	350	320	150	50	190	240
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	970	30	100	580	90	350	320	150	50	190	240
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	130	970	30	100	580	90	350	320	150	50	190	240
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.91	0.09	1.00	2.60	0.40	2.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	4656	144	1600	4155	645	5760	3200	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.21	0.21	0.06	0.14	0.14	0.06	0.10	0.09	0.03	0.12	0.15
Crit Moves:		****		****			****					****

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM

Intersection #20: I-110 SB Off-Ramp & 190th St.

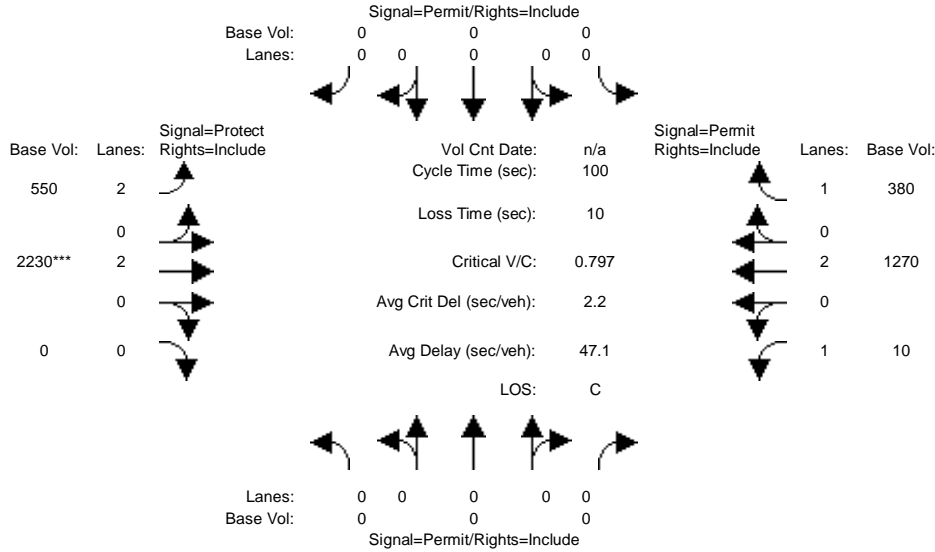


Street Name:	I-110 SB Off-Ramp						190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	650	0	460	0	2140	0	0	1260	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	650	0	460	0	2140	0	0	1260	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	650	0	460	0	2140	0	0	1260	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	650	0	460	0	2140	0	0	1260	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	650	0	460	0	2140	0	0	1260	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.41	0.00	0.29	0.00	0.67	0.00	0.00	0.26	0.00
Crit Moves:				***				***		***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM

Intersection #21: I-110 NB On-Ramp & 190th St.

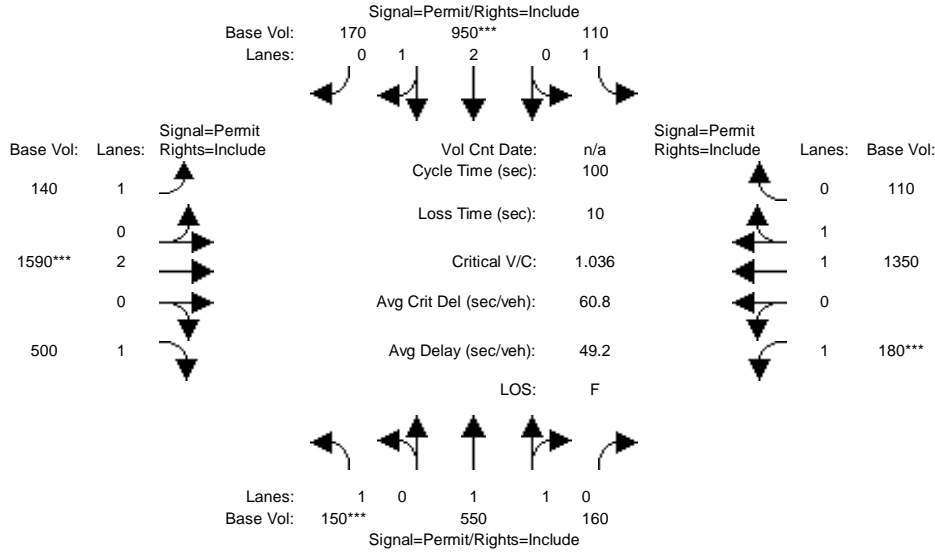


Street Name:	I-110 NB On-Ramp						190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	0	0	0	550	2230	0	10	1270	380
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	550	2230	0	10	1270	380
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	550	2230	0	10	1270	380
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	550	2230	0	10	1270	380
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	0	0	0	550	2230	0	10	1270	380
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	0	0	0	0	0	5760	3200	0	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.70	0.00	0.01	0.40	0.24
Crit Moves:	***											

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM

Intersection #22: Figueroa St. & 190th St./Victoria St.

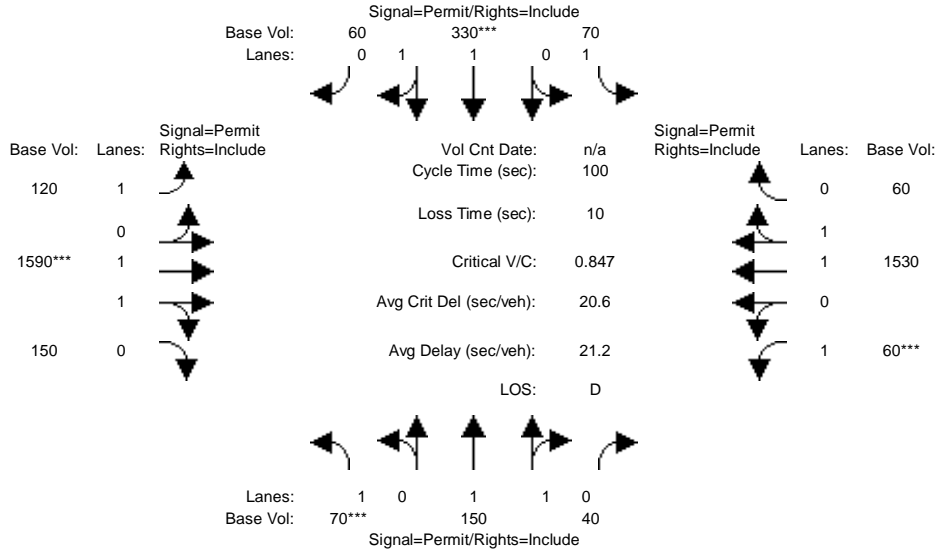


Street Name:	Figueroa St.						190th St./Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	150	550	160	110	950	170	140	1590	500	180	1350	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	550	160	110	950	170	140	1590	500	180	1350	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	550	160	110	950	170	140	1590	500	180	1350	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	550	160	110	950	170	140	1590	500	180	1350	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	150	550	160	110	950	170	140	1590	500	180	1350	110
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.55	0.45	1.00	2.54	0.46	1.00	2.00	1.00	1.00	1.85	0.15
Final Sat.:	1600	2479	721	1600	4071	729	1600	3200	1600	1600	2959	241
Capacity Analysis Module:												
Vol/Sat:	0.09	0.22	0.22	0.07	0.23	0.23	0.09	0.50	0.31	0.11	0.46	0.46
Crit Moves:	***				***			***			***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM

Intersection #23: Broadway & Victoria St.

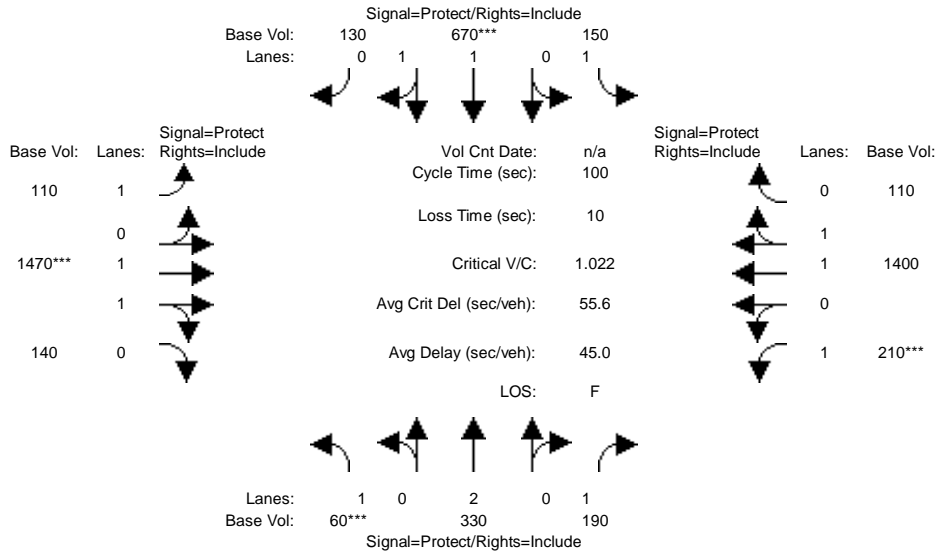


Street Name:	Broadway						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	70	150	40	70	330	60	120	1590	150	60	1530	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	150	40	70	330	60	120	1590	150	60	1530	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	150	40	70	330	60	120	1590	150	60	1530	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	150	40	70	330	60	120	1590	150	60	1530	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	70	150	40	70	330	60	120	1590	150	60	1530	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.58	0.42	1.00	1.69	0.31	1.00	1.83	0.17	1.00	1.92	0.08
Final Sat.:	1600	2526	674	1600	2708	492	1600	2924	276	1600	3079	121
Capacity Analysis Module:												
Vol/Sat:	0.04	0.06	0.06	0.04	0.12	0.12	0.08	0.54	0.54	0.04	0.50	0.50
Crit Moves:	***			***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM

Intersection #24: Main St. & Victoria St.

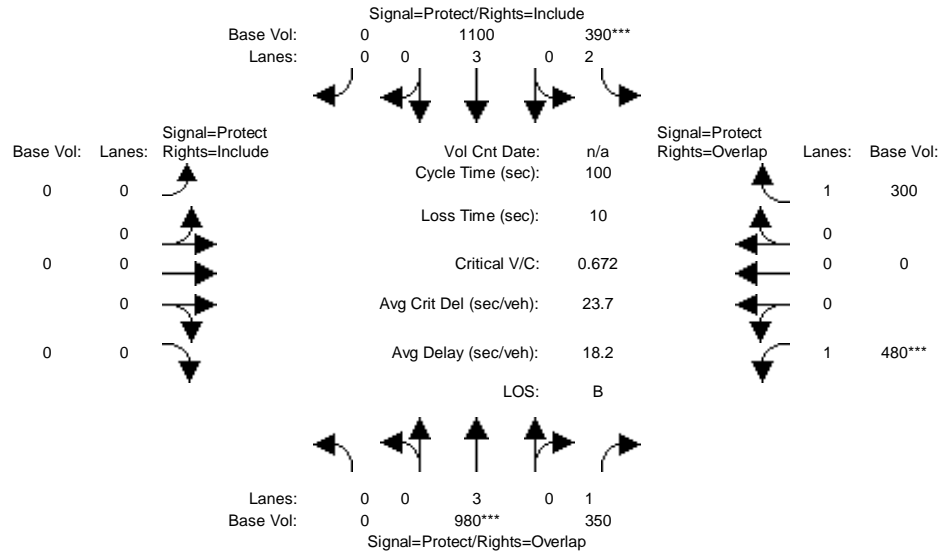


Street Name:	Main St.						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	60	330	190	150	670	130	110	1470	140	210	1400	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	330	190	150	670	130	110	1470	140	210	1400	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	330	190	150	670	130	110	1470	140	210	1400	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	330	190	150	670	130	110	1470	140	210	1400	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	60	330	190	150	670	130	110	1470	140	210	1400	110
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.68	0.32	1.00	1.83	0.17	1.00	1.85	0.15
Final Sat.:	1600	3200	1600	1600	2680	520	1600	2922	278	1600	2967	233
Capacity Analysis Module:												
Vol/Sat:	0.04	0.10	0.12	0.09	0.25	0.25	0.07	0.50	0.50	0.13	0.47	0.47
Crit Moves:	***				***			***			***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM

Intersection #25: Avalon Blvd. & University Dr.

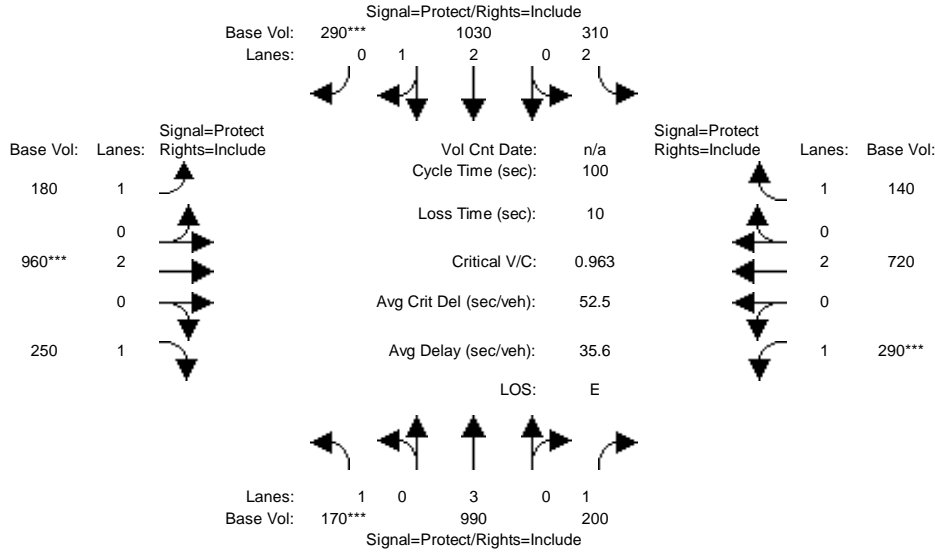


Street Name:	Avalon Blvd.						University Dr.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	980	350	390	1100	0	0	0	0	480	0	300
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	980	350	390	1100	0	0	0	0	480	0	300
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	980	350	390	1100	0	0	0	0	480	0	300
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	980	350	390	1100	0	0	0	0	480	0	300
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	980	350	390	1100	0	0	0	0	480	0	300
OvlAdjVol:												192
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.22	0.07	0.23	0.00	0.00	0.00	0.00	0.30	0.00	0.19
OvlAdjV/S:												0.12
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM

Intersection #26: Avalon Blvd. & Del Amo Blvd.

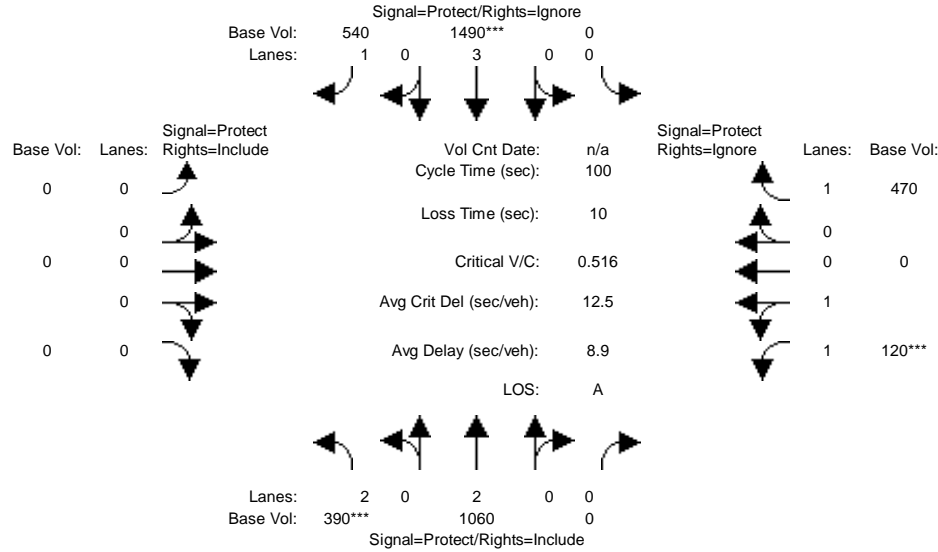


Street Name:	Avalon Blvd.						Del Amo Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	170	990	200	310	1030	290	180	960	250	290	720	140
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	170	990	200	310	1030	290	180	960	250	290	720	140
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	170	990	200	310	1030	290	180	960	250	290	720	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	170	990	200	310	1030	290	180	960	250	290	720	140
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	170	990	200	310	1030	290	180	960	250	290	720	140
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.34	0.66	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	3745	1055	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.21	0.13	0.05	0.27	0.28	0.11	0.30	0.16	0.18	0.23	0.09
Crit Moves:	***					***		***		***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM

Intersection #27: Avalon Blvd. & I-405 NB Ramps

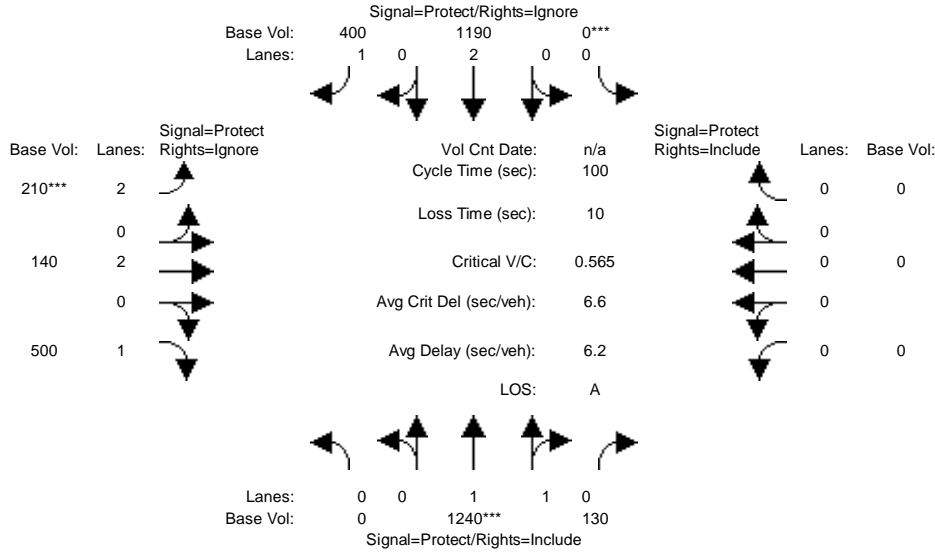


Street Name:	Avalon Blvd.						I-405 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	390	1060	0	0	1490	540	0	0	0	120	0	470
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	390	1060	0	0	1490	540	0	0	0	120	0	470
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	390	1060	0	0	1490	0	0	0	0	120	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	390	1060	0	0	1490	0	0	0	0	120	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Volume:	390	1060	0	0	1490	0	0	0	0	120	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	5760	3200	0	0	4800	1600	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.33	0.00	0.00	0.31	0.00	0.00	0.00	0.00	0.04	0.00	0.00
Crit Moves:	***				***					***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM

Intersection #28: Avalon Blvd. & I-405 SB Ramps

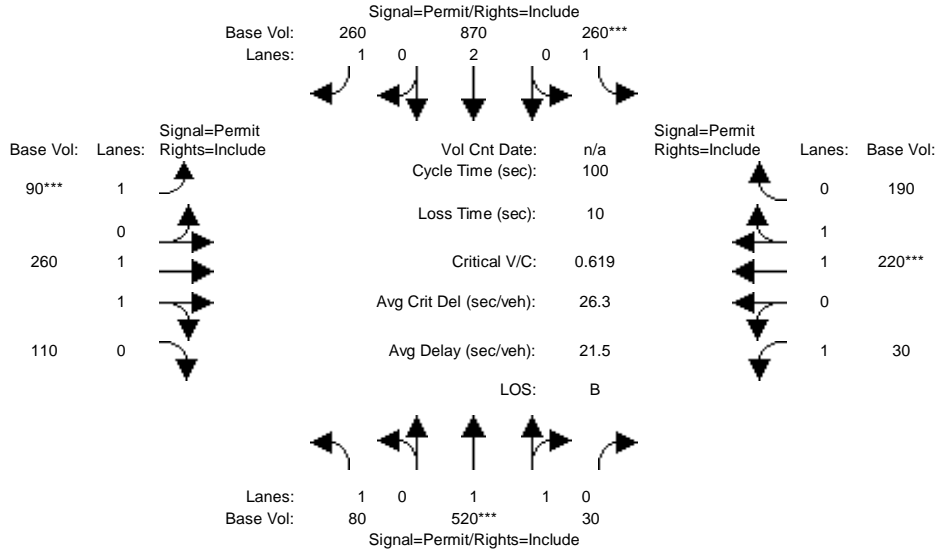


Street Name:	Avalon Blvd.						I-405 SB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1240	130	0	1190	400	210	140	500	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1240	130	0	1190	400	210	140	500	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	1240	130	0	1190	0	210	140	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1240	130	0	1190	0	210	140	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Volume:	0	1240	130	0	1190	0	210	140	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.81	0.19	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	0	2896	304	0	3200	1600	5760	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.43	0.43	0.00	0.37	0.00	0.04	0.04	0.00	0.00	0.00	0.00
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM

Intersection #29: Central Ave. & University Dr.

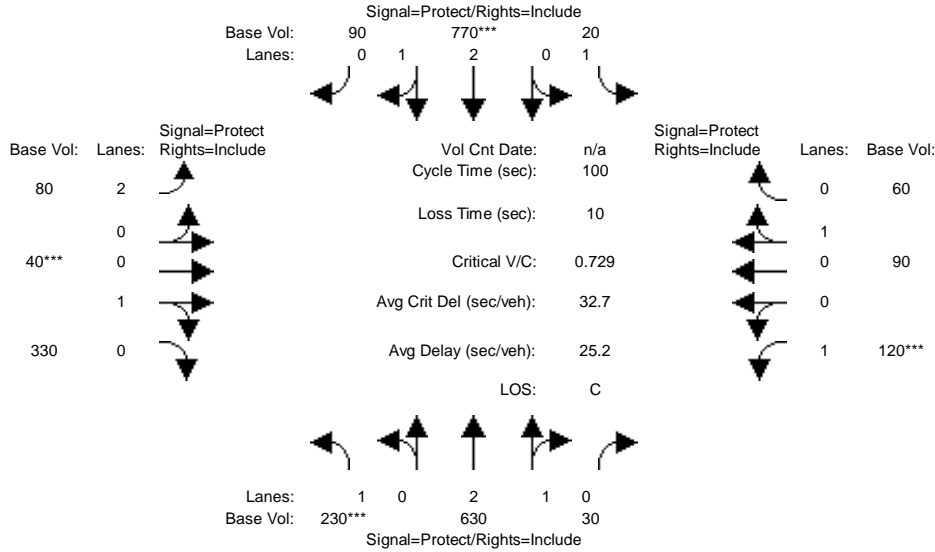


Street Name:	Central Ave.						University Dr.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	80	520	30	260	870	260	90	260	110	30	220	190
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	520	30	260	870	260	90	260	110	30	220	190
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	520	30	260	870	260	90	260	110	30	220	190
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	520	30	260	870	260	90	260	110	30	220	190
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	80	520	30	260	870	260	90	260	110	30	220	190
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.89	0.11	1.00	2.00	1.00	1.00	1.41	0.59	1.00	1.07	0.93
Final Sat.:	1600	3025	175	1600	3200	1600	1600	2249	951	1600	1717	1483
Capacity Analysis Module:												
Vol/Sat:	0.05	0.17	0.17	0.16	0.27	0.16	0.06	0.12	0.12	0.02	0.13	0.13
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM

Intersection #30: Wilmington Ave. & University Dr.

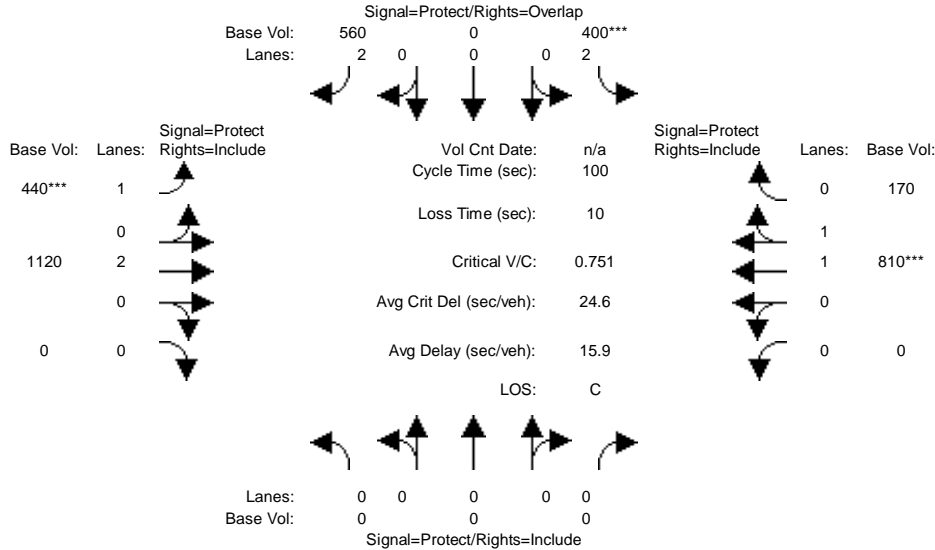


Street Name:	Wilmington Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	230	630	30	20	770	90	80	40	330	120	90	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	230	630	30	20	770	90	80	40	330	120	90	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	230	630	30	20	770	90	80	40	330	120	90	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	230	630	30	20	770	90	80	40	330	120	90	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	230	630	30	20	770	90	80	40	330	120	90	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.86	0.14	1.00	2.69	0.31	2.00	0.11	0.89	1.00	0.60	0.40
Final Sat.:	1600	4582	218	1600	4298	502	5760	173	1427	1600	960	640
Capacity Analysis Module:												
Vol/Sat:	0.14	0.14	0.14	0.01	0.18	0.18	0.01	0.23	0.23	0.08	0.09	0.09
Crit Moves:	***				***			***			***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM

Intersection #31: Central Ave. & Del Amo Blvd.

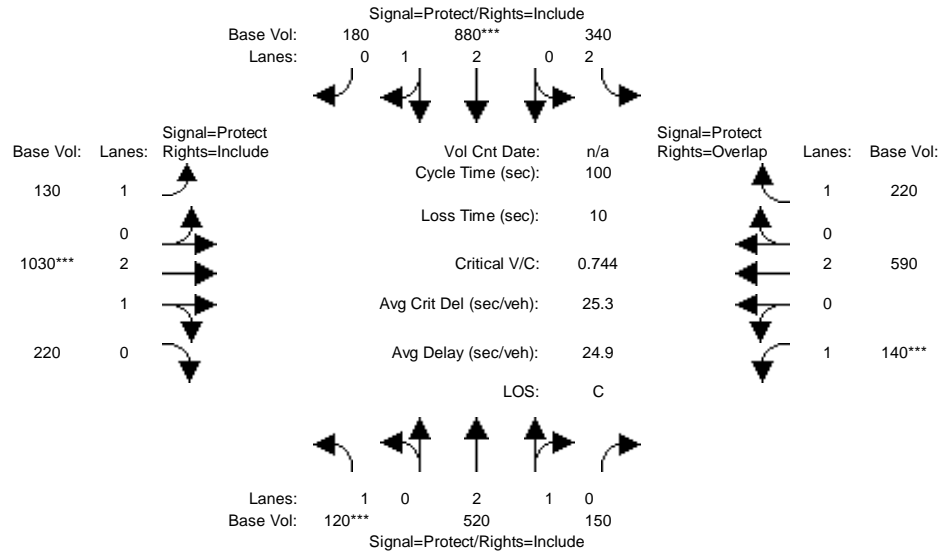


Street Name:	Central Ave.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	400	0	560	440	1120	0	0	810	170
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	400	0	560	440	1120	0	0	810	170
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	400	0	560	440	1120	0	0	810	170
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	400	0	560	440	1120	0	0	810	170
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	400	0	560	440	1120	0	0	810	170
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	2.00	1.00	2.00	0.00	0.00	1.65	0.35
Final Sat.:	0	0	0	5760	0	3200	1600	3200	0	0	2645	555
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.07	0.00	0.17	0.28	0.35	0.00	0.00	0.31	0.31
OvlAdjV/S:	0.00											
Crit Moves:				****				****				****

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM

Intersection #32: Wilmington Ave. & Del Amo Blvd.

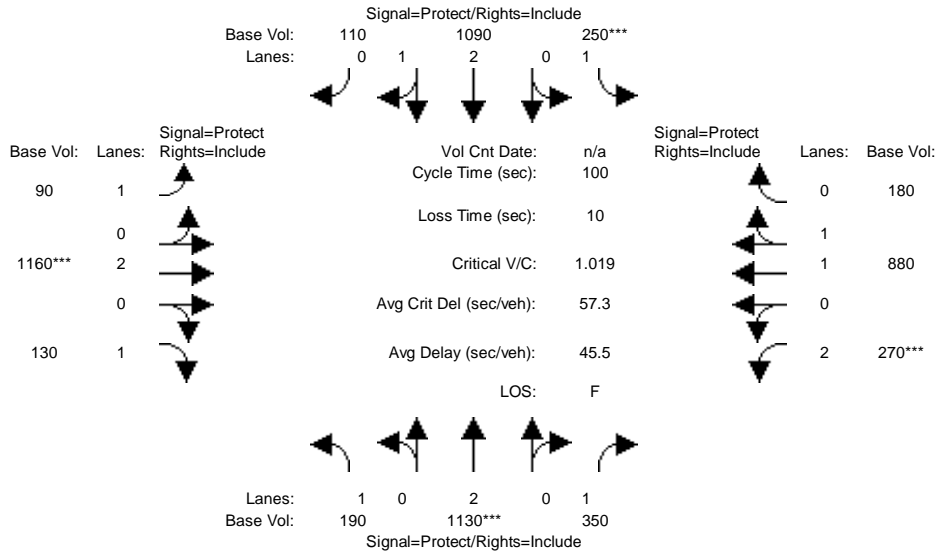


Street Name:	Wilmington Ave.						Del Amo Blvd.						
Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Volume Module:													
Base Vol:	120	520	150	340	880	180	130	1030	220	140	590	220	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	120	520	150	340	880	180	130	1030	220	140	590	220	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:	120	520	150	340	880	180	130	1030	220	140	590	220	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	120	520	150	340	880	180	130	1030	220	140	590	220	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Final Volume:	120	520	150	340	880	180	130	1030	220	140	590	220	
OvlAdjVol:												126	
Saturation Flow Module:													
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Lanes:	1.00	2.33	0.67	2.00	2.49	0.51	1.00	2.47	0.53	1.00	2.00	1.00	
Final Sat.:	1600	3725	1075	5760	3985	815	1600	3955	845	1600	3200	1600	
Capacity Analysis Module:													
Vol/Sat:	0.08	0.14	0.14	0.06	0.22	0.22	0.08	0.26	0.26	0.09	0.18	0.14	
OvlAdjV/S:												0.08	
Crit Moves:	***						***				***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM

Intersection #33: W. Artesia Blvd. & Crenshaw Blvd.

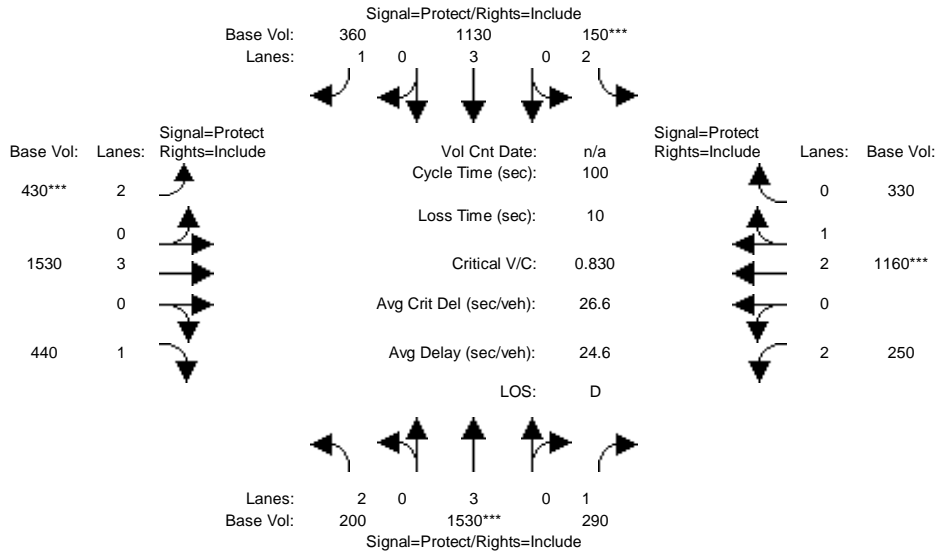


Street Name:	Crenshaw Blvd.						W. Artesia Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	190	1130	350	250	1090	110	90	1160	130	270	880	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	190	1130	350	250	1090	110	90	1160	130	270	880	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	190	1130	350	250	1090	110	90	1160	130	270	880	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	190	1130	350	250	1090	110	90	1160	130	270	880	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	190	1130	350	250	1090	110	90	1160	130	270	880	180
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.72	0.28	1.00	2.00	1.00	2.00	1.66	0.34
Final Sat.:	1600	3200	1600	1600	4360	440	1600	3200	1600	5760	2657	543
Capacity Analysis Module:												
Vol/Sat:	0.12	0.35	0.22	0.16	0.25	0.25	0.06	0.36	0.08	0.05	0.33	0.33
Crit Moves:	****			****				****		****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM

Intersection #34: W 190th St. & South Western Ave.

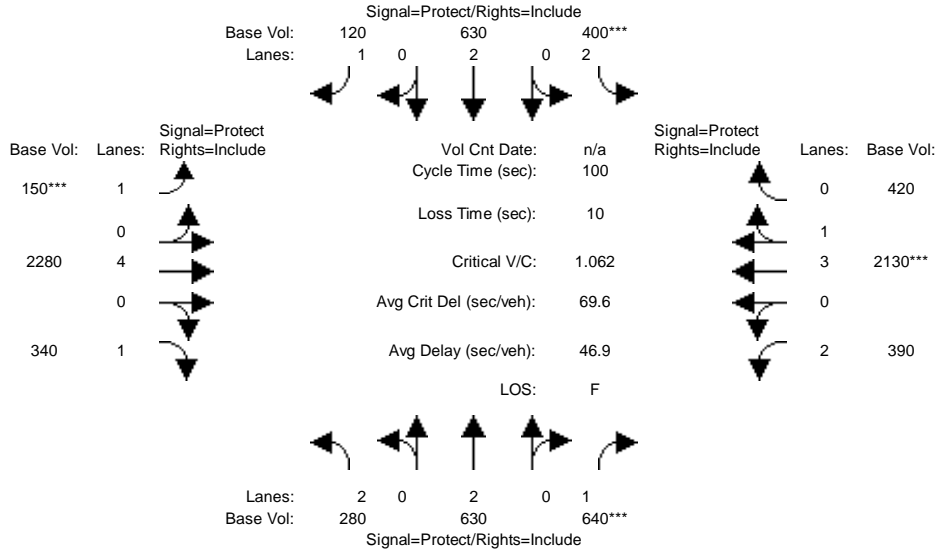


Street Name:	S. Western Ave.						W. 190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	200	1530	290	150	1130	360	430	1530	440	250	1160	330
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	200	1530	290	150	1130	360	430	1530	440	250	1160	330
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	200	1530	290	150	1130	360	430	1530	440	250	1160	330
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	200	1530	290	150	1130	360	430	1530	440	250	1160	330
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	200	1530	290	150	1130	360	430	1530	440	250	1160	330
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.34	0.66
Final Sat.:	5760	4800	1600	5760	4800	1600	5760	4800	1600	5760	3737	1063
Capacity Analysis Module:												
Vol/Sat:	0.03	0.32	0.18	0.03	0.24	0.23	0.07	0.32	0.28	0.04	0.31	0.31
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM

Intersection #35: W. Artesia Blvd. & Vermont Av.e

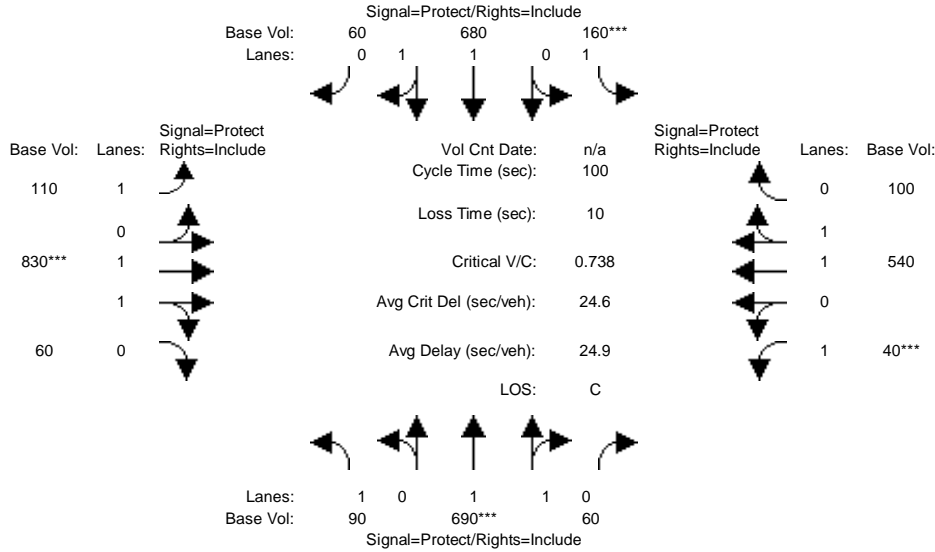


Street Name:	Vermont Ave.						W. Artesia Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	280	630	640	400	630	120	150	2280	340	390	2130	420
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	280	630	640	400	630	120	150	2280	340	390	2130	420
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	280	630	640	400	630	120	150	2280	340	390	2130	420
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	280	630	640	400	630	120	150	2280	340	390	2130	420
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	280	630	640	400	630	120	150	2280	340	390	2130	420
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	1.00	4.00	1.00	2.00	3.34	0.66
Final Sat.:	5760	3200	1600	5760	3200	1600	1600	6400	1600	5760	5346	1054
Capacity Analysis Module:												
Vol/Sat:	0.05	0.20	0.40	0.07	0.20	0.08	0.09	0.36	0.21	0.07	0.40	0.40
Crit Moves:			****	****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM

Intersection #36: Alameda St. & Compton Blvd.

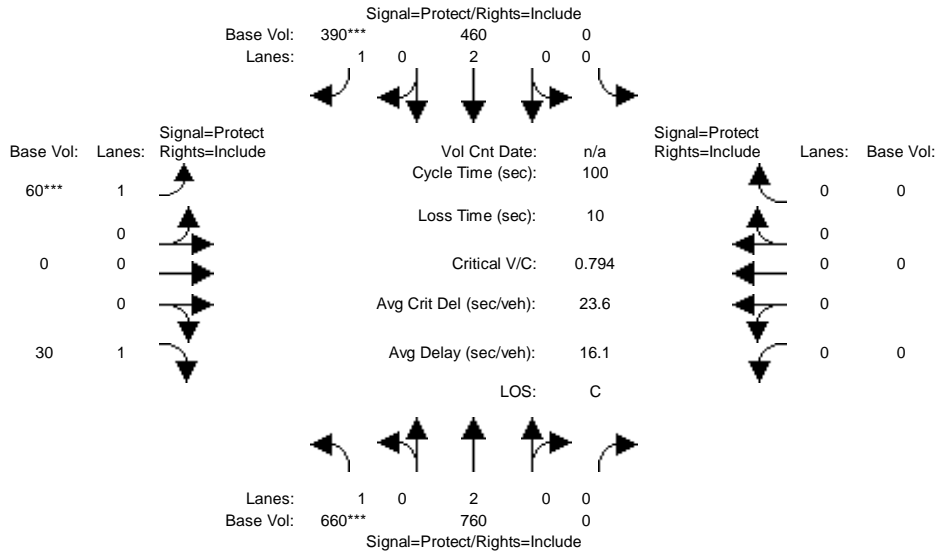


Street Name:	Alameda St.						Compton Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Movement:												
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	90	690	60	160	680	60	110	830	60	40	540	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	690	60	160	680	60	110	830	60	40	540	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	690	60	160	680	60	110	830	60	40	540	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	690	60	160	680	60	110	830	60	40	540	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	90	690	60	160	680	60	110	830	60	40	540	100
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.84	0.16	1.00	1.84	0.16	1.00	1.87	0.13	1.00	1.69	0.31
Final Sat.:	1600	2944	256	1600	2941	259	1600	2984	216	1600	2700	500
Capacity Analysis Module:												
Vol/Sat:	0.06	0.23	0.23	0.10	0.23	0.23	0.07	0.28	0.28	0.03	0.20	0.20
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM

Intersection #37: Alameda St. & SR 91 EB Ramps

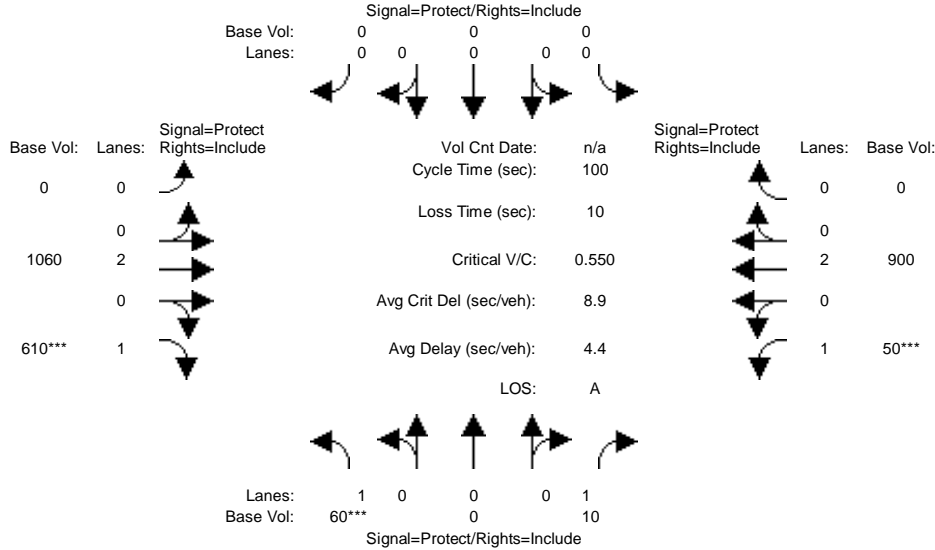


Street Name:	Alameda St.						SR 91 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	660	760	0	0	460	390	60	0	30	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	660	760	0	0	460	390	60	0	30	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	660	760	0	0	460	390	60	0	30	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	660	760	0	0	460	390	60	0	30	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	660	760	0	0	460	390	60	0	30	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	3200	0	0	3200	1600	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.41	0.24	0.00	0.00	0.14	0.24	0.04	0.00	0.02	0.00	0.00	0.00
Crit Moves:	***					***	***					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM Mitigated

Intersection #1: Victoria St. & Drive D

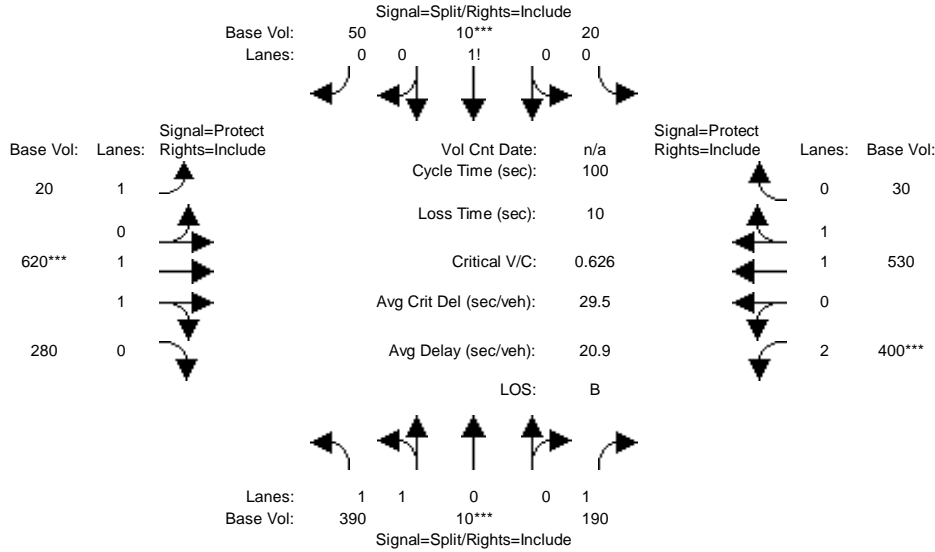


Street Name:	Drive D						Victoria St..					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	60	0	10	0	0	0	0	1060	610	50	900	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	0	10	0	0	0	0	1060	610	50	900	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	0	10	0	0	0	0	1060	610	50	900	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	0	10	0	0	0	0	1060	610	50	900	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	0	10	0	0	0	0	1060	610	50	900	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	1600	0	1600	0	0	0	0	3200	1600	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.04	0.00	0.01	0.00	0.00	0.00	0.00	0.33	0.38	0.03	0.28	0.00
Crit Moves:	****						****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM Mitigated

Intersection #3: Victoria St. & Birchknoll Dr.

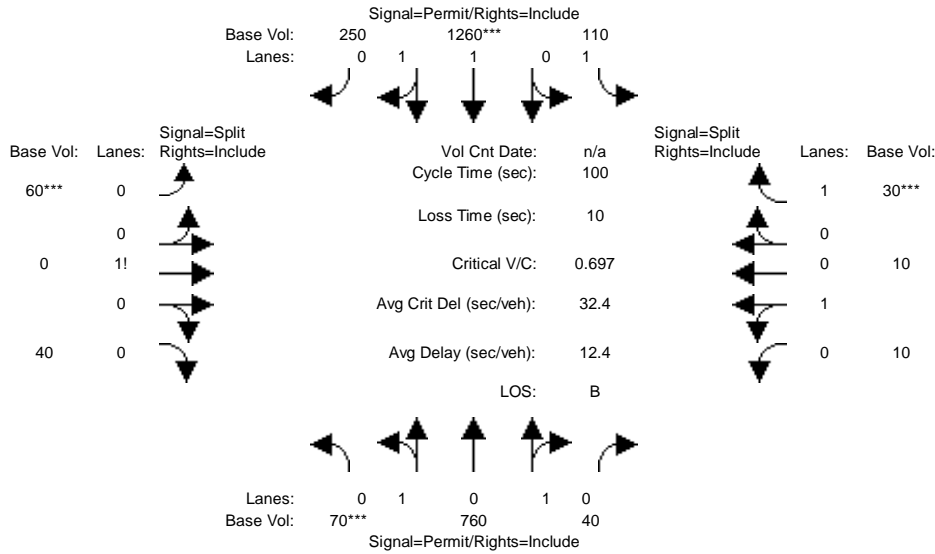


Street Name:	Victoria St.						Birchknoll Dr.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	390	10	190	20	10	50	20	620	280	400	530	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	390	10	190	20	10	50	20	620	280	400	530	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	390	10	190	20	10	50	20	620	280	400	530	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	390	10	190	20	10	50	20	620	280	400	530	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	390	10	190	20	10	50	20	620	280	400	530	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	1.95	0.05	1.00	0.25	0.12	0.63	1.00	1.38	0.62	2.00	1.89	0.11
Final Sat.:	3120	80	1600	400	200	1000	1600	2204	996	5760	3029	171
Capacity Analysis Module:												
Vol/Sat:	0.13	0.13	0.12	0.05	0.05	0.05	0.01	0.28	0.28	0.07	0.17	0.18
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM Mitigated

Intersection #5: Central Ave. & Charles Willard St.

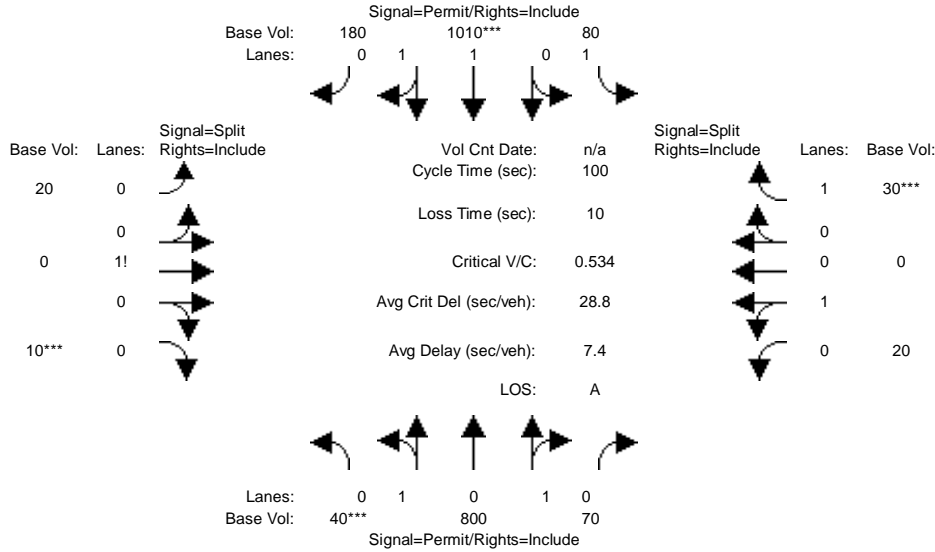


Street Name:	Central Ave.						Charles Willard St.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	70	760	40	110	1260	250	60	0	40	10	10	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	760	40	110	1260	250	60	0	40	10	10	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	760	40	110	1260	250	60	0	40	10	10	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	760	40	110	1260	250	60	0	40	10	10	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	70	760	40	110	1260	250	60	0	40	10	10	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.16	1.75	0.09	1.00	1.67	0.33	0.60	0.00	0.40	0.50	0.50	1.00
Final Sat.:	257	2795	147	1600	2670	530	960	0	640	800	800	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.27	0.27	0.07	0.47	0.47	0.06	0.00	0.06	0.01	0.01	0.02
Crit Moves:	***				***		***					***

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM Mitigated

Intersection #6: Central Ave. & Project Driveway/Beachey Pl.

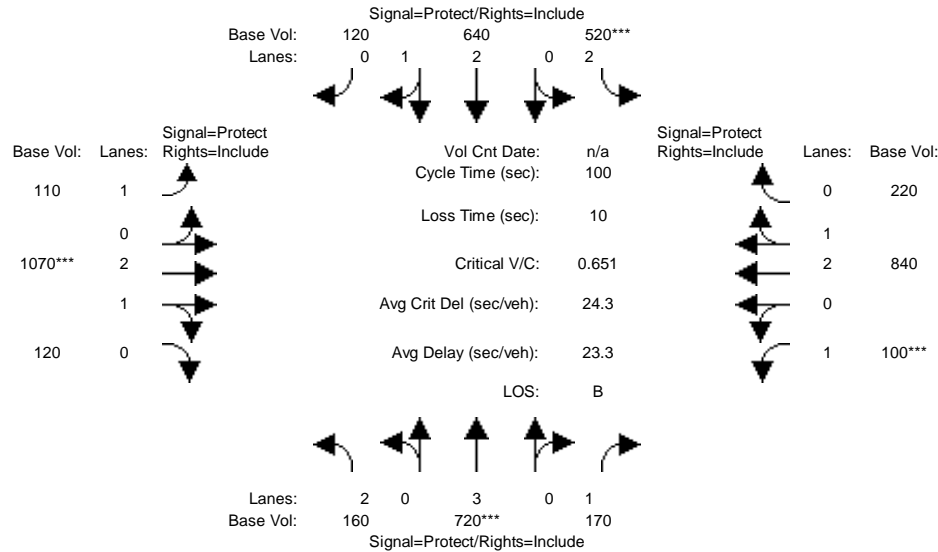


Street Name:	Central Ave.						Beachey Pl.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	40	800	70	80	1010	180	20	0	10	20	0	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	800	70	80	1010	180	20	0	10	20	0	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	800	70	80	1010	180	20	0	10	20	0	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	800	70	80	1010	180	20	0	10	20	0	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	40	800	70	80	1010	180	20	0	10	20	0	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.09	1.76	0.15	1.00	1.70	0.30	0.67	0.00	0.33	1.00	0.00	1.00
Final Sat.:	141	2813	246	1600	2716	484	1067	0	533	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.28	0.28	0.05	0.37	0.37	0.02	0.00	0.02	0.01	0.00	0.02
Crit Moves:	***				****				****			****

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM Mitigated

Intersection #13: Avalon Blvd. & Victoria St.

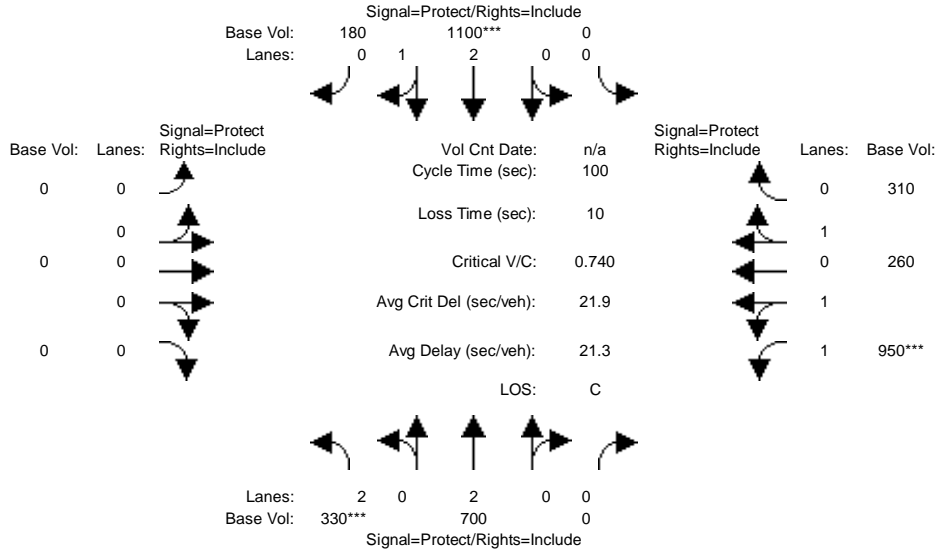


Street Name:	Avalon Blvd.						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	160	720	170	520	640	120	110	1070	120	100	840	220
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	160	720	170	520	640	120	110	1070	120	100	840	220
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	160	720	170	520	640	120	110	1070	120	100	840	220
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	720	170	520	640	120	110	1070	120	100	840	220
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	160	720	170	520	640	120	110	1070	120	100	840	220
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	2.53	0.47	1.00	2.70	0.30	1.00	2.38	0.62
Final Sat.:	5760	4800	1600	5760	4042	758	1600	4316	484	1600	3804	996
Capacity Analysis Module:												
Vol/Sat:	0.03	0.15	0.11	0.09	0.16	0.16	0.07	0.25	0.25	0.06	0.22	0.22
Crit Moves:	****			****				****		****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM Mitigated

Intersection #14: Central Ave. & Artesia Blvd.

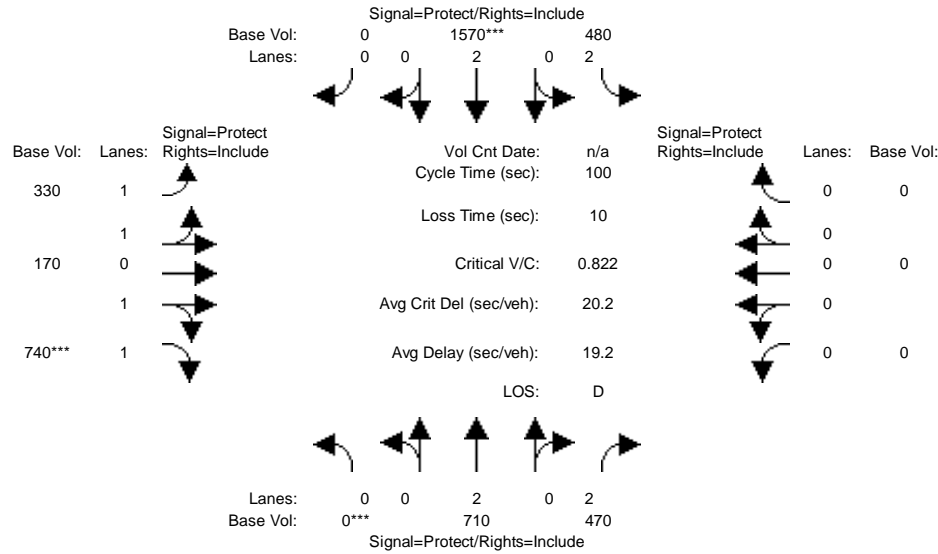


Street Name:	Central Ave.						Artesia Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	330	700	0	0	1100	180	0	0	0	950	260	310
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	330	700	0	0	1100	180	0	0	0	950	260	310
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	330	700	0	0	1100	180	0	0	0	950	260	310
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	330	700	0	0	1100	180	0	0	0	950	260	310
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	330	700	0	0	1100	180	0	0	0	950	260	310
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	2.58	0.42	0.00	0.00	0.00	1.88	0.51	0.61
Final Sat.:	5760	3200	0	0	4125	675	0	0	0	3003	820	977
Capacity Analysis Module:												
Vol/Sat:	0.06	0.22	0.00	0.00	0.27	0.27	0.00	0.00	0.00	0.32	0.32	0.32
Crit Moves:	***				***	***				***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM Mitigated

Intersection #15: Central Ave. & Albertoni St./Artesia Blvd. EB



Street Name: Central Ave. Albertoni St./Artesia Blvd. EB

Approach: North Bound South Bound East Bound West Bound

Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0

Volume Module:

Base Vol:	0	710	470	480	1570	0	330	170	740	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	710	470	480	1570	0	330	170	740	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	710	470	480	1570	0	330	170	740	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	710	470	480	1570	0	330	170	740	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	710	470	480	1570	0	330	170	740	0	0	0

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.32	0.68	2.00	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	2112	1088	3200	0	0	0

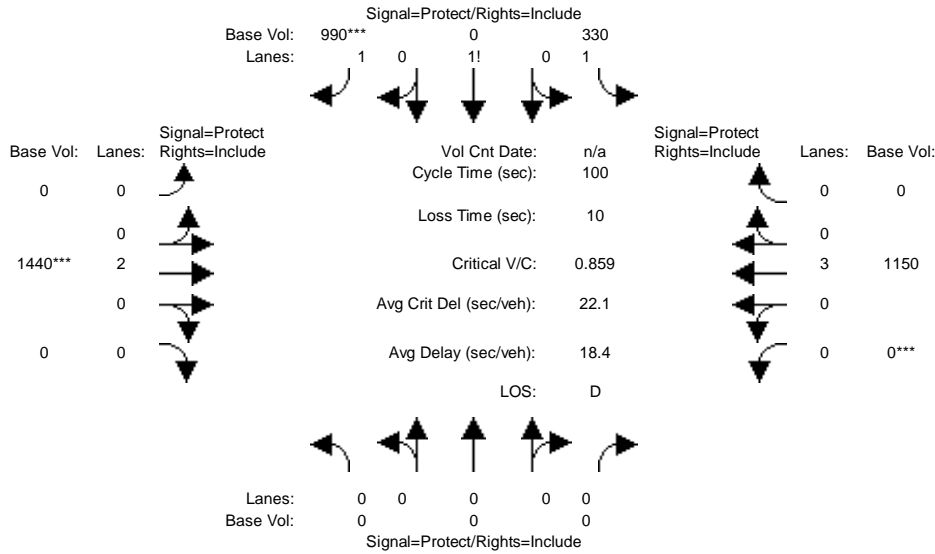
Capacity Analysis Module:

Vol/Sat:	0.00	0.22	0.15	0.08	0.49	0.00	0.16	0.16	0.23	0.00	0.00	0.00
Crit Moves:	***				***				***			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM Mitigated

Intersection #20: I-110 SB Off-Ramp & 190th St.

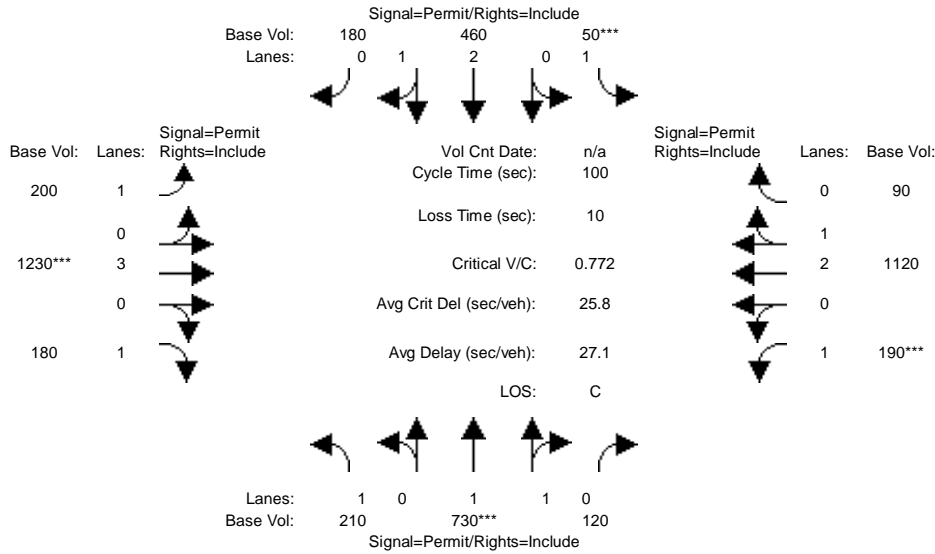


Street Name:	I-110 SB Off-Ramp						190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	330	0	990	0	1440	0	0	1150	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	330	0	990	0	1440	0	0	1150	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	330	0	990	0	1440	0	0	1150	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	330	0	990	0	1440	0	0	1150	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	330	0	990	0	1440	0	0	1150	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	2.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	3200	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.21	0.00	0.31	0.00	0.45	0.00	0.00	0.24	0.00
Crit Moves:						***		***			***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM Mitigated

Intersection #22: Figueroa St. & 190th St./Victoria St.

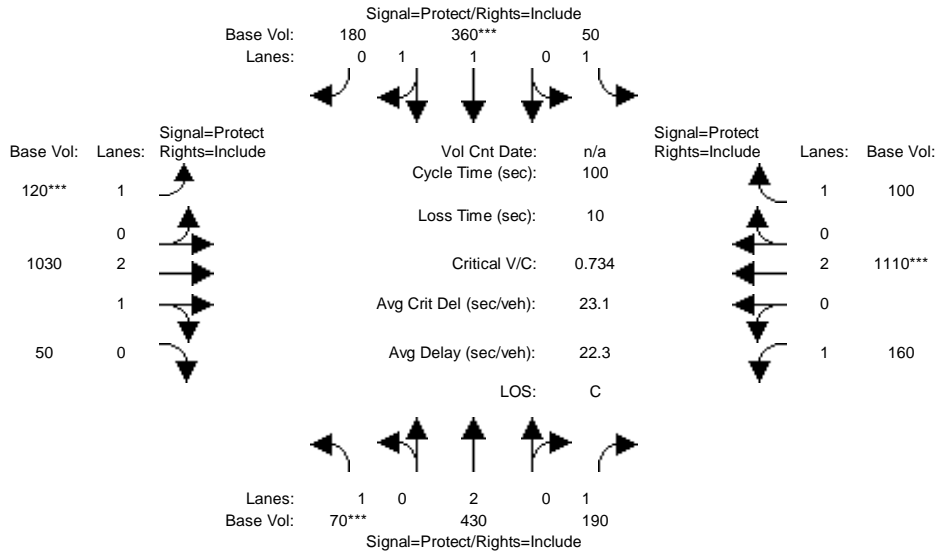


Street Name:	Figueroa St.						190th St./Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	210	730	120	50	460	180	200	1230	180	190	1120	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	210	730	120	50	460	180	200	1230	180	190	1120	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	210	730	120	50	460	180	200	1230	180	190	1120	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	210	730	120	50	460	180	200	1230	180	190	1120	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	210	730	120	50	460	180	200	1230	180	190	1120	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.72	0.28	1.00	2.16	0.84	1.00	3.00	1.00	1.00	2.78	0.22
Final Sat.:	1600	2748	452	1600	3450	1350	1600	4800	1600	1600	4443	357
Capacity Analysis Module:												
Vol/Sat:	0.13	0.27	0.27	0.03	0.13	0.13	0.13	0.26	0.11	0.12	0.25	0.25
Crit Moves:	****			****				****		****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM Mitigated

Intersection #24: Main St. & Victoria St.

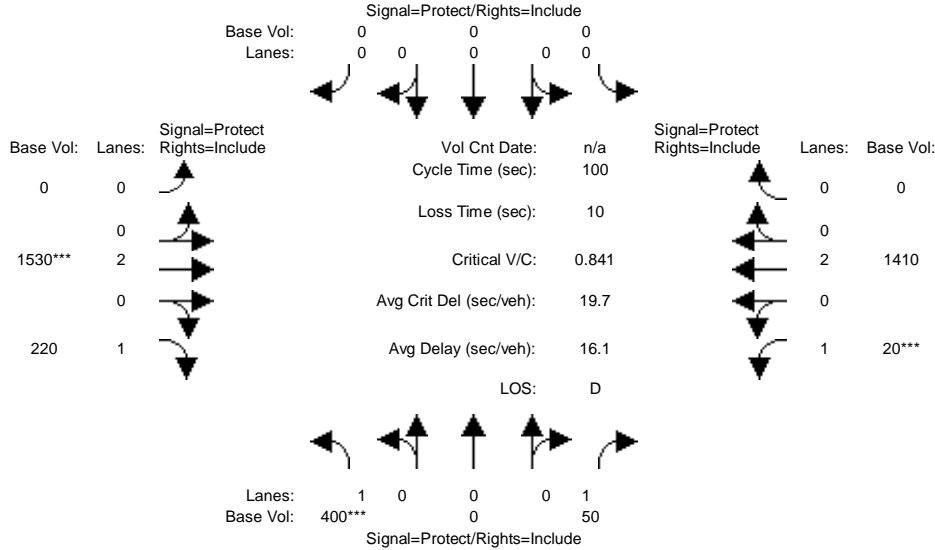


Street Name:	Main St.						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	70	430	190	50	360	180	120	1030	50	160	1110	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	430	190	50	360	180	120	1030	50	160	1110	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	430	190	50	360	180	120	1030	50	160	1110	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	430	190	50	360	180	120	1030	50	160	1110	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	70	430	190	50	360	180	120	1030	50	160	1110	100
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.33	0.67	1.00	2.86	0.14	1.00	2.00	1.00
Final Sat.:	1600	3200	1600	1600	2133	1067	1600	4578	222	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.13	0.12	0.03	0.17	0.17	0.08	0.22	0.23	0.10	0.35	0.06
Crit Moves:	***				***		***				***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM Mitigated

Intersection #1: Victoria St. & Drive D

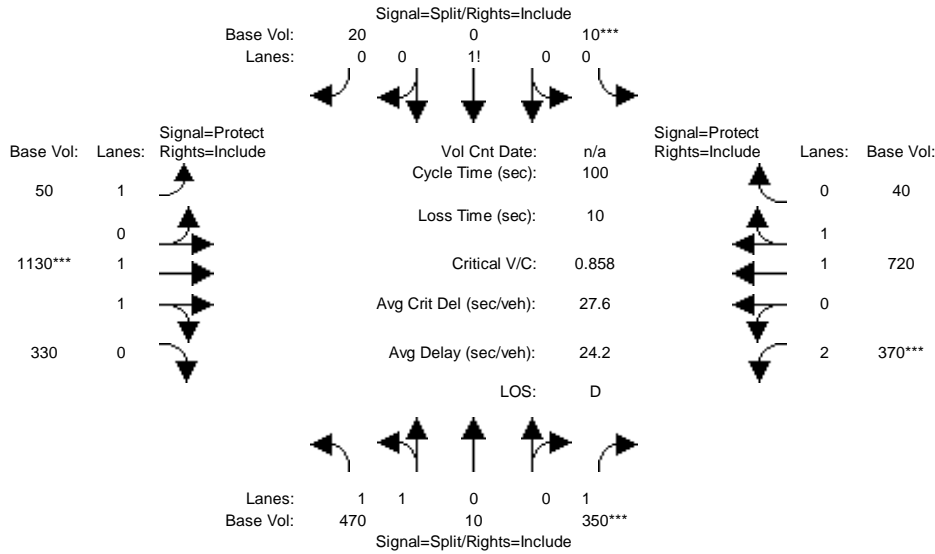


Street Name:	Drive D						Victoria St..					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	400	0	50	0	0	0	0	1530	220	20	1410	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	400	0	50	0	0	0	0	1530	220	20	1410	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	400	0	50	0	0	0	0	1530	220	20	1410	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	400	0	50	0	0	0	0	1530	220	20	1410	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	400	0	50	0	0	0	0	1530	220	20	1410	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	1600	0	1600	0	0	0	0	3200	1600	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.25	0.00	0.03	0.00	0.00	0.00	0.00	0.48	0.14	0.01	0.44	0.00
Crit Moves:	****							****		****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM Mitigated

Intersection #3: Victoria St. & Birchknoll Dr.

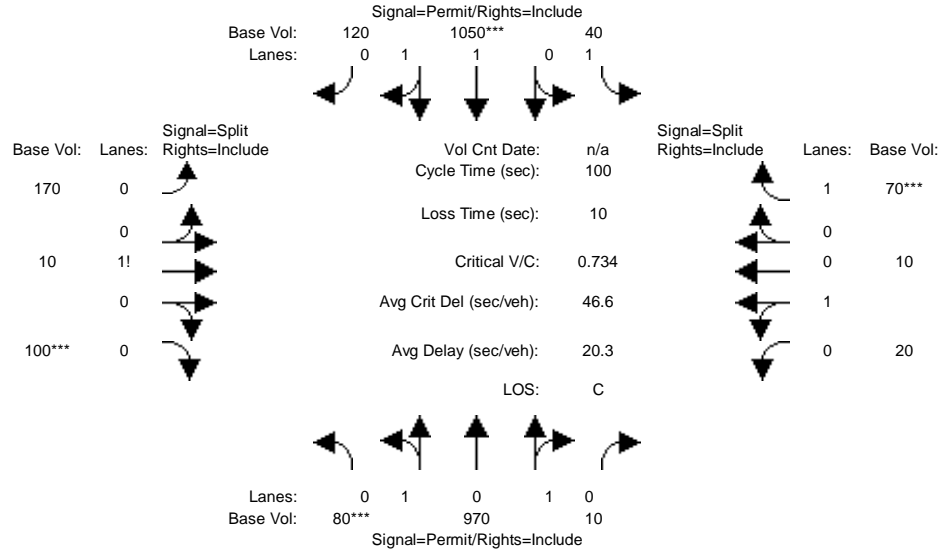


Street Name:	Victoria St.						Birchknoll Dr.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	470	10	350	10	0	20	50	1130	330	370	720	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	470	10	350	10	0	20	50	1130	330	370	720	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	470	10	350	10	0	20	50	1130	330	370	720	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	470	10	350	10	0	20	50	1130	330	370	720	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	470	10	350	10	0	20	50	1130	330	370	720	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	1.96	0.04	1.00	0.33	0.00	0.67	1.00	1.55	0.45	2.00	1.89	0.11
Final Sat.:	3133	67	1600	533	0	1067	1600	2477	723	5760	3032	168
Capacity Analysis Module:												
Vol/Sat:	0.15	0.15	0.22	0.02	0.00	0.02	0.03	0.46	0.46	0.06	0.24	0.24
Crit Moves:			***	***				***		***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM Mitigated

Intersection #5: Central Ave. & Charles Willard St.

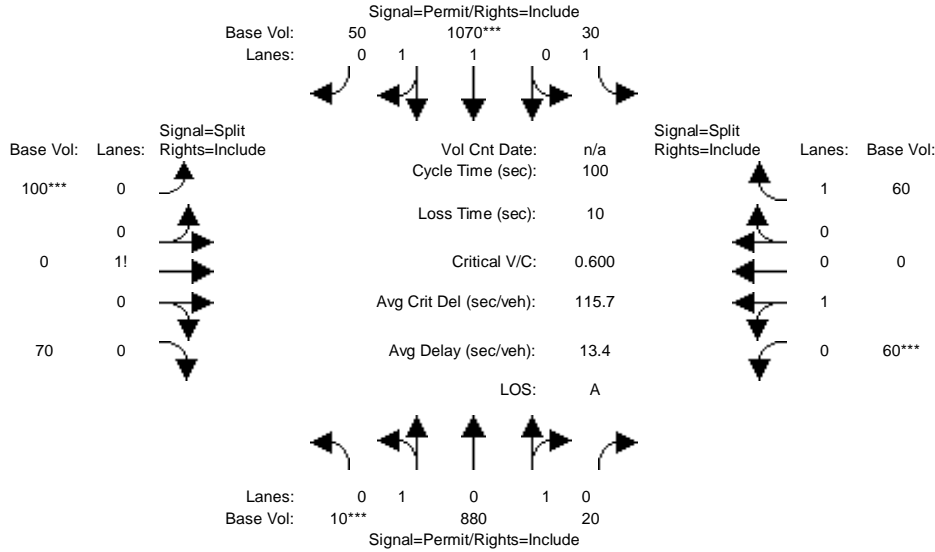


Street Name:	Central Ave.						Charles Willard St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	80	970	10	40	1050	120	170	10	100	20	10	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	970	10	40	1050	120	170	10	100	20	10	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	970	10	40	1050	120	170	10	100	20	10	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	970	10	40	1050	120	170	10	100	20	10	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	80	970	10	40	1050	120	170	10	100	20	10	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.15	1.83	0.02	1.00	1.79	0.21	0.61	0.03	0.36	0.67	0.33	1.00
Final Sat.:	242	2928	30	1600	2872	328	971	57	571	1067	533	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.33	0.33	0.03	0.37	0.37	0.18	0.17	0.18	0.02	0.02	0.04
Crit Moves:	***				***				***			***

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM Mitigated

Intersection #6: Central Ave. & Project Driveway/Beachey Pl.

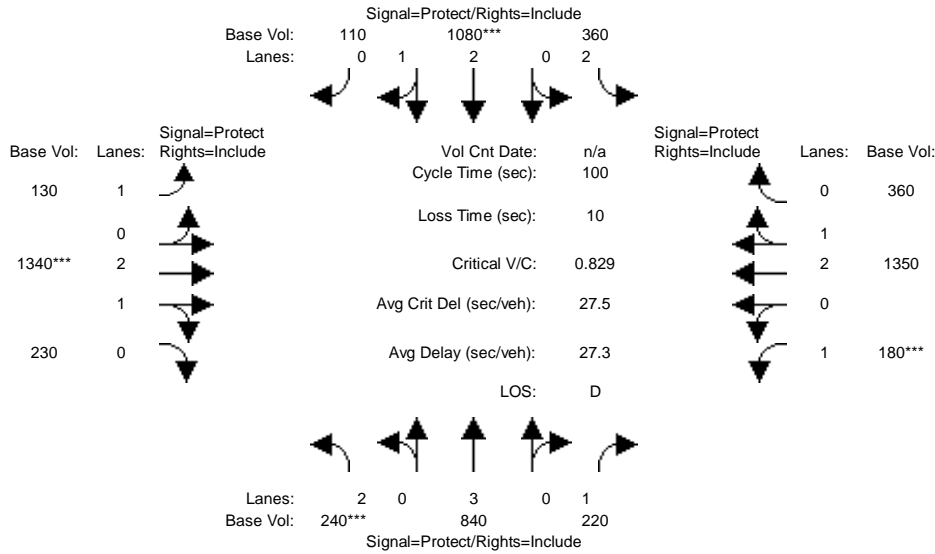


Street Name:	Central Ave.						Beachey Pl.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	10	880	20	30	1070	50	100	0	70	60	0	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	880	20	30	1070	50	100	0	70	60	0	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	10	880	20	30	1070	50	100	0	70	60	0	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	880	20	30	1070	50	100	0	70	60	0	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	10	880	20	30	1070	50	100	0	70	60	0	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.02	1.94	0.04	1.00	1.91	0.09	0.59	0.00	0.41	1.00	0.00	1.00
Final Sat.:	35	3095	70	1600	3057	143	941	0	659	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.28	0.28	0.02	0.35	0.35	0.11	0.00	0.11	0.04	0.00	0.04
Crit Moves:	***				***		***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM Mitigated

Intersection #13: Avalon Blvd. & Victoria St.

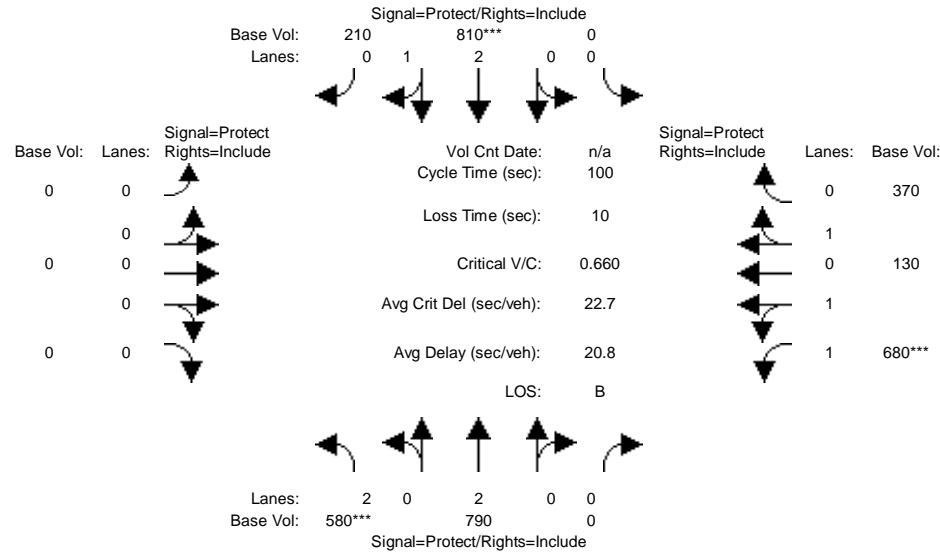


Street Name:	Avalon Blvd.						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	240	840	220	360	1080	110	130	1340	230	180	1350	360
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	240	840	220	360	1080	110	130	1340	230	180	1350	360
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	240	840	220	360	1080	110	130	1340	230	180	1350	360
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	240	840	220	360	1080	110	130	1340	230	180	1350	360
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	240	840	220	360	1080	110	130	1340	230	180	1350	360
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	2.72	0.28	1.00	2.56	0.44	1.00	2.37	0.63
Final Sat.:	5760	4800	1600	5760	4356	444	1600	4097	703	1600	3789	1011
Capacity Analysis Module:												
Vol/Sat:	0.04	0.17	0.14	0.06	0.25	0.25	0.08	0.33	0.33	0.11	0.36	0.36
Crit Moves:	***				***			***			***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM Mitigated

Intersection #14: Central Ave. & Artesia Blvd.

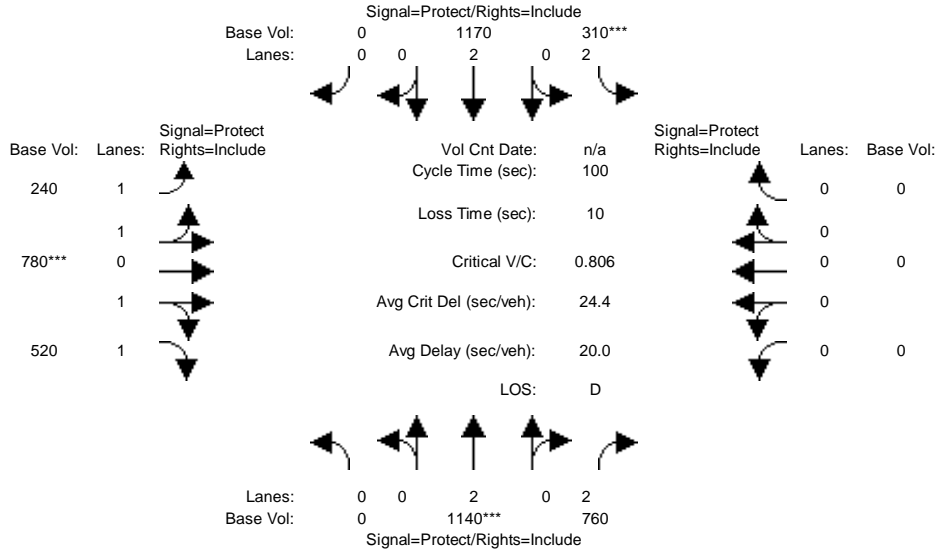


Street Name:	Central Ave.						Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	580	790	0	0	810	210	0	0	0	680	130	370
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	580	790	0	0	810	210	0	0	0	680	130	370
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	580	790	0	0	810	210	0	0	0	680	130	370
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	580	790	0	0	810	210	0	0	0	680	130	370
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	580	790	0	0	810	210	0	0	0	680	130	370
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	2.38	0.62	0.00	0.00	0.00	1.72	0.33	0.95
Final Sat.:	5760	3200	0	0	3812	988	0	0	0	2757	528	1515
Capacity Analysis Module:												
Vol/Sat:	0.10	0.25	0.00	0.00	0.21	0.21	0.00	0.00	0.00	0.25	0.25	0.24
Crit Moves:	***				***	***				***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM Mitigated

Intersection #15: Central Ave. & Albertoni St./Artesia Blvd. EB

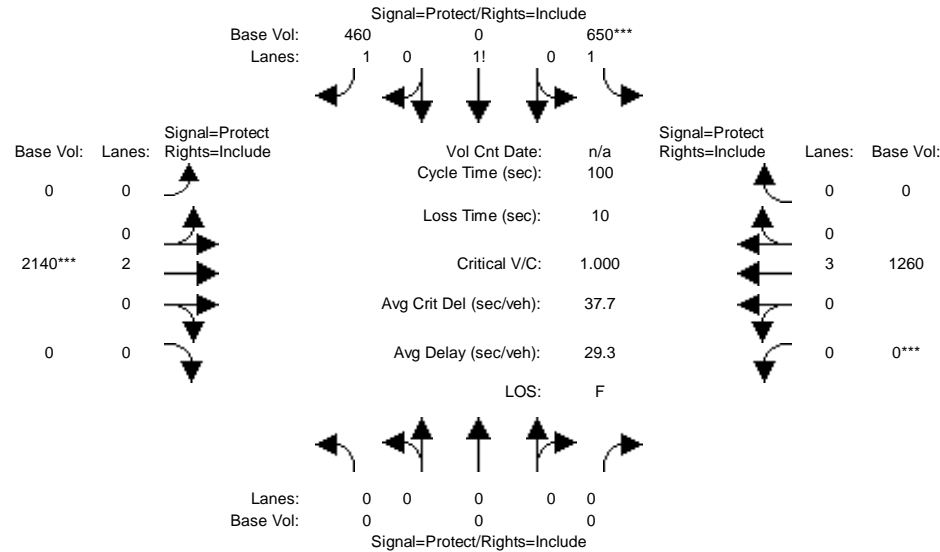


Street Name:	Central Ave.						Albertoni St./Artesia Blvd. EB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1140	760	310	1170	0	240	780	520	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1140	760	310	1170	0	240	780	520	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1140	760	310	1170	0	240	780	520	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1140	760	310	1170	0	240	780	520	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	1140	760	310	1170	0	240	780	520	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.00	1.65	1.35	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	1600	2638	2162	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.36	0.24	0.05	0.37	0.00	0.15	0.30	0.24	0.00	0.00	0.00
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM Mitigated

Intersection #20: I-110 SB Off-Ramp & 190th St.

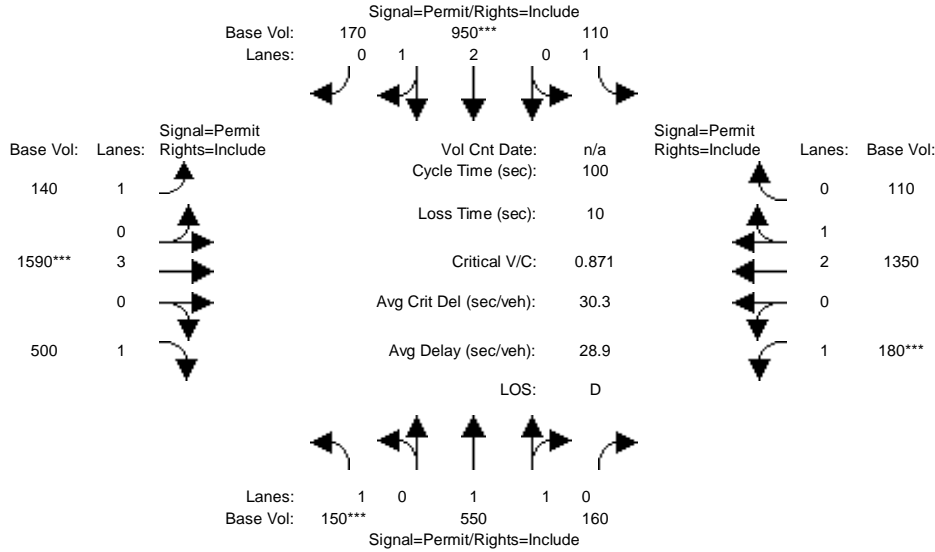


Street Name:	I-110 SB Off-Ramp						190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	650	0	460	0	2140	0	0	1260	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	650	0	460	0	2140	0	0	1260	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	650	0	460	0	2140	0	0	1260	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	650	0	460	0	2140	0	0	1260	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	650	0	460	0	2140	0	0	1260	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.76	0.00	1.24	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	2811	0	1989	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.23	0.00	0.23	0.00	0.67	0.00	0.00	0.26	0.00
Crit Moves:				***				***			***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM Mitigated

Intersection #22: Figueroa St. & 190th St./Victoria St.

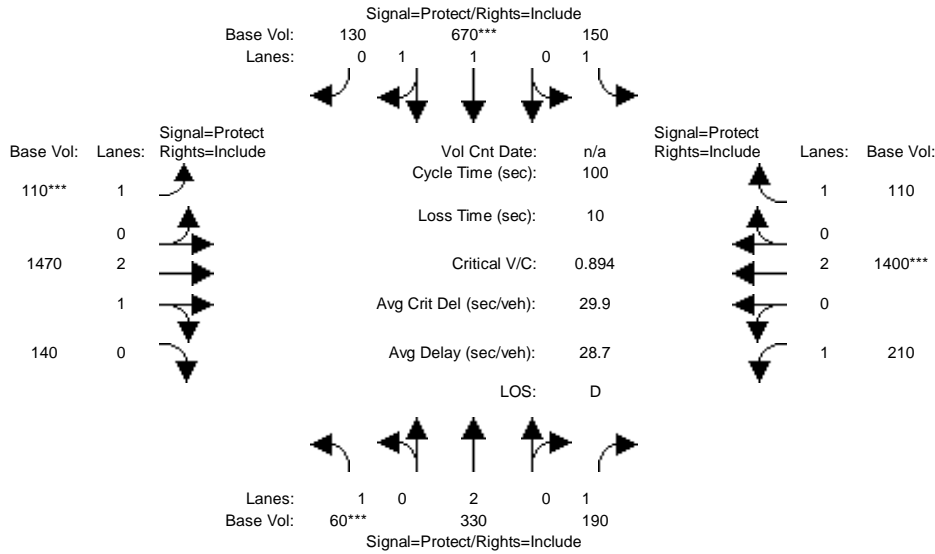


Street Name:	Figueroa St.						190th St./Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	150	550	160	110	950	170	140	1590	500	180	1350	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	550	160	110	950	170	140	1590	500	180	1350	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	550	160	110	950	170	140	1590	500	180	1350	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	550	160	110	950	170	140	1590	500	180	1350	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	150	550	160	110	950	170	140	1590	500	180	1350	110
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.55	0.45	1.00	2.54	0.46	1.00	3.00	1.00	1.00	2.77	0.23
Final Sat.:	1600	2479	721	1600	4071	729	1600	4800	1600	1600	4438	362
Capacity Analysis Module:												
Vol/Sat:	0.09	0.22	0.22	0.07	0.23	0.23	0.09	0.33	0.31	0.11	0.30	0.30
Crit Moves:	***				***			***			***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM Mitigated

Intersection #24: Main St. & Victoria St.



Street Name:	Main St.						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	60	330	190	150	670	130	110	1470	140	210	1400	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	330	190	150	670	130	110	1470	140	210	1400	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	330	190	150	670	130	110	1470	140	210	1400	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	330	190	150	670	130	110	1470	140	210	1400	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	60	330	190	150	670	130	110	1470	140	210	1400	110
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.68	0.32	1.00	2.74	0.26	1.00	2.00	1.00
Final Sat.:	1600	3200	1600	1600	2680	520	1600	4383	417	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.10	0.12	0.09	0.25	0.25	0.07	0.34	0.34	0.13	0.44	0.07
Crit Moves:	***				***		***				***	

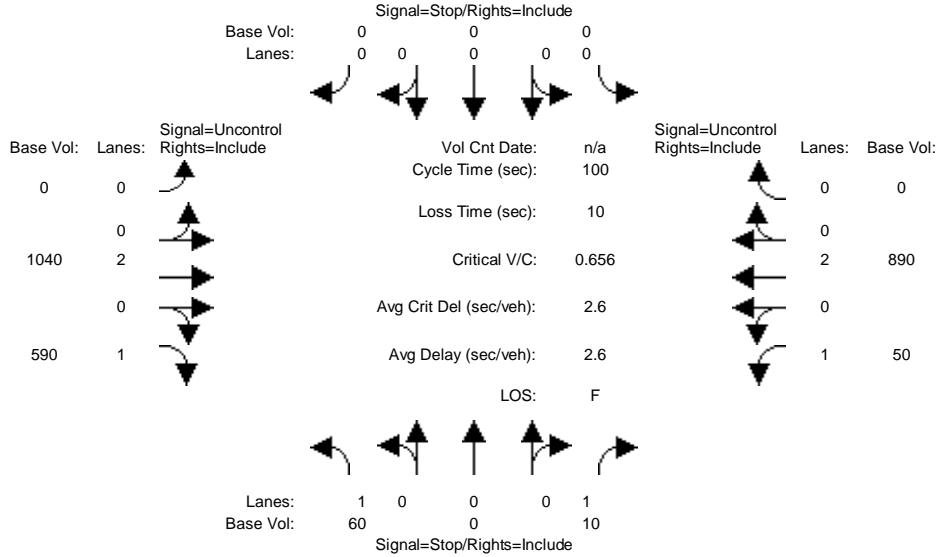
Appendix N

Intersection LOS Worksheets for 2025 Weekday Plus Project Alternative 2 Conditions

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2025 With Project Alt2 Weekday AM

Intersection #1: Victoria St. & Drive D



Street Name:	Drive D						Victoria St..					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	60	0	10	0	0	0	0	1040	590	50	890	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	0	10	0	0	0	0	1040	590	50	890	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	0	10	0	0	0	0	1040	590	50	890	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	60	0	10	0	0	0	0	1040	590	50	890	0
Critical Gap Module:												
Critical Gp:	6.8	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	1585	xxxx	520	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1630	xxxx	xxxxx
Potent Cap.:	101	xxxx	506	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	404	xxxx	xxxxx
Move Cap.:	91	xxxx	506	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	404	xxxx	xxxxx
Volume/Cap:	0.66	xxxx	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.12	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	3.2	xxxx	0.1	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.4	xxxx	xxxxx
Control Del:	99.7	xxxx	12.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	15.2	xxxx	xxxxx
LOS by Move:	F	*	B	*	*	*	*	*	*	C	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	87.2			xxxxxx			xxxxxx			xxxxxx		

ApproachLOS: F * * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #1 Victoria St. & Drive D

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 2 0 1	1 0 2 0 0
Initial Vol:	60 0 10	0 0 0	0 1040 590	50 890 0
ApproachDel:	87.2	xxxxxx	xxxxxx	xxxxxx

Approach[northbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=1.7]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=70]

FAIL - Approach volume less than 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=2640]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #1 Victoria St. & Drive D

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 2 0 1	1 0 2 0 0
Initial Vol:	60 0 10	0 0 0	0 1040 590	50 890 0

Major Street Volume: 2570

Minor Approach Volume: 70

Minor Approach Volume Threshold: -32 [less than minimum of 150]

SIGNAL WARRANT DISCLAIMER

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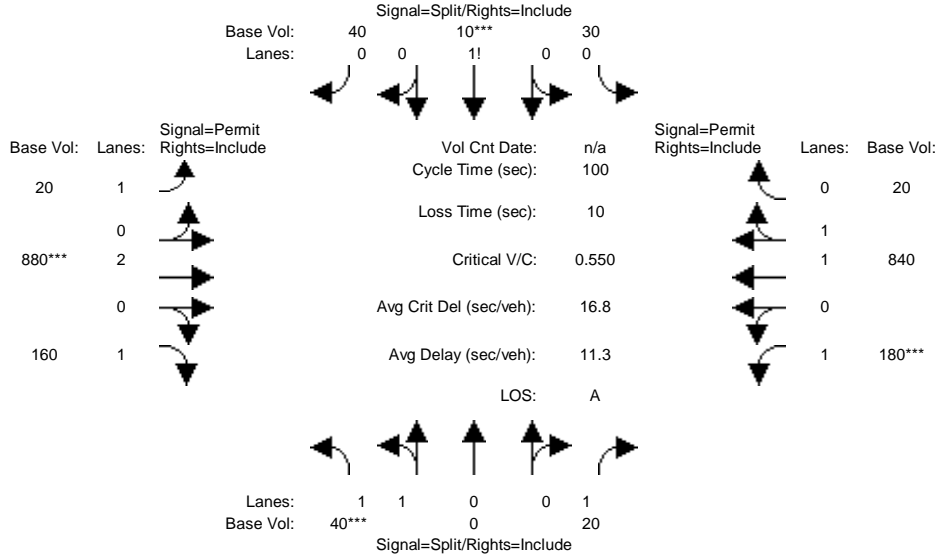
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday AM

Intersection #2: Victoria St. & Tamcliff Ave.

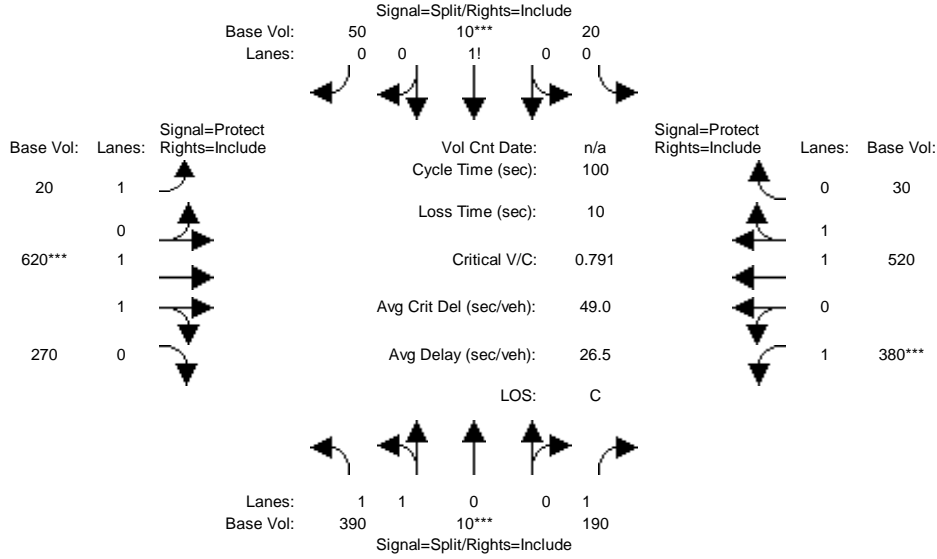


Street Name:	Victoria St.						Tamcliff Ave.													
Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																				
Base Vol:	40	0	20	30	10	40	20	880	160	180	840	20								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	40	0	20	30	10	40	20	880	160	180	840	20								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Volume:	40	0	20	30	10	40	20	880	160	180	840	20								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	40	0	20	30	10	40	20	880	160	180	840	20								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
FinalVolume:	40	0	20	30	10	40	20	880	160	180	840	20								
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600								
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Lanes:	2.00	0.00	1.00	0.38	0.12	0.50	1.00	2.00	1.00	1.00	1.95	0.05								
Final Sat.:	3200	0	1600	600	200	800	1600	3200	1600	1600	3126	74								
Capacity Analysis Module:																				
Vol/Sat:	0.01	0.00	0.01	0.05	0.05	0.05	0.01	0.28	0.10	0.11	0.27	0.27								
Crit Moves:	****				****		****		****		****									

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday AM

Intersection #3: Victoria St. & Birchknoll Dr.

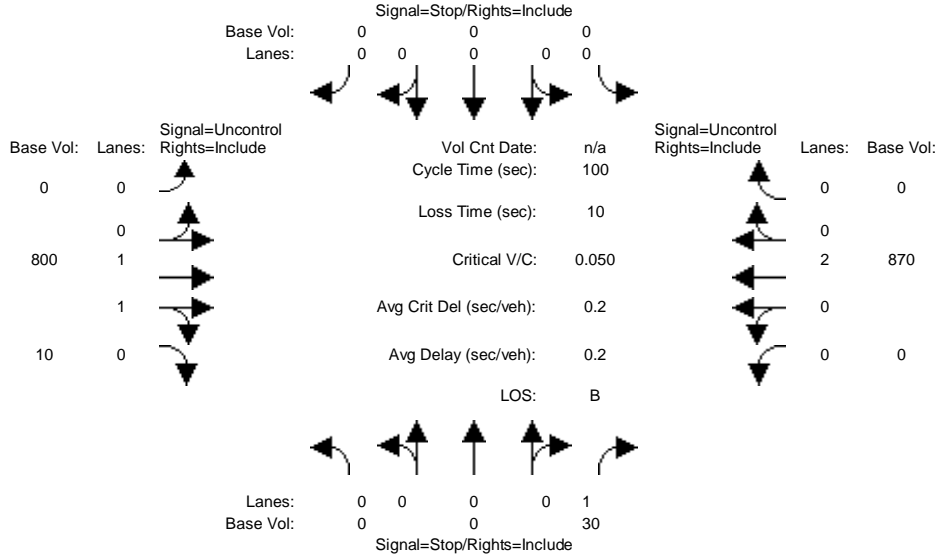


Street Name:	Victoria St.						Birchknoll Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	390	10	190	20	10	50	20	620	270	380	520	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	390	10	190	20	10	50	20	620	270	380	520	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	390	10	190	20	10	50	20	620	270	380	520	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	390	10	190	20	10	50	20	620	270	380	520	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	390	10	190	20	10	50	20	620	270	380	520	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.95	0.05	1.00	0.25	0.12	0.63	1.00	1.39	0.61	1.00	1.89	0.11
Final Sat.:	3120	80	1600	400	200	1000	1600	2229	971	1600	3025	175
Capacity Analysis Module:												
Vol/Sat:	0.13	0.13	0.12	0.05	0.05	0.05	0.01	0.28	0.28	0.24	0.17	0.17
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2025 With Project Alt2 Weekday AM

Intersection #4: Victoria St. & Project Service Rd.



Street Name:	Project Service Rd.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	30	0	0	0	0	800	10	0	870	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	30	0	0	0	0	800	10	0	870	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	30	0	0	0	0	800	10	0	870	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	30	0	0	0	0	800	10	0	870	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	xxxx	xxxx	405	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	601	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	601	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.05	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	0.2	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	11.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	B	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	11.3			xxxxxx			xxxxxx			xxxxxx		

ApproachLOS: B * * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #4 Victoria St. & Project Service Rd.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 1	0 0 0 0 0	0 0 1 1 0	0 0 2 0 0
Initial Vol:	0 0 30	0 0 0	0 800 10	0 870 0
ApproachDel:	11.3	xxxxxx	xxxxxx	xxxxxx

Approach[northbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.1]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=30]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=1710]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #4 Victoria St. & Project Service Rd.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 1	0 0 0 0 0	0 0 1 1 0	0 0 2 0 0
Initial Vol:	0 0 30	0 0 0	0 800 10	0 870 0

Major Street Volume: 1680

Minor Approach Volume: 30

Minor Approach Volume Threshold: 106

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

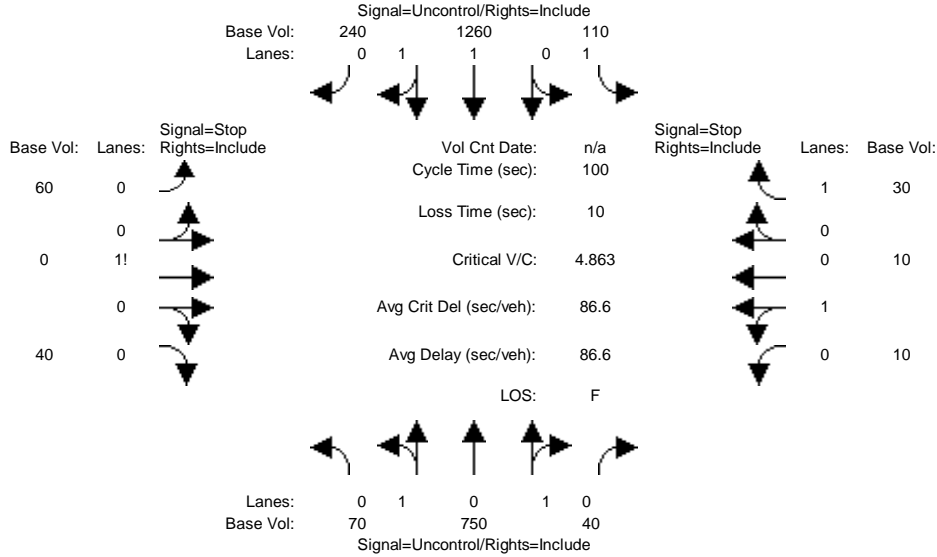
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2025 With Project Alt2 Weekday AM

Intersection #5: Central Ave. & Charles Willard St.



Street Name:	Central Ave.						Charles Willard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	70	750	40	110	1260	240	60	0	40	10	10	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	750	40	110	1260	240	60	0	40	10	10	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	750	40	110	1260	240	60	0	40	10	10	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	70	750	40	110	1260	240	60	0	40	10	10	30
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	4.1	xxxx	xxxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxxx	2.2	xxxx	xxxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflct Vol:	1500	xxxx	xxxxxx	790	xxxx	xxxxxx	2120	2530	750	1760	2630	395
Potent Cap.:	453	xxxx	xxxxxx	839	xxxx	xxxxxx	29	28	358	55	24	610
Move Cap.:	453	xxxx	xxxxxx	839	xxxx	xxxxxx	12	20	358	38	17	610
Volume/Cap:	0.15	xxxx	xxxx	0.13	xxxx	xxxx	4.86	0.00	0.11	0.26	0.57	0.05
Level Of Service Module:												
2Way95thQ:	0.5	xxxx	xxxxxx	0.5	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	0.2
Control Del:	14.4	xxxx	xxxxxx	9.9	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	11.2
LOS by Move:	B	*	*	A	*	*	*	*	*	*	*	B
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	20	xxxxxx	24	xxxx	xxxxxx
SharedQueue:	0.5	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	12.9	xxxxxx	2.5	xxxx	xxxxxx
Shrd ConDel:	14.4	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	2174	xxxxxx	356.9	xxxx	xxxxxx
Shared LOS:	B	*	*	*	*	*	*	F	*	F	*	*
ApproachDel:	xxxxxxx			xxxxxxx			2173.9			149.5		

ApproachLOS: * * F F

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #5 Central Ave. & Charles Willard St.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound							
Movement:	L	T	R	L	T	R	L	T	R	L	T	R					
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign							
Lanes:	0	1	0	1	0	1	0	0	0	1	0	0	0	1	0	0	1
Initial Vol:	70	750	40	110	1260	240	60	0	40	10	10	30					
ApproachDel:	xxxxxx			xxxxxx			2173.9			149.5							

Approach[eastbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=60.4]
SUCCEED - Vehicle-hours greater than or equal to 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=100]
SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=2620]
SUCCEED - Total volume greater than or equal to 800 for intersection
with four or more approaches.

Approach[westbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=2.1]
FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=50]
FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=2620]
SUCCEED - Total volume greater than or equal to 800 for intersection
with four or more approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #5 Central Ave. & Charles Willard St.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound							
Movement:	L	T	R	L	T	R	L	T	R	L	T	R					
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign							
Lanes:	0	1	0	1	0	1	0	0	0	1	0	0	0	1	0	0	1
Initial Vol:	70	750	40	110	1260	240	60	0	40	10	10	30					

Major Street Volume: 2470
Minor Approach Volume: 100
Minor Approach Volume Threshold: -27 [less than minimum of 100]

SIGNAL WARRANT DISCLAIMER

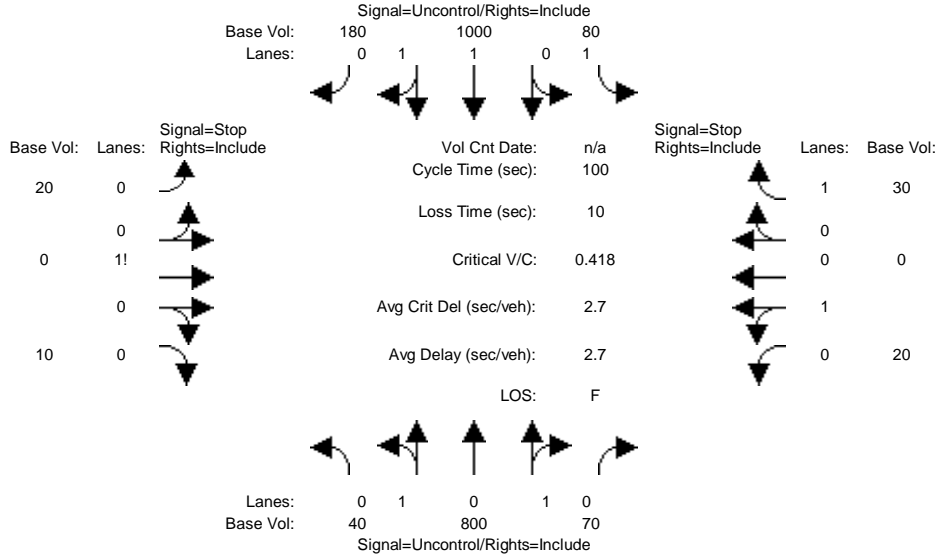
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2025 With Project Alt2 Weekday AM

Intersection #6: Central Ave. & Project Driveway/Beachey Pl.



Street Name: Central Ave. Beachey Pl.
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R

Volume Module:												
Base Vol:	40	800	70	80	1000	180	20	0	10	20	0	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	800	70	80	1000	180	20	0	10	20	0	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	800	70	80	1000	180	20	0	10	20	0	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	40	800	70	80	1000	180	20	0	10	20	0	30

Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	4.1	xxxx	xxxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxxx	2.2	xxxx	xxxxxx	3.5	4.0	3.3	3.5	4.0	3.3

Capacity Module:												
Cnflct Vol:	1180	xxxx	xxxxxx	870	xxxx	xxxxxx	1730	2200	590	1575	2255	435
Potent Cap.:	599	xxxx	xxxxxx	783	xxxx	xxxxxx	58	45	456	76	42	575
Move Cap.:	599	xxxx	xxxxxx	783	xxxx	xxxxxx	48	38	456	64	35	575
Volume/Cap:	0.07	xxxx	xxxx	0.10	xxxx	xxxx	0.42	0.00	0.02	0.31	0.00	0.05

Level Of Service Module:												
2Way95thQ:	0.2	xxxx	xxxxxx	0.3	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	0.2
Control Del:	11.4	xxxx	xxxxxx	10.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	11.6
LOS by Move:	B	*	*	B	*	*	*	*	*	*	*	B
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	68	xxxxxx	64	xxxx	xxxxxx
SharedQueue:	0.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	1.7	xxxxxx	1.1	xxxx	xxxxxx
Shrd ConDel:	11.4	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	94.1	xxxxxx	84.2	xxxx	xxxxxx
Shared LOS:	B	*	*	*	*	*	*	F	*	F	*	*
ApproachDel:	xxxxxxx			xxxxxxx				94.1				40.7

ApproachLOS: * * F E

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #6 Central Ave. & Project Driveway/Beachey Pl.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	0	1	0	1	0	1	0	0	1	0	0	1
Initial Vol:	40	800	70	80	1000	180	20	0	10	20	0	30
ApproachDel:	xxxxxx			xxxxxx			94.1			40.7		

Approach[eastbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.8]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=30]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=2250]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Approach[westbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.6]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=50]

FAIL - Approach volume less than 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=2250]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

SIGNAL WARRANT DISCLAIMER

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The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #6 Central Ave. & Project Driveway/Beachey Pl.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	0	1	0	1	0	1	0	0	1	0	1	0
Initial Vol:	40	800	70	80	1000	180	20	0	10	20	0	30

Major Street Volume: 2170

Minor Approach Volume: 50

Minor Approach Volume Threshold: 41 [less than minimum of 150]

SIGNAL WARRANT DISCLAIMER

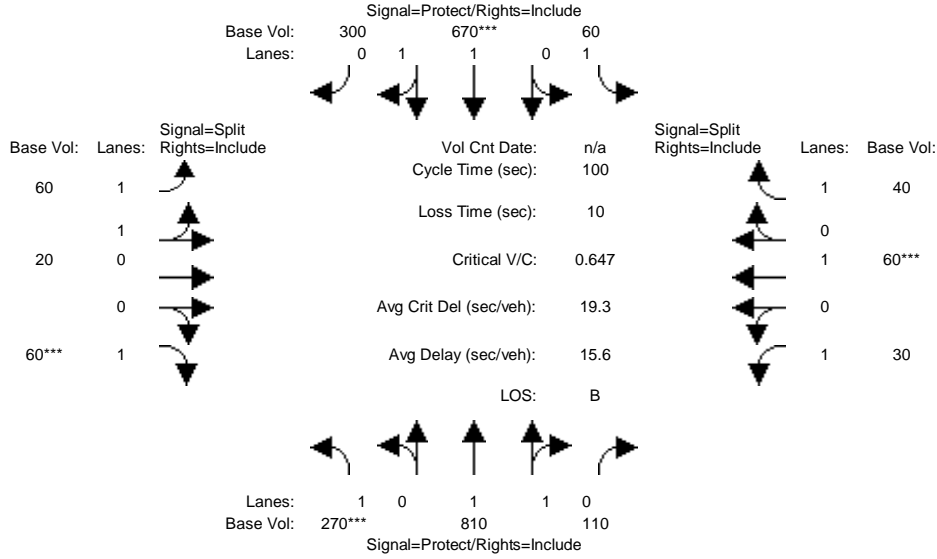
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday AM

Intersection #7: Central Ave. & Glenn Curtiss St.

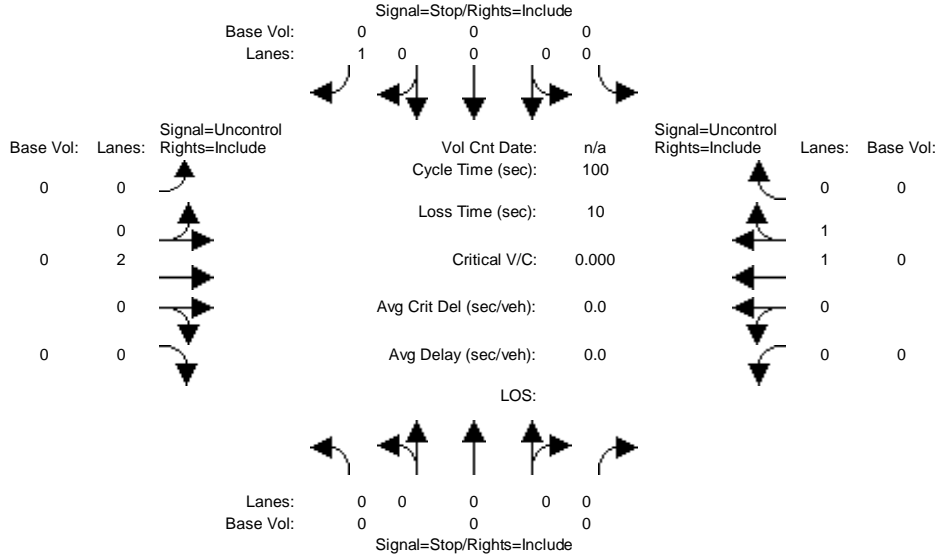


Street Name:	Central Ave.						Glenn Curtiss St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	270	810	110	60	670	300	60	20	60	30	60	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	270	810	110	60	670	300	60	20	60	30	60	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	270	810	110	60	670	300	60	20	60	30	60	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	270	810	110	60	670	300	60	20	60	30	60	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	270	810	110	60	670	300	60	20	60	30	60	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.76	0.24	1.00	1.38	0.62	1.50	0.50	1.00	1.00	1.00	1.00
Final Sat.:	1600	2817	383	1600	2210	990	2400	800	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.17	0.29	0.29	0.04	0.30	0.30	0.03	0.03	0.04	0.02	0.04	0.03
Crit Moves:	****				****				****		****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2025 With Project Alt2 Weekday AM

Intersection #8: University Dr./Birchknoll Dr. Ext.



Street Name:	Birchknoll Dr. Ext.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Growth Adj:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Bse:	0	0	0	0	0	0	0	0	0	0	0	0
User Adj:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PHF Adj:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PHF Volume:	0	0	0	0	0	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	0	0	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FollowUpTim:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capacity Module:												
Cnflct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Potent Cap.:	0	0	0	0	0	0	0	0	0	0	0	0
Move Cap.:	1	1	1	1	1	1	1	1	1	1	1	1
Volume/Cap:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Level Of Service Module:												
2Way95thQ:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Del:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LOS by Move:												
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	0	0	0	0	0	0	0	0	0	0	0	0
SharedQueue:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Shrd ConDel:	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Shared LOS:												
ApproachDel:	0.0			0.0			0.0			0.0		

ApproachLOS:

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #8 University Dr./Birchknoll Dr. Ext.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound					South Bound					East Bound					West Bound									
Movement:	L	T	R	L	R	L	T	R	L	R	L	T	R	L	T	R	L	T	R	L	T	R			
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled									
Lanes:	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0	0	0	1	1	0	0	0	1	1	0
Initial Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ApproachDel:	0.0					0.0					0.0					0.0									

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #8 University Dr./Birchknoll Dr. Ext.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound					South Bound					East Bound					West Bound									
Movement:	L	T	R	L	R	L	T	R	L	R	L	T	R	L	T	R	L	T	R	L	T	R			
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled									
Lanes:	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0	0	0	1	1	0	0	0	1	1	0
Initial Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major Street Volume:						0																			
Minor Approach Volume:						0																			
Minor Approach Volume Threshold:	+Inf																								

SIGNAL WARRANT DISCLAIMER

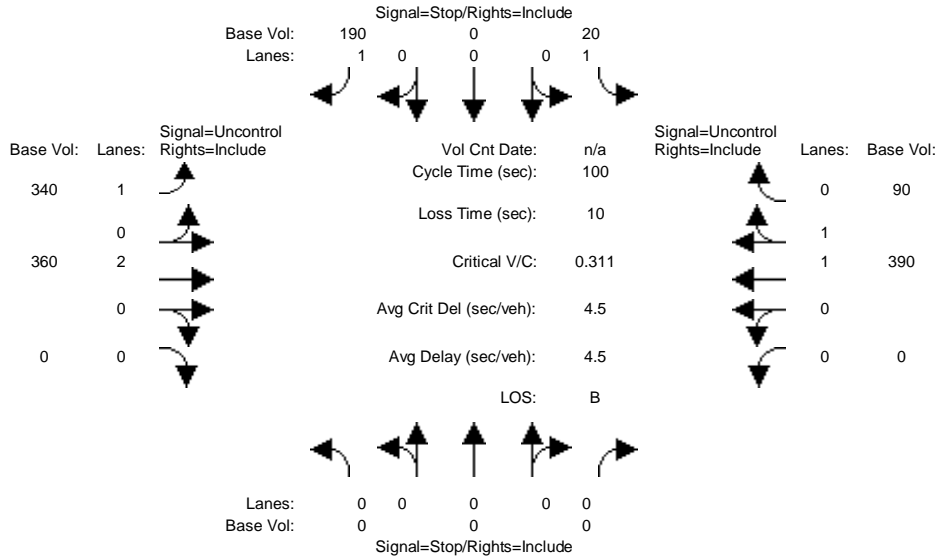
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2025 With Project Alt2 Weekday AM

Intersection #9: University Dr. & Toro Center Dr.



Street Name:	University Dr.						Toro Center Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	20	0	190	340	360	0	0	390	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	20	0	190	340	360	0	0	390	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	20	0	190	340	360	0	0	390	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	20	0	190	340	360	0	0	390	90
Critical Gap Module:												
Critical Gp:	xxxx	xxxx	xxxx	6.8	xxxx	6.9	4.1	xxxx	xxxx	xxxx	xxxx	xxxx
FollowUpTim:	xxxx	xxxx	xxxx	3.5	xxxx	3.3	2.2	xxxx	xxxx	xxxx	xxxx	xxxx
Capacity Module:												
Cnflct Vol:	xxxx	xxxx	xxxx	1295	xxxx	240	480	xxxx	xxxx	xxxx	xxxx	xxxx
Potent Cap.:	xxxx	xxxx	xxxx	157	xxxx	767	1093	xxxx	xxxx	xxxx	xxxx	xxxx
Move Cap.:	xxxx	xxxx	xxxx	119	xxxx	767	1093	xxxx	xxxx	xxxx	xxxx	xxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.17	xxxx	0.25	0.31	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxx	0.6	xxxx	1.0	1.3	xxxx	xxxx	xxxx	xxxx	xxxx
Control Del:	xxxx	xxxx	xxxx	41.3	xxxx	11.2	9.8	xxxx	xxxx	xxxx	xxxx	xxxx
LOS by Move:	*	*	*	E	*	B	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
SharedQueue:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Shrd ConDel:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			14.1			xxxxxx			xxxxxx		

ApproachLOS: * B * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #9 University Dr. & Toro Center Dr.

Base Volume Alternative: Peak Hour Warrant NOT Met

-----|-----|-----|-----|

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0	0	0	0	0	0	1	0	2	0	0	1
Initial Vol:	0	0	0	20	0	190	340	360	0	0	390	90
ApproachDel:	xxxxxx			14.1			xxxxxx			xxxxxx		

-----|-----|-----|-----|

Approach[southbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.8]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=210]

SUCCEED - Approach volume >= 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=1390]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #9 University Dr. & Toro Center Dr.

Base Volume Alternative: Peak Hour Warrant NOT Met

-----|-----|-----|-----|

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0	0	0	0	0	0	1	0	2	0	0	1
Initial Vol:	0	0	0	20	0	190	340	360	0	0	390	90

-----|-----|-----|-----|

Major Street Volume: 1180

Minor Approach Volume: 210

Minor Approach Volume Threshold: 303

SIGNAL WARRANT DISCLAIMER

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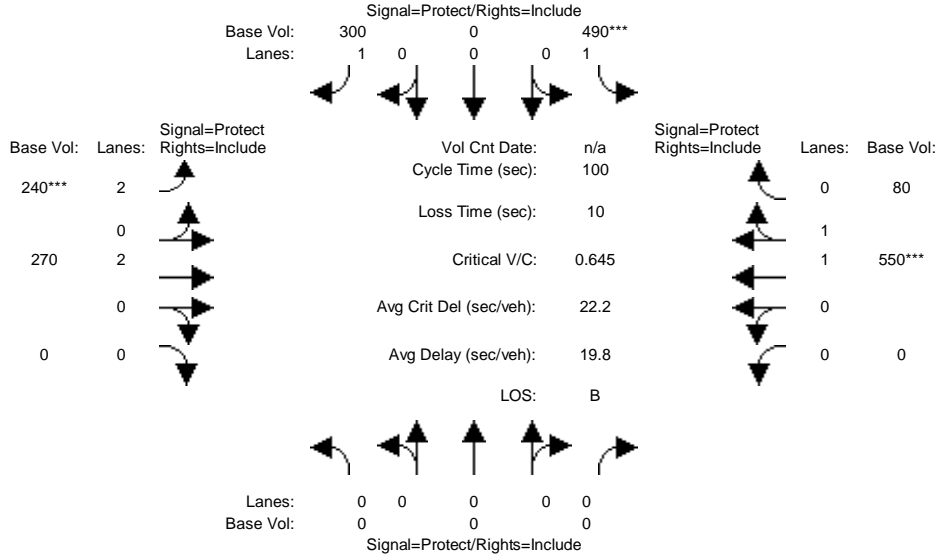
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday AM

Intersection #10: Albertoni St. & SR 91 EB Ramps

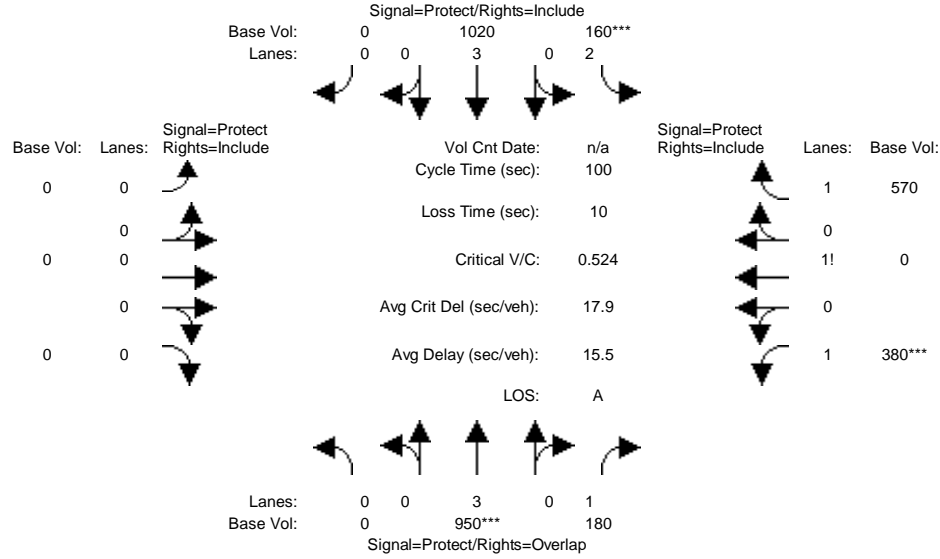


Street Name:	Albertoni St.						SR 91 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	490	0	300	240	270	0	0	550	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	490	0	300	240	270	0	0	550	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	490	0	300	240	270	0	0	550	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	490	0	300	240	270	0	0	550	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	490	0	300	240	270	0	0	550	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.75	0.25
Final Sat.:	0	0	0	1600	0	1600	5760	3200	0	0	2794	406
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.31	0.00	0.19	0.04	0.08	0.00	0.00	0.20	0.20
Crit Moves:				****			****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday AM

Intersection #11: Avalon Blvd. & SR 91 WB On-Ramp

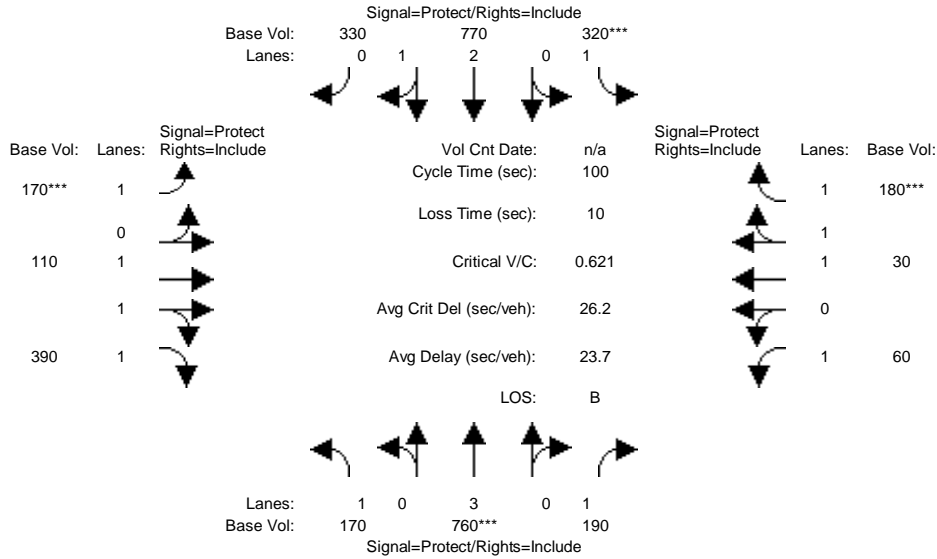


Street Name:	Avalon Blvd.						SR 91 WB On-Ramp														
Approach:	North Bound			South Bound			East Bound			West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Volume Module:																					
Base Vol:	0	950	180	160	1020	0	0	0	0	380	0	570									
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	0	950	180	160	1020	0	0	0	0	380	0	570									
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:	0	950	180	160	1020	0	0	0	0	380	0	570									
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0									
Reduced Vol:	0	950	180	160	1020	0	0	0	0	380	0	570									
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Final Volume:	0	950	180	160	1020	0	0	0	0	380	0	570									
OvlAdjVol:	0																				
Saturation Flow Module:																					
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.20	0.01	1.79									
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	1920	0	2880									
Capacity Analysis Module:																					
Vol/Sat:	0.00	0.20	0.11	0.03	0.21	0.00	0.00	0.00	0.00	0.20	0.00	0.20									
OvlAdjV/S:	0.00																				
Crit Moves:	****											****									

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday AM

Intersection #12: Avalon Blvd. & Albertoni St.

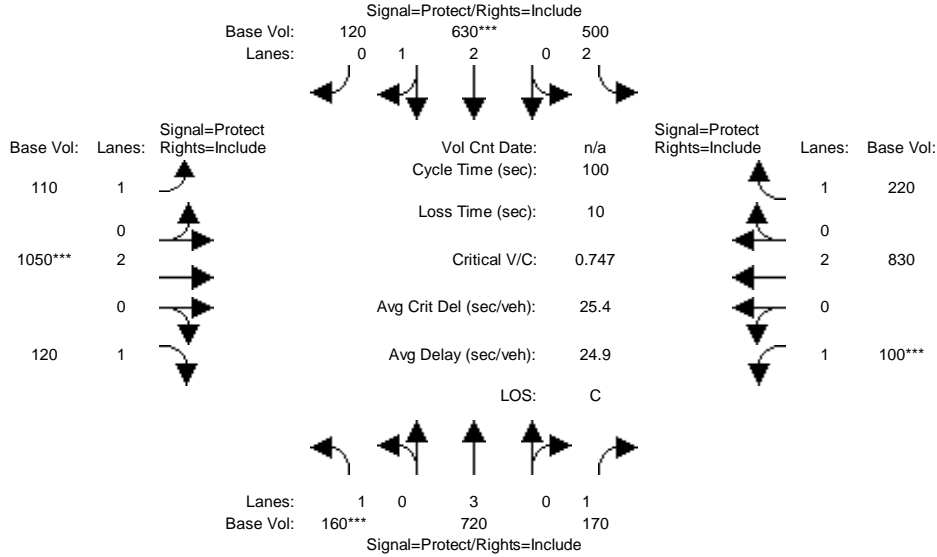


Street Name:	Avalon Blvd.						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	170	760	190	320	770	330	170	110	390	60	30	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	170	760	190	320	770	330	170	110	390	60	30	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	170	760	190	320	770	330	170	110	390	60	30	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	170	760	190	320	770	330	170	110	390	60	30	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	170	760	190	320	770	330	170	110	390	60	30	180
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.10	0.90	1.00	1.00	2.00	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3360	1440	1600	1600	3200	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.11	0.16	0.12	0.20	0.23	0.23	0.11	0.07	0.12	0.04	0.02	0.06
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday AM

Intersection #13: Avalon Blvd. & Victoria St.

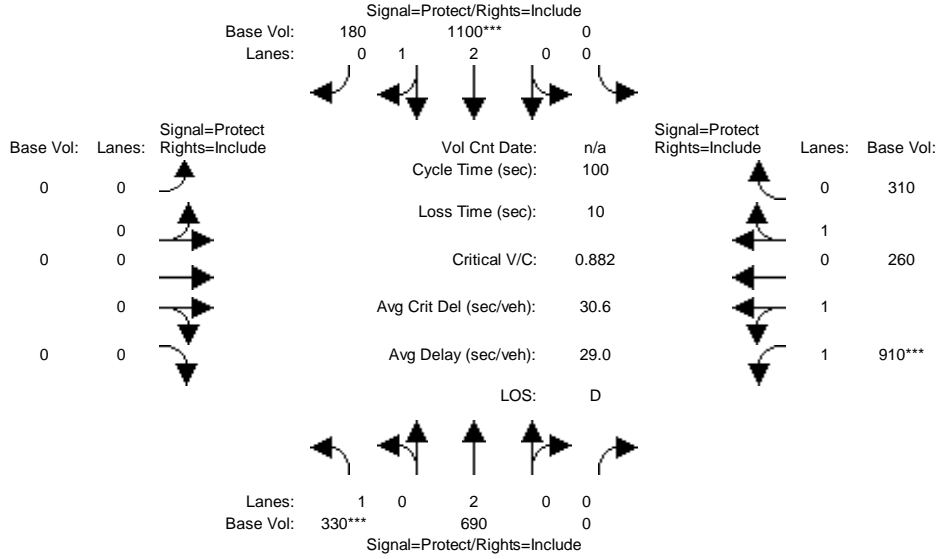


Street Name:	Avalon Blvd.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	160	720	170	500	630	120	110	1050	120	100	830	220
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	160	720	170	500	630	120	110	1050	120	100	830	220
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	160	720	170	500	630	120	110	1050	120	100	830	220
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	720	170	500	630	120	110	1050	120	100	830	220
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	160	720	170	500	630	120	110	1050	120	100	830	220
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.52	0.48	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4032	768	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.10	0.15	0.11	0.09	0.16	0.16	0.07	0.33	0.08	0.06	0.26	0.14
Crit Moves:	****				****			****			****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday AM

Intersection #14: Central Ave. & Artesia Blvd.

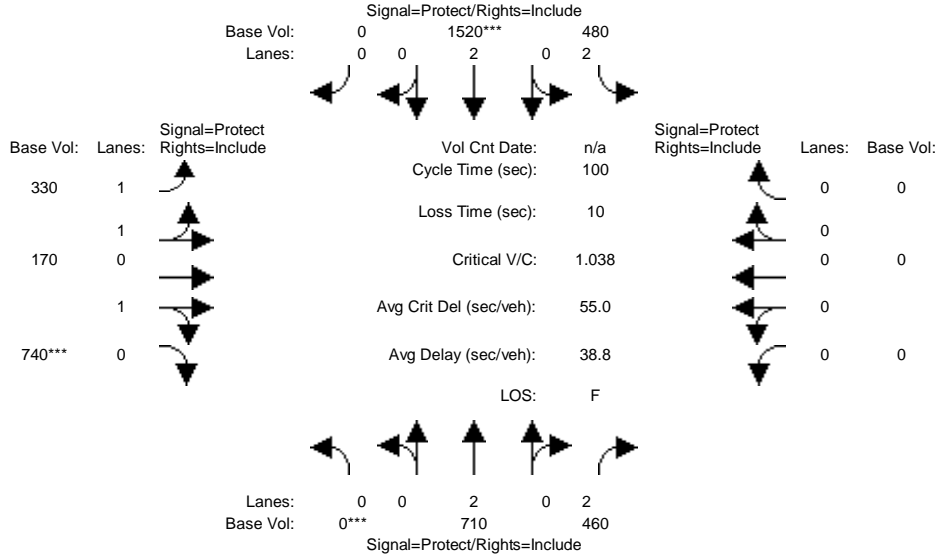


Street Name:	Central Ave.						Artesia Blvd.													
Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																				
Base Vol:	330	690	0	0	1100	180	0	0	0	910	260	310								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	330	690	0	0	1100	180	0	0	0	910	260	310								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	330	690	0	0	1100	180	0	0	0	910	260	310								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	330	690	0	0	1100	180	0	0	0	910	260	310								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	330	690	0	0	1100	180	0	0	0	910	260	310								
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.58	0.42	0.00	0.00	0.00	1.84	0.53	0.63								
Final Sat.:	1600	3200	0	0	4125	675	0	0	0	2947	845	1008								
Capacity Analysis Module:																				
Vol/Sat:	0.21	0.22	0.00	0.00	0.27	0.27	0.00	0.00	0.00	0.31	0.31	0.31								
Crit Moves:	****				****					****										

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday AM

Intersection #15: Central Ave. & Albertoni St./Artesia Blvd. EB

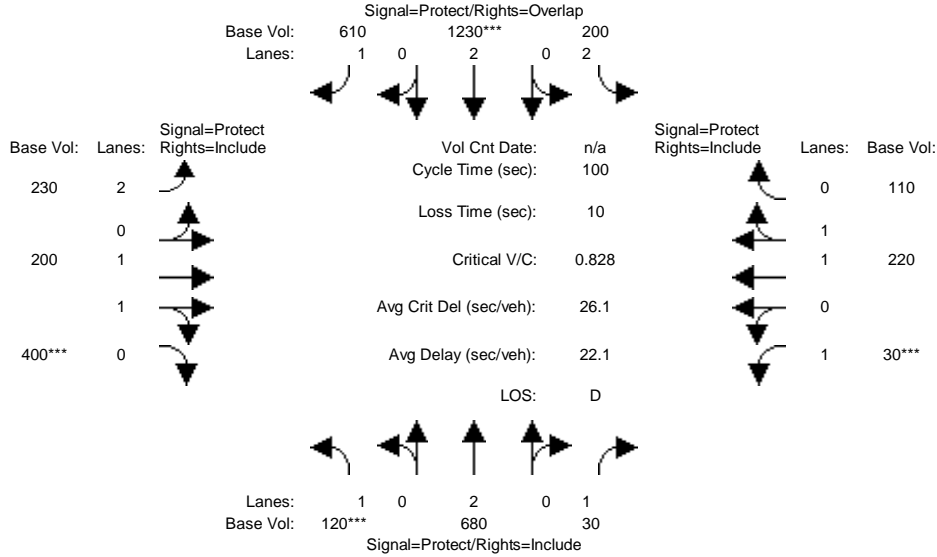


Street Name:	Central Ave.						Albertoni St./Artesia Blvd. EB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	710	460	480	1520	0	330	170	740	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	710	460	480	1520	0	330	170	740	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	710	460	480	1520	0	330	170	740	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	710	460	480	1520	0	330	170	740	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	710	460	480	1520	0	330	170	740	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.32	0.68	1.00	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	2112	1088	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.22	0.14	0.08	0.48	0.00	0.16	0.16	0.46	0.00	0.00	0.00
Crit Moves:	****				****				****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday AM

Intersection #16: Central Ave. & Victoria St.

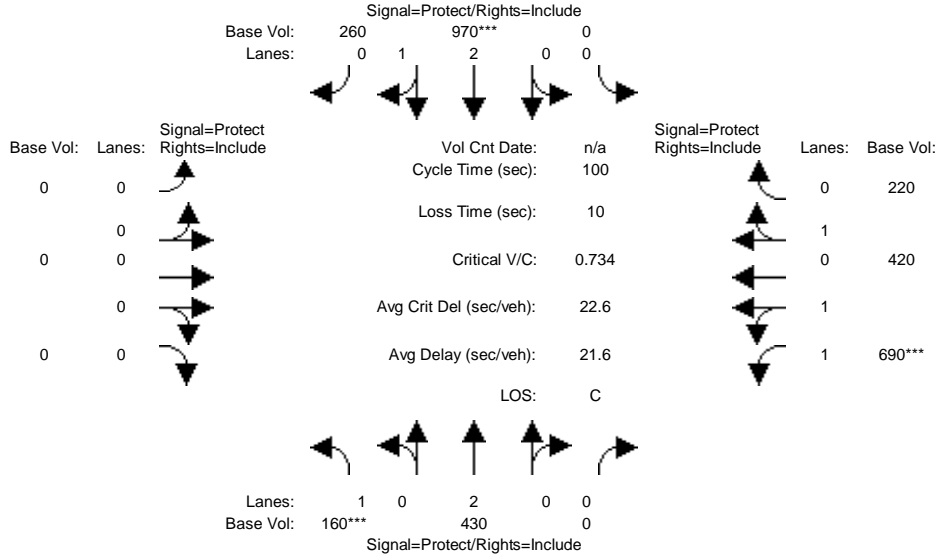


Street Name:	Central Ave.						Victoria St.						
Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Volume Module:													
Base Vol:	120	680	30	200	1230	610	230	200	400	30	220	110	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	120	680	30	200	1230	610	230	200	400	30	220	110	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:	120	680	30	200	1230	610	230	200	400	30	220	110	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	120	680	30	200	1230	610	230	200	400	30	220	110	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Final Volume:	120	680	30	200	1230	610	230	200	400	30	220	110	
OvlAdjVol:							546						
Saturation Flow Module:													
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.00	1.00	1.00	1.33	0.67	
Final Sat.:	1600	3200	1600	5760	3200	1600	5760	1600	1600	1600	2133	1067	
Capacity Analysis Module:													
Vol/Sat:	0.08	0.21	0.02	0.03	0.38	0.38	0.04	0.13	0.25	0.02	0.10	0.10	
OvlAdjV/S:							0.34						
Crit Moves:	***							***	***	***	***	***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday AM

Intersection #17: Wilmington Ave. & Artesia Blvd. WB

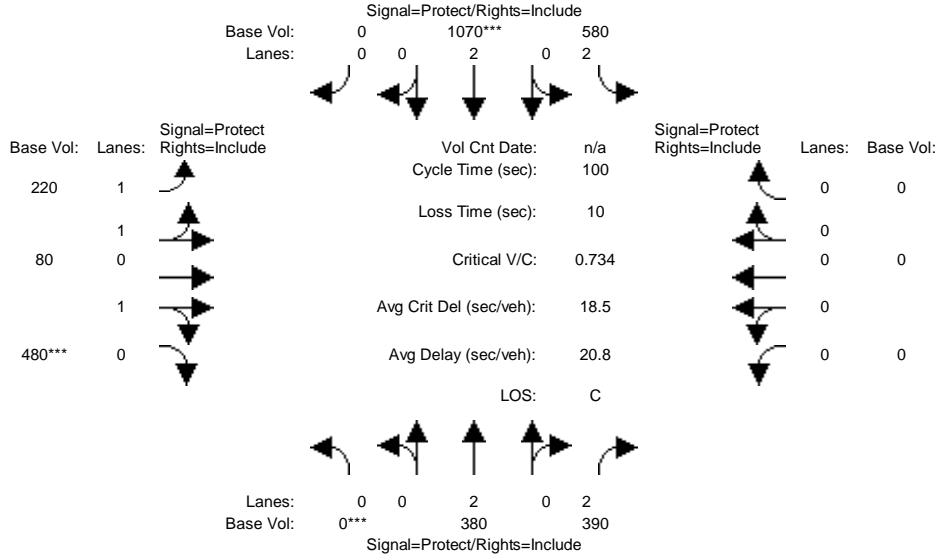


Street Name:	Wilmington Ave.						Artesia Blvd. WB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	160	430	0	0	970	260	0	0	0	690	420	220
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	160	430	0	0	970	260	0	0	0	690	420	220
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	160	430	0	0	970	260	0	0	0	690	420	220
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	430	0	0	970	260	0	0	0	690	420	220
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	160	430	0	0	970	260	0	0	0	690	420	220
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.37	0.63	0.00	0.00	0.00	1.55	0.95	0.50
Final Sat.:	1600	3200	0	0	3785	1015	0	0	0	2488	1517	795
Capacity Analysis Module:												
Vol/Sat:	0.10	0.13	0.00	0.00	0.26	0.26	0.00	0.00	0.00	0.28	0.28	0.28
Crit Moves:	****				****					****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday AM

Intersection #18: Wilmington Ave. & Artesia Blvd. EB

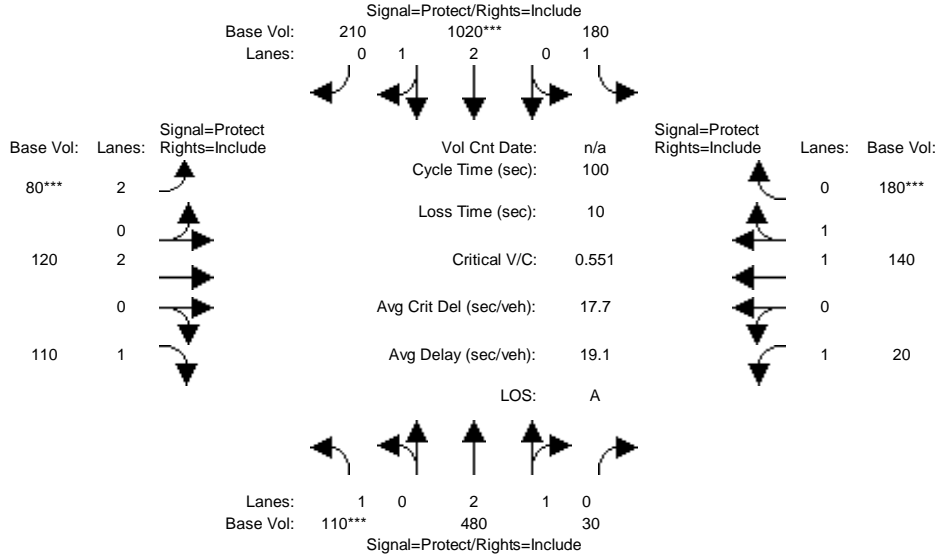


Street Name:	Wilmington Ave.						Artesia Blvd. EB													
Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																				
Base Vol:	0	380	390	580	1070	0	220	80	480	0	0	0	0	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	380	390	580	1070	0	220	80	480	0	0	0	0	0	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	380	390	580	1070	0	220	80	480	0	0	0	0	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	380	390	580	1070	0	220	80	480	0	0	0	0	0	0	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	380	390	580	1070	0	220	80	480	0	0	0	0	0	0	0	0	0	0	0
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.47	0.53	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	2347	853	1600	0	0	0	0	0	0	0	0	0	0	0
Capacity Analysis Module:																				
Vol/Sat:	0.00	0.12	0.12	0.10	0.33	0.00	0.09	0.09	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****				****				****											

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday AM

Intersection #19: Wilmington Ave. & Victoria St.

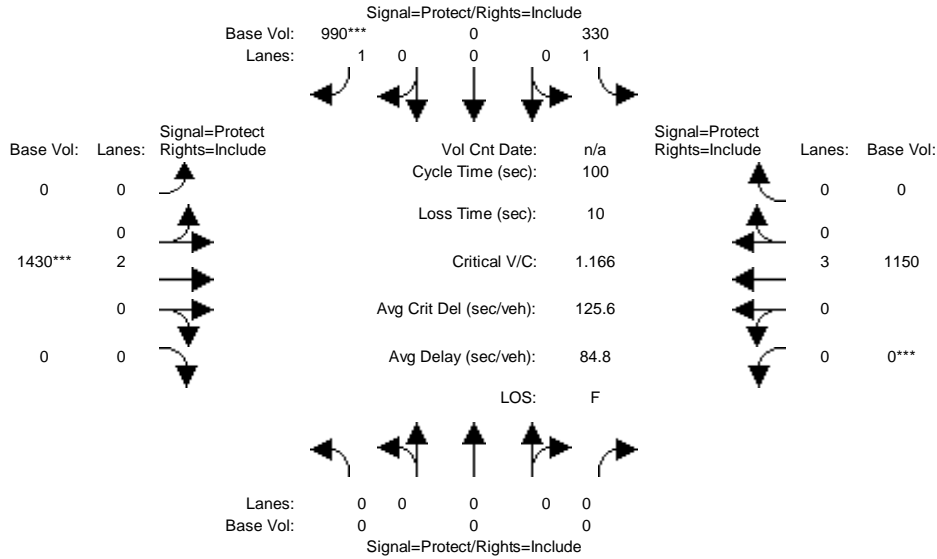


Street Name:	Wilmington Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	110	480	30	180	1020	210	80	120	110	20	140	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	480	30	180	1020	210	80	120	110	20	140	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	110	480	30	180	1020	210	80	120	110	20	140	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	480	30	180	1020	210	80	120	110	20	140	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	110	480	30	180	1020	210	80	120	110	20	140	180
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.82	0.18	1.00	2.49	0.51	2.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	4518	282	1600	3980	820	5760	3200	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.11	0.11	0.11	0.26	0.26	0.01	0.04	0.07	0.01	0.09	0.11
Crit Moves:	****				****		****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday AM

Intersection #20: I-110 SB Off-Ramp & 190th St.

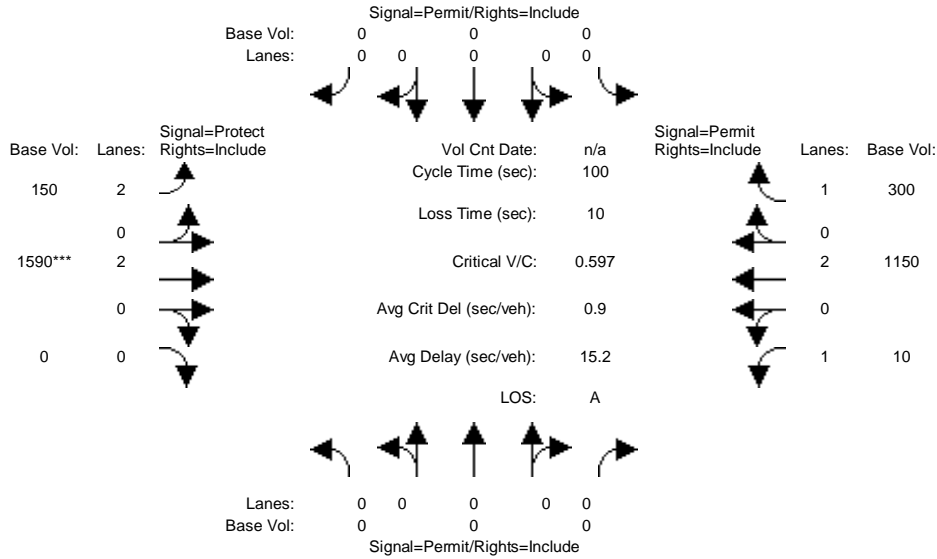


Street Name:	I-110 SB Off-Ramp						190th St.														
Approach:	North Bound			South Bound			East Bound			West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Volume Module:																					
Base Vol:	0	0	0	330	0	990	0	1430	0	0	1150	0									
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	0	0	0	330	0	990	0	1430	0	0	1150	0									
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Volume:	0	0	0	330	0	990	0	1430	0	0	1150	0									
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0									
Reduced Vol:	0	0	0	330	0	990	0	1430	0	0	1150	0									
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
FinalVolume:	0	0	0	330	0	990	0	1430	0	0	1150	0									
Saturation Flow Module:																					
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600								
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00									
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0									
Capacity Analysis Module:																					
Vol/Sat:	0.00	0.00	0.00	0.21	0.00	0.62	0.00	0.45	0.00	0.00	0.24	0.00									
Crit Moves:						****		****			****										

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday AM

Intersection #21: I-110 NB On-Ramp & 190th St.

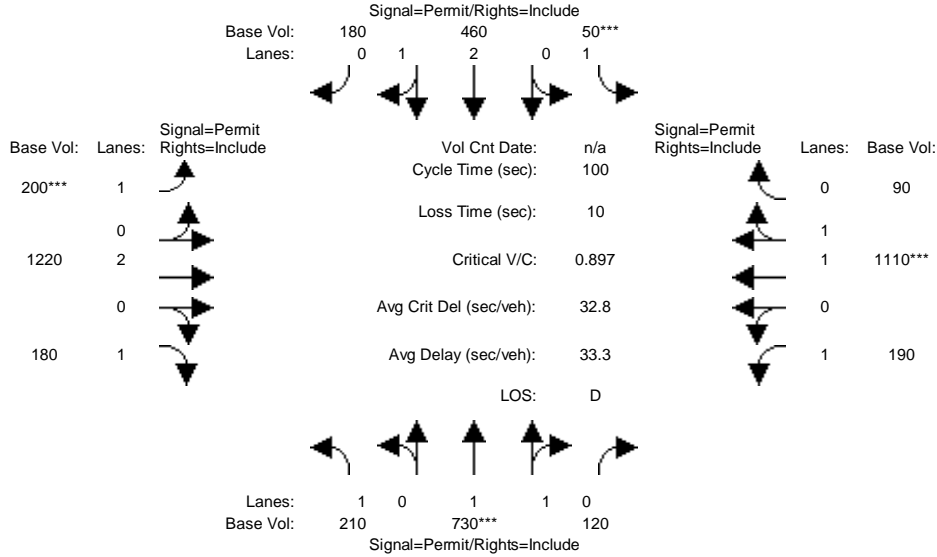


Street Name:	I-110 NB On-Ramp						190th St.														
Approach:	North Bound			South Bound			East Bound			West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																					
Base Vol:	0	0	0	0	0	0	150	1590	0	10	1150	300									
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
Initial Bse:	0	0	0	0	0	0	150	1590	0	10	1150	300									
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
PHF Volume:	0	0	0	0	0	0	150	1590	0	10	1150	300									
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0									
Reduced Vol:	0	0	0	0	0	0	150	1590	0	10	1150	300									
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
FinalVolume:	0	0	0	0	0	0	150	1590	0	10	1150	300									
Saturation Flow Module:																					
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600									
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00									
Lanes:	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00									
Final Sat.:	0	0	0	0	0	0	5760	3200	0	1600	3200	1600									
Capacity Analysis Module:																					
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.50	0.00	0.01	0.36	0.19									
Crit Moves:													****								

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday AM

Intersection #22: Figueroa St. & 190th St./Victoria St.

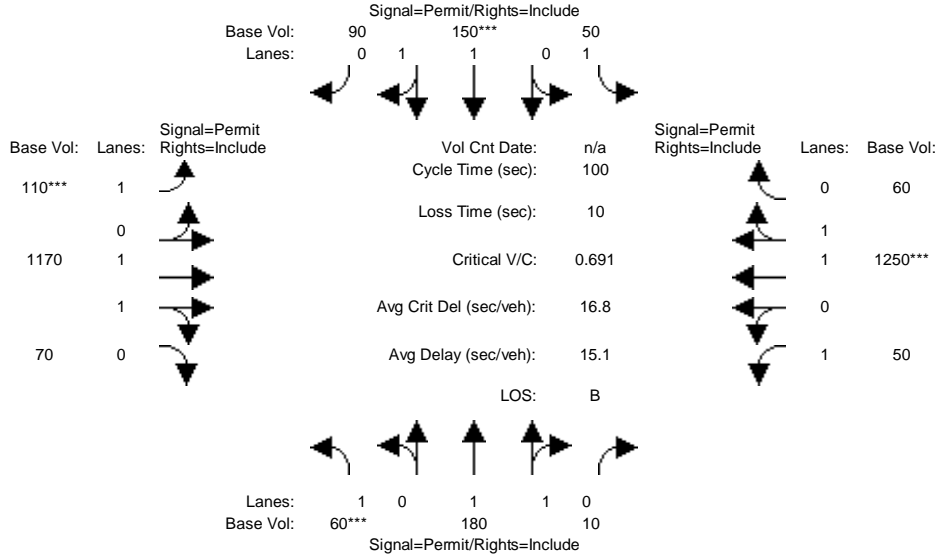


Street Name:	Figueroa St.						190th St./Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	210	730	120	50	460	180	200	1220	180	190	1110	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	210	730	120	50	460	180	200	1220	180	190	1110	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	210	730	120	50	460	180	200	1220	180	190	1110	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	210	730	120	50	460	180	200	1220	180	190	1110	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	210	730	120	50	460	180	200	1220	180	190	1110	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.72	0.28	1.00	2.16	0.84	1.00	2.00	1.00	1.00	1.85	0.15
Final Sat.:	1600	2748	452	1600	3450	1350	1600	3200	1600	1600	2960	240
Capacity Analysis Module:												
Vol/Sat:	0.13	0.27	0.27	0.03	0.13	0.13	0.13	0.38	0.11	0.12	0.38	0.38
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday AM

Intersection #23: Broadway & Victoria St.

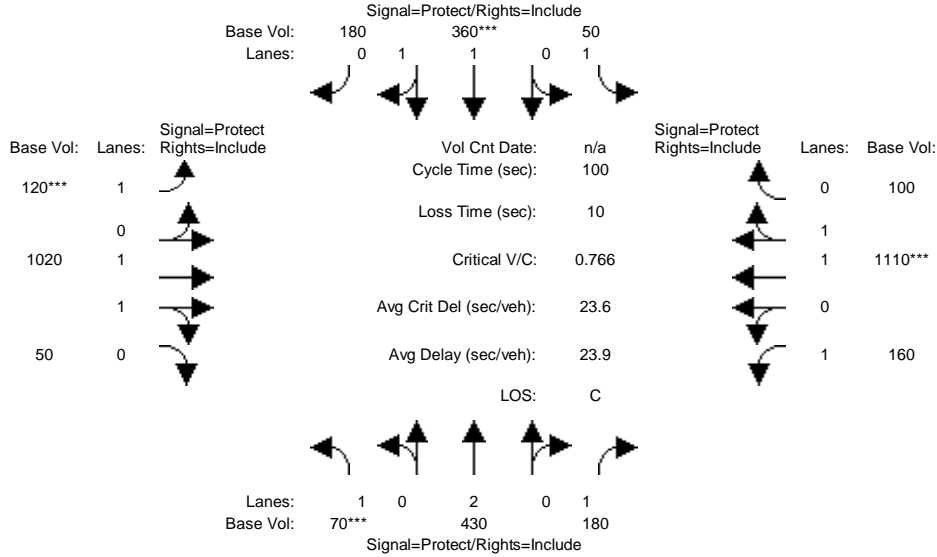


Street Name:	Broadway						Victoria St.													
Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Volume Module:																				
Base Vol:	60	180	10	50	150	90	110	1170	70	50	1250	60								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	60	180	10	50	150	90	110	1170	70	50	1250	60								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Volume:	60	180	10	50	150	90	110	1170	70	50	1250	60								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	60	180	10	50	150	90	110	1170	70	50	1250	60								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
FinalVolume:	60	180	10	50	150	90	110	1170	70	50	1250	60								
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600								
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Lanes:	1.00	1.89	0.11	1.00	1.25	0.75	1.00	1.89	0.11	1.00	1.91	0.09								
Final Sat.:	1600	3032	168	1600	2000	1200	1600	3019	181	1600	3053	147								
Capacity Analysis Module:																				
Vol/Sat:	0.04	0.06	0.06	0.03	0.08	0.08	0.07	0.39	0.39	0.03	0.41	0.41								
Crit Moves:	****				****		****				****									

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday AM

Intersection #24: Main St. & Victoria St.

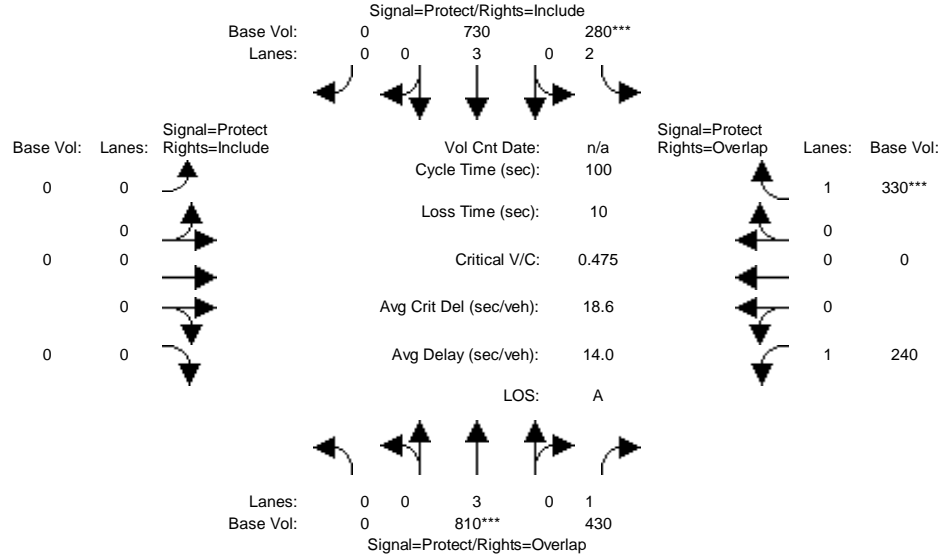


Street Name:	Main St.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	70	430	180	50	360	180	120	1020	50	160	1110	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	430	180	50	360	180	120	1020	50	160	1110	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	430	180	50	360	180	120	1020	50	160	1110	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	430	180	50	360	180	120	1020	50	160	1110	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	70	430	180	50	360	180	120	1020	50	160	1110	100
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.33	0.67	1.00	1.91	0.09	1.00	1.83	0.17
Final Sat.:	1600	3200	1600	1600	2133	1067	1600	3050	150	1600	2936	264
Capacity Analysis Module:												
Vol/Sat:	0.04	0.13	0.11	0.03	0.17	0.17	0.08	0.33	0.33	0.10	0.38	0.38
Crit Moves:	****				****		****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday AM

Intersection #25: Avalon Blvd. & University Dr.

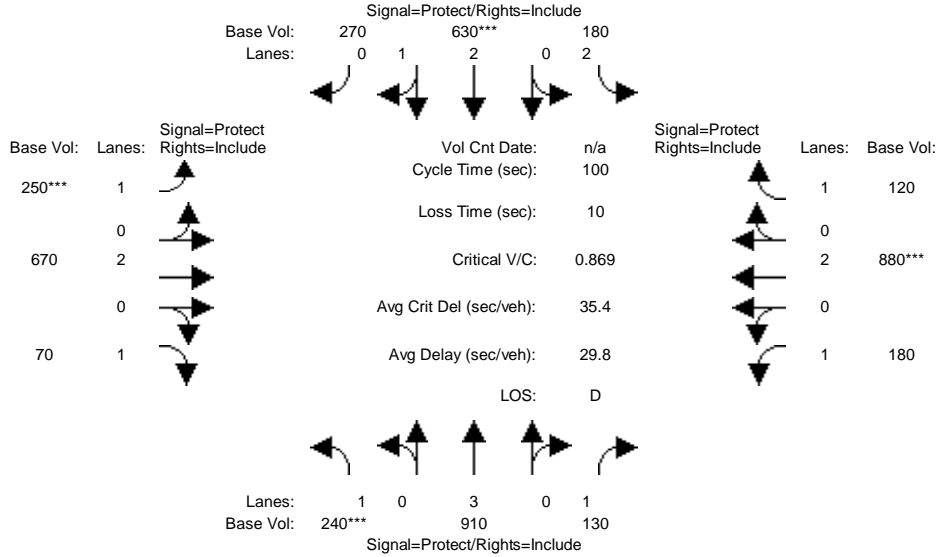


Street Name:	Avalon Blvd.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	810	430	280	730	0	0	0	0	240	0	330
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	810	430	280	730	0	0	0	0	240	0	330
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	810	430	280	730	0	0	0	0	240	0	330
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	810	430	280	730	0	0	0	0	240	0	330
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	810	430	280	730	0	0	0	0	240	0	330
OvlAdjVol:			190									252
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.17	0.27	0.05	0.15	0.00	0.00	0.00	0.00	0.15	0.00	0.21
OvlAdjV/S:			0.12									0.16
Crit Moves:	****			****						****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday AM

Intersection #26: Avalon Blvd. & Del Amo Blvd.

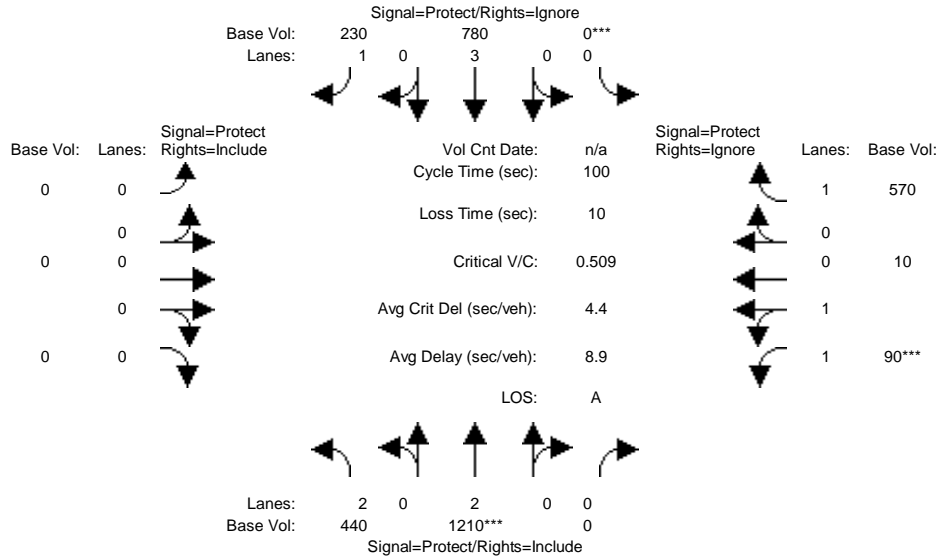


Street Name:	Avalon Blvd.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	240	910	130	180	630	270	250	670	70	180	880	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	240	910	130	180	630	270	250	670	70	180	880	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	240	910	130	180	630	270	250	670	70	180	880	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	240	910	130	180	630	270	250	670	70	180	880	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	240	910	130	180	630	270	250	670	70	180	880	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.10	0.90	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	3360	1440	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.15	0.19	0.08	0.03	0.19	0.19	0.16	0.21	0.04	0.11	0.28	0.08
Crit Moves:	****				****		****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday AM

Intersection #27: Avalon Blvd. & I-405 NB Ramps

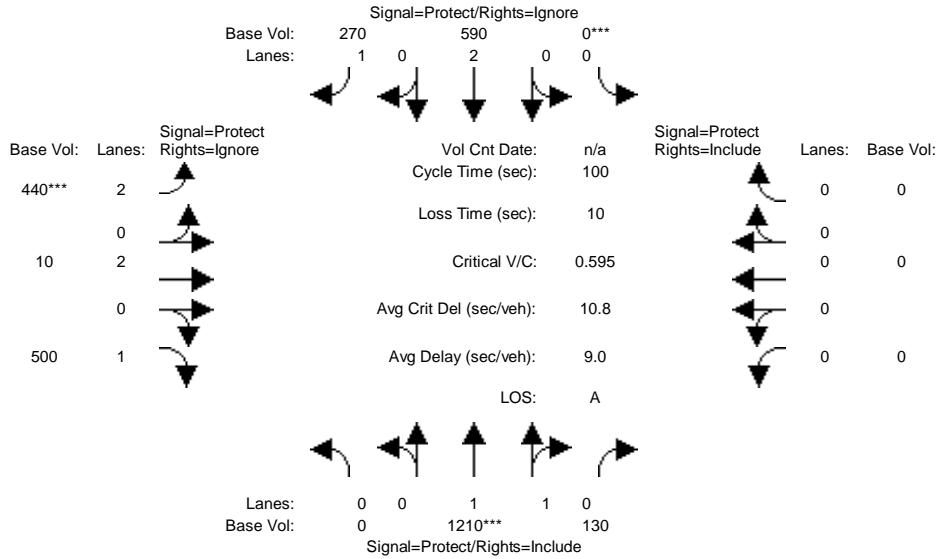


Street Name:	Avalon Blvd.						I-405 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	440	1210	0	0	780	230	0	0	0	90	10	570
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	440	1210	0	0	780	230	0	0	0	90	10	570
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	440	1210	0	0	780	0	0	0	0	90	10	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	440	1210	0	0	780	0	0	0	0	90	10	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Volume:	440	1210	0	0	780	0	0	0	0	90	10	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.80	0.20	1.00
Final Sat.:	5760	3200	0	0	4800	1600	0	0	0	2880	320	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.38	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.03	0.03	0.00
Crit Moves:	****			****						****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday AM

Intersection #28: Avalon Blvd. & I-405 SB Ramps

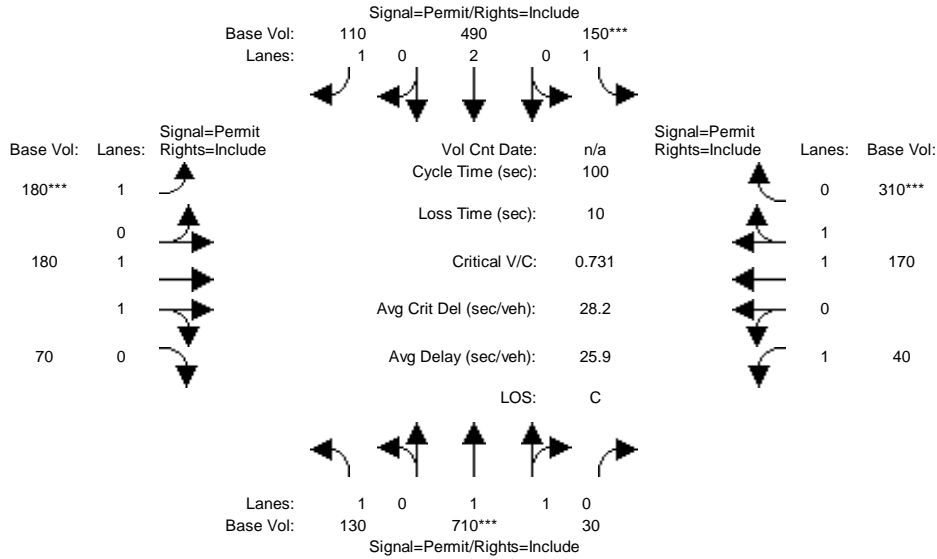


Street Name:	Avalon Blvd.						I-405 SB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1210	130	0	590	270	440	10	500	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1210	130	0	590	270	440	10	500	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	1210	130	0	590	0	440	10	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1210	130	0	590	0	440	10	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Volume:	0	1210	130	0	590	0	440	10	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.81	0.19	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	0	2890	310	0	3200	1600	5760	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.42	0.42	0.00	0.18	0.00	0.08	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday AM

Intersection #29: Central Ave. & University Dr.

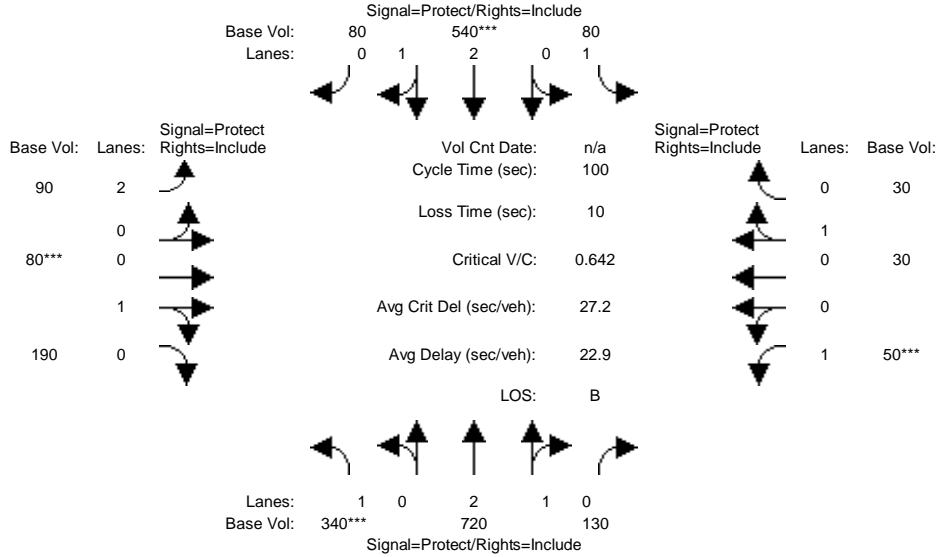


Street Name:	Central Ave.						University Dr.													
Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																				
Base Vol:	130	710	30	150	490	110	180	180	70	40	170	310								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							
Initial Bse:	130	710	30	150	490	110	180	180	70	40	170	310								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							
PHF Volume:	130	710	30	150	490	110	180	180	70	40	170	310								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	130	710	30	150	490	110	180	180	70	40	170	310								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							
FinalVolume:	130	710	30	150	490	110	180	180	70	40	170	310								
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600							
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							
Lanes:	1.00	1.92	0.08	1.00	2.00	1.00	1.00	1.44	0.56	1.00	1.00	1.00								
Final Sat.:	1600	3070	130	1600	3200	1600	1600	2304	896	1600	1600	1600								
Capacity Analysis Module:																				
Vol/Sat:	0.08	0.23	0.23	0.09	0.15	0.07	0.11	0.08	0.08	0.03	0.11	0.19								
Crit Moves:	****			****			****			****										

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday AM

Intersection #30: Wilmington Ave. & University Dr.

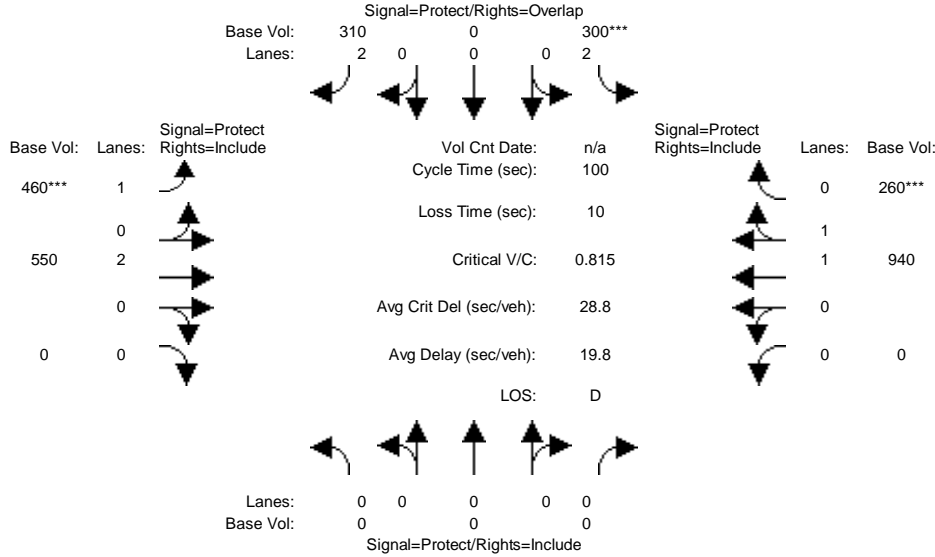


Street Name:	Wilmington Ave.						University Dr.														
Approach:	North Bound			South Bound			East Bound			West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Volume Module:																					
Base Vol:	340	720	130	80	540	80	90	80	190	50	30	30									
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	340	720	130	80	540	80	90	80	190	50	30	30									
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:	340	720	130	80	540	80	90	80	190	50	30	30									
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0									
Reduced Vol:	340	720	130	80	540	80	90	80	190	50	30	30									
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
FinalVolume:	340	720	130	80	540	80	90	80	190	50	30	30									
Saturation Flow Module:																					
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Lanes:	1.00	2.54	0.46	1.00	2.61	0.39	2.00	0.30	0.70	1.00	0.50	0.50									
Final Sat.:	1600	4066	734	1600	4181	619	5760	474	1126	1600	800	800									
Capacity Analysis Module:																					
Vol/Sat:	0.21	0.18	0.18	0.05	0.13	0.13	0.02	0.17	0.17	0.03	0.04	0.04									
Crit Moves:	****				****		****			****											

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday AM

Intersection #31: Central Ave. & Del Amo Blvd.

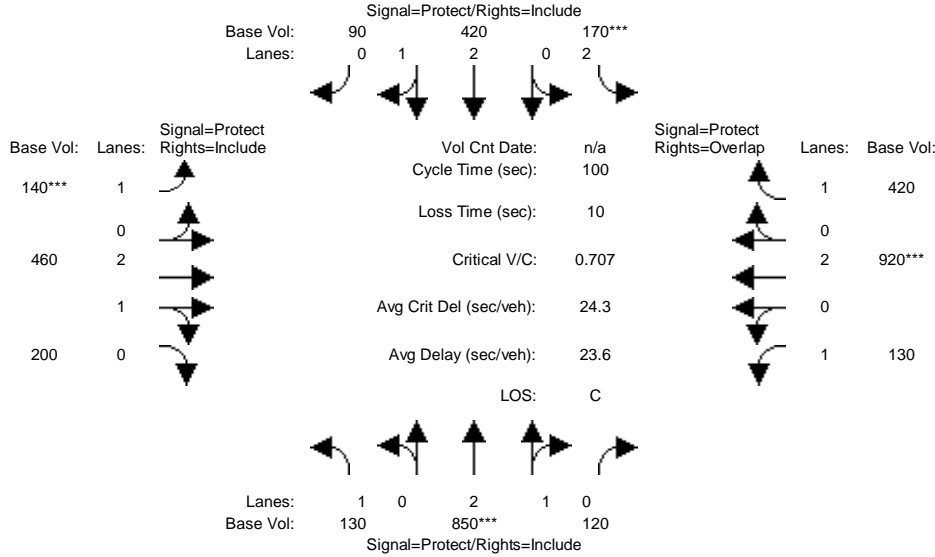


Street Name:	Central Ave.						Del Amo Blvd.														
Approach:	North Bound			South Bound			East Bound			West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																					
Base Vol:	0	0	0	300	0	310	460	550	0	0	0	940	260								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	0	0	0	300	0	310	460	550	0	0	0	940	260								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Volume:	0	0	0	300	0	310	460	550	0	0	0	940	260								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	0	0	0	300	0	310	460	550	0	0	0	940	260								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Final Volume:	0	0	0	300	0	310	460	550	0	0	0	940	260								
OvlAdjVol:	0																				
Saturation Flow Module:																					
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600								
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Lanes:	0.00	0.00	0.00	2.00	0.00	2.00	1.00	2.00	0.00	0.00	0.00	1.57	0.43								
Final Sat.:	0	0	0	5760	0	3200	1600	3200	0	0	0	2507	693								
Capacity Analysis Module:																					
Vol/Sat:	0.00	0.00	0.00	0.05	0.00	0.10	0.29	0.17	0.00	0.00	0.00	0.37	0.38								
OvlAdjV/S:							0.00														
Crit Moves:							****						****								

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday AM

Intersection #32: Wilmington Ave. & Del Amo Blvd.

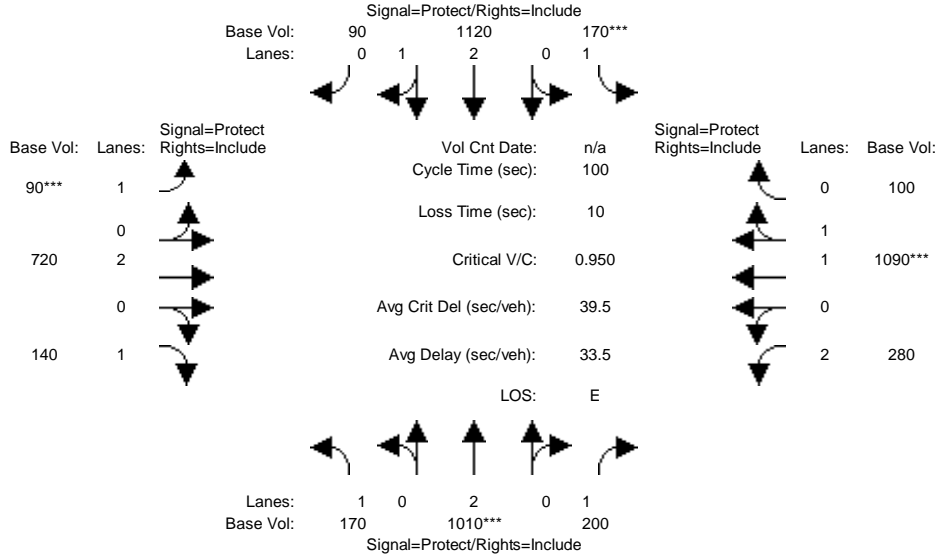


Street Name:	Wilmington Ave.						Del Amo Blvd.													
Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																				
Base Vol:	130	850	120	170	420	90	140	460	200	130	920	420								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	130	850	120	170	420	90	140	460	200	130	920	420								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Volume:	130	850	120	170	420	90	140	460	200	130	920	420								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	130	850	120	170	420	90	140	460	200	130	920	420								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Final Volume:	130	850	120	170	420	90	140	460	200	130	920	420								
OvlAdjVol:												373								
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600								
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Lanes:	1.00	2.63	0.37	2.00	2.47	0.53	1.00	2.09	0.91	1.00	2.00	1.00								
Final Sat.:	1600	4206	594	5760	3953	847	1600	3345	1455	1600	3200	1600								
Capacity Analysis Module:																				
Vol/Sat:	0.08	0.20	0.20	0.03	0.11	0.11	0.09	0.14	0.14	0.08	0.29	0.26								
OvlAdjV/S:												0.23								
Crit Moves:	****			****			****			****										

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday AM

Intersection #33: W. Artesia Blvd. & Crenshaw Blvd.

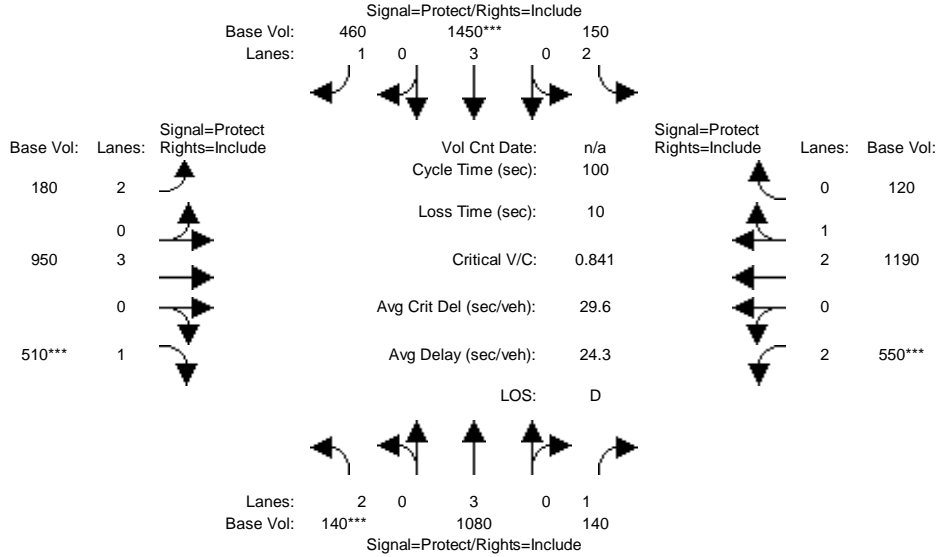


Street Name:	Crenshaw Blvd.						W. Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	170	1010	200	170	1120	90	90	720	140	280	1090	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	170	1010	200	170	1120	90	90	720	140	280	1090	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	170	1010	200	170	1120	90	90	720	140	280	1090	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	170	1010	200	170	1120	90	90	720	140	280	1090	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	170	1010	200	170	1120	90	90	720	140	280	1090	100
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.78	0.22	1.00	2.00	1.00	2.00	1.83	0.17
Final Sat.:	1600	3200	1600	1600	4443	357	1600	3200	1600	5760	2931	269
Capacity Analysis Module:												
Vol/Sat:	0.11	0.32	0.13	0.11	0.25	0.25	0.06	0.23	0.09	0.05	0.37	0.37
Crit Moves:		****		****			****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday AM

Intersection #34: W 190th St. & South Western Ave.

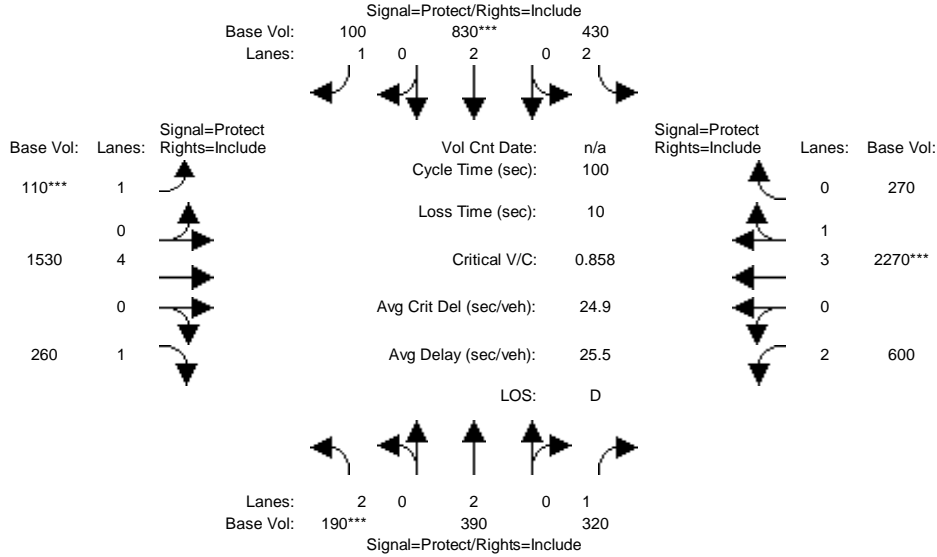


Street Name:	S. Western Ave.						W. 190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	140	1080	140	150	1450	460	180	950	510	550	1190	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	1080	140	150	1450	460	180	950	510	550	1190	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	140	1080	140	150	1450	460	180	950	510	550	1190	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	1080	140	150	1450	460	180	950	510	550	1190	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	140	1080	140	150	1450	460	180	950	510	550	1190	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.73	0.27
Final Sat.:	5760	4800	1600	5760	4800	1600	5760	4800	1600	5760	4360	440
Capacity Analysis Module:												
Vol/Sat:	0.02	0.23	0.09	0.03	0.30	0.29	0.03	0.20	0.32	0.10	0.27	0.27
Crit Moves:	****				****				****	****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday AM

Intersection #35: W. Artesia Blvd. & Vermont Av.e

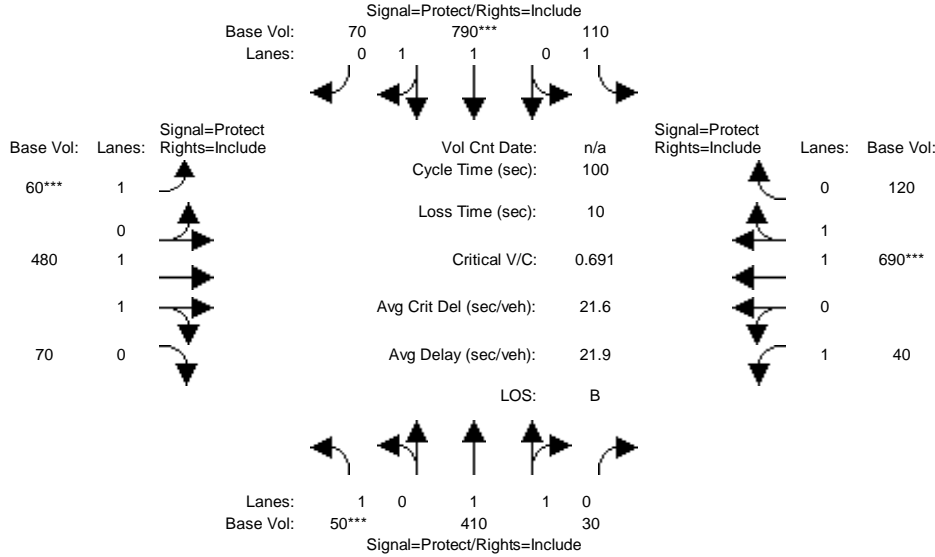


Street Name:	Vermont Ave.						W. Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	190	390	320	430	830	100	110	1530	260	600	2270	270
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	190	390	320	430	830	100	110	1530	260	600	2270	270
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	190	390	320	430	830	100	110	1530	260	600	2270	270
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	190	390	320	430	830	100	110	1530	260	600	2270	270
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	190	390	320	430	830	100	110	1530	260	600	2270	270
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	1.00	4.00	1.00	2.00	3.57	0.43
Final Sat.:	5760	3200	1600	5760	3200	1600	1600	6400	1600	5760	5720	680
Capacity Analysis Module:												
Vol/Sat:	0.03	0.12	0.20	0.07	0.26	0.06	0.07	0.24	0.16	0.10	0.40	0.40
Crit Moves:	****				****		****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday AM

Intersection #36: Alameda St. & Compton Blvd.

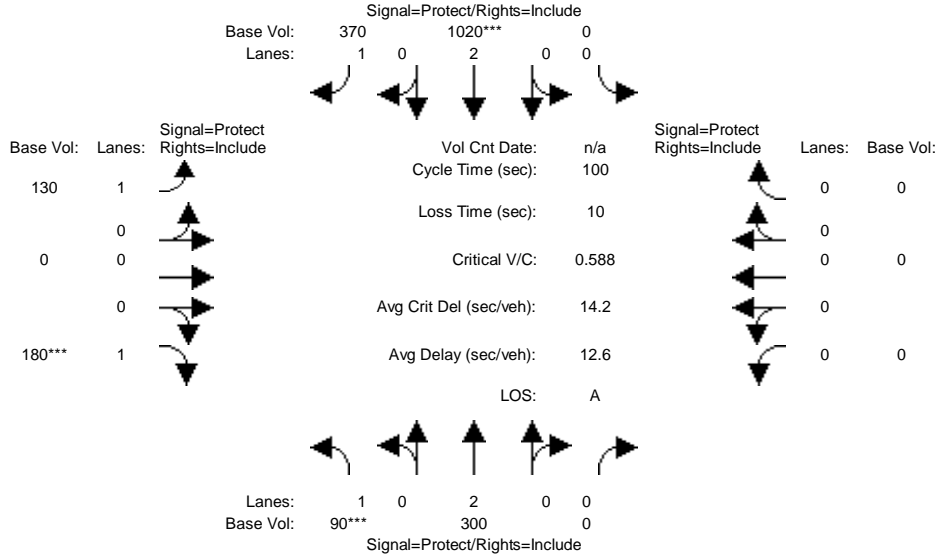


Street Name:	Alameda St.						Compton Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	50	410	30	110	790	70	60	480	70	40	690	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	410	30	110	790	70	60	480	70	40	690	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	410	30	110	790	70	60	480	70	40	690	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	410	30	110	790	70	60	480	70	40	690	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	410	30	110	790	70	60	480	70	40	690	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.86	0.14	1.00	1.84	0.16	1.00	1.75	0.25	1.00	1.70	0.30
Final Sat.:	1600	2982	218	1600	2940	260	1600	2793	407	1600	2726	474
Capacity Analysis Module:												
Vol/Sat:	0.03	0.14	0.14	0.07	0.27	0.27	0.04	0.17	0.17	0.03	0.25	0.25
Crit Moves:	****				****		****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday AM

Intersection #37: Alameda St. & SR 91 EB Ramps

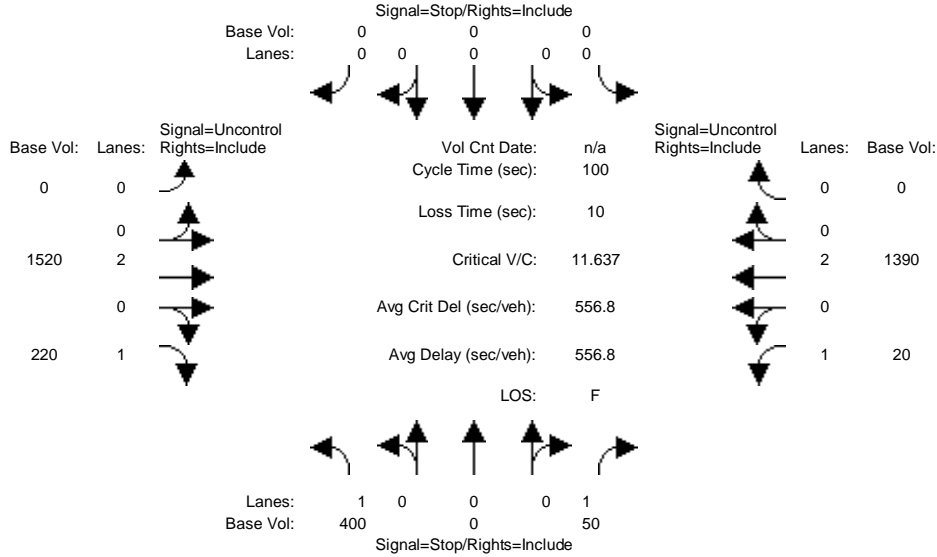


Street Name:	Alameda St.						SR 91 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	90	300	0	0	1020	370	130	0	180	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	300	0	0	1020	370	130	0	180	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	300	0	0	1020	370	130	0	180	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	300	0	0	1020	370	130	0	180	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	300	0	0	1020	370	130	0	180	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	3200	0	0	3200	1600	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.09	0.00	0.00	0.32	0.23	0.08	0.00	0.11	0.00	0.00	0.00
Crit Moves:	****				****				****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2025 With Project Alt2 Weekday PM

Intersection #1: Victoria St. & Drive D



Street Name:	Drive D						Victoria St..					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	400	0	50	0	0	0	0	1520	220	20	1390	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	400	0	50	0	0	0	0	1520	220	20	1390	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	400	0	50	0	0	0	0	1520	220	20	1390	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	400	0	50	0	0	0	0	1520	220	20	1390	0
Critical Gap Module:												
Critical Gp:	6.8	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	2255	xxxx	760	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1740	xxxx	xxxxx
Potent Cap.:	36	xxxx	353	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	366	xxxx	xxxxx
Move Cap.:	34	xxxx	353	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	366	xxxx	xxxxx
Volume/Cap:	11.64	xxxx	0.14	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.05	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	48.8	xxxx	0.5	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx
Control Del:	5009	xxxx	16.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	15.4	xxxx	xxxxx
LOS by Move:	F	*	C	*	*	*	*	*	*	C	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	4453.9			xxxxxx			xxxxxx			xxxxxx		

ApproachLOS: F * * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #1 Victoria St. & Drive D

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	1	0	0	0	0	0	0	0	2	1	0	2
Initial Vol:	400	0	50	0	0	0	0	1520	220	20	1390	0
ApproachDel:	4453.9			xxxxxx			xxxxxx			xxxxxx		

Approach[northbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=556.7]

SUCCEED - Vehicle-hours >= 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=450]

SUCCEED - Approach volume >= 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=3600]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #1 Victoria St. & Drive D

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	1	0	0	0	0	0	0	0	2	1	0	2
Initial Vol:	400	0	50	0	0	0	0	1520	220	20	1390	0

Major Street Volume: 3150

Minor Approach Volume: 450

Minor Approach Volume Threshold: -119 [less than minimum of 150]

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

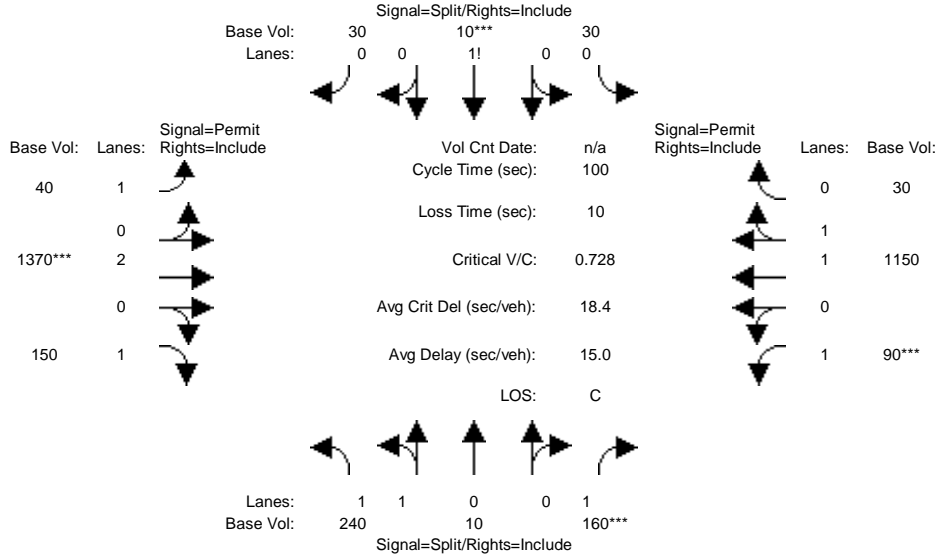
The peak hour warrant analysis in this report is not intended to replace

a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday PM

Intersection #2: Victoria St. & Tamcliff Ave.

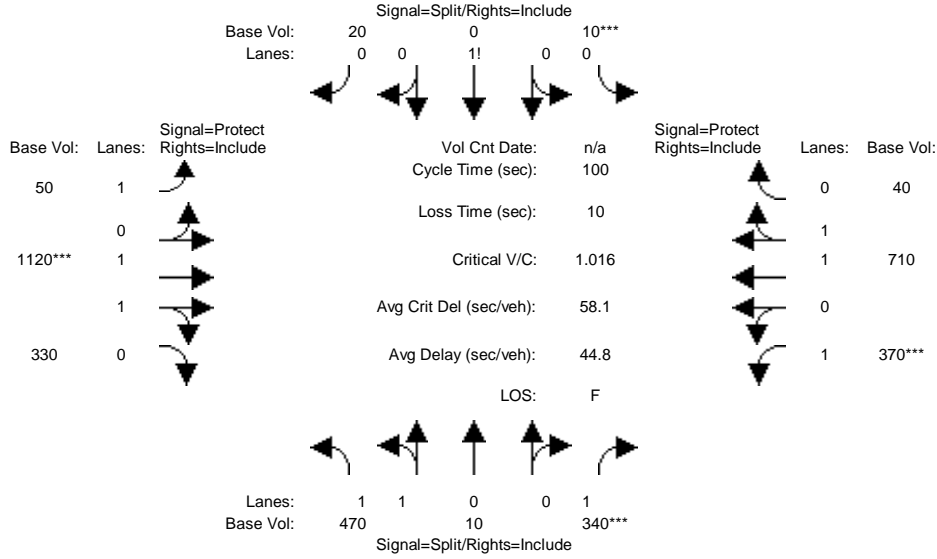


Street Name:	Victoria St.						Tamcliff Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	240	10	160	30	10	30	40	1370	150	90	1150	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	240	10	160	30	10	30	40	1370	150	90	1150	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	240	10	160	30	10	30	40	1370	150	90	1150	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	240	10	160	30	10	30	40	1370	150	90	1150	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	240	10	160	30	10	30	40	1370	150	90	1150	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.92	0.08	1.00	0.43	0.14	0.43	1.00	2.00	1.00	1.00	1.95	0.05
Final Sat.:	3072	128	1600	686	229	686	1600	3200	1600	1600	3119	81
Capacity Analysis Module:												
Vol/Sat:	0.08	0.08	0.10	0.04	0.04	0.04	0.03	0.43	0.09	0.06	0.37	0.37
Crit Moves:			****			****			****			****

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday PM

Intersection #3: Victoria St. & Birchknoll Dr.

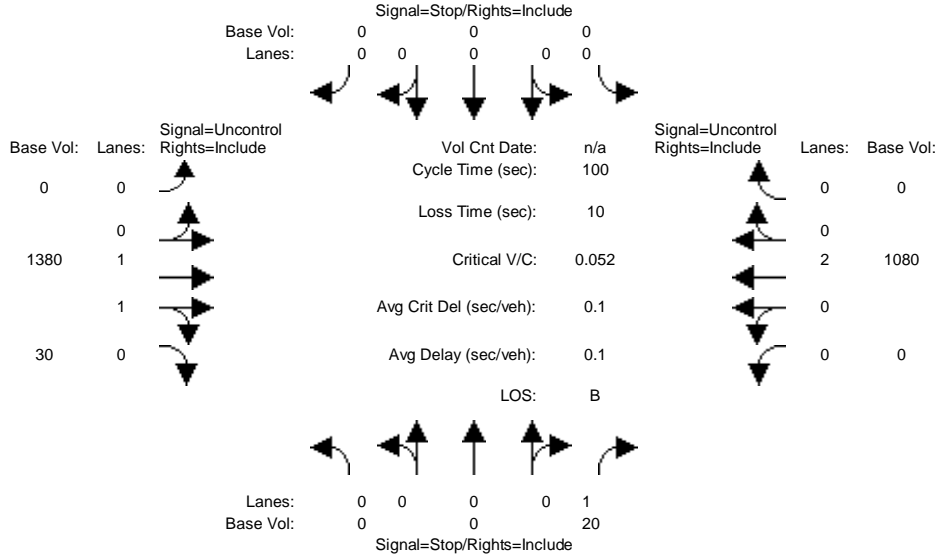


Street Name:	Victoria St.						Birchknoll Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	470	10	340	10	0	20	50	1120	330	370	710	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	470	10	340	10	0	20	50	1120	330	370	710	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	470	10	340	10	0	20	50	1120	330	370	710	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	470	10	340	10	0	20	50	1120	330	370	710	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	470	10	340	10	0	20	50	1120	330	370	710	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.96	0.04	1.00	0.33	0.00	0.67	1.00	1.54	0.46	1.00	1.89	0.11
Final Sat.:	3133	67	1600	533	0	1067	1600	2472	728	1600	3029	171
Capacity Analysis Module:												
Vol/Sat:	0.15	0.15	0.21	0.02	0.00	0.02	0.03	0.45	0.45	0.23	0.23	0.23
Crit Moves:			****	****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2025 With Project Alt2 Weekday PM

Intersection #4: Victoria St. & Project Service Rd.



Street Name:	Project Service Rd.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:	0	0	20	0	0	0	0	1380	30	0	1080	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	20	0	0	0	0	1380	30	0	1080	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	20	0	0	0	0	1380	30	0	1080	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	20	0	0	0	0	1380	30	0	1080	0
Critical Gap Module:	Critical Gp:xxxxx xxxxx 6.9			xxxxx xxxxx xxxxxx			xxxxx xxxxx xxxxxx			xxxxx xxxxx xxxxxx		
FollowUpTim:	xxxxx xxxxx 3.3			xxxxx xxxxx xxxxxx			xxxxx xxxxx xxxxxx			xxxxx xxxxx xxxxxx		
Capacity Module:	Cnflct Vol: xxxxx xxxxx 705			xxxxx xxxxx xxxxxx			xxxxx xxxxx xxxxxx			xxxxx xxxxx xxxxxx		
Potent Cap.:	xxxxx xxxxx 383			xxxxx xxxxx xxxxxx			xxxxx xxxxx xxxxxx			xxxxx xxxxx xxxxxx		
Move Cap.:	xxxxx xxxxx 383			xxxxx xxxxx xxxxxx			xxxxx xxxxx xxxxxx			xxxxx xxxxx xxxxxx		
Volume/Cap:	xxxxx xxxxx 0.05			xxxxx xxxxx xxxxxx			xxxxx xxxxx xxxxxx			xxxxx xxxxx xxxxxx		
Level Of Service Module:	2Way95thQ: xxxxx xxxxx 0.2			xxxxx xxxxx xxxxxx			xxxxx xxxxx xxxxxx			xxxxx xxxxx xxxxxx		
Control Del:	xxxxxx xxxxx 14.9			xxxxxx xxxxx xxxxxx			xxxxxx xxxxx xxxxxx			xxxxxx xxxxx xxxxxx		
LOS by Move:	*	*	B	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
SharedQueue:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	14.9			xxxxxxx			xxxxxxx			xxxxxxx		

ApproachLOS: B * * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #4 Victoria St. & Project Service Rd.

Base Volume Alternative: Peak Hour Warrant NOT Met

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Lanes, Initial Vol, and ApproachDel.

Approach[northbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.1]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=20]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=2510]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future.

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #4 Victoria St. & Project Service Rd.

Base Volume Alternative: Peak Hour Warrant NOT Met

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Lanes, Initial Vol.

Major Street Volume: 2490
Minor Approach Volume: 20
Minor Approach Volume Threshold: -29 [less than minimum of 100]

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future.

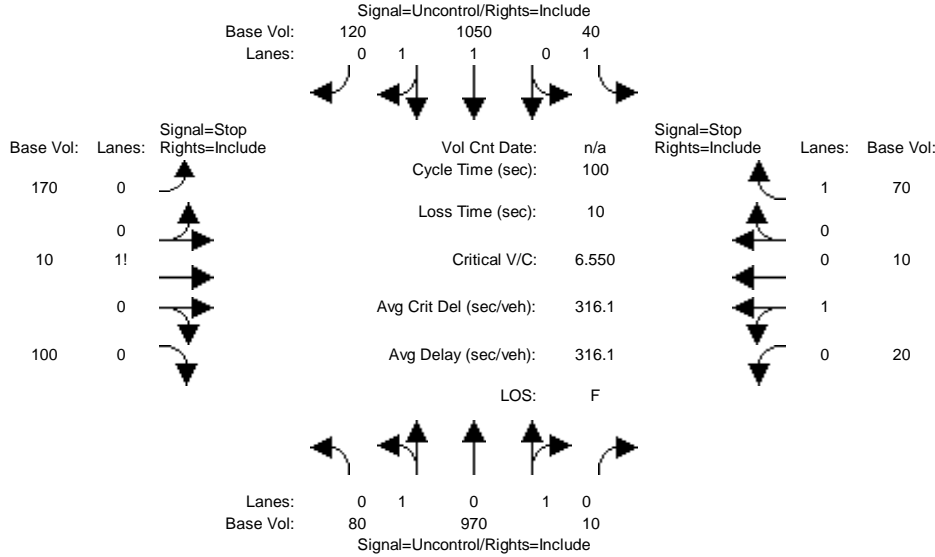
The peak hour warrant analysis in this report is not intended to replace

a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2025 With Project Alt2 Weekday PM

Intersection #5: Central Ave. & Charles Willard St.



Street Name:	Central Ave.				Charles Willard St.							
Approach:	North Bound		South Bound		East Bound		West Bound					
Movement:	L	T	R	L	T	R	L	T	R			
Volume Module:												
Base Vol:	80	970	10	40	1050	120	170	10	100	20	10	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	970	10	40	1050	120	170	10	100	20	10	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	970	10	40	1050	120	170	10	100	20	10	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	80	970	10	40	1050	120	170	10	100	20	10	70
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	4.1	xxxx	xxxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxxx	2.2	xxxx	xxxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflct Vol:	1170	xxxx	xxxxxx	980	xxxx	xxxxxx	1840	2330	585	1745	2385	490
Potent Cap.:	604	xxxx	xxxxxx	712	xxxx	xxxxxx	48	38	459	56	35	529
Move Cap.:	604	xxxx	xxxxxx	712	xxxx	xxxxxx	26	30	459	28	28	529
Volume/Cap:	0.13	xxxx	xxxx	0.06	xxxx	xxxx	6.55	0.33	0.22	0.70	0.36	0.13
Level Of Service Module:												
2Way95thQ:	0.5	xxxx	xxxxxx	0.2	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	0.5
Control Del:	11.9	xxxx	xxxxxx	10.4	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	12.8
LOS by Move:	B	*	*	B	*	*	*	*	*	*	*	B
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	39	xxxxxx	28	xxxx	xxxxxx
SharedQueue:	0.5	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	33.2	xxxxxx	3.5	xxxx	xxxxxx
Shrd ConDel:	11.9	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	2942	xxxxxx	392.5	xxxx	xxxxxx
Shared LOS:	B	*	*	*	*	*	*	F	*	F	*	*
ApproachDel:	xxxxxxx			xxxxxxx			2941.7			126.7		

ApproachLOS: * * F F

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #5 Central Ave. & Charles Willard St.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	0	1	0	1	0	1	0	0	1	0	1	0
Initial Vol:	80	970	10	40	1050	120	170	10	100	20	10	70
ApproachDel:	xxxxxx			xxxxxx			2941.7			126.7		

Approach[eastbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=228.8]
SUCCEED - Vehicle-hours greater than or equal to 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=280]
SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=2650]
SUCCEED - Total volume greater than or equal to 800 for intersection
with four or more approaches.

Approach[westbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=3.5]
FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=100]
FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=2650]
SUCCEED - Total volume greater than or equal to 800 for intersection
with four or more approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #5 Central Ave. & Charles Willard St.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	0	1	0	1	0	1	0	0	1	0	1	0
Initial Vol:	80	970	10	40	1050	120	170	10	100	20	10	70

Major Street Volume: 2270
Minor Approach Volume: 280
Minor Approach Volume Threshold: 2 [less than minimum of 100]

SIGNAL WARRANT DISCLAIMER

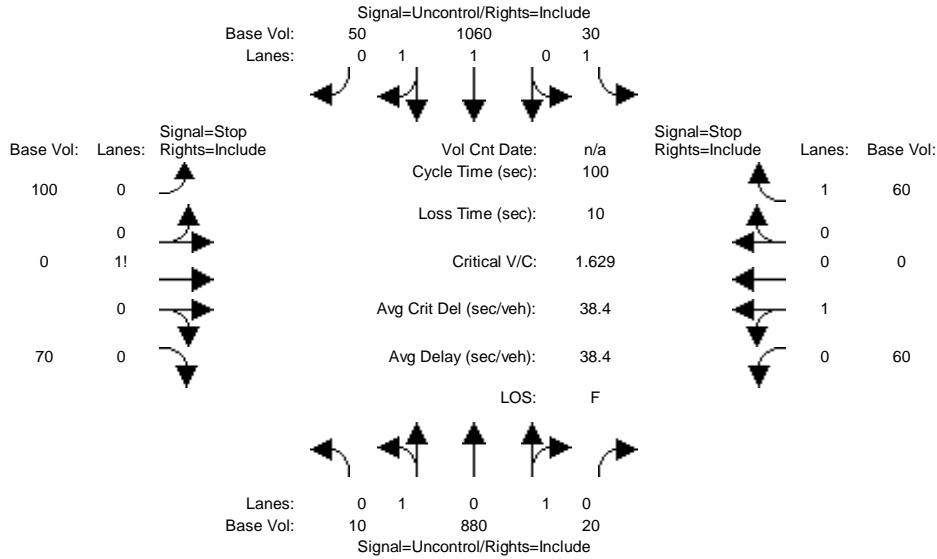
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2025 With Project Alt2 Weekday PM

Intersection #6: Central Ave. & Project Driveway/Beachey Pl.



Street Name:	Central Ave.					Beachey Pl.						
Approach:	North Bound			South Bound		East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	10	880	20	30	1060	50	100	0	70	60	0	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	880	20	30	1060	50	100	0	70	60	0	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	10	880	20	30	1060	50	100	0	70	60	0	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	10	880	20	30	1060	50	100	0	70	60	0	60
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflct Vol:	1110	xxxx	xxxxx	900	xxxx	xxxxx	1605	2065	555	1500	2080	450
Potent Cap.:	637	xxxx	xxxxx	763	xxxx	xxxxx	72	55	480	86	54	562
Move Cap.:	637	xxxx	xxxxx	763	xxxx	xxxxx	61	52	480	70	51	562
Volume/Cap:	0.02	xxxx	xxxx	0.04	xxxx	xxxx	1.63	0.00	0.15	0.85	0.00	0.11
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0.4
Control Del:	10.7	xxxx	xxxxx	9.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	12.2
LOS by Move:	B	*	*	A	*	*	*	*	*	*	*	B
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	96	xxxxx	70	xxxx	xxxxx
Shared Queue:	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	13.9	xxxxx	4.1	xxxx	xxxxx
Shrd ConDel:	10.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	463	xxxxx	167.3	xxxx	xxxxx
Shared LOS:	B	*	*	*	*	*	*	F	*	F	*	*
ApproachDel:	xxxxxxx			xxxxxxx			462.5			89.7		

ApproachLOS: * * F F

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #6 Central Ave. & Project Driveway/Beachey Pl.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	0	1	0	1	0	1	0	0	1	0	1	0
Initial Vol:	10	880	20	30	1060	50	100	0	70	60	0	60
ApproachDel:	xxxxxx			xxxxxx			462.5			89.7		

Approach[eastbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=21.8]
SUCCEED - Vehicle-hours greater than or equal to 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=170]
SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=2340]
SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Approach[westbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=3.0]
FAIL - Vehicle-hours less than 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=120]
FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=2340]
SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #6 Central Ave. & Project Driveway/Beachey Pl.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	0	1	0	1	0	1	0	0	1	0	1	0
Initial Vol:	10	880	20	30	1060	50	100	0	70	60	0	60

Major Street Volume: 2050
Minor Approach Volume: 170
Minor Approach Volume Threshold: 38 [less than minimum of 100]

SIGNAL WARRANT DISCLAIMER

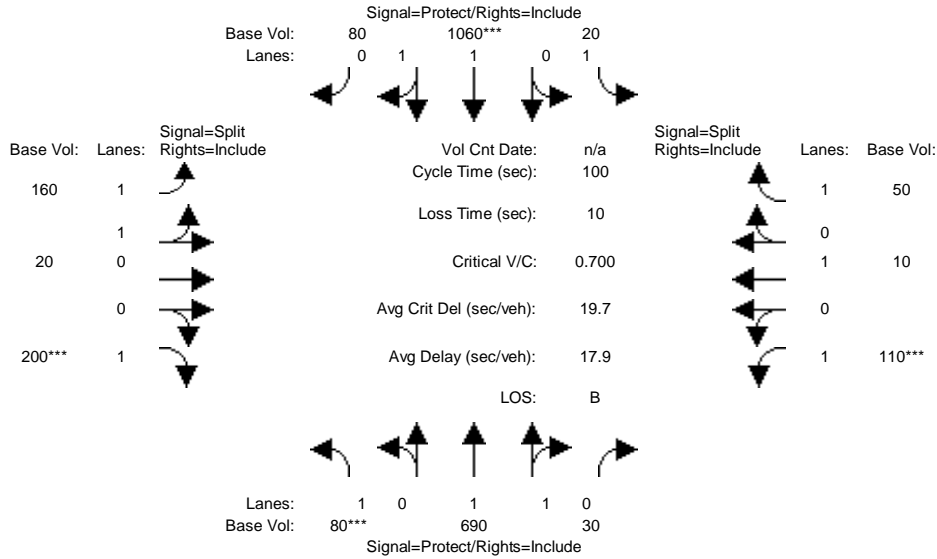
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday PM

Intersection #7: Central Ave. & Glenn Curtiss St.

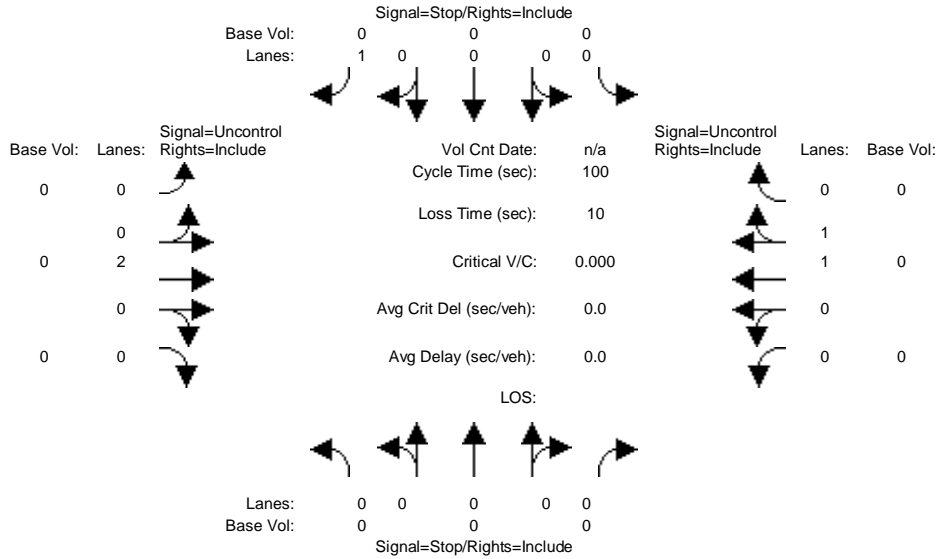


Street Name:	Central Ave.						Glenn Curtiss St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	80	690	30	20	1060	80	160	20	200	110	10	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	690	30	20	1060	80	160	20	200	110	10	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	690	30	20	1060	80	160	20	200	110	10	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	690	30	20	1060	80	160	20	200	110	10	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	690	30	20	1060	80	160	20	200	110	10	50
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.92	0.08	1.00	1.86	0.14	1.78	0.22	1.00	1.00	1.00	1.00
Final Sat.:	1600	3067	133	1600	2975	225	2844	356	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.22	0.23	0.01	0.36	0.36	0.06	0.06	0.13	0.07	0.01	0.03
Crit Moves:	****				****				****	****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2025 With Project Alt2 Weekday PM

Intersection #8: University Dr./Birchknoll Dr. Ext.



Street Name:	Birchknoll Dr. Ext.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Growth Adj:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Bse:	0	0	0	0	0	0	0	0	0	0	0	0
User Adj:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PHF Adj:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PHF Volume:	0	0	0	0	0	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	0	0	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FollowUpTim:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capacity Module:												
Cnflct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Potent Cap.:	0	0	0	0	0	0	0	0	0	0	0	0
Move Cap.:	1	1	1	1	1	1	1	1	1	1	1	1
Volume/Cap:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Level Of Service Module:												
2Way95thQ:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Del:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LOS by Move:												
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	0	0	0	0	0	0	0	0	0	0	0	0
SharedQueue:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Shrd ConDel:	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Shared LOS:												
ApproachDel:	0.0			0.0			0.0			0.0		

ApproachLOS:

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #8 University Dr./Birchknoll Dr. Ext.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound					South Bound					East Bound					West Bound						
Movement:	L	T	R	L	R	L	T	R	L	R	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled						
Lanes:	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0	0	0	1	1	0		
Initial Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
ApproachDel:	0.0					0.0					0.0					0.0						

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #8 University Dr./Birchknoll Dr. Ext.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound					South Bound					East Bound					West Bound									
Movement:	L	T	R	L	R	L	T	R	L	R	L	T	R	L	T	R	L	T	R	L	T	R			
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled									
Lanes:	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0	0	0	1	1	0					
Initial Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
Major Street Volume:						0																			
Minor Approach Volume:						0																			
Minor Approach Volume Threshold:	+Inf																								

SIGNAL WARRANT DISCLAIMER

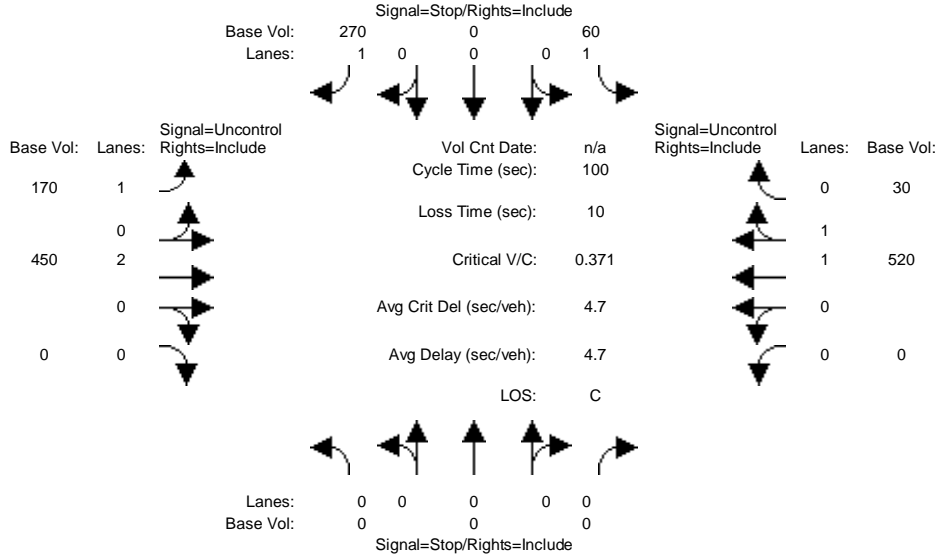
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
2025 With Project Alt2 Weekday PM

Intersection #9: University Dr. & Toro Center Dr.



Street Name:	University Dr.						Toro Center Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:	-----|-----|-----|-----|-----|-----|											
Base Vol:	0	0	0	60	0	270	170	450	0	0	520	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	60	0	270	170	450	0	0	520	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	60	0	270	170	450	0	0	520	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	60	0	270	170	450	0	0	520	30
Critical Gap Module:	-----|-----|-----|-----|-----|-----|											
Critical Gp:	xxxx	xxxx	xxxx	6.8	xxxx	6.9	4.1	xxxx	xxxx	xxxx	xxxx	xxxx
FollowUpTim:	xxxx	xxxx	xxxx	3.5	xxxx	3.3	2.2	xxxx	xxxx	xxxx	xxxx	xxxx
Capacity Module:	-----|-----|-----|-----|-----|-----|											
Cnflct Vol:	xxxx	xxxx	xxxx	1100	xxxx	275	550	xxxx	xxxx	xxxx	xxxx	xxxx
Potent Cap.:	xxxx	xxxx	xxxx	210	xxxx	729	1030	xxxx	xxxx	xxxx	xxxx	xxxx
Move Cap.:	xxxx	xxxx	xxxx	183	xxxx	729	1030	xxxx	xxxx	xxxx	xxxx	xxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.33	xxxx	0.37	0.17	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:	-----|-----|-----|-----|-----|-----|											
2Way95thQ:	xxxx	xxxx	xxxx	1.3	xxxx	1.7	0.6	xxxx	xxxx	xxxx	xxxx	xxxx
Control Del:	xxxx	xxxx	xxxx	34.0	xxxx	12.8	9.2	xxxx	xxxx	xxxx	xxxx	xxxx
LOS by Move:	*	*	*	D	*	B	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
SharedQueue:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Shrd ConDel:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			16.7			xxxxxx			xxxxxx		

ApproachLOS: * C * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #9 University Dr. & Toro Center Dr.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 0	1 0 0 0 1	1 0 2 0 0	0 0 1 1 0
Initial Vol:	0 0 0	60 0 270	170 450 0	0 520 30
ApproachDel:	xxxxxx	16.7	xxxxxx	xxxxxx

Approach[southbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=1.5]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=330]

SUCCEED - Approach volume >= 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=1500]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #9 University Dr. & Toro Center Dr.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 0	1 0 0 0 1	1 0 2 0 0	0 0 1 1 0
Initial Vol:	0 0 0	60 0 270	170 450 0	0 520 30

Major Street Volume: 1170

Minor Approach Volume: 330

Minor Approach Volume Threshold: 307

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

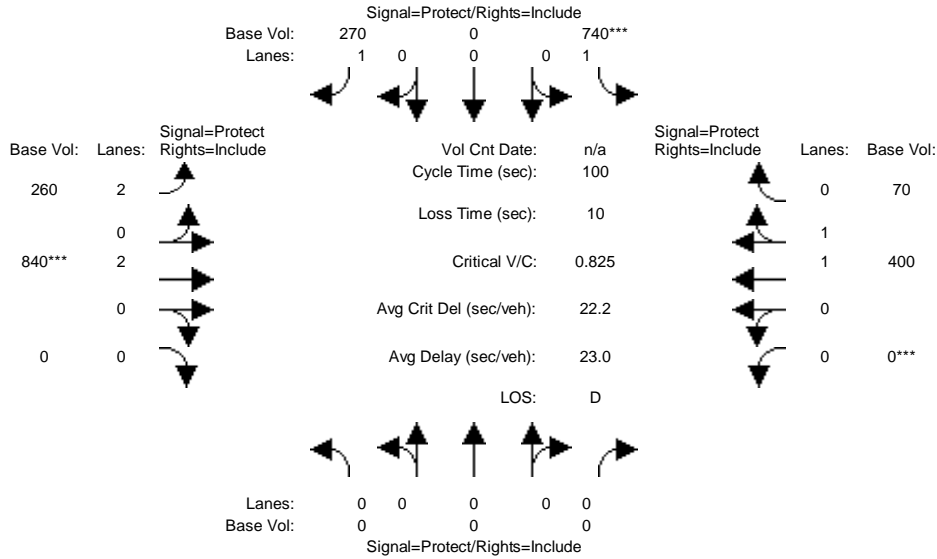
The peak hour warrant analysis in this report is not intended to replace

a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday PM

Intersection #10: Albertoni St. & SR 91 EB Ramps

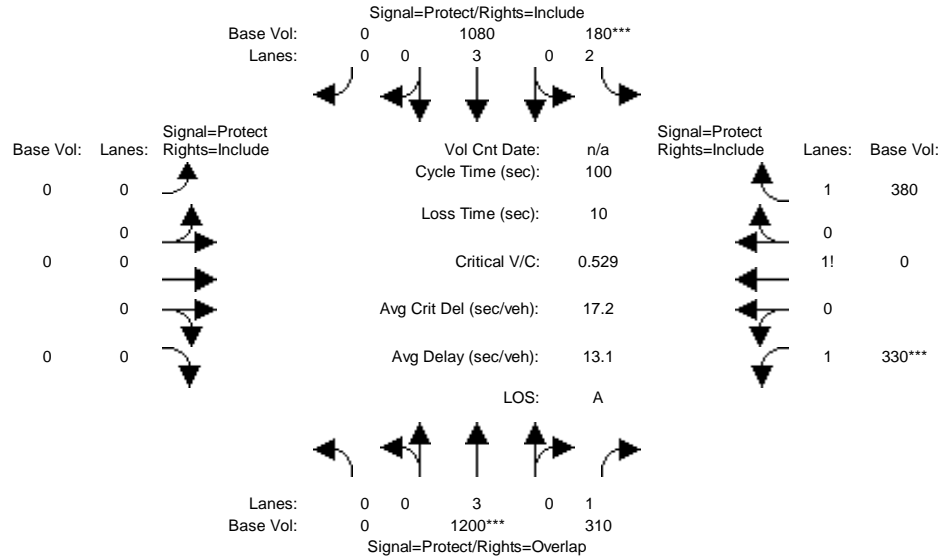


Street Name:	Albertoni St.						SR 91 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	740	0	270	260	840	0	0	400	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	740	0	270	260	840	0	0	400	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	740	0	270	260	840	0	0	400	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	740	0	270	260	840	0	0	400	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	740	0	270	260	840	0	0	400	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.70	0.30
Final Sat.:	0	0	0	1600	0	1600	5760	3200	0	0	2723	477
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.46	0.00	0.17	0.05	0.26	0.00	0.00	0.15	0.15
Crit Moves:				****				****		****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday PM

Intersection #11: Avalon Blvd. & SR 91 WB On-Ramp

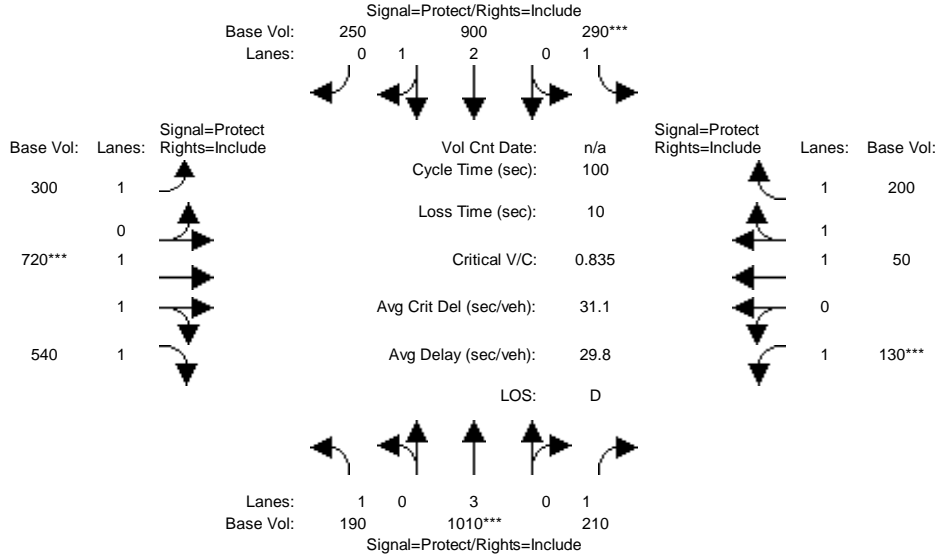


Street Name:	Avalon Blvd.						SR 91 WB On-Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1200	310	180	1080	0	0	0	0	330	0	380
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1200	310	180	1080	0	0	0	0	330	0	380
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1200	310	180	1080	0	0	0	0	330	0	380
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1200	310	180	1080	0	0	0	0	330	0	380
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	1200	310	180	1080	0	0	0	0	330	0	380
OvlAdjVol:	73											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.39	0.00	1.61
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	2231	0	2569
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.19	0.03	0.23	0.00	0.00	0.00	0.00	0.15	0.00	0.15
OvlAdjV/S:	0.05											
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday PM

Intersection #12: Avalon Blvd. & Albertoni St.

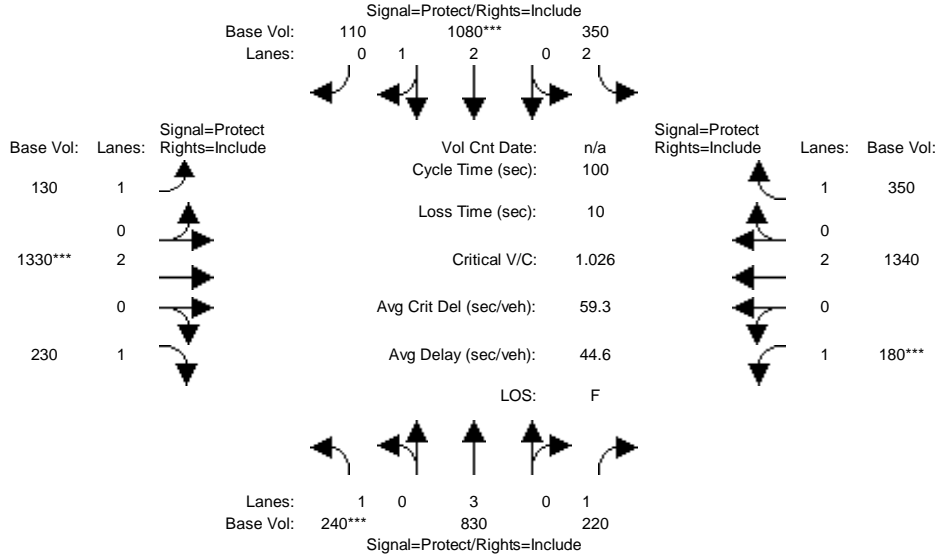


Street Name:	Avalon Blvd.						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	190	1010	210	290	900	250	300	720	540	130	50	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	190	1010	210	290	900	250	300	720	540	130	50	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	190	1010	210	290	900	250	300	720	540	130	50	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	190	1010	210	290	900	250	300	720	540	130	50	200
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	190	1010	210	290	900	250	300	720	540	130	50	200
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.35	0.65	1.00	1.71	1.29	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3757	1043	1600	2743	2057	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.12	0.21	0.13	0.18	0.24	0.24	0.19	0.26	0.26	0.08	0.03	0.06
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday PM

Intersection #13: Avalon Blvd. & Victoria St.

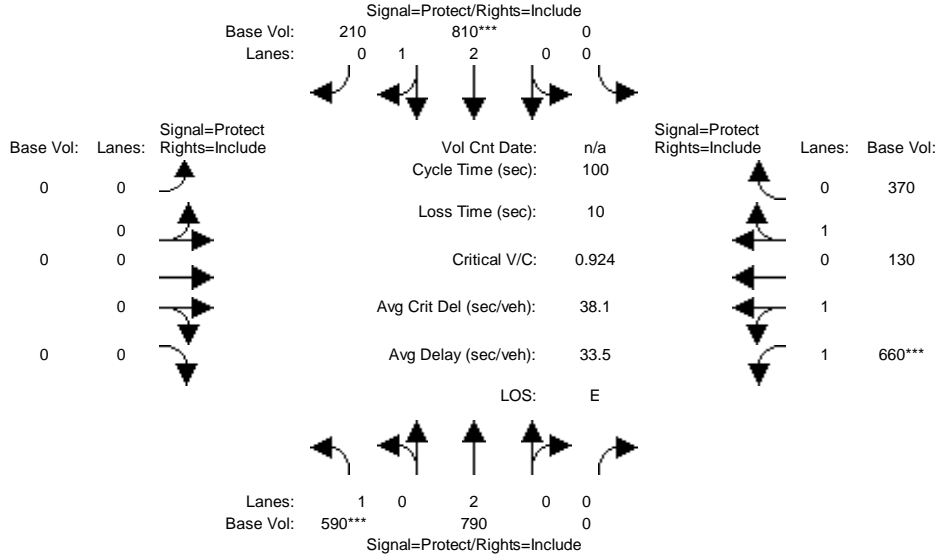


Street Name:	Avalon Blvd.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	240	830	220	350	1080	110	130	1330	230	180	1340	350
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	240	830	220	350	1080	110	130	1330	230	180	1340	350
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	240	830	220	350	1080	110	130	1330	230	180	1340	350
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	240	830	220	350	1080	110	130	1330	230	180	1340	350
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	240	830	220	350	1080	110	130	1330	230	180	1340	350
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.72	0.28	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4356	444	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.15	0.17	0.14	0.06	0.25	0.25	0.08	0.42	0.14	0.11	0.42	0.22
Crit Moves:	****				****			****			****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday PM

Intersection #14: Central Ave. & Artesia Blvd.

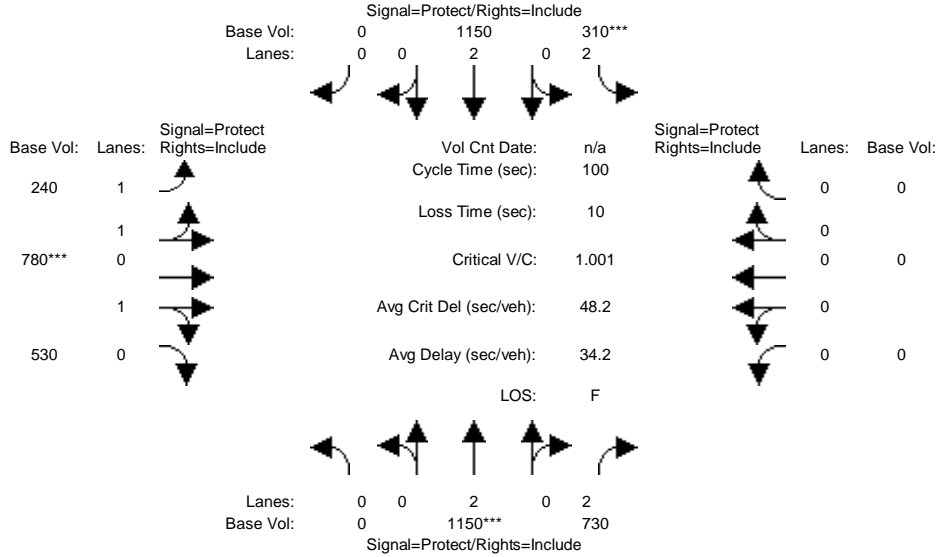


Street Name:	Central Ave.						Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	590	790	0	0	810	210	0	0	0	660	130	370
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	590	790	0	0	810	210	0	0	0	660	130	370
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	590	790	0	0	810	210	0	0	0	660	130	370
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	590	790	0	0	810	210	0	0	0	660	130	370
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	590	790	0	0	810	210	0	0	0	660	130	370
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.38	0.62	0.00	0.00	0.00	1.70	0.34	0.96
Final Sat.:	1600	3200	0	0	3812	988	0	0	0	2723	537	1540
Capacity Analysis Module:												
Vol/Sat:	0.37	0.25	0.00	0.00	0.21	0.21	0.00	0.00	0.00	0.24	0.24	0.24
Crit Moves:	****				****					****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday PM

Intersection #15: Central Ave. & Albertoni St./Artesia Blvd. EB

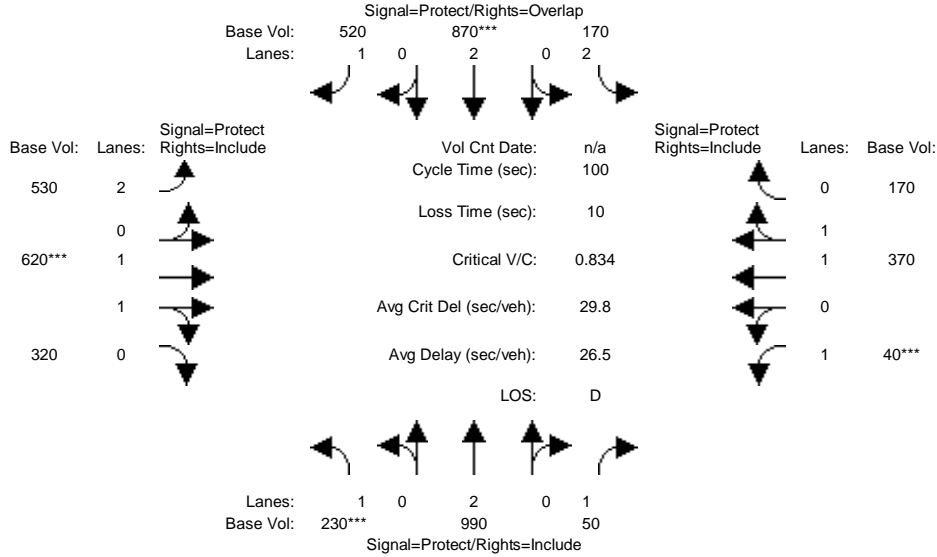


Street Name:	Central Ave.						Albertoni St./Artesia Blvd. EB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1150	730	310	1150	0	240	780	530	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1150	730	310	1150	0	240	780	530	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1150	730	310	1150	0	240	780	530	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1150	730	310	1150	0	240	780	530	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	1150	730	310	1150	0	240	780	530	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	1600	1600	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.36	0.23	0.05	0.36	0.00	0.15	0.49	0.33	0.00	0.00	0.00
Crit Moves:		****		****				****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday PM

Intersection #16: Central Ave. & Victoria St.

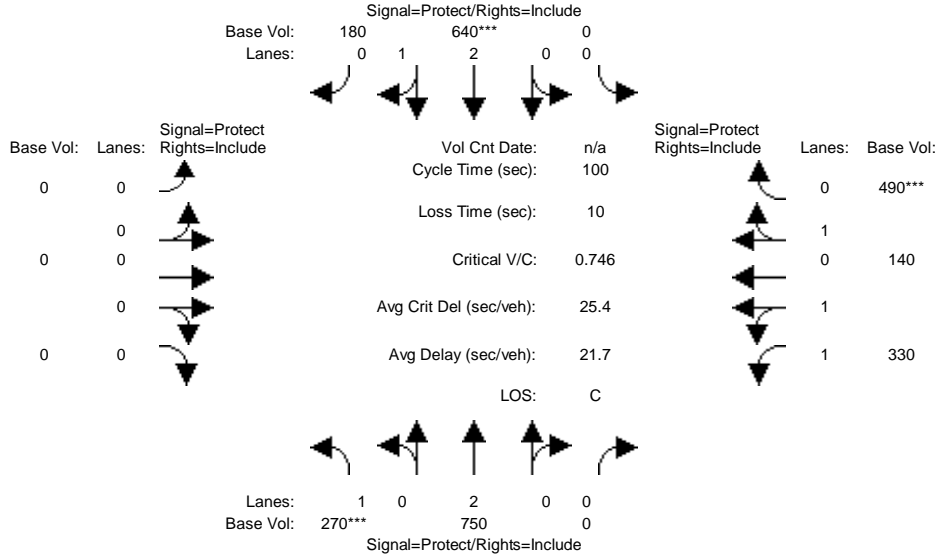


Street Name:	Central Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	230	990	50	170	870	520	530	620	320	40	370	170
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	230	990	50	170	870	520	530	620	320	40	370	170
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	230	990	50	170	870	520	530	620	320	40	370	170
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	230	990	50	170	870	520	530	620	320	40	370	170
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	230	990	50	170	870	520	530	620	320	40	370	170
OvlAdjVol:	373											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.32	0.68	1.00	1.37	0.63
Final Sat.:	1600	3200	1600	5760	3200	1600	5760	2111	1089	1600	2193	1007
Capacity Analysis Module:												
Vol/Sat:	0.14	0.31	0.03	0.03	0.27	0.33	0.09	0.29	0.29	0.03	0.17	0.17
OvlAdjV/S:	0.23											
Crit Moves:	***			***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday PM

Intersection #17: Wilmington Ave. & Artesia Blvd. WB

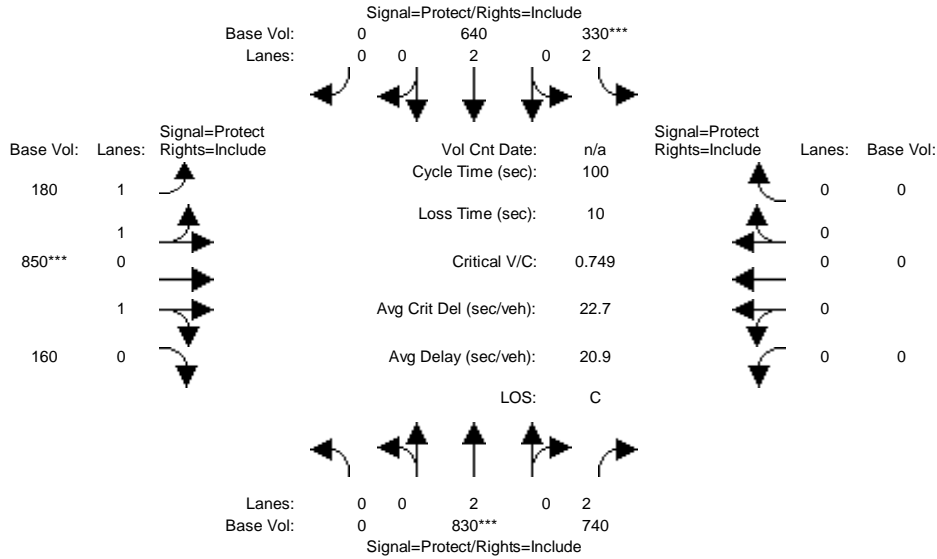


Street Name:	Wilmington Ave.						Artesia Blvd. WB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	270	750	0	0	640	180	0	0	0	330	140	490
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	270	750	0	0	640	180	0	0	0	330	140	490
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	270	750	0	0	640	180	0	0	0	330	140	490
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	270	750	0	0	640	180	0	0	0	330	140	490
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	270	750	0	0	640	180	0	0	0	330	140	490
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.34	0.66	0.00	0.00	0.00	1.40	0.60	1.00
Final Sat.:	1600	3200	0	0	3746	1054	0	0	0	2247	953	1600
Capacity Analysis Module:												
Vol/Sat:	0.17	0.23	0.00	0.00	0.17	0.17	0.00	0.00	0.00	0.15	0.15	0.31
Crit Moves:	****				****							****

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday PM

Intersection #18: Wilmington Ave. & Artesia Blvd. EB

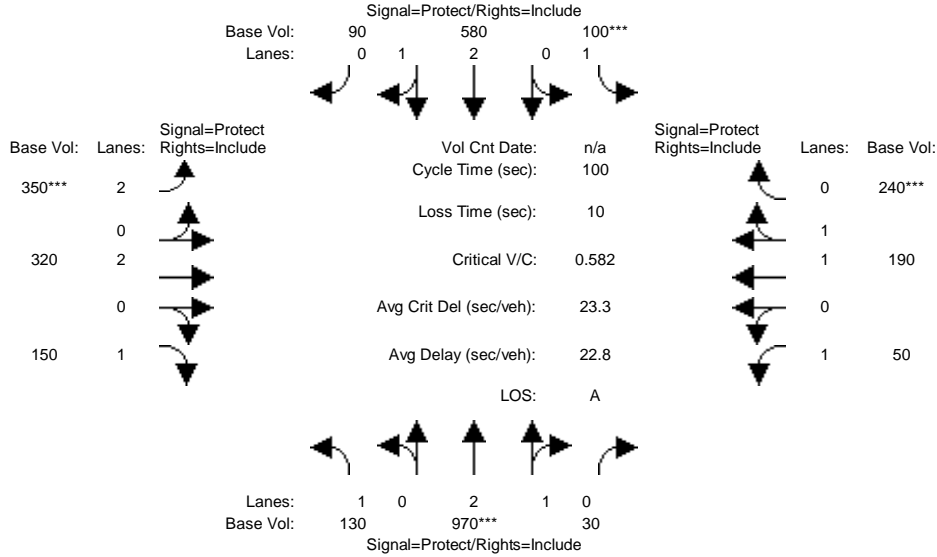


Street Name:	Wilmington Ave.						Artesia Blvd. EB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	830	740	330	640	0	180	850	160	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	830	740	330	640	0	180	850	160	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	830	740	330	640	0	180	850	160	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	830	740	330	640	0	180	850	160	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	830	740	330	640	0	180	850	160	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.00	1.60	0.40	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	1600	2557	643	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.23	0.06	0.20	0.00	0.11	0.33	0.25	0.00	0.00	0.00
Crit Moves:		****		****				****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday PM

Intersection #19: Wilmington Ave. & Victoria St.

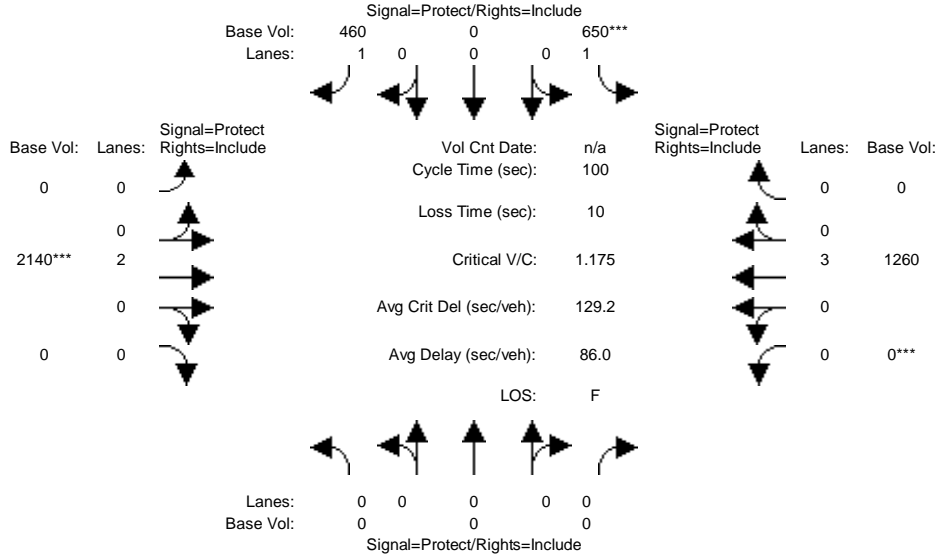


Street Name:	Wilmington Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	130	970	30	100	580	90	350	320	150	50	190	240
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	970	30	100	580	90	350	320	150	50	190	240
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	970	30	100	580	90	350	320	150	50	190	240
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	970	30	100	580	90	350	320	150	50	190	240
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	130	970	30	100	580	90	350	320	150	50	190	240
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.91	0.09	1.00	2.60	0.40	2.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	4656	144	1600	4155	645	5760	3200	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.21	0.21	0.06	0.14	0.14	0.06	0.10	0.09	0.03	0.12	0.15
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday PM

Intersection #20: I-110 SB Off-Ramp & 190th St.

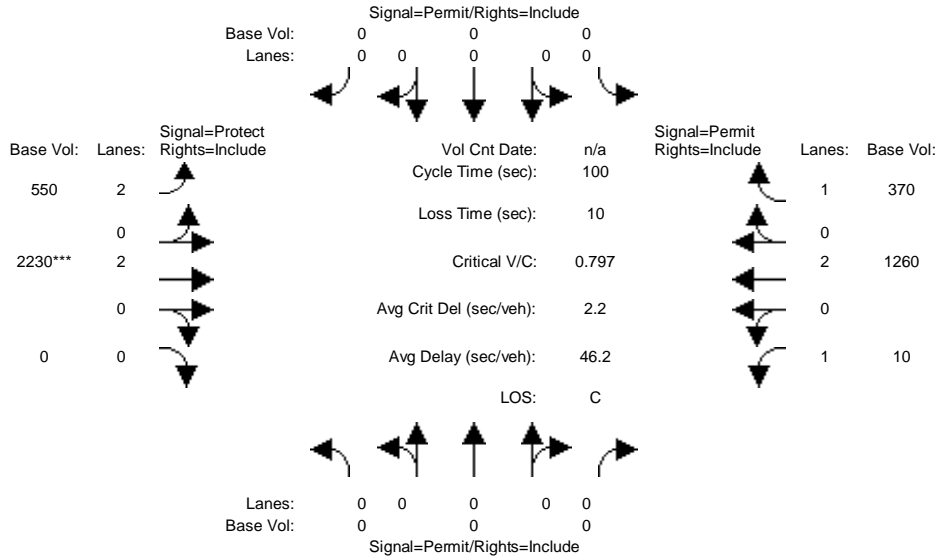


Street Name:	I-110 SB Off-Ramp						190th St.														
Approach:	North Bound			South Bound			East Bound			West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																					
Base Vol:	0	0	0	650	0	460	0	2140	0	0	1260	0	0	0	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	650	0	460	0	2140	0	0	1260	0	0	0	0	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	650	0	460	0	2140	0	0	1260	0	0	0	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	650	0	460	0	2140	0	0	1260	0	0	0	0	0	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	650	0	460	0	2140	0	0	1260	0	0	0	0	0	0	0	0	0	0
Saturation Flow Module:																					
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0	0	0	0	0	0	0	0	0	0
Capacity Analysis Module:																					
Vol/Sat:	0.00	0.00	0.00	0.41	0.00	0.29	0.00	0.67	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crit Moves:				****				****													

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday PM

Intersection #21: I-110 NB On-Ramp & 190th St.

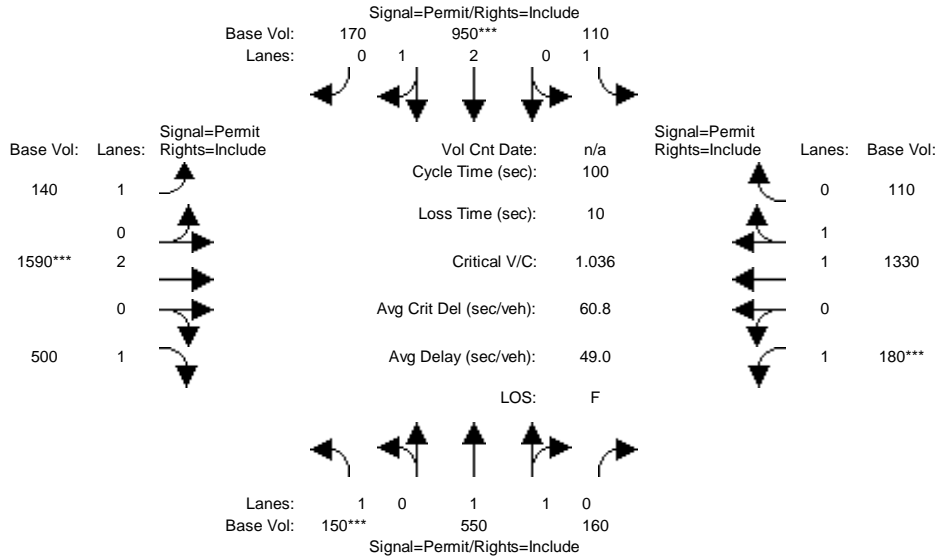


Street Name:	I-110 NB On-Ramp						190th St.													
Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																				
Base Vol:	0	0	0	0	0	0	550	2230	0	10	1260	370								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	550	2230	0	10	1260	370								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	550	2230	0	10	1260	370								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	0	0	0	0	0	0	550	2230	0	10	1260	370								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	550	2230	0	10	1260	370								
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00								
Final Sat.:	0	0	0	0	0	0	5760	3200	0	1600	3200	1600								
Capacity Analysis Module:																				
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.70	0.00	0.01	0.39	0.23								
Crit Moves:													****							

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday PM

Intersection #22: Figueroa St. & 190th St./Victoria St.

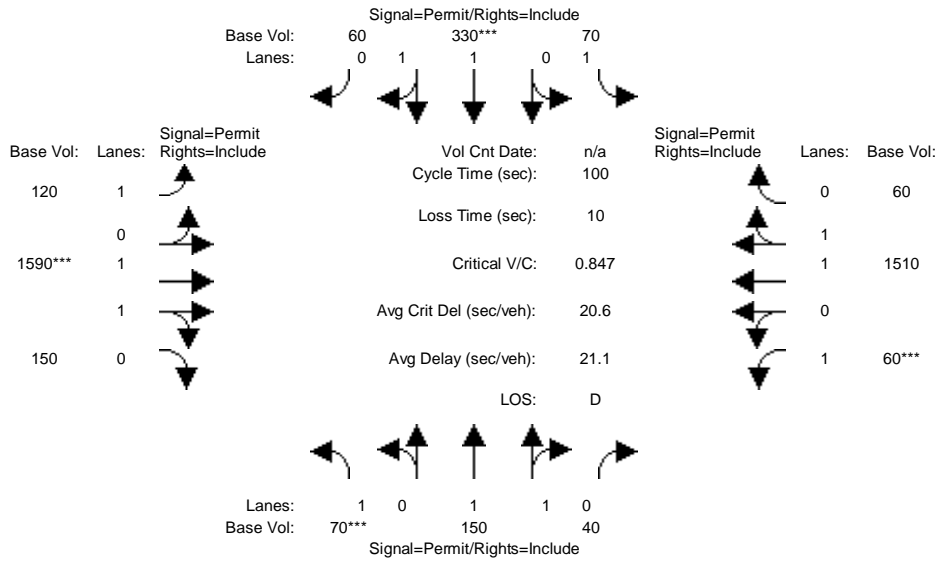


Street Name:	Figueroa St.						190th St./Victoria St.														
Approach:	North Bound			South Bound			East Bound			West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																					
Base Vol:	150	550	160	110	950	170	140	1590	500	180	1330	110									
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
Initial Bse:	150	550	160	110	950	170	140	1590	500	180	1330	110									
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
PHF Volume:	150	550	160	110	950	170	140	1590	500	180	1330	110									
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0									
Reduced Vol:	150	550	160	110	950	170	140	1590	500	180	1330	110									
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
FinalVolume:	150	550	160	110	950	170	140	1590	500	180	1330	110									
Saturation Flow Module:																					
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600									
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
Lanes:	1.00	1.55	0.45	1.00	2.54	0.46	1.00	2.00	1.00	1.00	1.85	0.15									
Final Sat.:	1600	2479	721	1600	4071	729	1600	3200	1600	1600	2956	244									
Capacity Analysis Module:																					
Vol/Sat:	0.09	0.22	0.22	0.07	0.23	0.23	0.09	0.50	0.31	0.11	0.45	0.45									
Crit Moves:	****				****			****			****										

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday PM

Intersection #23: Broadway & Victoria St.

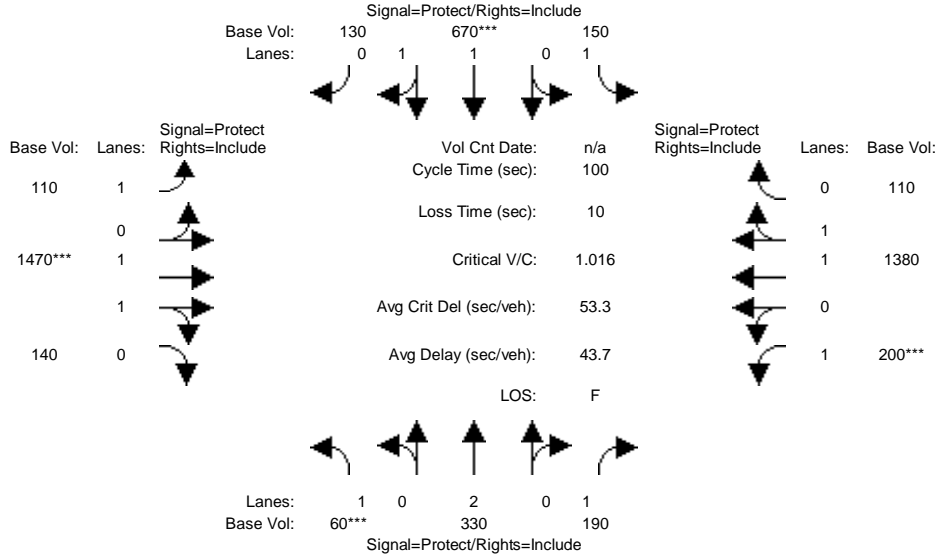


Street Name:	Broadway						Victoria St.													
Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Volume Module:																				
Base Vol:	70	150	40	70	330	60	120	1590	150	60	1510	60								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	70	150	40	70	330	60	120	1590	150	60	1510	60								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Volume:	70	150	40	70	330	60	120	1590	150	60	1510	60								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	70	150	40	70	330	60	120	1590	150	60	1510	60								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
FinalVolume:	70	150	40	70	330	60	120	1590	150	60	1510	60								
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600								
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Lanes:	1.00	1.58	0.42	1.00	1.69	0.31	1.00	1.83	0.17	1.00	1.92	0.08								
Final Sat.:	1600	2526	674	1600	2708	492	1600	2924	276	1600	3078	122								
Capacity Analysis Module:																				
Vol/Sat:	0.04	0.06	0.06	0.04	0.12	0.12	0.08	0.54	0.54	0.04	0.49	0.49								
Crit Moves:	****				****		****			****										

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday PM

Intersection #24: Main St. & Victoria St.

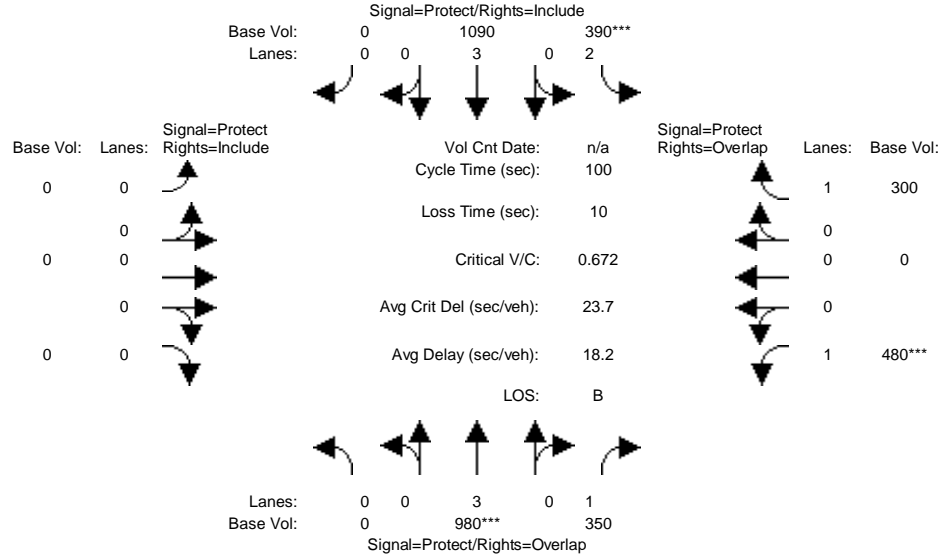


Street Name:	Main St.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	60	330	190	150	670	130	110	1470	140	200	1380	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	330	190	150	670	130	110	1470	140	200	1380	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	330	190	150	670	130	110	1470	140	200	1380	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	330	190	150	670	130	110	1470	140	200	1380	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	330	190	150	670	130	110	1470	140	200	1380	110
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.68	0.32	1.00	1.83	0.17	1.00	1.85	0.15
Final Sat.:	1600	3200	1600	1600	2680	520	1600	2922	278	1600	2964	236
Capacity Analysis Module:												
Vol/Sat:	0.04	0.10	0.12	0.09	0.25	0.25	0.07	0.50	0.50	0.13	0.47	0.47
Crit Moves:	****				****		****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday PM

Intersection #25: Avalon Blvd. & University Dr.

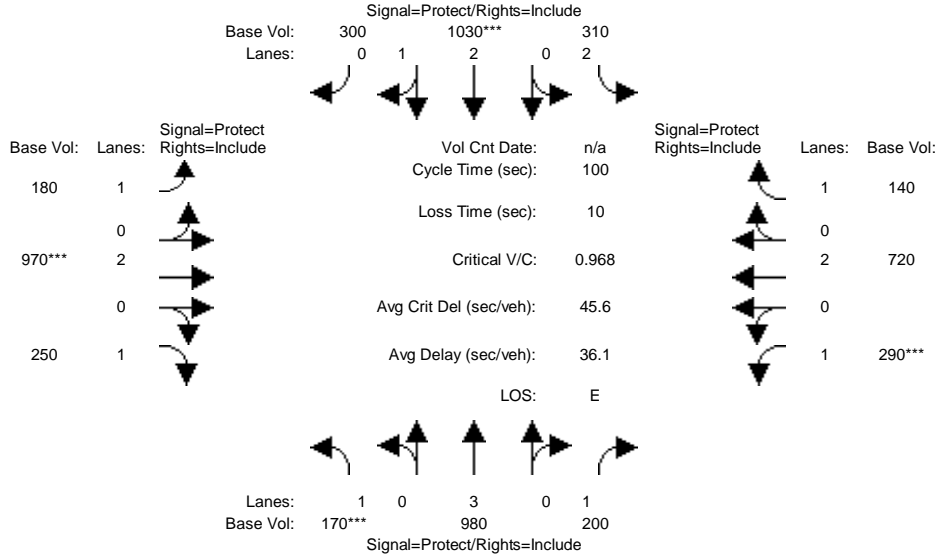


Street Name:	Avalon Blvd.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	980	350	390	1090	0	0	0	0	480	0	300
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	980	350	390	1090	0	0	0	0	480	0	300
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	980	350	390	1090	0	0	0	0	480	0	300
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	980	350	390	1090	0	0	0	0	480	0	300
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	980	350	390	1090	0	0	0	0	480	0	300
OvlAdjVol:												192
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.22	0.07	0.23	0.00	0.00	0.00	0.00	0.30	0.00	0.19
OvlAdjV/S:												0.12
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday PM

Intersection #26: Avalon Blvd. & Del Amo Blvd.

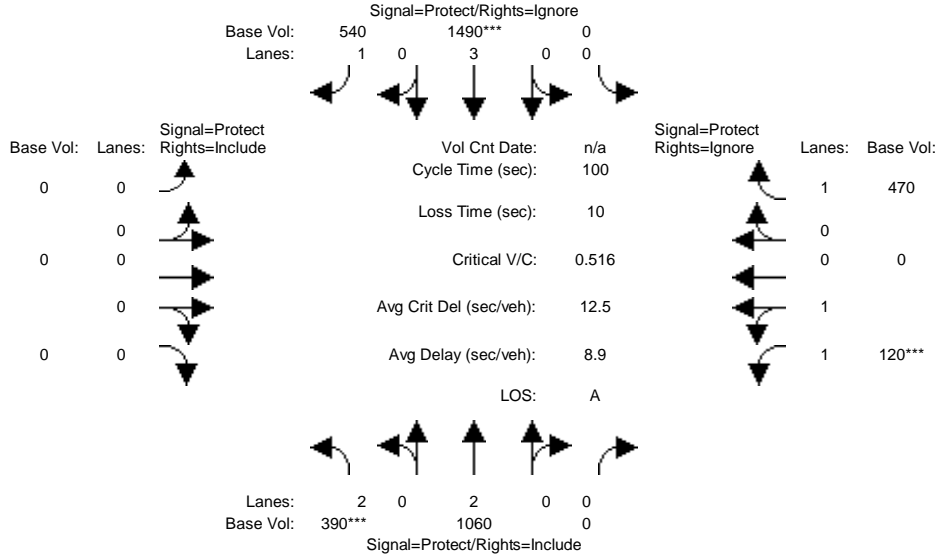


Street Name:	Avalon Blvd.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	170	980	200	310	1030	300	180	970	250	290	720	140
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	170	980	200	310	1030	300	180	970	250	290	720	140
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	170	980	200	310	1030	300	180	970	250	290	720	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	170	980	200	310	1030	300	180	970	250	290	720	140
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	170	980	200	310	1030	300	180	970	250	290	720	140
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.32	0.68	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	3717	1083	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.20	0.13	0.05	0.28	0.28	0.11	0.30	0.16	0.18	0.23	0.09
Crit Moves:	****				****		****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday PM

Intersection #27: Avalon Blvd. & I-405 NB Ramps

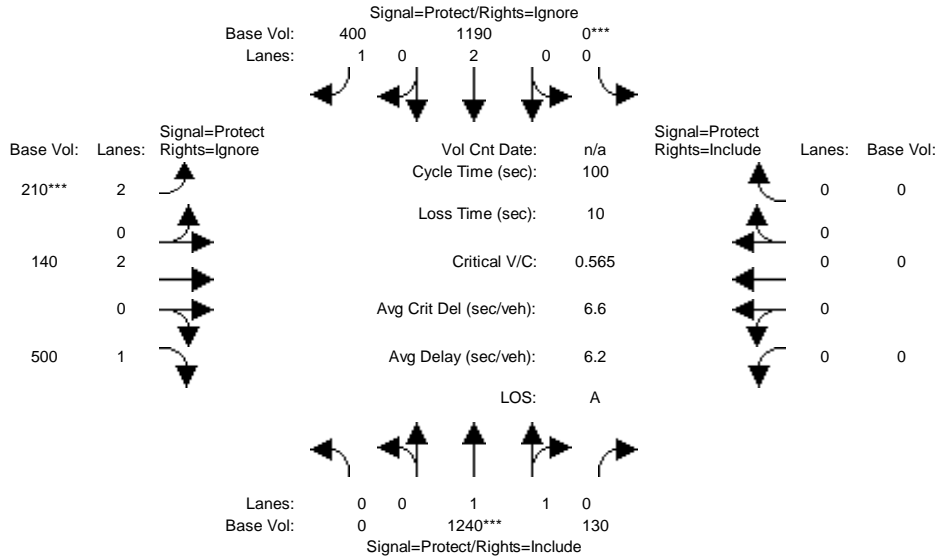


Street Name:	Avalon Blvd.						I-405 NB Ramps													
Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																				
Base Vol:	390	1060	0	0	1490	540	0	0	0	120	0	470								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	390	1060	0	0	1490	540	0	0	0	120	0	470								
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00								
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00								
PHF Volume:	390	1060	0	0	1490	0	0	0	0	120	0	0								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	390	1060	0	0	1490	0	0	0	0	120	0	0								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00								
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00								
FinalVolume:	390	1060	0	0	1490	0	0	0	0	120	0	0								
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	2.00	0.00	1.00								
Final Sat.:	5760	3200	0	0	4800	1600	0	0	0	3200	0	1600								
Capacity Analysis Module:																				
Vol/Sat:	0.07	0.33	0.00	0.00	0.31	0.00	0.00	0.00	0.00	0.04	0.00	0.00								
Crit Moves:	****				****					****										

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday PM

Intersection #28: Avalon Blvd. & I-405 SB Ramps

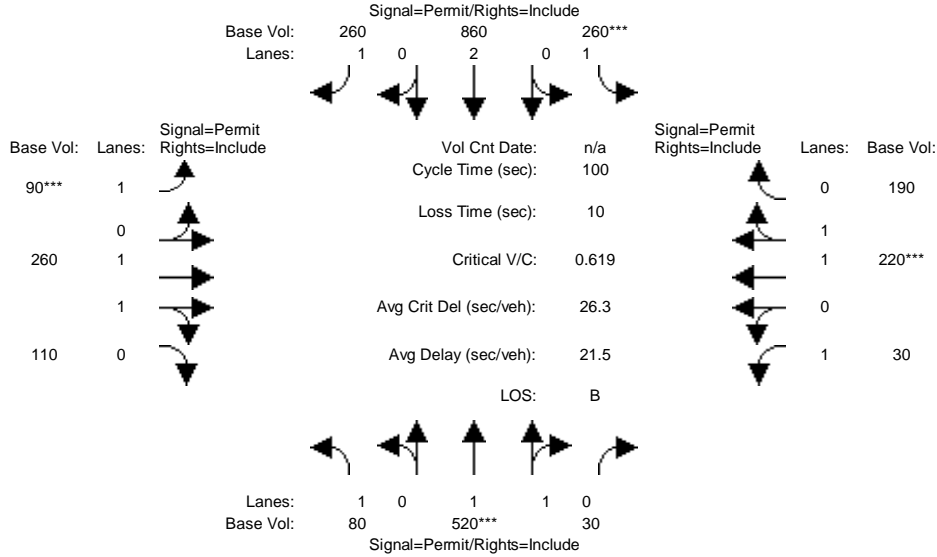


Street Name:	Avalon Blvd.						I-405 SB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1240	130	0	1190	400	210	140	500	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1240	130	0	1190	400	210	140	500	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	1240	130	0	1190	0	210	140	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1240	130	0	1190	0	210	140	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Volume:	0	1240	130	0	1190	0	210	140	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.81	0.19	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	0	2896	304	0	3200	1600	5760	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.43	0.43	0.00	0.37	0.00	0.04	0.04	0.00	0.00	0.00	0.00
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday PM

Intersection #29: Central Ave. & University Dr.

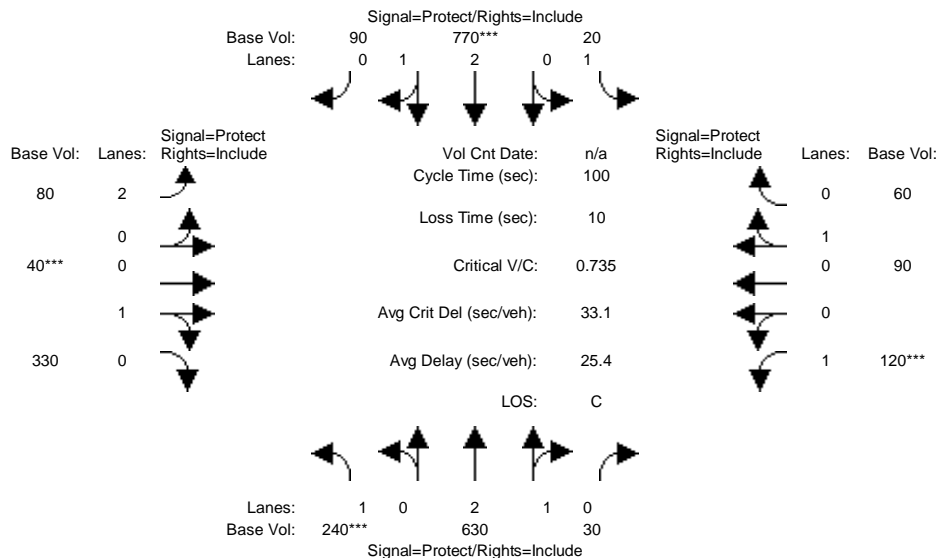


Street Name:	Central Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	80	520	30	260	860	260	90	260	110	30	220	190
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	520	30	260	860	260	90	260	110	30	220	190
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	520	30	260	860	260	90	260	110	30	220	190
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	520	30	260	860	260	90	260	110	30	220	190
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	520	30	260	860	260	90	260	110	30	220	190
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.89	0.11	1.00	2.00	1.00	1.00	1.41	0.59	1.00	1.07	0.93
Final Sat.:	1600	3025	175	1600	3200	1600	1600	2249	951	1600	1717	1483
Capacity Analysis Module:												
Vol/Sat:	0.05	0.17	0.17	0.16	0.27	0.16	0.06	0.12	0.12	0.02	0.13	0.13
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday PM

Intersection #30: Wilmington Ave. & University Dr.

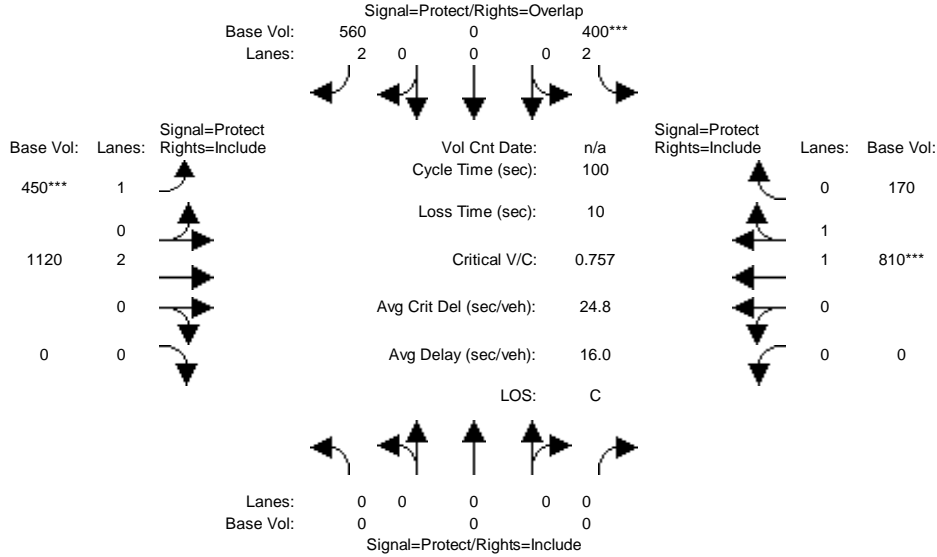


Street Name:	Wilmington Ave.						University Dr.													
Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																				
Base Vol:	240	630	30	20	770	90	80	40	330	120	90	60								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	240	630	30	20	770	90	80	40	330	120	90	60								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Volume:	240	630	30	20	770	90	80	40	330	120	90	60								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	240	630	30	20	770	90	80	40	330	120	90	60								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
FinalVolume:	240	630	30	20	770	90	80	40	330	120	90	60								
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600								
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00								
Lanes:	1.00	2.86	0.14	1.00	2.69	0.31	2.00	0.11	0.89	1.00	0.60	0.40								
Final Sat.:	1600	4582	218	1600	4298	502	5760	173	1427	1600	960	640								
Capacity Analysis Module:																				
Vol/Sat:	0.15	0.14	0.14	0.01	0.18	0.18	0.01	0.23	0.23	0.08	0.09	0.09								
Crit Moves:	****				****		****			****										

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday PM

Intersection #31: Central Ave. & Del Amo Blvd.

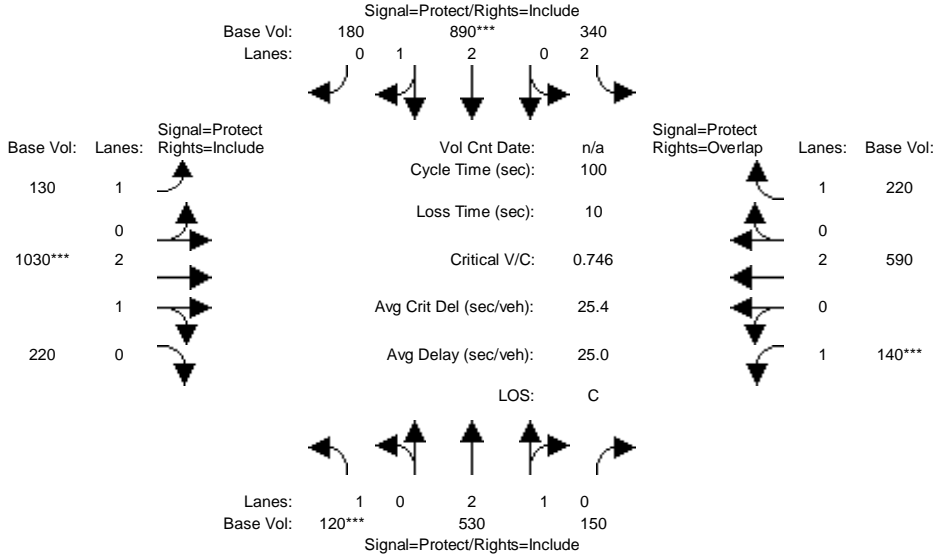


Street Name:	Central Ave.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	400	0	560	450	1120	0	0	810	170
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	400	0	560	450	1120	0	0	810	170
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	400	0	560	450	1120	0	0	810	170
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	400	0	560	450	1120	0	0	810	170
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	400	0	560	450	1120	0	0	810	170
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	2.00	1.00	2.00	0.00	0.00	1.65	0.35
Final Sat.:	0	0	0	5760	0	3200	1600	3200	0	0	2645	555
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.07	0.00	0.17	0.28	0.35	0.00	0.00	0.31	0.31
OvlAdjV/S:							0.00					
Crit Moves:				****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday PM

Intersection #32: Wilmington Ave. & Del Amo Blvd.

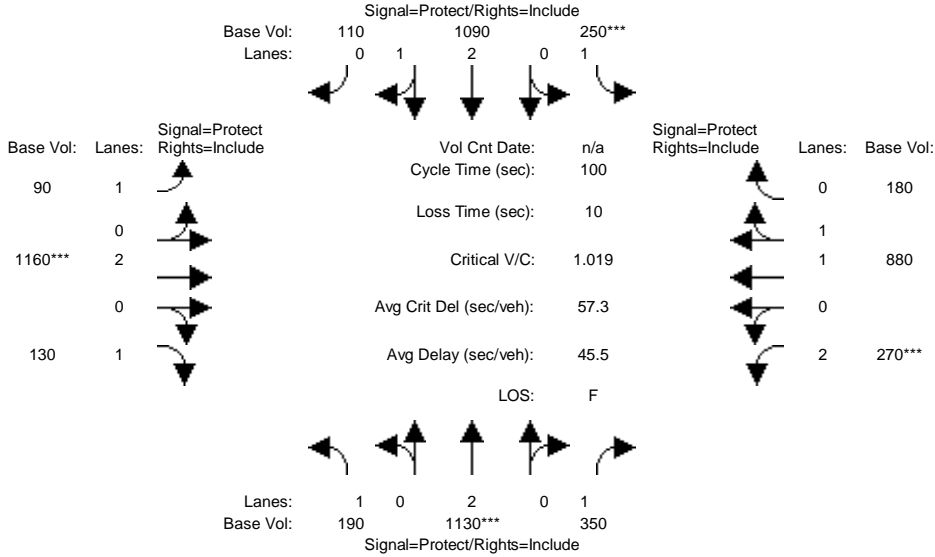


Street Name:	Wilmington Ave.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	120	530	150	340	890	180	130	1030	220	140	590	220
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	120	530	150	340	890	180	130	1030	220	140	590	220
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	120	530	150	340	890	180	130	1030	220	140	590	220
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	530	150	340	890	180	130	1030	220	140	590	220
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	120	530	150	340	890	180	130	1030	220	140	590	220
OvlAdjVol:												126
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.34	0.66	2.00	2.50	0.50	1.00	2.47	0.53	1.00	2.00	1.00
Final Sat.:	1600	3741	1059	5760	3993	807	1600	3955	845	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.14	0.14	0.06	0.22	0.22	0.08	0.26	0.26	0.09	0.18	0.14
OvlAdjV/S:												0.08
Crit Moves:	***			***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday PM

Intersection #33: W. Artesia Blvd. & Crenshaw Blvd.

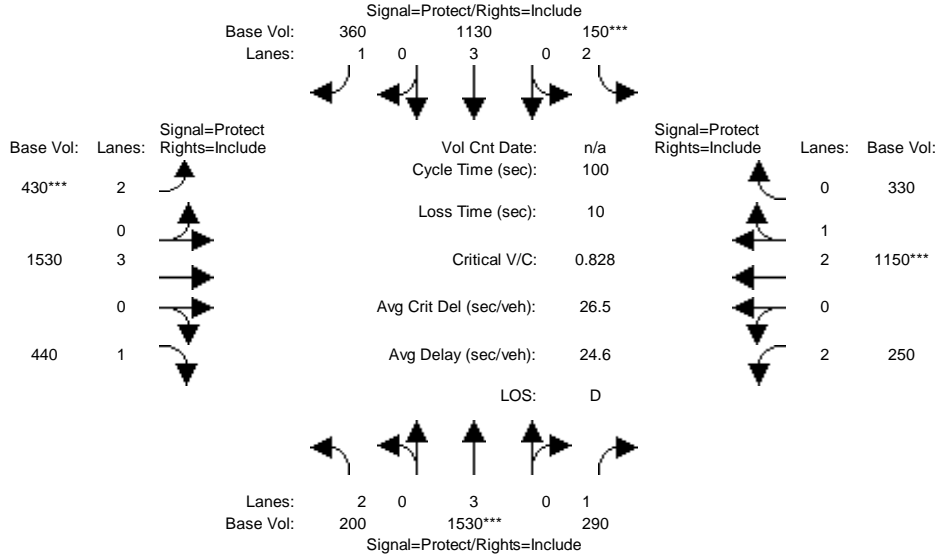


Street Name:	Crenshaw Blvd.						W. Artesia Blvd.													
Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																				
Base Vol:	190	1130	350	250	1090	110	90	1160	130	270	880	180								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							
Initial Bse:	190	1130	350	250	1090	110	90	1160	130	270	880	180								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							
PHF Volume:	190	1130	350	250	1090	110	90	1160	130	270	880	180								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0							
Reduced Vol:	190	1130	350	250	1090	110	90	1160	130	270	880	180								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							
FinalVolume:	190	1130	350	250	1090	110	90	1160	130	270	880	180								
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600							
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00							
Lanes:	1.00	2.00	1.00	1.00	2.72	0.28	1.00	2.00	1.00	2.00	1.66	0.34	0.34							
Final Sat.:	1600	3200	1600	1600	4360	440	1600	3200	1600	5760	2657	543	543							
Capacity Analysis Module:																				
Vol/Sat:	0.12	0.35	0.22	0.16	0.25	0.25	0.06	0.36	0.08	0.05	0.33	0.33	0.33							
Crit Moves:		****		****				****		****										

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday PM

Intersection #34: W 190th St. & South Western Ave.

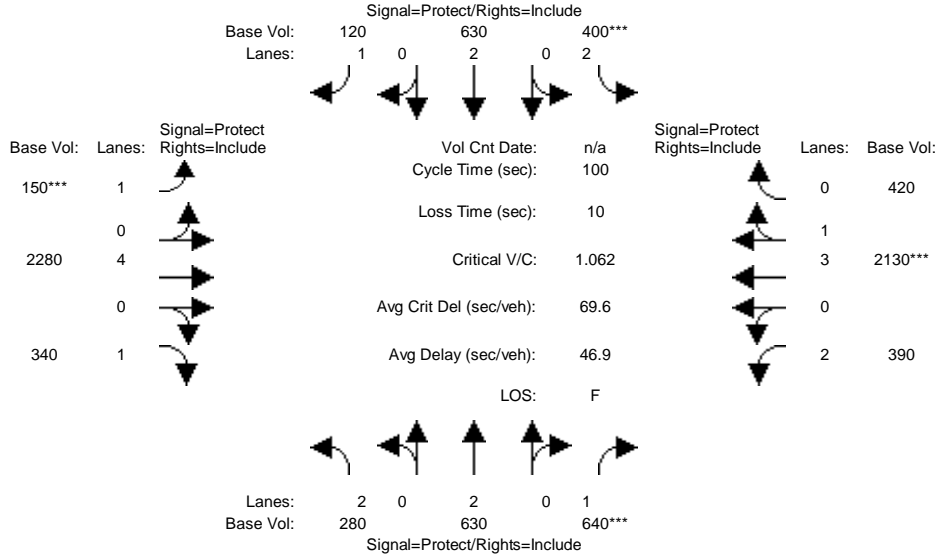


Street Name:	S. Western Ave.						W. 190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	200	1530	290	150	1130	360	430	1530	440	250	1150	330
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	200	1530	290	150	1130	360	430	1530	440	250	1150	330
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	200	1530	290	150	1130	360	430	1530	440	250	1150	330
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	200	1530	290	150	1130	360	430	1530	440	250	1150	330
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	200	1530	290	150	1130	360	430	1530	440	250	1150	330
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.33	0.67
Final Sat.:	5760	4800	1600	5760	4800	1600	5760	4800	1600	5760	3730	1070
Capacity Analysis Module:												
Vol/Sat:	0.03	0.32	0.18	0.03	0.24	0.23	0.07	0.32	0.28	0.04	0.31	0.31
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday PM

Intersection #35: W. Artesia Blvd. & Vermont Av.e

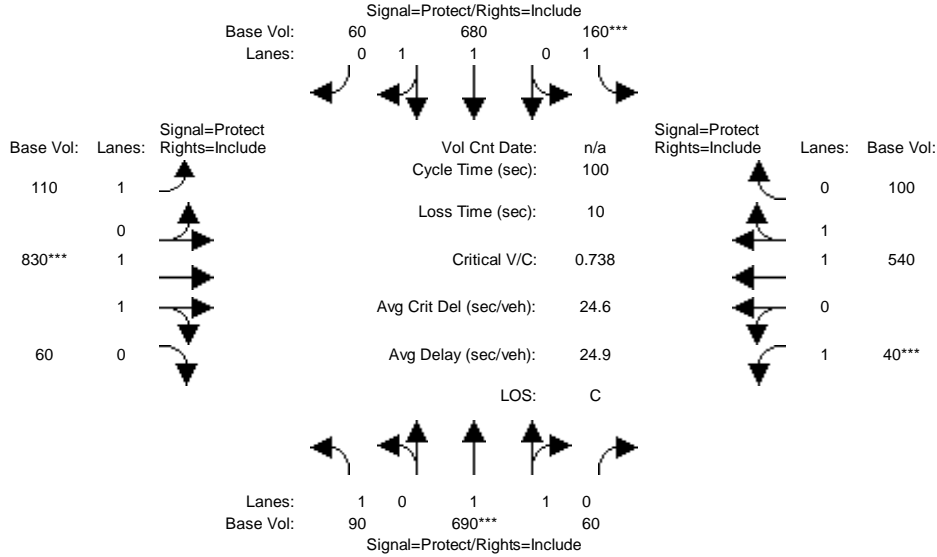


Street Name:	Vermont Ave.						W. Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	280	630	640	400	630	120	150	2280	340	390	2130	420
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	280	630	640	400	630	120	150	2280	340	390	2130	420
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	280	630	640	400	630	120	150	2280	340	390	2130	420
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	280	630	640	400	630	120	150	2280	340	390	2130	420
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	280	630	640	400	630	120	150	2280	340	390	2130	420
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	1.00	4.00	1.00	2.00	3.34	0.66
Final Sat.:	5760	3200	1600	5760	3200	1600	1600	6400	1600	5760	5346	1054
Capacity Analysis Module:												
Vol/Sat:	0.05	0.20	0.40	0.07	0.20	0.08	0.09	0.36	0.21	0.07	0.40	0.40
Crit Moves:			****	****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday PM

Intersection #36: Alameda St. & Compton Blvd.

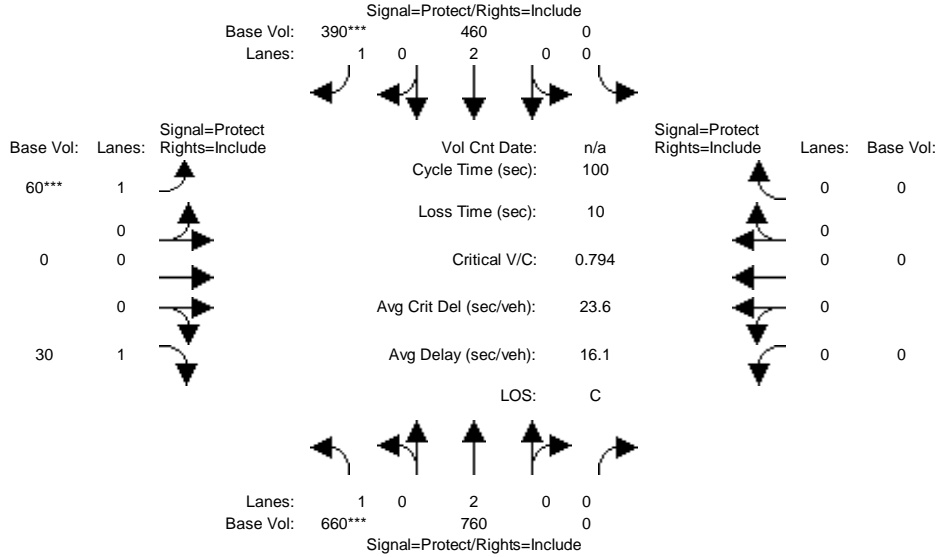


Street Name:	Alameda St.						Compton Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	90	690	60	160	680	60	110	830	60	40	540	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	690	60	160	680	60	110	830	60	40	540	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	690	60	160	680	60	110	830	60	40	540	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	690	60	160	680	60	110	830	60	40	540	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	690	60	160	680	60	110	830	60	40	540	100
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.84	0.16	1.00	1.84	0.16	1.00	1.87	0.13	1.00	1.69	0.31
Final Sat.:	1600	2944	256	1600	2941	259	1600	2984	216	1600	2700	500
Capacity Analysis Module:												
Vol/Sat:	0.06	0.23	0.23	0.10	0.23	0.23	0.07	0.28	0.28	0.03	0.20	0.20
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 With Project Alt2 Weekday PM

Intersection #37: Alameda St. & SR 91 EB Ramps

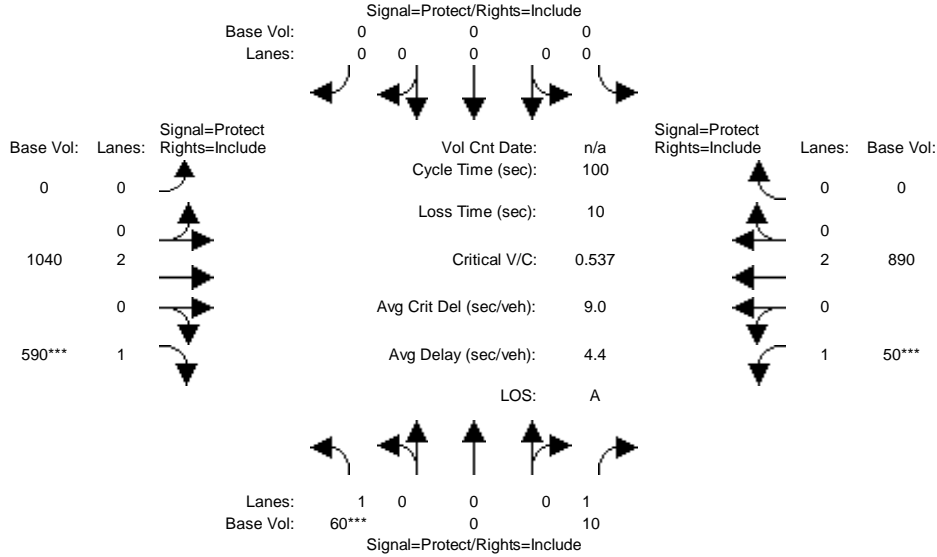


Street Name:	Alameda St.						SR 91 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	660	760	0	0	460	390	60	0	30	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	660	760	0	0	460	390	60	0	30	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	660	760	0	0	460	390	60	0	30	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	660	760	0	0	460	390	60	0	30	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	660	760	0	0	460	390	60	0	30	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	3200	0	0	3200	1600	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.41	0.24	0.00	0.00	0.14	0.24	0.04	0.00	0.02	0.00	0.00	0.00
Crit Moves:	****					****	****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM Mitigated

Intersection #1: Victoria St. & Drive D

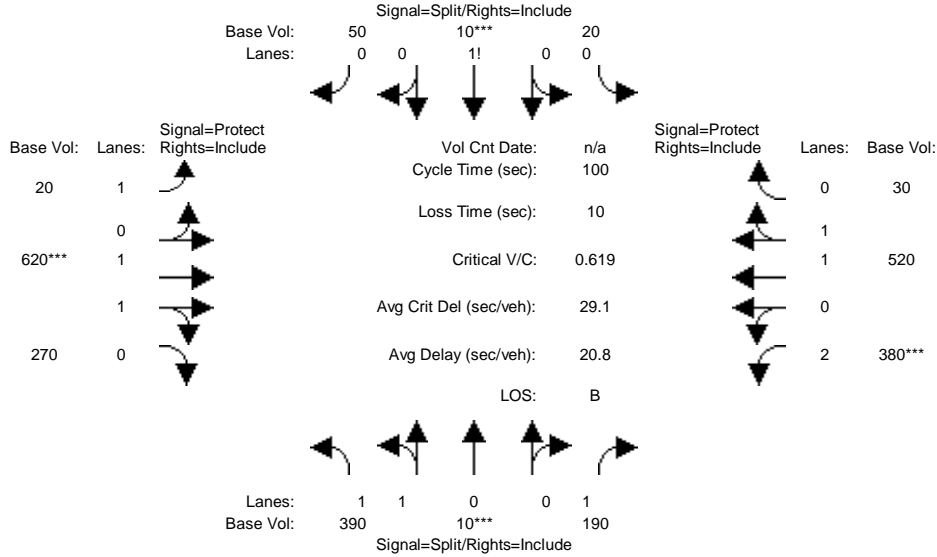


Street Name:	Drive D						Victoria St..					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	60	0	10	0	0	0	0	1040	590	50	890	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	0	10	0	0	0	0	1040	590	50	890	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	0	10	0	0	0	0	1040	590	50	890	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	0	10	0	0	0	0	1040	590	50	890	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	0	10	0	0	0	0	1040	590	50	890	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	1600	0	1600	0	0	0	0	3200	1600	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.04	0.00	0.01	0.00	0.00	0.00	0.00	0.33	0.37	0.03	0.28	0.00
Crit Moves:	****								****	****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM Mitigated

Intersection #3: Victoria St. & Birchknoll Dr.

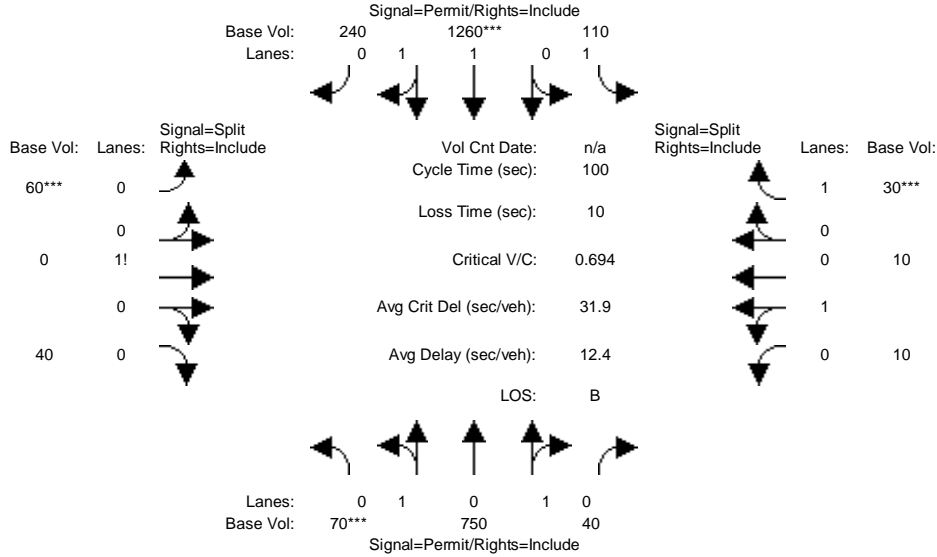


Street Name:	Victoria St.						Birchknoll Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	390	10	190	20	10	50	20	620	270	380	520	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	390	10	190	20	10	50	20	620	270	380	520	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	390	10	190	20	10	50	20	620	270	380	520	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	390	10	190	20	10	50	20	620	270	380	520	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	390	10	190	20	10	50	20	620	270	380	520	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	1.95	0.05	1.00	0.25	0.12	0.63	1.00	1.39	0.61	2.00	1.89	0.11
Final Sat.:	3120	80	1600	400	200	1000	1600	2229	971	5760	3025	175
Capacity Analysis Module:												
Vol/Sat:	0.13	0.13	0.12	0.05	0.05	0.05	0.01	0.28	0.28	0.07	0.17	0.17
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM Mitigated

Intersection #5: Central Ave. & Charles Willard St.

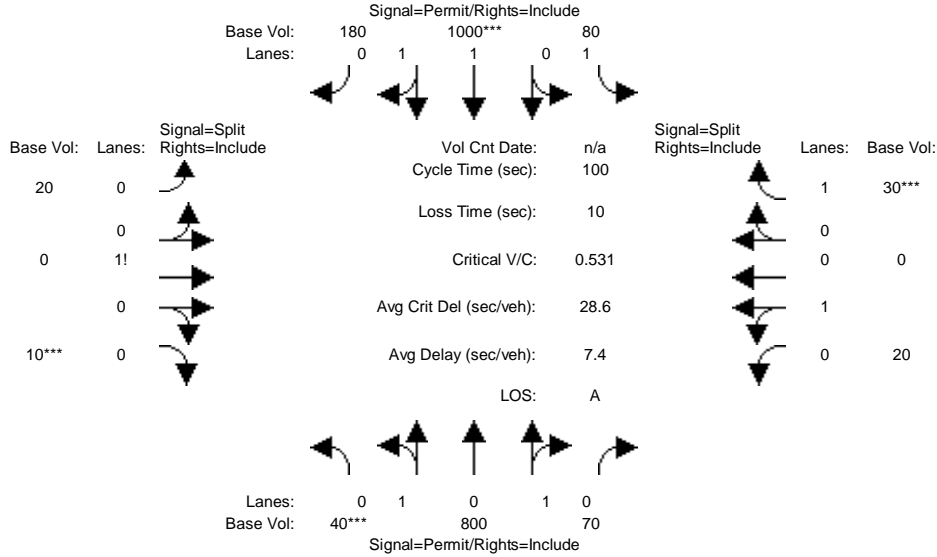


Street Name:	Central Ave.						Charles Willard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	70	750	40	110	1260	240	60	0	40	10	10	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	750	40	110	1260	240	60	0	40	10	10	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	750	40	110	1260	240	60	0	40	10	10	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	750	40	110	1260	240	60	0	40	10	10	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	70	750	40	110	1260	240	60	0	40	10	10	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.16	1.75	0.09	1.00	1.68	0.32	0.60	0.00	0.40	0.50	0.50	1.00
Final Sat.:	260	2791	149	1600	2688	512	960	0	640	800	800	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.27	0.27	0.07	0.47	0.47	0.06	0.00	0.06	0.01	0.01	0.02
Crit Moves:	****				****		****					****

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM Mitigated

Intersection #6: Central Ave. & Project Driveway/Beachey Pl.

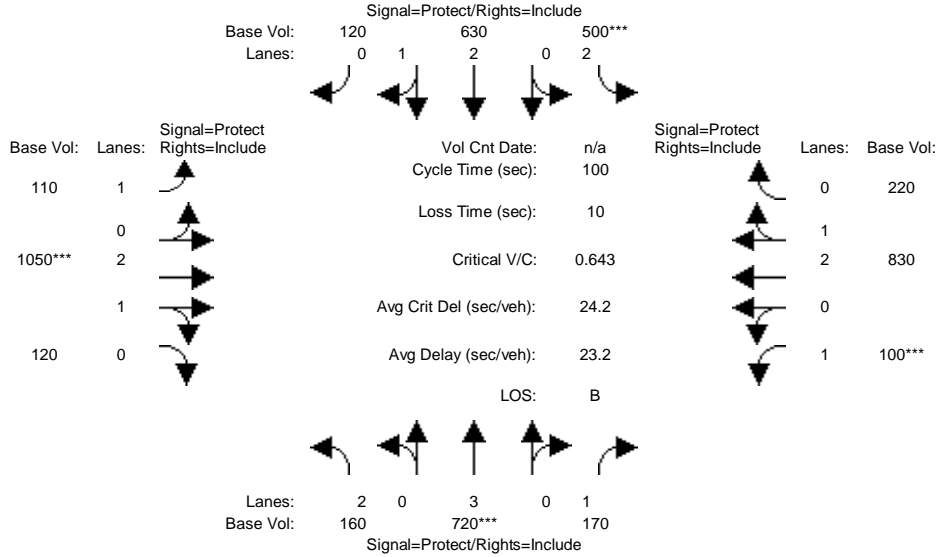


Street Name:	Central Ave.						Beachey Pl.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	40	800	70	80	1000	180	20	0	10	20	0	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	800	70	80	1000	180	20	0	10	20	0	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	800	70	80	1000	180	20	0	10	20	0	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	800	70	80	1000	180	20	0	10	20	0	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	800	70	80	1000	180	20	0	10	20	0	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.09	1.76	0.15	1.00	1.69	0.31	0.67	0.00	0.33	1.00	0.00	1.00
Final Sat.:	141	2813	246	1600	2712	488	1067	0	533	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.28	0.28	0.05	0.37	0.37	0.02	0.00	0.02	0.01	0.00	0.02
Crit Moves:	****				****				****			****

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM Mitigated

Intersection #13: Avalon Blvd. & Victoria St.

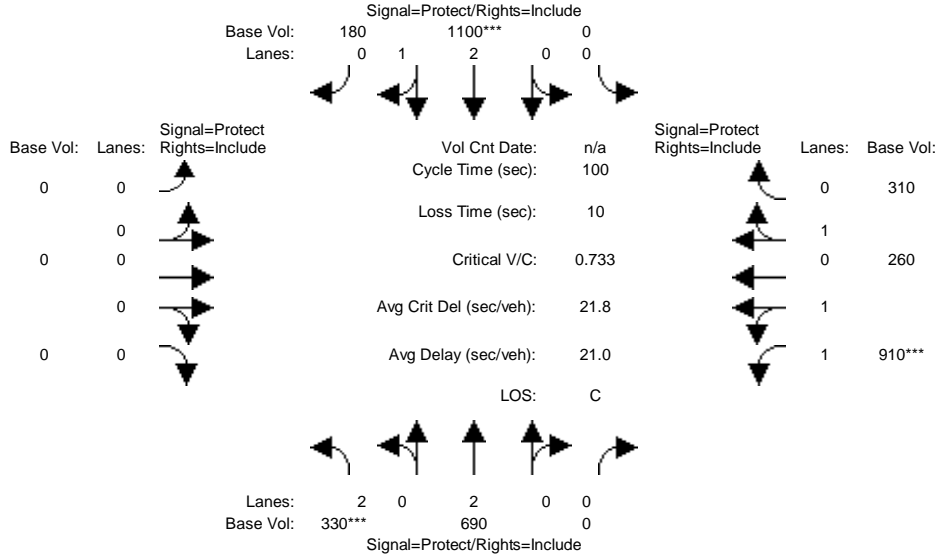


Street Name:	Avalon Blvd.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	160	720	170	500	630	120	110	1050	120	100	830	220
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	160	720	170	500	630	120	110	1050	120	100	830	220
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	160	720	170	500	630	120	110	1050	120	100	830	220
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	720	170	500	630	120	110	1050	120	100	830	220
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	160	720	170	500	630	120	110	1050	120	100	830	220
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	2.52	0.48	1.00	2.69	0.31	1.00	2.37	0.63
Final Sat.:	5760	4800	1600	5760	4032	768	1600	4308	492	1600	3794	1006
Capacity Analysis Module:												
Vol/Sat:	0.03	0.15	0.11	0.09	0.16	0.16	0.07	0.24	0.24	0.06	0.22	0.22
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM Mitigated

Intersection #14: Central Ave. & Artesia Blvd.

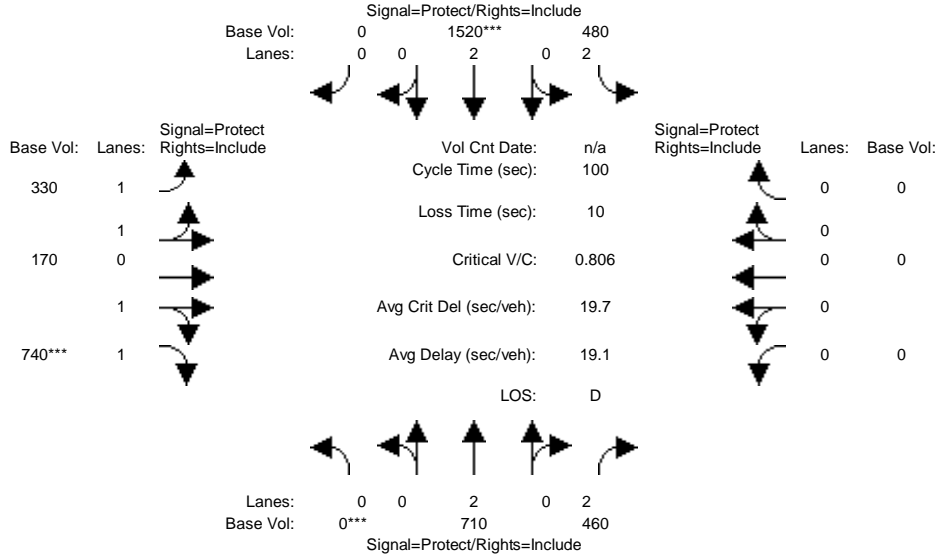


Street Name:	Central Ave.						Artesia Blvd.													
Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																				
Base Vol:	330	690	0	0	1100	180	0	0	0	910	260	310								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	330	690	0	0	1100	180	0	0	0	910	260	310								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	330	690	0	0	1100	180	0	0	0	910	260	310								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	330	690	0	0	1100	180	0	0	0	910	260	310								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	330	690	0	0	1100	180	0	0	0	910	260	310								
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	2.58	0.42	0.00	0.00	0.00	1.84	0.53	0.63								
Final Sat.:	5760	3200	0	0	4125	675	0	0	0	2947	845	1008								
Capacity Analysis Module:																				
Vol/Sat:	0.06	0.22	0.00	0.00	0.27	0.27	0.00	0.00	0.00	0.31	0.31	0.31								
Crit Moves:	****				****					****										

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM Mitigated

Intersection #15: Central Ave. & Albertoni St./Artesia Blvd. EB

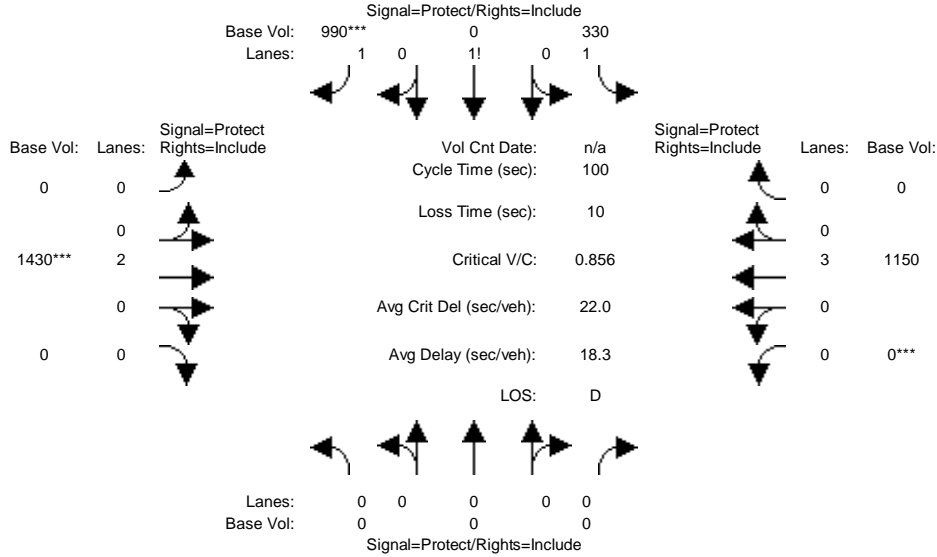


Street Name:	Central Ave.						Albertoni St./Artesia Blvd. EB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	710	460	480	1520	0	330	170	740	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	710	460	480	1520	0	330	170	740	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	710	460	480	1520	0	330	170	740	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	710	460	480	1520	0	330	170	740	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	710	460	480	1520	0	330	170	740	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.32	0.68	2.00	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	2112	1088	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.22	0.14	0.08	0.48	0.00	0.16	0.16	0.23	0.00	0.00	0.00
Crit Moves:	****				****				****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM Mitigated

Intersection #20: I-110 SB Off-Ramp & 190th St.

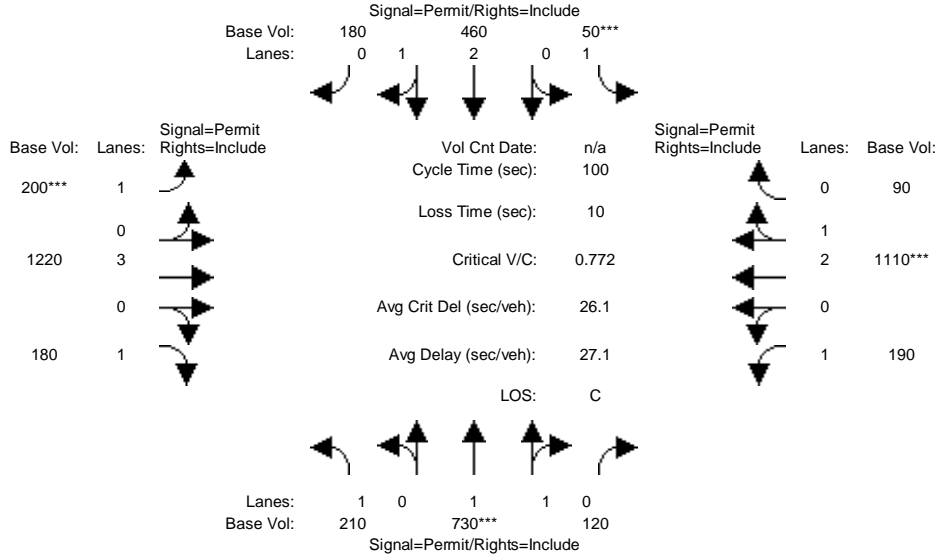


Street Name:	I-110 SB Off-Ramp						190th St.														
Approach:	North Bound			South Bound			East Bound			West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																					
Base Vol:	0	0	0	330	0	990	0	1430	0	0	1150	0	0	0	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	330	0	990	0	1430	0	0	1150	0	0	0	0	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	330	0	990	0	1430	0	0	1150	0	0	0	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	330	0	990	0	1430	0	0	1150	0	0	0	0	0	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	330	0	990	0	1430	0	0	1150	0	0	0	0	0	0	0	0	0	0
Saturation Flow Module:																					
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	2.00	0.00	2.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Final Sat.:	0	0	0	1600	0	3200	0	3200	0	0	4800	0	0	0	0	0	0	0	0	0	0
Capacity Analysis Module:																					
Vol/Sat:	0.00	0.00	0.00	0.21	0.00	0.31	0.00	0.45	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crit Moves:						****		****													

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM Mitigated

Intersection #22: Figueroa St. & 190th St./Victoria St.

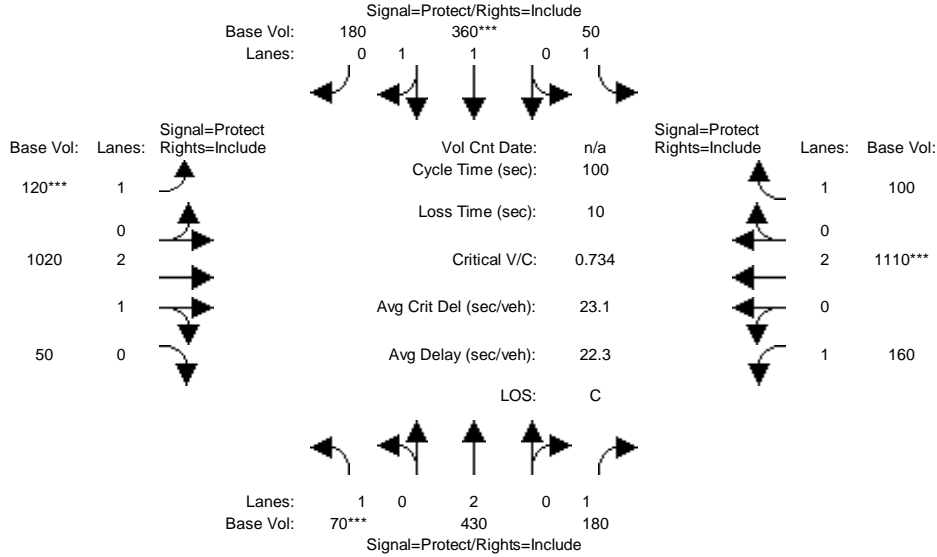


Street Name:	Figueroa St.						190th St./Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L - T - R			L - T - R			L - T - R			L - T - R		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	210	730	120	50	460	180	200	1220	180	190	1110	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	210	730	120	50	460	180	200	1220	180	190	1110	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	210	730	120	50	460	180	200	1220	180	190	1110	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	210	730	120	50	460	180	200	1220	180	190	1110	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	210	730	120	50	460	180	200	1220	180	190	1110	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.72	0.28	1.00	2.16	0.84	1.00	3.00	1.00	1.00	2.78	0.22
Final Sat.:	1600	2748	452	1600	3450	1350	1600	4800	1600	1600	4440	360
Capacity Analysis Module:												
Vol/Sat:	0.13	0.27	0.27	0.03	0.13	0.13	0.13	0.25	0.11	0.12	0.25	0.25
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM Mitigated

Intersection #24: Main St. & Victoria St.

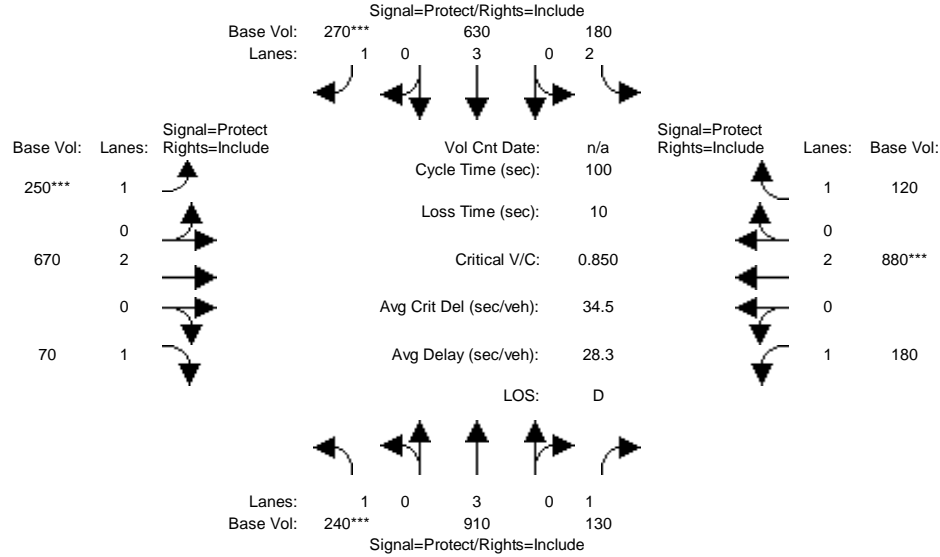


Street Name:	Main St.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	70	430	180	50	360	180	120	1020	50	160	1110	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	430	180	50	360	180	120	1020	50	160	1110	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	430	180	50	360	180	120	1020	50	160	1110	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	430	180	50	360	180	120	1020	50	160	1110	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	70	430	180	50	360	180	120	1020	50	160	1110	100
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.33	0.67	1.00	2.86	0.14	1.00	2.00	1.00
Final Sat.:	1600	3200	1600	1600	2133	1067	1600	4576	224	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.13	0.11	0.03	0.17	0.17	0.08	0.22	0.22	0.10	0.35	0.06
Crit Moves:	****				****		****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday AM Mitigated

Intersection #26: Avalon Blvd. & Del Amo Blvd.

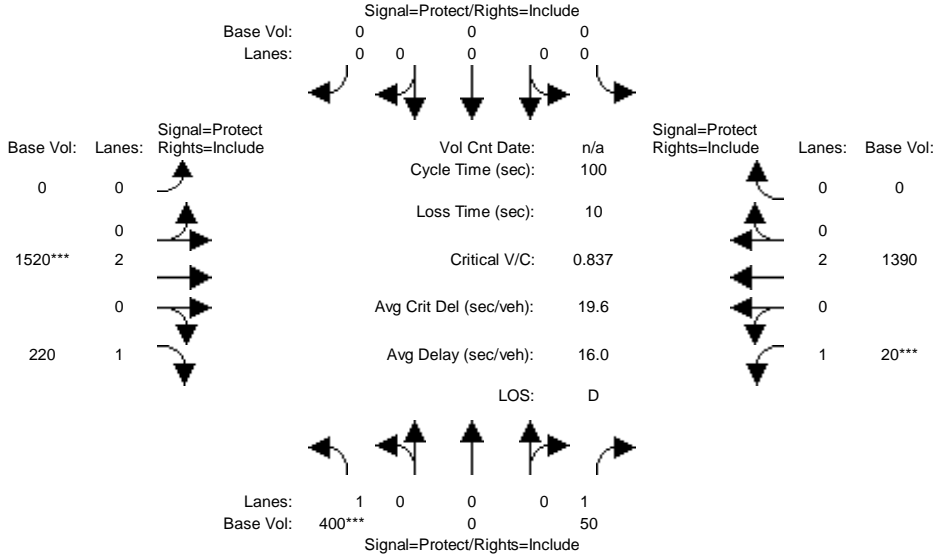


Street Name:	Avalon Blvd.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	240	910	130	180	630	270	250	670	70	180	880	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	240	910	130	180	630	270	250	670	70	180	880	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	240	910	130	180	630	270	250	670	70	180	880	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	240	910	130	180	630	270	250	670	70	180	880	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	240	910	130	180	630	270	250	670	70	180	880	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4800	1600	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.15	0.19	0.08	0.03	0.13	0.17	0.16	0.21	0.04	0.11	0.28	0.08
Crit Moves:	****					****	****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM Mitigated

Intersection #1: Victoria St. & Drive D

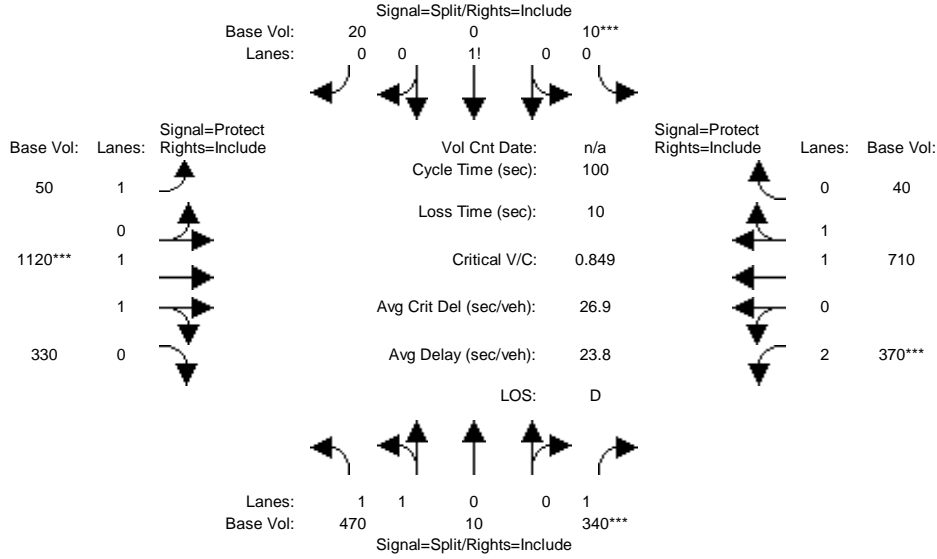


Street Name:	Drive D						Victoria St..					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	400	0	50	0	0	0	0	1520	220	20	1390	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	400	0	50	0	0	0	0	1520	220	20	1390	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	400	0	50	0	0	0	0	1520	220	20	1390	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	400	0	50	0	0	0	0	1520	220	20	1390	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	400	0	50	0	0	0	0	1520	220	20	1390	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	1600	0	1600	0	0	0	0	3200	1600	1600	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.25	0.00	0.03	0.00	0.00	0.00	0.00	0.48	0.14	0.01	0.43	0.00
Crit Moves:	****							****		****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM Mitigated

Intersection #3: Victoria St. & Birchknoll Dr.

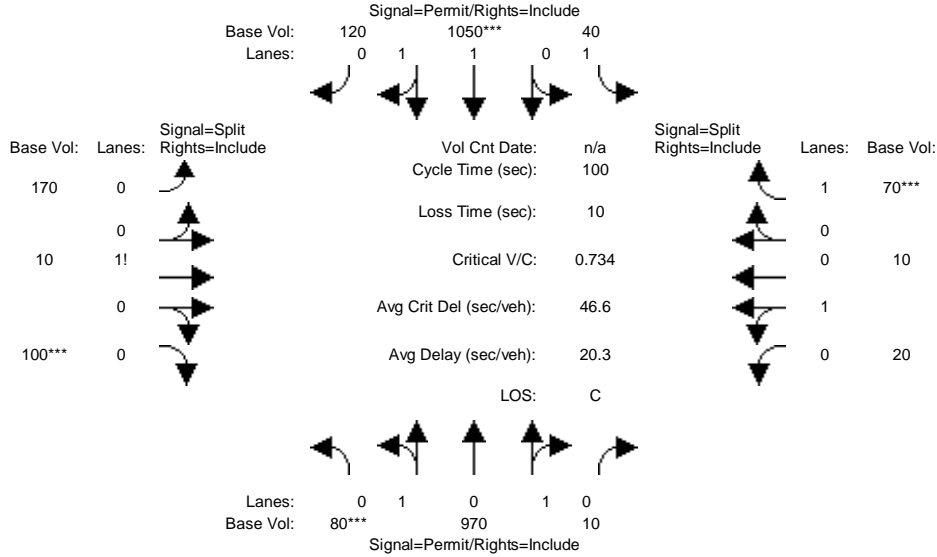


Street Name:	Victoria St.						Birchknoll Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	470	10	340	10	0	20	50	1120	330	370	710	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	470	10	340	10	0	20	50	1120	330	370	710	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	470	10	340	10	0	20	50	1120	330	370	710	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	470	10	340	10	0	20	50	1120	330	370	710	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	470	10	340	10	0	20	50	1120	330	370	710	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	1.96	0.04	1.00	0.33	0.00	0.67	1.00	1.54	0.46	2.00	1.89	0.11
Final Sat.:	3133	67	1600	533	0	1067	1600	2472	728	5760	3029	171
Capacity Analysis Module:												
Vol/Sat:	0.15	0.15	0.21	0.02	0.00	0.02	0.03	0.45	0.45	0.06	0.23	0.23
Crit Moves:			****	****				****		****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM Mitigated

Intersection #5: Central Ave. & Charles Willard St.

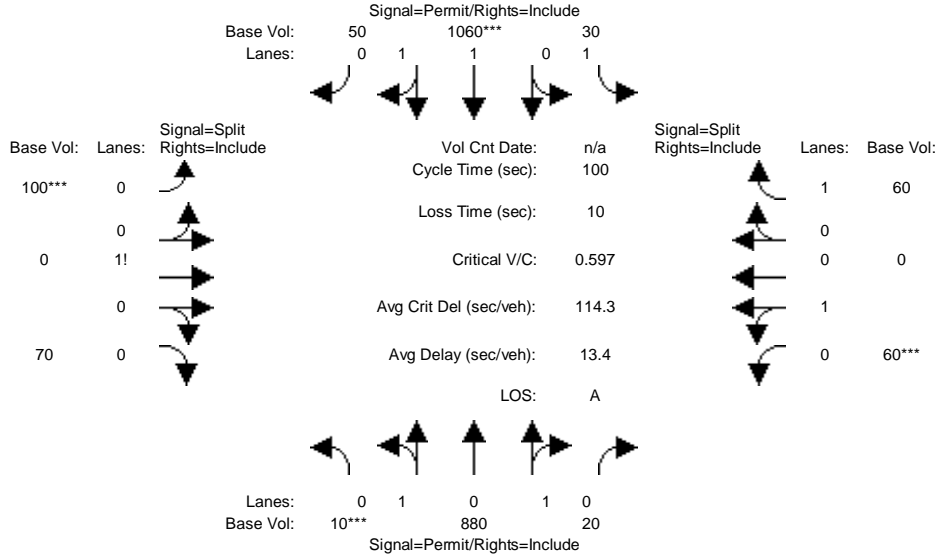


Street Name:	Central Ave.						Charles Willard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	80	970	10	40	1050	120	170	10	100	20	10	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	970	10	40	1050	120	170	10	100	20	10	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	970	10	40	1050	120	170	10	100	20	10	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	970	10	40	1050	120	170	10	100	20	10	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	970	10	40	1050	120	170	10	100	20	10	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.15	1.83	0.02	1.00	1.79	0.21	0.61	0.03	0.36	0.67	0.33	1.00
Final Sat.:	242	2928	30	1600	2872	328	971	57	571	1067	533	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.33	0.33	0.03	0.37	0.37	0.18	0.17	0.18	0.02	0.02	0.04
Crit Moves:	****				****				****			****

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM Mitigated

Intersection #6: Central Ave. & Project Driveway/Beachey Pl.

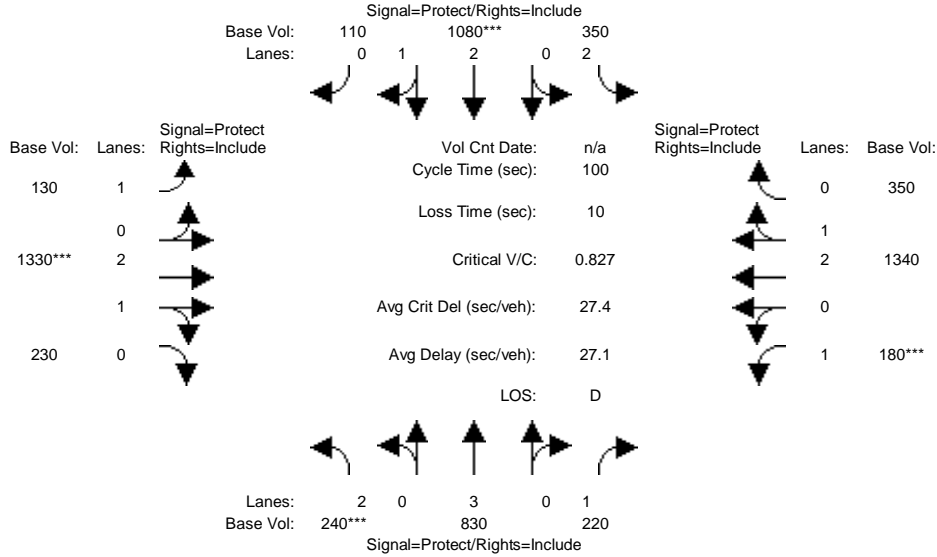


Street Name:	Central Ave.						Beachey Pl.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	10	880	20	30	1060	50	100	0	70	60	0	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	880	20	30	1060	50	100	0	70	60	0	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	10	880	20	30	1060	50	100	0	70	60	0	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	880	20	30	1060	50	100	0	70	60	0	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	10	880	20	30	1060	50	100	0	70	60	0	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.02	1.94	0.04	1.00	1.91	0.09	0.59	0.00	0.41	1.00	0.00	1.00
Final Sat.:	35	3095	70	1600	3056	144	941	0	659	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.28	0.28	0.02	0.35	0.35	0.11	0.00	0.11	0.04	0.00	0.04
Crit Moves:	****				****		****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM Mitigated

Intersection #13: Avalon Blvd. & Victoria St.

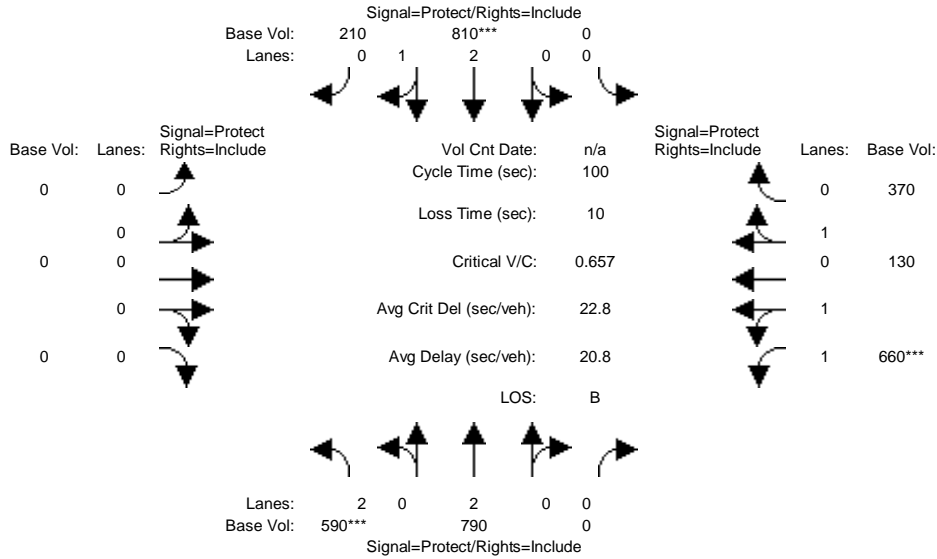


Street Name:	Avalon Blvd.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	240	830	220	350	1080	110	130	1330	230	180	1340	350
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	240	830	220	350	1080	110	130	1330	230	180	1340	350
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	240	830	220	350	1080	110	130	1330	230	180	1340	350
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	240	830	220	350	1080	110	130	1330	230	180	1340	350
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	240	830	220	350	1080	110	130	1330	230	180	1340	350
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	2.72	0.28	1.00	2.56	0.44	1.00	2.38	0.62
Final Sat.:	5760	4800	1600	5760	4356	444	1600	4092	708	1600	3806	994
Capacity Analysis Module:												
Vol/Sat:	0.04	0.17	0.14	0.06	0.25	0.25	0.08	0.33	0.32	0.11	0.35	0.35
Crit Moves:	****				****			****			****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM Mitigated

Intersection #14: Central Ave. & Artesia Blvd.

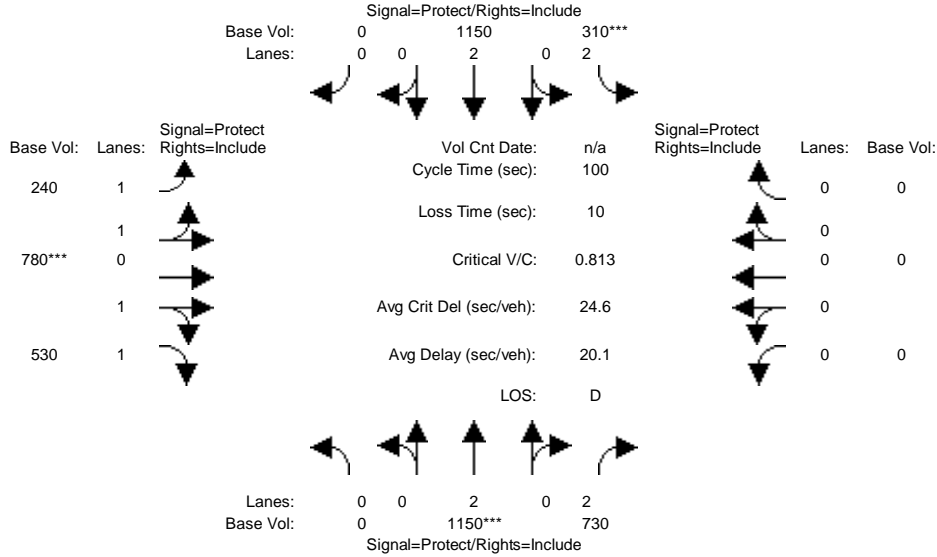


Street Name:	Central Ave.						Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	590	790	0	0	810	210	0	0	0	660	130	370
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	590	790	0	0	810	210	0	0	0	660	130	370
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	590	790	0	0	810	210	0	0	0	660	130	370
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	590	790	0	0	810	210	0	0	0	660	130	370
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	590	790	0	0	810	210	0	0	0	660	130	370
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	2.38	0.62	0.00	0.00	0.00	1.70	0.34	0.96
Final Sat.:	5760	3200	0	0	3812	988	0	0	0	2723	537	1540
Capacity Analysis Module:												
Vol/Sat:	0.10	0.25	0.00	0.00	0.21	0.21	0.00	0.00	0.00	0.24	0.24	0.24
Crit Moves:	****				****					****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM Mitigated

Intersection #15: Central Ave. & Albertoni St./Artesia Blvd. EB

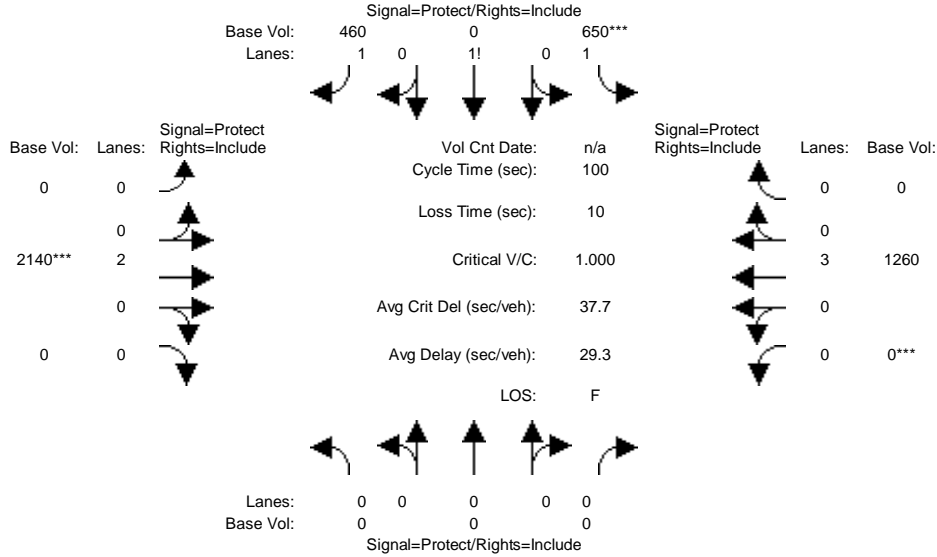


Street Name:	Central Ave.						Albertoni St./Artesia Blvd. EB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1150	730	310	1150	0	240	780	530	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1150	730	310	1150	0	240	780	530	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1150	730	310	1150	0	240	780	530	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1150	730	310	1150	0	240	780	530	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	1150	730	310	1150	0	240	780	530	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.00	1.63	1.37	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	1600	2603	2197	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.36	0.23	0.05	0.36	0.00	0.15	0.30	0.24	0.00	0.00	0.00
Crit Moves:		****		****				****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM Mitigated

Intersection #20: I-110 SB Off-Ramp & 190th St.

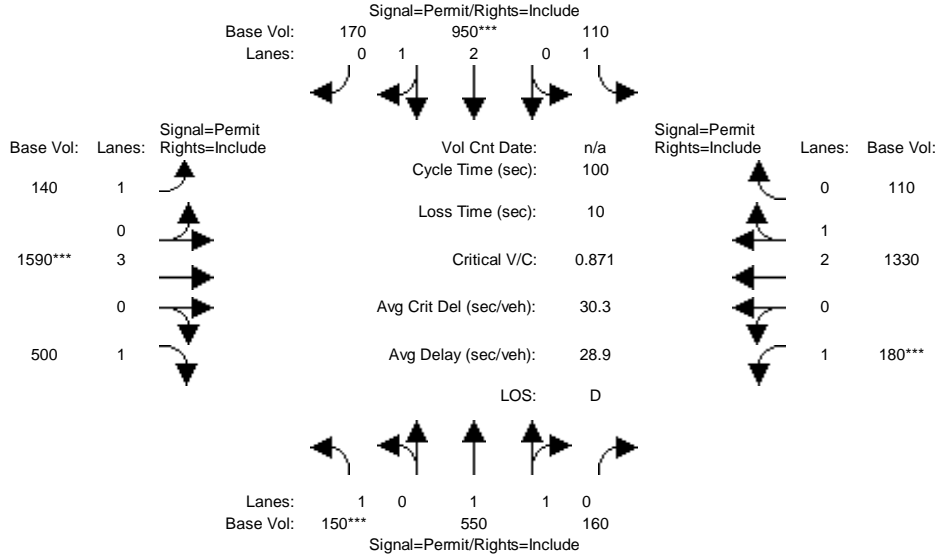


Street Name:	I-110 SB Off-Ramp						190th St.													
Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																				
Base Vol:	0	0	0	650	0	460	0	2140	0	0	1260	0	0	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	650	0	460	0	2140	0	0	1260	0	0	0	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	650	0	460	0	2140	0	0	1260	0	0	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	650	0	460	0	2140	0	0	1260	0	0	0	0	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	650	0	460	0	2140	0	0	1260	0	0	0	0	0	0	0	0	0
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.76	0.00	1.24	0.00	2.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Final Sat.:	0	0	0	2811	0	1989	0	3200	0	0	4800	0	0	0	0	0	0	0	0	0
Capacity Analysis Module:																				
Vol/Sat:	0.00	0.00	0.00	0.23	0.00	0.23	0.00	0.67	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crit Moves:				****				****			****									

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM Mitigated

Intersection #22: Figueroa St. & 190th St./Victoria St.

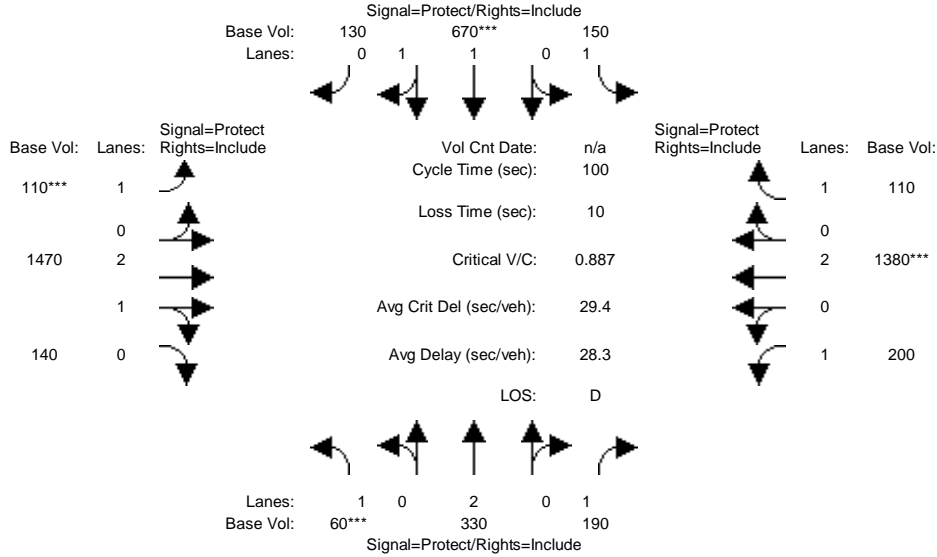


Street Name:	Figueroa St.						190th St./Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	150	550	160	110	950	170	140	1590	500	180	1330	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	550	160	110	950	170	140	1590	500	180	1330	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	550	160	110	950	170	140	1590	500	180	1330	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	550	160	110	950	170	140	1590	500	180	1330	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	550	160	110	950	170	140	1590	500	180	1330	110
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.55	0.45	1.00	2.54	0.46	1.00	3.00	1.00	1.00	2.77	0.23
Final Sat.:	1600	2479	721	1600	4071	729	1600	4800	1600	1600	4433	367
Capacity Analysis Module:												
Vol/Sat:	0.09	0.22	0.22	0.07	0.23	0.23	0.09	0.33	0.31	0.11	0.30	0.30
Crit Moves:	****				****			****			****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM Mitigated

Intersection #24: Main St. & Victoria St.

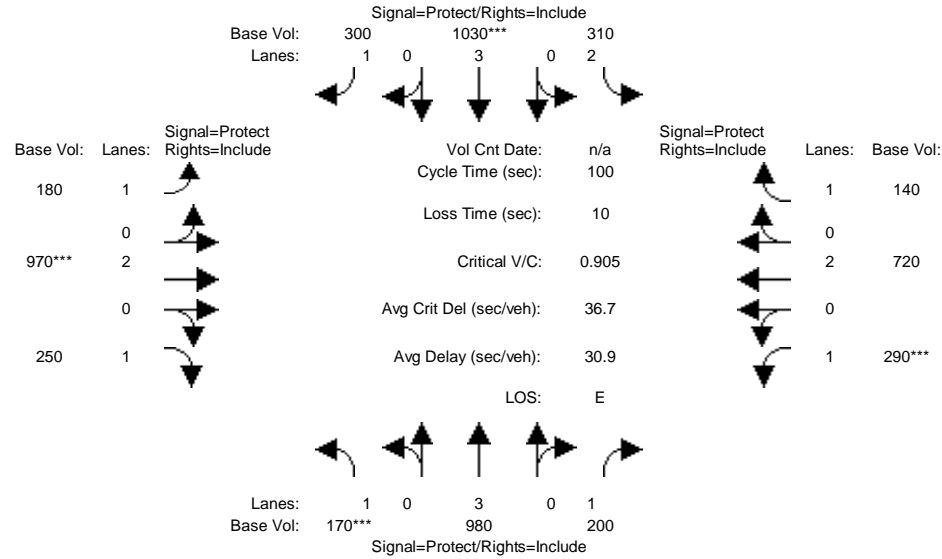


Street Name:	Main St.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	60	330	190	150	670	130	110	1470	140	200	1380	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	330	190	150	670	130	110	1470	140	200	1380	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	330	190	150	670	130	110	1470	140	200	1380	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	330	190	150	670	130	110	1470	140	200	1380	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	330	190	150	670	130	110	1470	140	200	1380	110
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.68	0.32	1.00	2.74	0.26	1.00	2.00	1.00
Final Sat.:	1600	3200	1600	1600	2680	520	1600	4383	417	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.10	0.12	0.09	0.25	0.25	0.07	0.34	0.34	0.13	0.43	0.07
Crit Moves:	****				****		****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2025 Plus Project Weekday PM Mitigated

Intersection #26: Avalon Blvd. & Del Amo Blvd.



Street Name:	Avalon Blvd.						Del Amo Blvd.														
Approach:	North Bound			South Bound			East Bound			West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																					
Base Vol:	170	980	200	310	1030	300	180	970	250	290	720	140									
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
Initial Bse:	170	980	200	310	1030	300	180	970	250	290	720	140									
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
PHF Volume:	170	980	200	310	1030	300	180	970	250	290	720	140									
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0									
Reduced Vol:	170	980	200	310	1030	300	180	970	250	290	720	140									
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
Final Volume:	170	980	200	310	1030	300	180	970	250	290	720	140									
Saturation Flow Module:																					
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600									
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00									
Final Sat.:	1600	4800	1600	5760	4800	1600	1600	3200	1600	1600	3200	1600									
Capacity Analysis Module:																					
Vol/Sat:	0.11	0.20	0.13	0.05	0.21	0.19	0.11	0.30	0.16	0.18	0.23	0.09									
Crit Moves:	****				****			****			****										

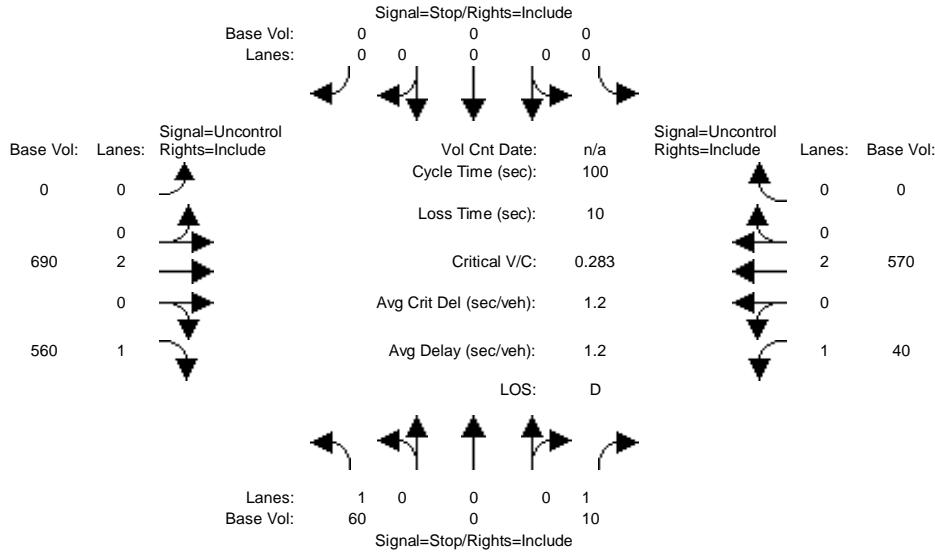
Appendix O

Intersection LOS Worksheets for 2035 Weekday No Project Conditions

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2035 No Project Weekday AM

Intersection #1: Victoria St. & Drive D



Street Name:	Drive D						Victoria St..					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	60	0	10	0	0	0	0	690	560	40	570	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	0	10	0	0	0	0	690	560	40	570	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	0	10	0	0	0	0	690	560	40	570	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	60	0	10	0	0	0	0	690	560	40	570	0
Critical Gap Module:												
Critical Gp:	6.8	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	1055	xxxx	345	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1250	xxxx	xxxxx
Potent Cap.:	224	xxxx	657	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	564	xxxx	xxxxx
Move Cap.:	212	xxxx	657	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	564	xxxx	xxxxx
Volume/Cap:	0.28	xxxx	0.02	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.07	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	1.1	xxxx	0.0	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx
Control Del:	28.5	xxxx	10.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	11.9	xxxx	xxxxx
LOS by Move:	D	*	B	*	*	*	*	*	*	B	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	26.0			xxxxxxx			xxxxxxx			xxxxxxx		

ApproachLOS: D * * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #1 Victoria St. & Drive D

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 2 0 1	1 0 2 0 0
Initial Vol:	60 0 10	0 0 0	0 690 560	40 570 0
ApproachDel:	26.0	xxxxxx	xxxxxx	xxxxxx

Approach[northbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.5]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=70]

FAIL - Approach volume less than 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=1930]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #1 Victoria St. & Drive D

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 2 0 1	1 0 2 0 0
Initial Vol:	60 0 10	0 0 0	0 690 560	40 570 0

Major Street Volume: 1860

Minor Approach Volume: 70

Minor Approach Volume Threshold: 107 [less than minimum of 150]

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

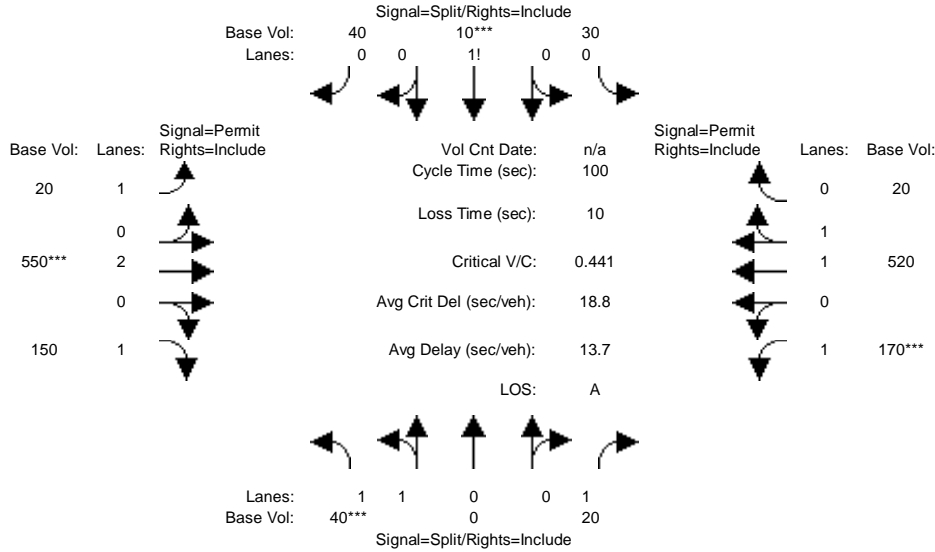
The peak hour warrant analysis in this report is not intended to replace

a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday AM

Intersection #2: Victoria St. & Tamcliff Ave.

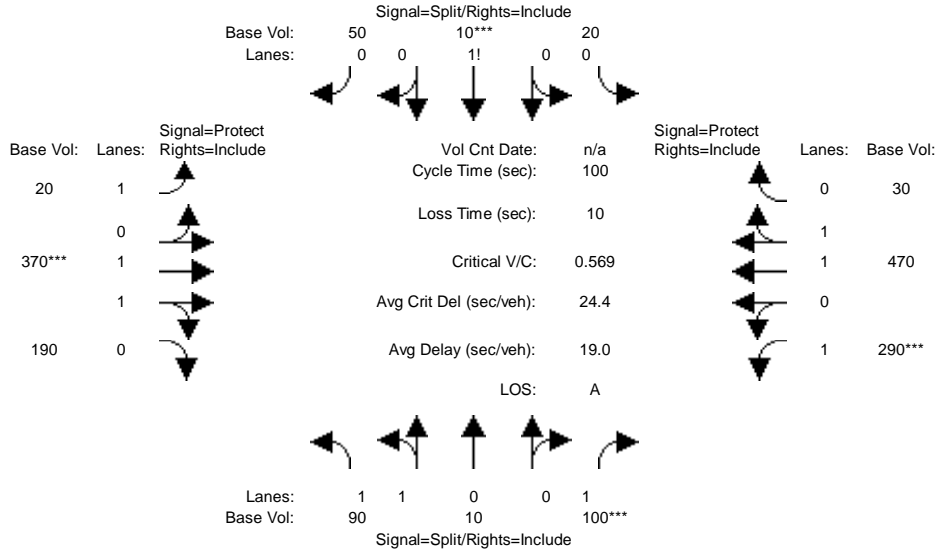


Street Name:	Victoria St.						Tamcliff Ave.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	40	0	20	30	10	40	20	550	150	170	520	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	0	20	30	10	40	20	550	150	170	520	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	0	20	30	10	40	20	550	150	170	520	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	0	20	30	10	40	20	550	150	170	520	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	40	0	20	30	10	40	20	550	150	170	520	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.38	0.12	0.50	1.00	2.00	1.00	1.00	1.93	0.07
Final Sat.:	3200	0	1600	600	200	800	1600	3200	1600	1600	3081	119
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.01	0.05	0.05	0.05	0.01	0.17	0.09	0.11	0.17	0.17
Crit Moves:	***			***	***		***	***		***	***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday AM

Intersection #3: Victoria St. & Birchknoll Dr.

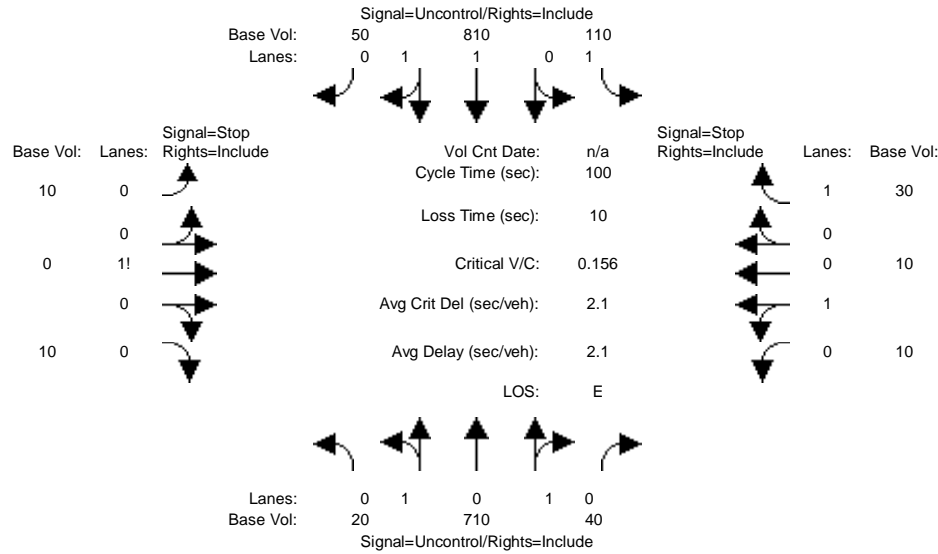


Street Name:	Victoria St.						Birchknoll Dr.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	90	10	100	20	10	50	20	370	190	290	470	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	10	100	20	10	50	20	370	190	290	470	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	10	100	20	10	50	20	370	190	290	470	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	10	100	20	10	50	20	370	190	290	470	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	90	10	100	20	10	50	20	370	190	290	470	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.80	0.20	1.00	0.25	0.12	0.63	1.00	1.32	0.68	1.00	1.88	0.12
Final Sat.:	2880	320	1600	400	200	1000	1600	2114	1086	1600	3008	192
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.06	0.05	0.05	0.05	0.01	0.18	0.17	0.18	0.16	0.16
Crit Moves:			***			***			***			***

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2035 No Project Weekday AM

Intersection #5: Central Ave. & Charles Willard St.



Street Name:	Central Ave.						Charles Willard St.								
Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R			
Volume Module:															
Base Vol:	20	710	40	110	810	50	10	0	10	10	10	30			
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Initial Bse:	20	710	40	110	810	50	10	0	10	10	10	30			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Volume:	20	710	40	110	810	50	10	0	10	10	10	30			
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0			
FinalVolume:	20	710	40	110	810	50	10	0	10	10	10	30			
Critical Gap Module:															
Critical Gp:	4.1	xxxx	xxxxxx	4.1	xxxx	xxxxxx	7.5	6.5	6.9	7.5	6.5	6.9			
FollowUpTim:	2.2	xxxx	xxxxxx	2.2	xxxx	xxxxxx	3.5	4.0	3.3	3.5	4.0	3.3			
Capacity Module:															
Cnflct Vol:	860	xxxx	xxxxxx	750	xxxx	xxxxxx	1455	1845	430	1395	1850	375			
Potent Cap.:	790	xxxx	xxxxxx	868	xxxx	xxxxxx	93	76	579	103	75	628			
Move Cap.:	790	xxxx	xxxxxx	868	xxxx	xxxxxx	69	64	579	89	64	628			
Volume/Cap:	0.03	xxxx	xxxxxx	0.13	xxxx	xxxxxx	0.14	0.00	0.02	0.11	0.16	0.05			
Level Of Service Module:															
2Way95thQ:	0.1	xxxx	xxxxxx	0.4	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	0.2			
Control Del:	9.7	xxxx	xxxxxx	9.7	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	11.0			
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	B			
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	123	xxxxxx	75	xxxx	xxxxxx			
SharedQueue:	0.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	0.6	xxxxxx	1.0	xxxx	xxxxxx			
Shrd ConDel:	9.7	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	39.8	xxxxxx	70.1	xxxx	xxxxxx			
Shared LOS:	A	*	*	*	*	*	*	E	*	F	*	*			

ApproachDel:	xxxxxx	xxxxxx	39.8	34.7
ApproachLOS:	*	*	E	D

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #5 Central Ave. & Charles Willard St.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 1 0 1 0	1 0 1 1 0	0 0 1! 0 0	0 1 0 0 1
Initial Vol:	20 710 40	110 810 50	10 0 10	10 10 30
ApproachDel:	xxxxxx	xxxxxx	39.8	34.7

Approach[eastbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.2]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=20]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=1810]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Approach[westbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.5]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=50]

FAIL - Approach volume less than 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=1810]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #5 Central Ave. & Charles Willard St.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 1 0 1 0	1 0 1 1 0	0 0 1! 0 0	0 1 0 0 1
Initial Vol:	20 710 40	110 810 50	10 0 10	10 10 30
Major Street Volume:	1740			
Minor Approach Volume:	50			

Minor Approach Volume Threshold: 136 [less than minimum of 150]

SIGNAL WARRANT DISCLAIMER

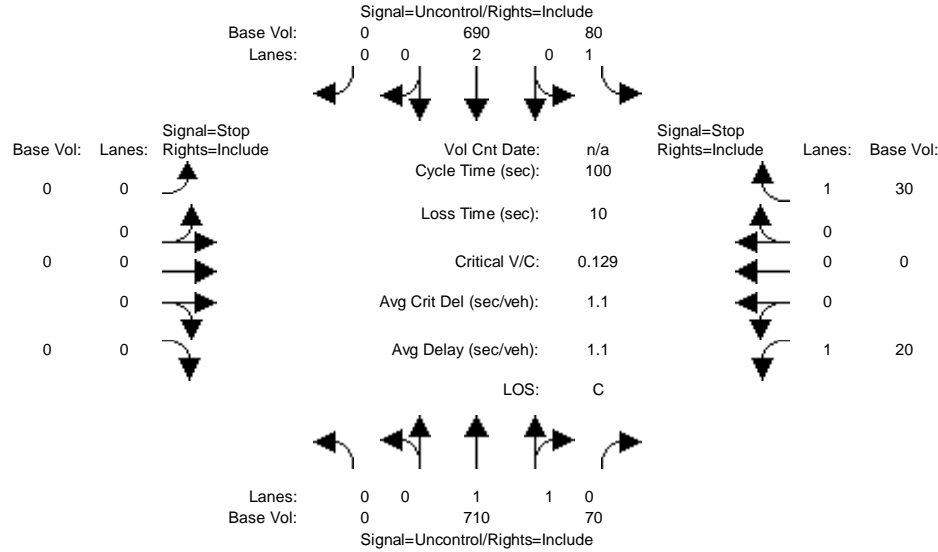
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2035 No Project Weekday AM

Intersection #6: Central Ave. & Project Driveway/Beachey Pl.



Street Name:	Central Ave.						Beachey Pl.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	710	70	80	690	0	0	0	0	20	0	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	710	70	80	690	0	0	0	0	20	0	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	710	70	80	690	0	0	0	0	20	0	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	0	710	70	80	690	0	0	0	0	20	0	30
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	xxxx	6.9
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3
Capacity Module:												
Cnflct Vol:	xxxx	xxxx	xxxxx	780	xxxx	xxxxx	xxxx	xxxx	xxxxx	1250	xxxx	390
Potent Cap.:	xxxx	xxxx	xxxxx	846	xxxx	xxxxx	xxxx	xxxx	xxxxx	168	xxxx	614
Move Cap.:	xxxx	xxxx	xxxxx	846	xxxx	xxxxx	xxxx	xxxx	xxxxx	155	xxxx	614
Volume/Cap:	xxxx	xxxx	xxxx	0.09	xxxx	xxxx	xxxx	xxxx	xxxx	0.13	xxxx	0.05
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.4	xxxx	0.2
Control Del:	xxxxx	xxxx	xxxxx	9.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	31.5	xxxx	11.2
LOS by Move:	*	*	*	A	*	*	*	*	*	D	*	B
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shared Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*

ApproachDel:	xxxxxx	xxxxxx	xxxxxx	19.3
ApproachLOS:	*	*	*	C

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #6 Central Ave. & Project Driveway/Beachey Pl.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 0 1 1 0	1 0 2 0 0	0 0 0 0 0	1 0 0 0 1
Initial Vol:	0 710 70	80 690 0	0 0 0 0	20 0 30
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	19.3

Approach[westbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.3]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=50]

FAIL - Approach volume less than 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=1600]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #6 Central Ave. & Project Driveway/Beachey Pl.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 0 1 1 0	1 0 2 0 0	0 0 0 0 0	1 0 0 0 1
Initial Vol:	0 710 70	80 690 0	0 0 0 0	20 0 30

Major Street Volume: 1550
 Minor Approach Volume: 50
 Minor Approach Volume Threshold: 186

SIGNAL WARRANT DISCLAIMER

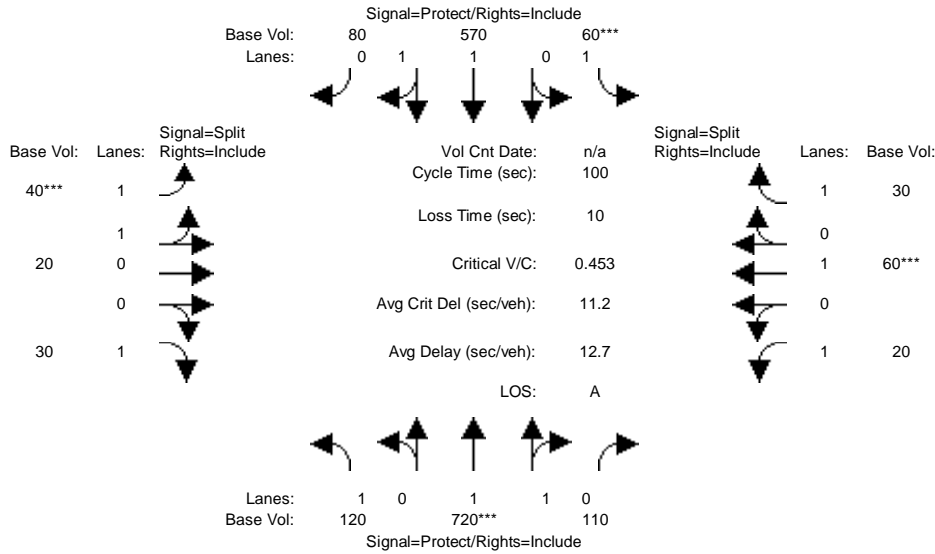
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday AM

Intersection #7: Central Ave. & Glenn Curtiss St.

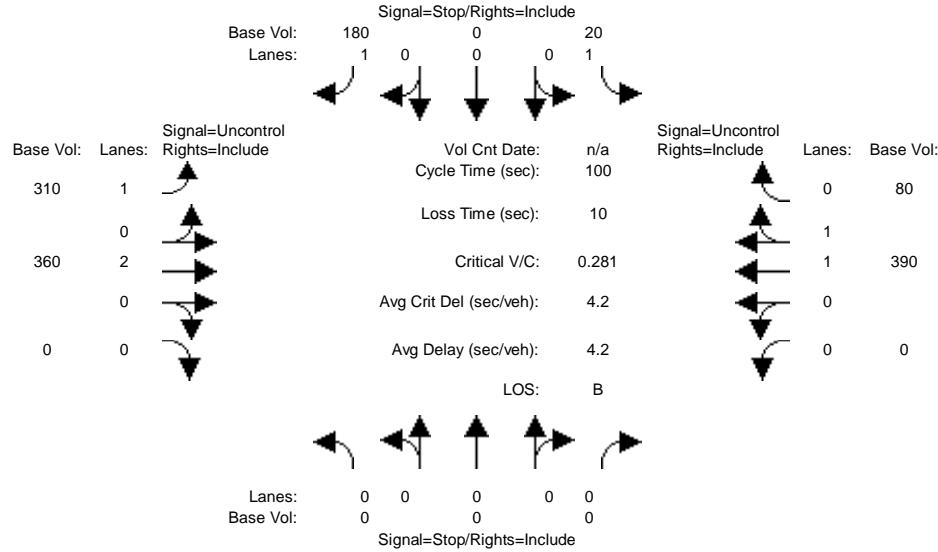


Street Name:	Central Ave.						Glenn Curtiss St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	120	720	110	60	570	80	40	20	30	20	60	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	120	720	110	60	570	80	40	20	30	20	60	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	120	720	110	60	570	80	40	20	30	20	60	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	720	110	60	570	80	40	20	30	20	60	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	120	720	110	60	570	80	40	20	30	20	60	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.73	0.27	1.00	1.75	0.25	1.33	0.67	1.00	1.00	1.00	1.00
Final Sat.:	1600	2776	424	1600	2806	394	2133	1067	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.26	0.26	0.04	0.20	0.20	0.02	0.02	0.02	0.01	0.04	0.02
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2035 No Project Weekday AM

Intersection #9: University Dr. & Toro Center Dr.



Street Name:	University Dr.						Toro Center Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	20	0	180	310	360	0	0	390	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	20	0	180	310	360	0	0	390	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	20	0	180	310	360	0	0	390	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	20	0	180	310	360	0	0	390	80
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.8	xxxx	6.9	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	xxxx	xxxx	xxxxx	1230	xxxx	235	470	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	173	xxxx	773	1102	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	135	xxxx	773	1102	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.15	xxxx	0.23	0.28	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.5	xxxx	0.9	1.2	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	36.2	xxxx	11.1	9.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	E	*	B	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*

ApproachDel: xxxxxxx 13.6 xxxxxxx xxxxxxx
 ApproachLOS: * B * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #9 University Dr. & Toro Center Dr.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0	0	0	0	0	0	1	0	2	0	0	1
Initial Vol:	0	0	0	20	0	180	310	360	0	0	390	80
ApproachDel:	xxxxxxx			13.6			xxxxxxx			xxxxxxx		

Approach[southbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.8]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=200]

SUCCEED - Approach volume >= 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=1340]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #9 University Dr. & Toro Center Dr.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0	0	0	0	0	0	1	0	2	0	0	1
Initial Vol:	0	0	0	20	0	180	310	360	0	0	390	80

Major Street Volume: 1140

Minor Approach Volume: 200

Minor Approach Volume Threshold: 318

SIGNAL WARRANT DISCLAIMER

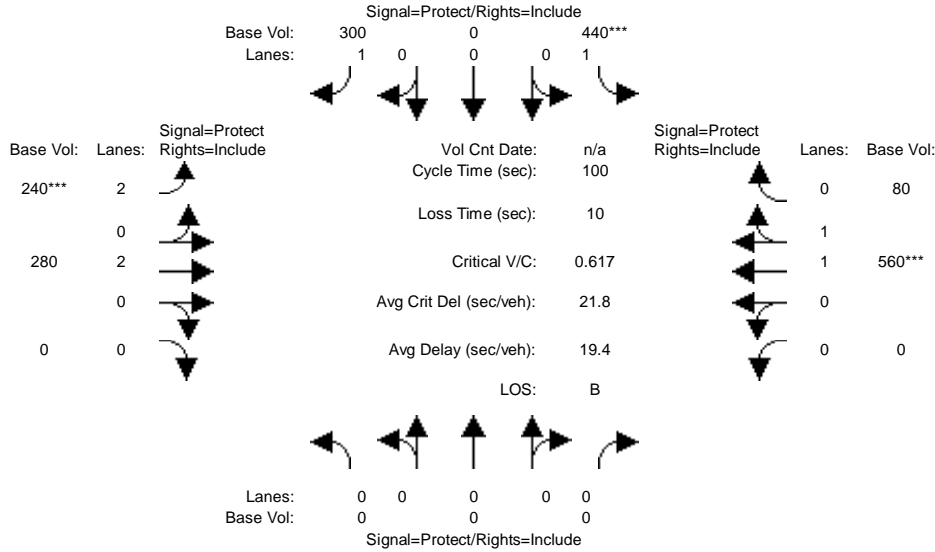
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday AM

Intersection #10: Albertoni St. & SR 91 EB Ramps

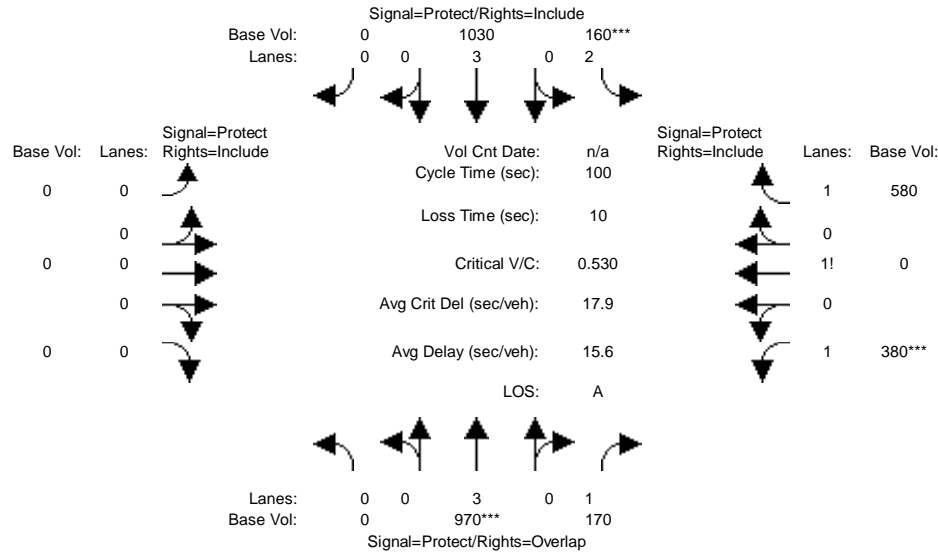


Street Name:	Albertoni St.						SR 91 EB Ramps					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	440	0	300	240	280	0	0	560	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	440	0	300	240	280	0	0	560	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	440	0	300	240	280	0	0	560	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	440	0	300	240	280	0	0	560	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	440	0	300	240	280	0	0	560	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.75	0.25
Final Sat.:	0	0	0	1600	0	1600	5760	3200	0	0	2800	400
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.28	0.00	0.19	0.04	0.09	0.00	0.00	0.20	0.20
Crit Moves:				***			***				***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday AM

Intersection #11: Avalon Blvd. & SR 91 WB On-Ramp

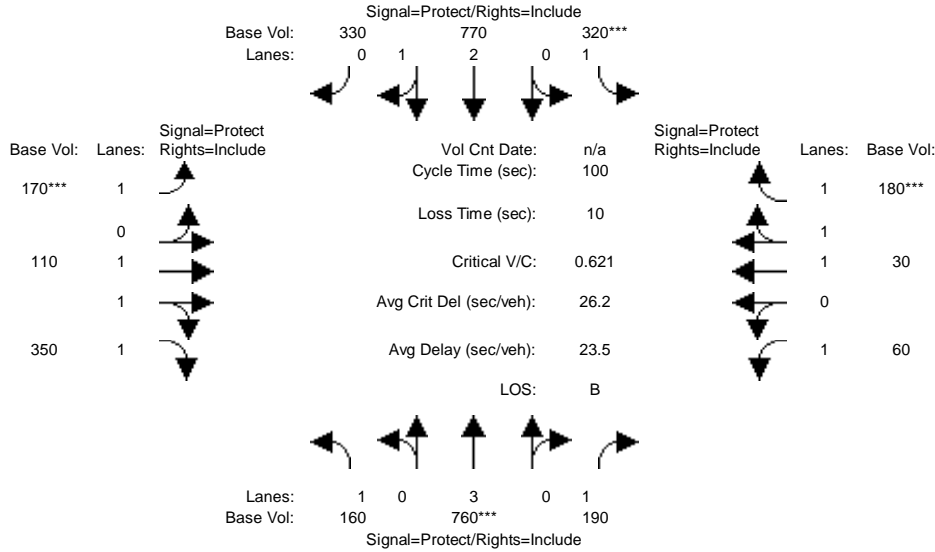


Street Name:	Avalon Blvd.						SR 91 WB On-Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	970	170	160	1030	0	0	0	0	380	0	580
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	970	170	160	1030	0	0	0	0	380	0	580
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	970	170	160	1030	0	0	0	0	380	0	580
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	970	170	160	1030	0	0	0	0	380	0	580
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	970	170	160	1030	0	0	0	0	380	0	580
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.19	0.00	1.81
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	1900	0	2900
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.11	0.03	0.21	0.00	0.00	0.00	0.00	0.20	0.00	0.20
OvlAdjV/S:	0.00											
Crit Moves:	****			****						****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday AM

Intersection #12: Avalon Blvd. & Albertoni St.

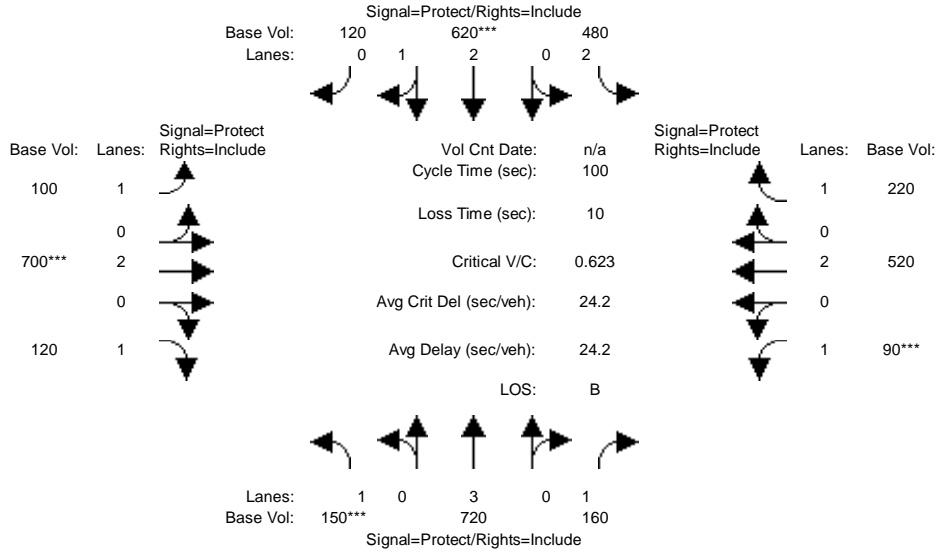


Street Name:	Avalon Blvd.						Albertoni St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	160	760	190	320	770	330	170	110	350	60	30	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	160	760	190	320	770	330	170	110	350	60	30	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	160	760	190	320	770	330	170	110	350	60	30	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	760	190	320	770	330	170	110	350	60	30	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	160	760	190	320	770	330	170	110	350	60	30	180
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.10	0.90	1.00	1.00	2.00	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3360	1440	1600	1600	3200	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.10	0.16	0.12	0.20	0.23	0.23	0.11	0.07	0.11	0.04	0.02	0.06
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday AM

Intersection #13: Avalon Blvd. & Victoria St.

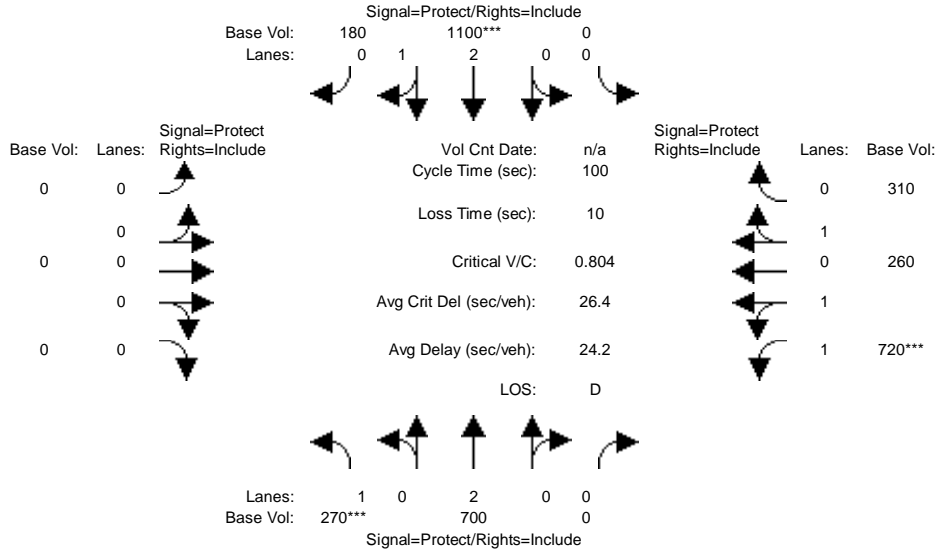


Street Name:	Avalon Blvd.						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	150	720	160	480	620	120	100	700	120	90	520	220
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	720	160	480	620	120	100	700	120	90	520	220
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	720	160	480	620	120	100	700	120	90	520	220
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	720	160	480	620	120	100	700	120	90	520	220
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	150	720	160	480	620	120	100	700	120	90	520	220
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.51	0.49	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4022	778	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.15	0.10	0.08	0.15	0.15	0.06	0.22	0.08	0.06	0.16	0.14
Crit Moves:	***			***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday AM

Intersection #14: Central Ave. & Artesia Blvd.

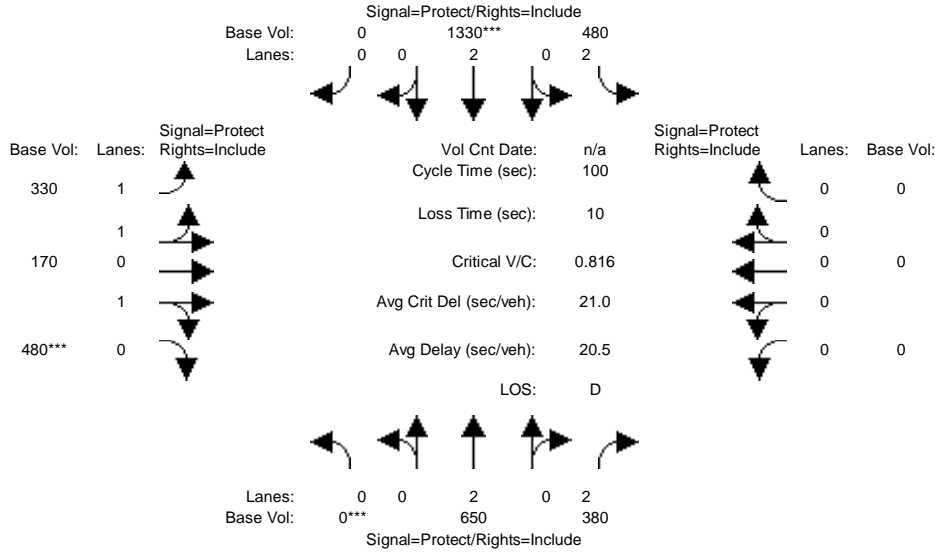


Street Name:	Central Ave.						Artesia Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	270	700	0	0	1100	180	0	0	0	720	260	310
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	270	700	0	0	1100	180	0	0	0	720	260	310
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	270	700	0	0	1100	180	0	0	0	720	260	310
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	270	700	0	0	1100	180	0	0	0	720	260	310
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	270	700	0	0	1100	180	0	0	0	720	260	310
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.58	0.42	0.00	0.00	0.00	1.68	0.60	0.72
Final Sat.:	1600	3200	0	0	4125	675	0	0	0	2678	968	1155
Capacity Analysis Module:												
Vol/Sat:	0.17	0.22	0.00	0.00	0.27	0.27	0.00	0.00	0.00	0.27	0.27	0.27
Crit Moves:	***				***	***				***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday AM

Intersection #15: Central Ave. & Albertoni St./Artesia Blvd. EB



Street Name: Central Ave. Albertoni St./Artesia Blvd. EB

Approach: North Bound South Bound East Bound West Bound

Movement:	North Bound			South Bound			East Bound			West Bound		
	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0

Volume Module:

Base Vol:	0	650	380	480	1330	0	330	170	480	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	650	380	480	1330	0	330	170	480	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	650	380	480	1330	0	330	170	480	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	650	380	480	1330	0	330	170	480	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	650	380	480	1330	0	330	170	480	0	0	0

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.32	0.68	1.00	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	2112	1088	1600	0	0	0

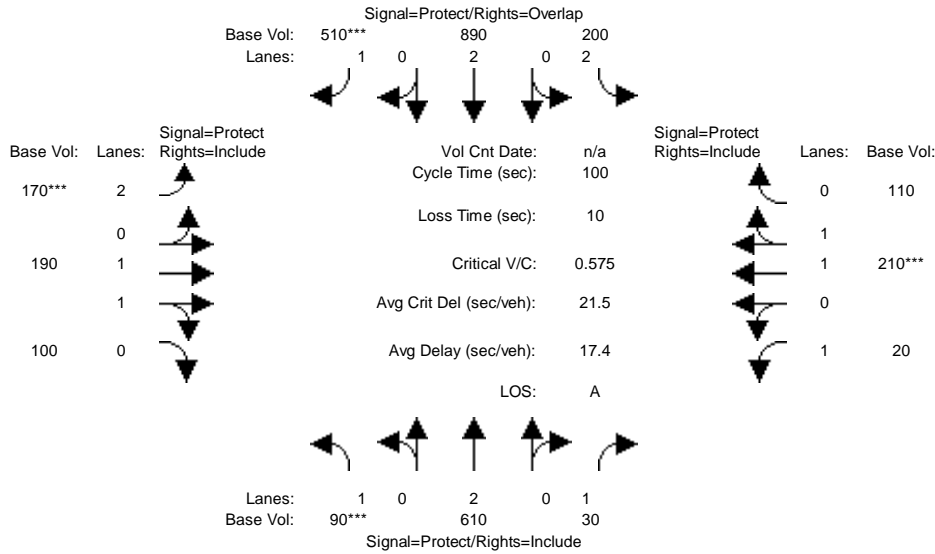
Capacity Analysis Module:

Vol/Sat:	0.00	0.20	0.12	0.08	0.42	0.00	0.16	0.16	0.30	0.00	0.00	0.00
Crit Moves:	***				****				****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday AM

Intersection #16: Central Ave. & Victoria St.

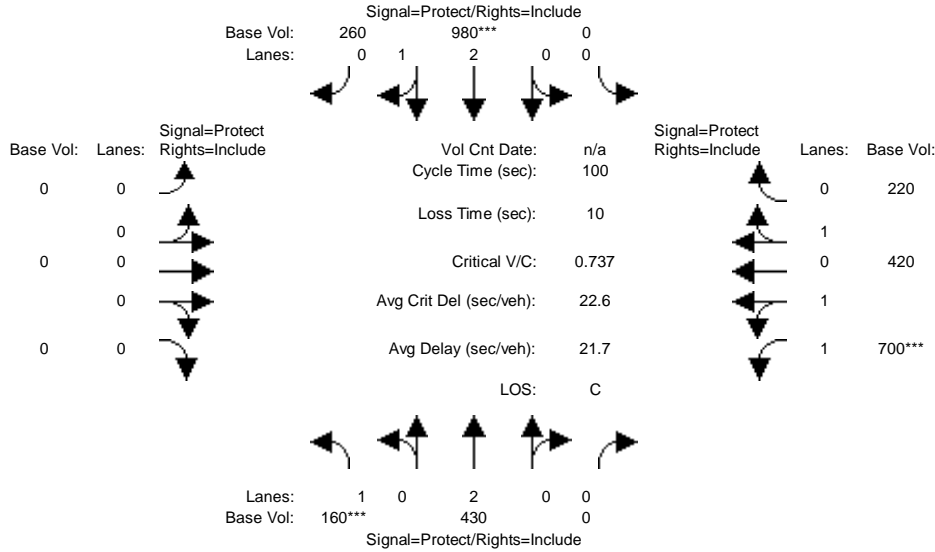


Street Name:	Central Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	90	610	30	200	890	510	170	190	100	20	210	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	610	30	200	890	510	170	190	100	20	210	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	610	30	200	890	510	170	190	100	20	210	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	610	30	200	890	510	170	190	100	20	210	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	610	30	200	890	510	170	190	100	20	210	110
OvlAdjVol:	463											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.31	0.69	1.00	1.31	0.69
Final Sat.:	1600	3200	1600	5760	3200	1600	5760	2097	1103	1600	2100	1100
Capacity Analysis Module:												
Vol/Sat:	0.06	0.19	0.02	0.03	0.28	0.32	0.03	0.09	0.09	0.01	0.10	0.10
OvlAdjV/S:	0.29											
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday AM

Intersection #17: Wilmington Ave. & Artesia Blvd. WB

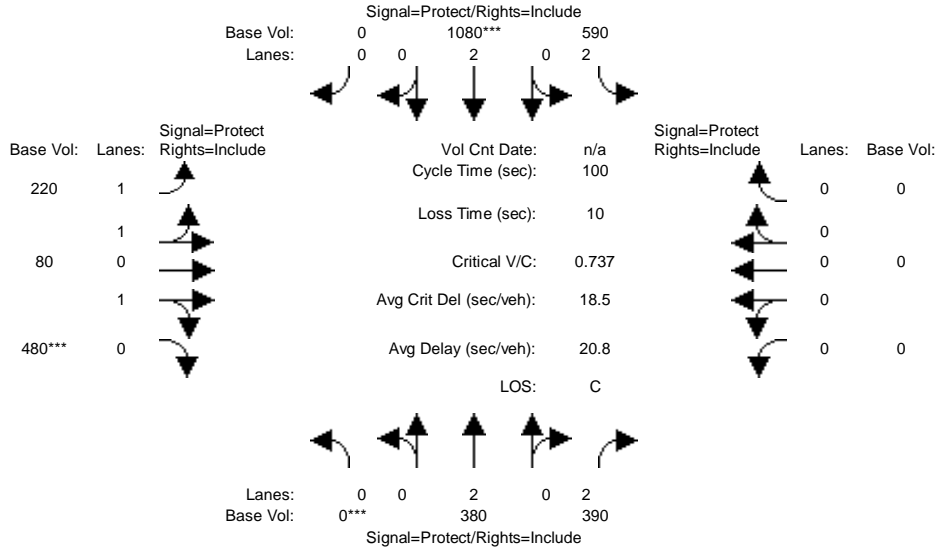


Street Name:	Wilmington Ave.						Artesia Blvd. WB					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	160	430	0	0	980	260	0	0	0	700	420	220
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	160	430	0	0	980	260	0	0	0	700	420	220
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	160	430	0	0	980	260	0	0	0	700	420	220
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	430	0	0	980	260	0	0	0	700	420	220
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	160	430	0	0	980	260	0	0	0	700	420	220
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.37	0.63	0.00	0.00	0.00	1.57	0.94	0.49
Final Sat.:	1600	3200	0	0	3794	1006	0	0	0	2508	1504	788
Capacity Analysis Module:												
Vol/Sat:	0.10	0.13	0.00	0.00	0.26	0.26	0.00	0.00	0.00	0.28	0.28	0.28
Crit Moves:	***				***					***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday AM

Intersection #18: Wilmington Ave. & Artesia Blvd. EB

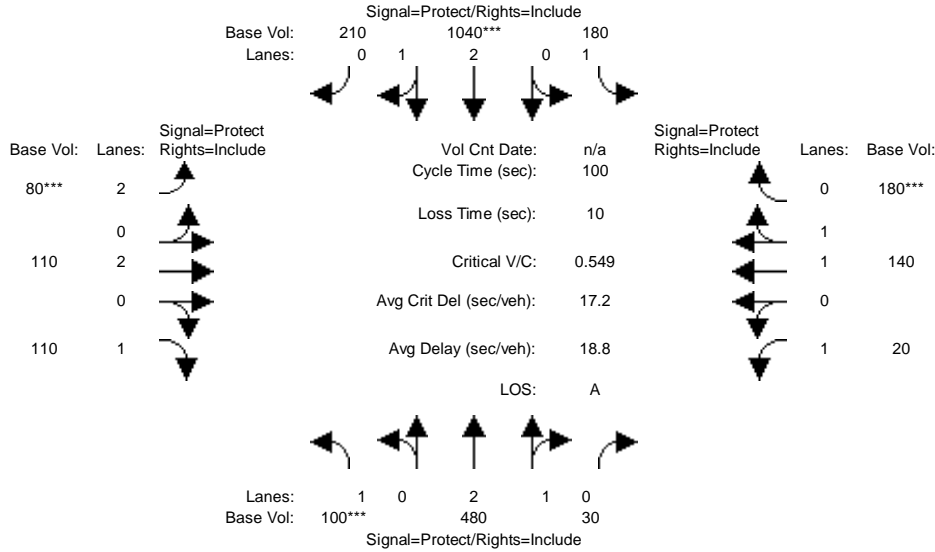


Street Name:	Wilmington Ave.						Artesia Blvd. EB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	380	390	590	1080	0	220	80	480	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	380	390	590	1080	0	220	80	480	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	380	390	590	1080	0	220	80	480	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	380	390	590	1080	0	220	80	480	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	380	390	590	1080	0	220	80	480	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.47	0.53	1.00	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	2347	853	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.12	0.12	0.10	0.34	0.00	0.09	0.09	0.30	0.00	0.00	0.00
Crit Moves:	***				***				***			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday AM

Intersection #19: Wilmington Ave. & Victoria St.

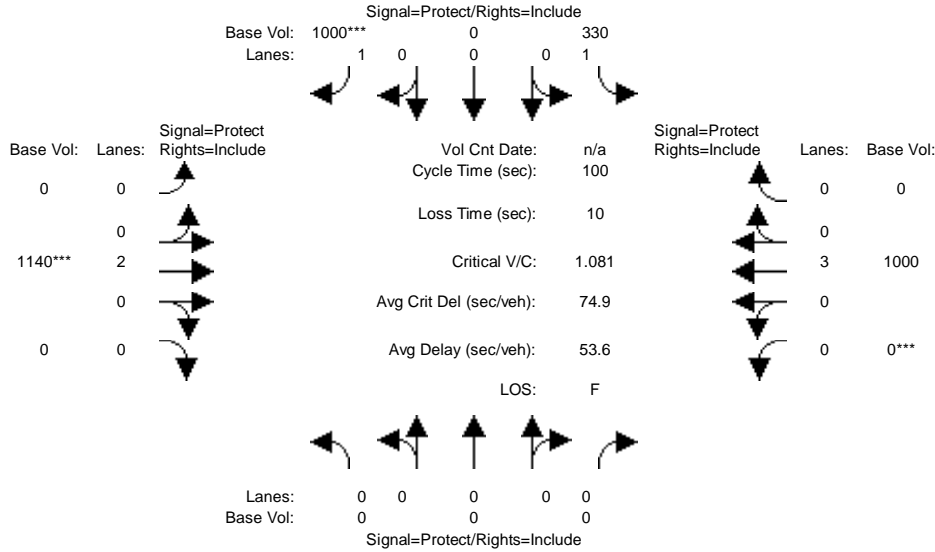


Street Name:	Wilmington Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	100	480	30	180	1040	210	80	110	110	20	140	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	100	480	30	180	1040	210	80	110	110	20	140	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	100	480	30	180	1040	210	80	110	110	20	140	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	100	480	30	180	1040	210	80	110	110	20	140	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	100	480	30	180	1040	210	80	110	110	20	140	180
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.82	0.18	1.00	2.50	0.50	2.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	4518	282	1600	3994	806	5760	3200	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.11	0.11	0.11	0.26	0.26	0.01	0.03	0.07	0.01	0.09	0.11
Crit Moves:	***				***		***				***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday AM

Intersection #20: I-110 SB Off-Ramp & 190th St.

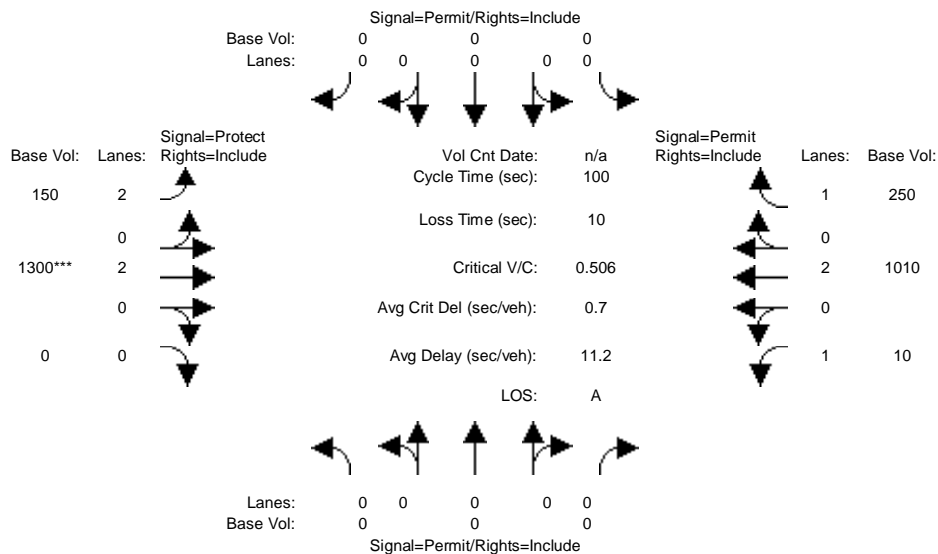


Street Name:	I-110 SB Off-Ramp						190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	330	0	1000	0	1140	0	0	1000	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	330	0	1000	0	1140	0	0	1000	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	330	0	1000	0	1140	0	0	1000	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	330	0	1000	0	1140	0	0	1000	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	330	0	1000	0	1140	0	0	1000	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.21	0.00	0.63	0.00	0.36	0.00	0.00	0.21	0.00
Crit Moves:						***		***			***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday AM

Intersection #21: I-110 NB On-Ramp & 190th St.

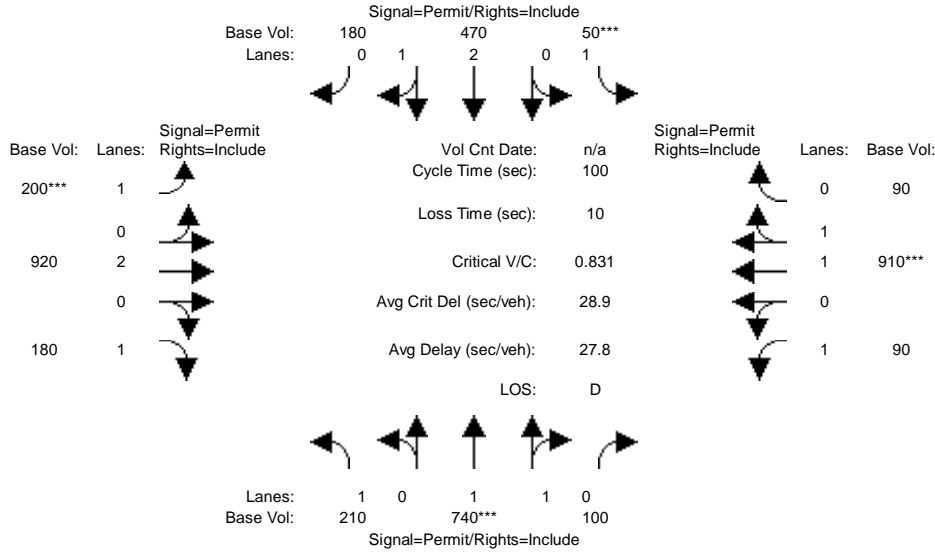


Street Name:	I-110 NB On-Ramp						190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	0	0	0	150	1300	0	10	1010	250
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	150	1300	0	10	1010	250
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	150	1300	0	10	1010	250
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	150	1300	0	10	1010	250
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	0	0	0	150	1300	0	10	1010	250
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	0	0	0	0	0	5760	3200	0	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.41	0.00	0.01	0.32	0.16
Crit Moves:	***											

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday AM

Intersection #22: Figueroa St. & 190th St./Victoria St.

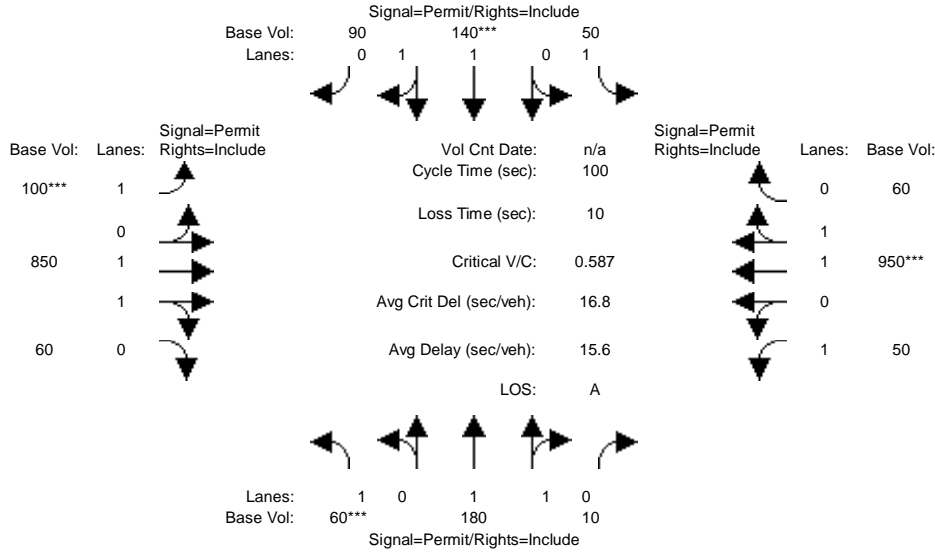


Street Name:	Figueroa St.						190th St./Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	210	740	100	50	470	180	200	920	180	90	910	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	210	740	100	50	470	180	200	920	180	90	910	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	210	740	100	50	470	180	200	920	180	90	910	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	210	740	100	50	470	180	200	920	180	90	910	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	210	740	100	50	470	180	200	920	180	90	910	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.76	0.24	1.00	2.17	0.83	1.00	2.00	1.00	1.00	1.82	0.18
Final Sat.:	1600	2819	381	1600	3471	1329	1600	3200	1600	1600	2912	288
Capacity Analysis Module:												
Vol/Sat:	0.13	0.26	0.26	0.03	0.14	0.14	0.13	0.29	0.11	0.06	0.31	0.31
Crit Moves:	****			****			****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday AM

Intersection #23: Broadway & Victoria St.

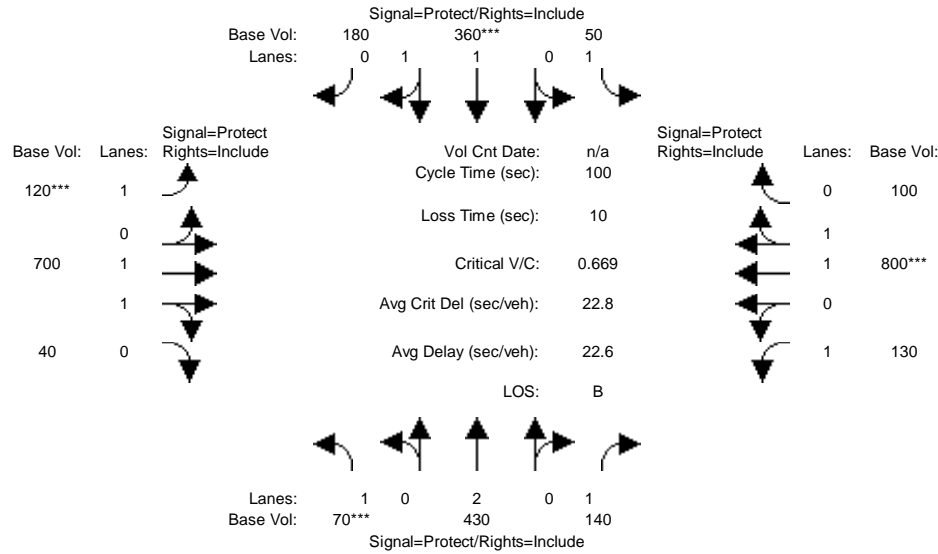


Street Name:	Broadway						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	60	180	10	50	140	90	100	850	60	50	950	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	180	10	50	140	90	100	850	60	50	950	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	180	10	50	140	90	100	850	60	50	950	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	180	10	50	140	90	100	850	60	50	950	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	60	180	10	50	140	90	100	850	60	50	950	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.89	0.11	1.00	1.22	0.78	1.00	1.87	0.13	1.00	1.88	0.12
Final Sat.:	1600	3032	168	1600	1948	1252	1600	2989	211	1600	3010	190
Capacity Analysis Module:												
Vol/Sat:	0.04	0.06	0.06	0.03	0.07	0.07	0.06	0.28	0.28	0.03	0.32	0.32
Crit Moves:	***				***		***				***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday AM

Intersection #24: Main St. & Victoria St.

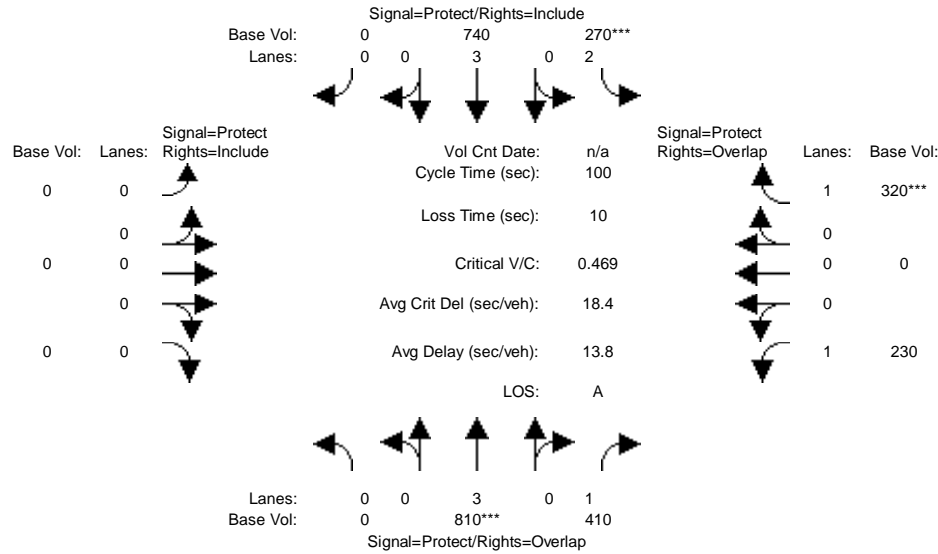


Street Name:	Main St.						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	70	430	140	50	360	180	120	700	40	130	800	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	430	140	50	360	180	120	700	40	130	800	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	430	140	50	360	180	120	700	40	130	800	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	430	140	50	360	180	120	700	40	130	800	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	70	430	140	50	360	180	120	700	40	130	800	100
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.33	0.67	1.00	1.89	0.11	1.00	1.78	0.22
Final Sat.:	1600	3200	1600	1600	2133	1067	1600	3027	173	1600	2844	356
Capacity Analysis Module:												
Vol/Sat:	0.04	0.13	0.09	0.03	0.17	0.17	0.08	0.23	0.23	0.08	0.28	0.28
Crit Moves:	***				***		***				***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday AM

Intersection #25: Avalon Blvd. & University Dr.

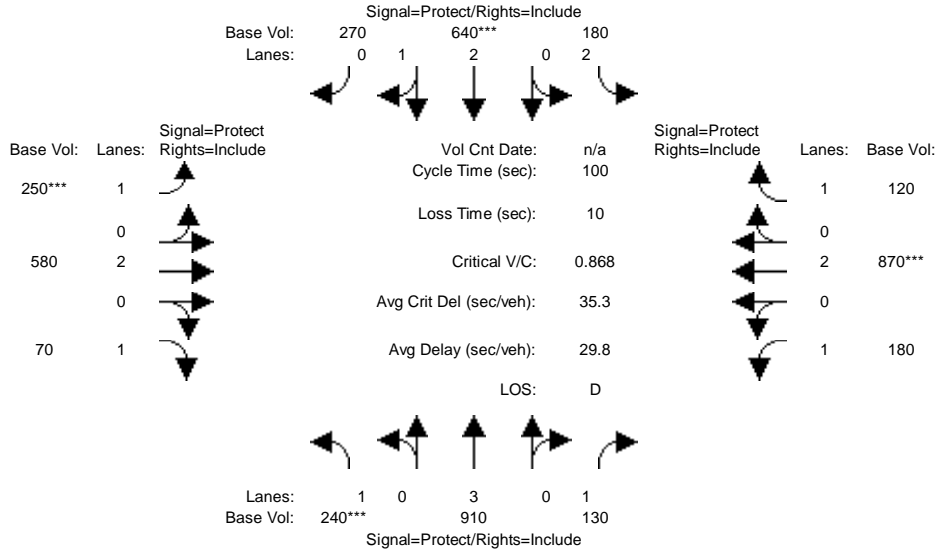


Street Name:	Avalon Blvd.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	810	410	270	740	0	0	0	0	230	0	320
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	810	410	270	740	0	0	0	0	230	0	320
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	810	410	270	740	0	0	0	0	230	0	320
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	810	410	270	740	0	0	0	0	230	0	320
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	810	410	270	740	0	0	0	0	230	0	320
OvlAdjVol:	180									245		
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.17	0.26	0.05	0.15	0.00	0.00	0.00	0.00	0.14	0.00	0.20
OvlAdjV/S:	0.11									0.15		
Crit Moves:	****			****						****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday AM

Intersection #26: Avalon Blvd. & Del Amo Blvd.

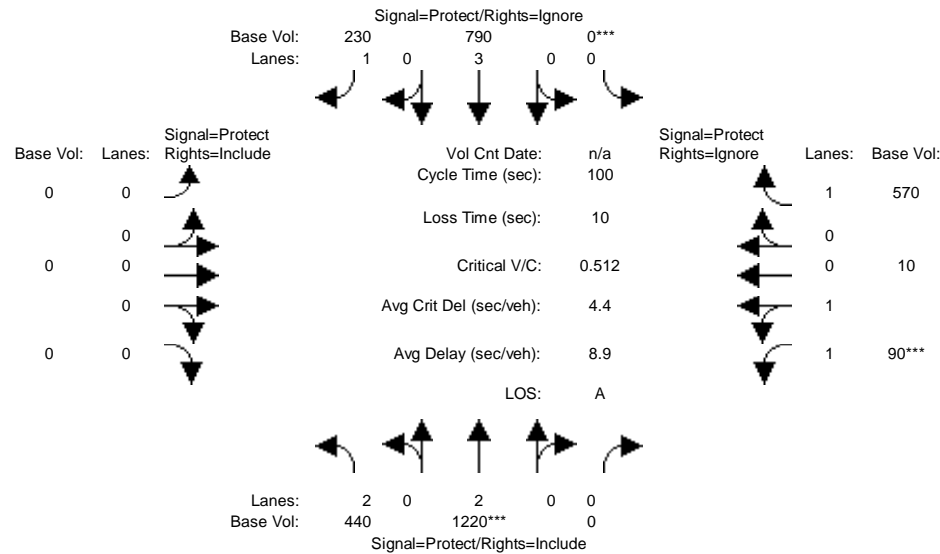


Street Name:	Avalon Blvd.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	240	910	130	180	640	270	250	580	70	180	870	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	240	910	130	180	640	270	250	580	70	180	870	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	240	910	130	180	640	270	250	580	70	180	870	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	240	910	130	180	640	270	250	580	70	180	870	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	240	910	130	180	640	270	250	580	70	180	870	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.11	0.89	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	3376	1424	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.15	0.19	0.08	0.03	0.19	0.19	0.16	0.18	0.04	0.11	0.27	0.08
Crit Moves:	***				***		***				***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday AM

Intersection #27: Avalon Blvd. & I-405 NB Ramps

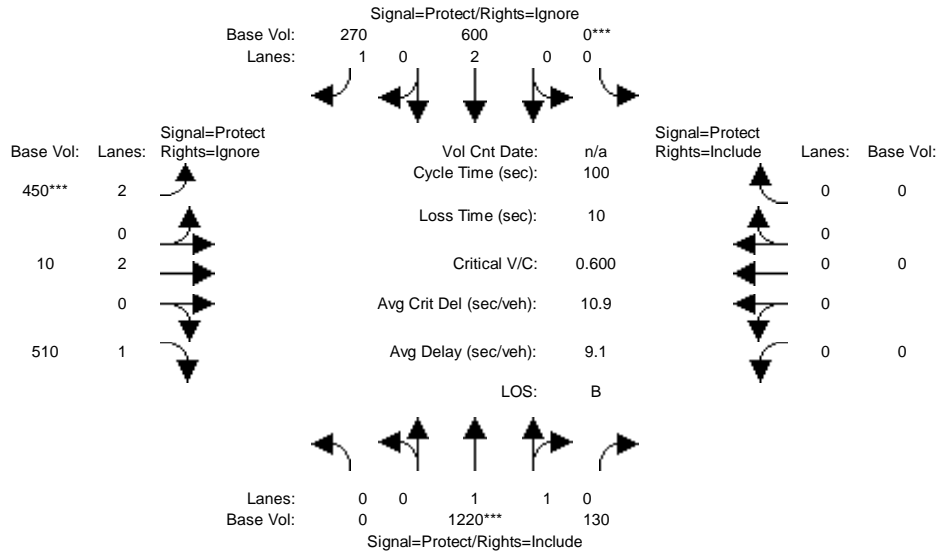


Street Name:	Avalon Blvd.						I-405 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	440	1220	0	0	790	230	0	0	0	90	10	570
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	440	1220	0	0	790	230	0	0	0	90	10	570
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	440	1220	0	0	790	0	0	0	0	90	10	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	440	1220	0	0	790	0	0	0	0	90	10	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Volume:	440	1220	0	0	790	0	0	0	0	90	10	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.80	0.20	1.00
Final Sat.:	5760	3200	0	0	4800	1600	0	0	0	2880	320	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.38	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.03	0.03	0.00
Crit Moves:	****			****						****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday AM

Intersection #28: Avalon Blvd. & I-405 SB Ramps

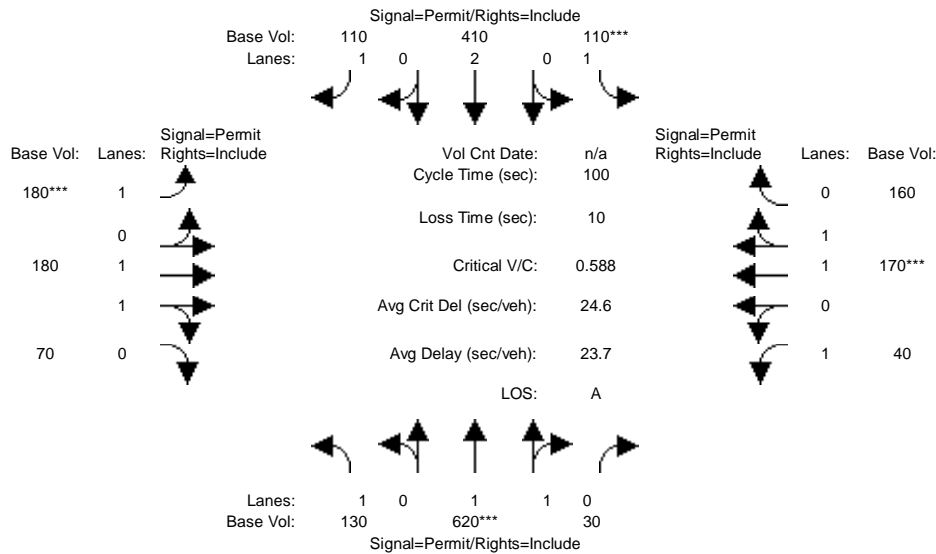


Street Name:	Avalon Blvd.						I-405 SB Ramps					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1220	130	0	600	270	450	10	510	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1220	130	0	600	270	450	10	510	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	1220	130	0	600	0	450	10	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1220	130	0	600	0	450	10	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Volume:	0	1220	130	0	600	0	450	10	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.81	0.19	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	0	2892	308	0	3200	1600	5760	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.42	0.42	0.00	0.19	0.00	0.08	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday AM

Intersection #29: Central Ave. & University Dr.

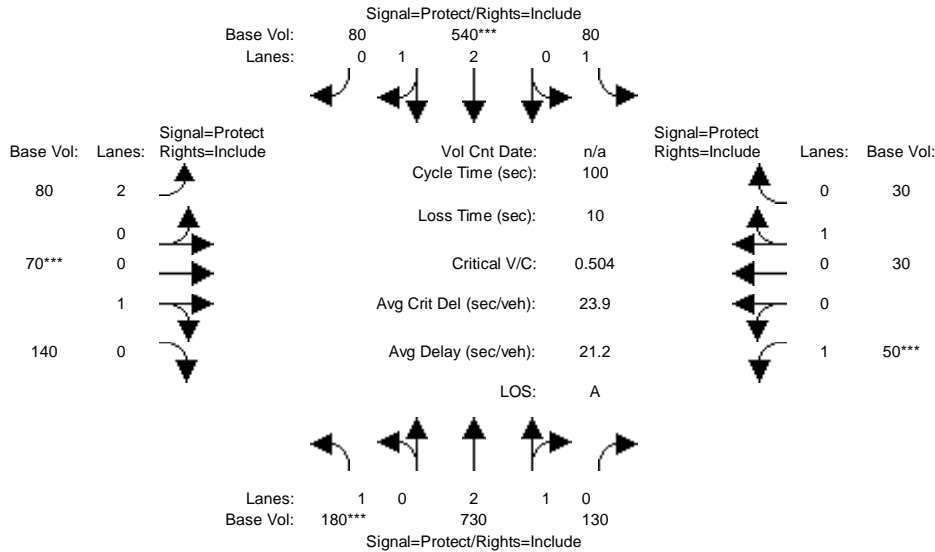


Street Name:	Central Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	130	620	30	110	410	110	180	180	70	40	170	160
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	620	30	110	410	110	180	180	70	40	170	160
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	620	30	110	410	110	180	180	70	40	170	160
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	620	30	110	410	110	180	180	70	40	170	160
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	130	620	30	110	410	110	180	180	70	40	170	160
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.91	0.09	1.00	2.00	1.00	1.00	1.44	0.56	1.00	1.03	0.97
Final Sat.:	1600	3052	148	1600	3200	1600	1600	2304	896	1600	1648	1552
Capacity Analysis Module:												
Vol/Sat:	0.08	0.20	0.20	0.07	0.13	0.07	0.11	0.08	0.08	0.03	0.10	0.10
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday AM

Intersection #30: Wilmington Ave. & University Dr.

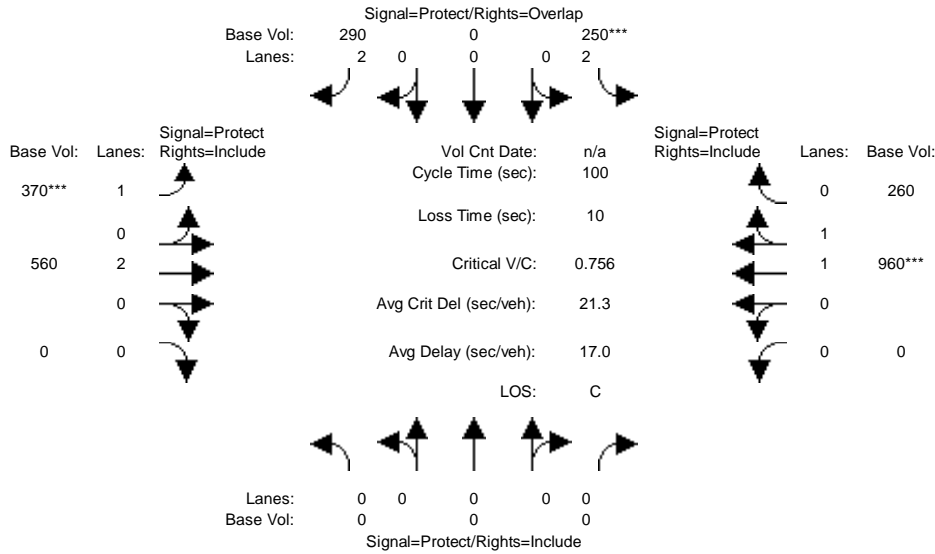


Street Name:	Wilmington Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	180	730	130	80	540	80	80	70	140	50	30	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	180	730	130	80	540	80	80	70	140	50	30	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	180	730	130	80	540	80	80	70	140	50	30	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	180	730	130	80	540	80	80	70	140	50	30	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	180	730	130	80	540	80	80	70	140	50	30	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.55	0.45	1.00	2.61	0.39	2.00	0.33	0.67	1.00	0.50	0.50
Final Sat.:	1600	4074	726	1600	4181	619	5760	533	1067	1600	800	800
Capacity Analysis Module:												
Vol/Sat:	0.11	0.18	0.18	0.05	0.13	0.13	0.01	0.13	0.13	0.03	0.04	0.04
Crit Moves:	***			***	***		***	***		***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday AM

Intersection #31: Central Ave. & Del Amo Blvd.

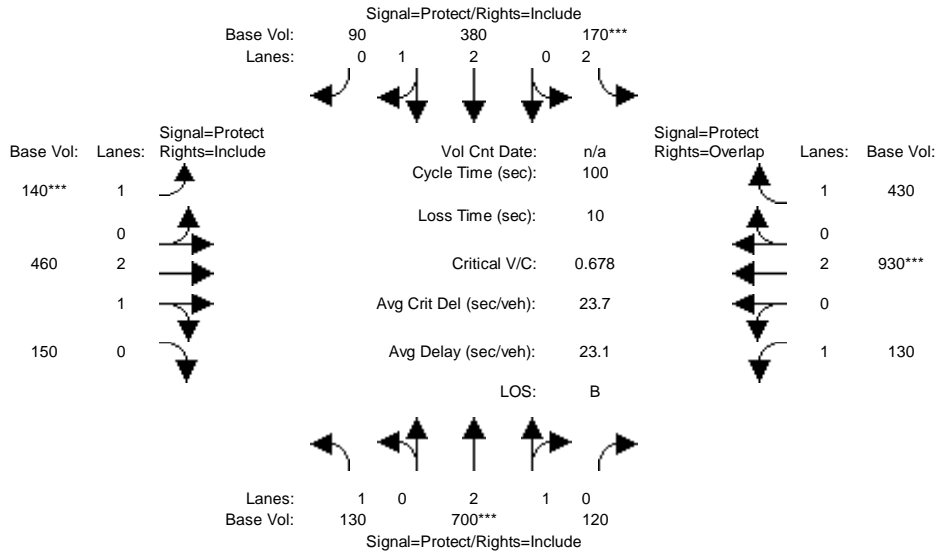


Street Name:	Central Ave.						Del Amo Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	250	0	290	370	560	0	0	960	260
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	250	0	290	370	560	0	0	960	260
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	250	0	290	370	560	0	0	960	260
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	250	0	290	370	560	0	0	960	260
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	250	0	290	370	560	0	0	960	260
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	2.00	1.00	2.00	0.00	0.00	1.57	0.43
Final Sat.:	0	0	0	5760	0	3200	1600	3200	0	0	2518	682
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.04	0.00	0.09	0.23	0.17	0.00	0.00	0.38	0.38
OvlAdjV/S:	0.00											
Crit Moves:				****				****				****

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday AM

Intersection #32: Wilmington Ave. & Del Amo Blvd.

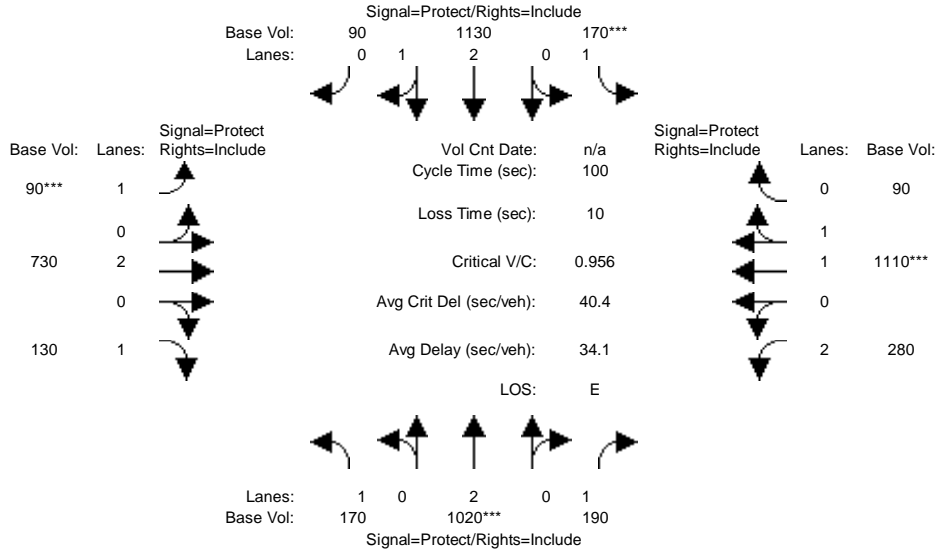


Street Name:	Wilmington Ave.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	130	700	120	170	380	90	140	460	150	130	930	430
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	700	120	170	380	90	140	460	150	130	930	430
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	700	120	170	380	90	140	460	150	130	930	430
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	700	120	170	380	90	140	460	150	130	930	430
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	700	120	170	380	90	140	460	150	130	930	430
OvlAdjVol:												383
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.56	0.44	2.00	2.43	0.57	1.00	2.26	0.74	1.00	2.00	1.00
Final Sat.:	1600	4098	702	5760	3881	919	1600	3620	1180	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.17	0.17	0.03	0.10	0.10	0.09	0.13	0.13	0.08	0.29	0.27
OvlAdjV/S:												0.24
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday AM

Intersection #33: W. Artesia Blvd. & Crenshaw Blvd.

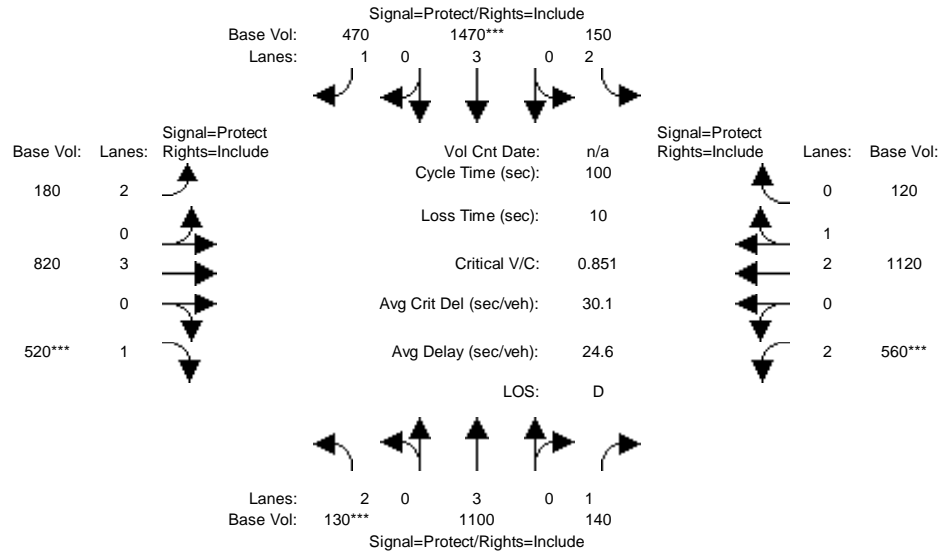


Street Name:	Crenshaw Blvd.						W. Artesia Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	170	1020	190	170	1130	90	90	730	130	280	1110	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	170	1020	190	170	1130	90	90	730	130	280	1110	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	170	1020	190	170	1130	90	90	730	130	280	1110	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	170	1020	190	170	1130	90	90	730	130	280	1110	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	170	1020	190	170	1130	90	90	730	130	280	1110	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.78	0.22	1.00	2.00	1.00	2.00	1.85	0.15
Final Sat.:	1600	3200	1600	1600	4446	354	1600	3200	1600	5760	2960	240
Capacity Analysis Module:												
Vol/Sat:	0.11	0.32	0.12	0.11	0.25	0.25	0.06	0.23	0.08	0.05	0.38	0.38
Crit Moves:	****			****			****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday AM

Intersection #34: W 190th St. & South Western Ave.

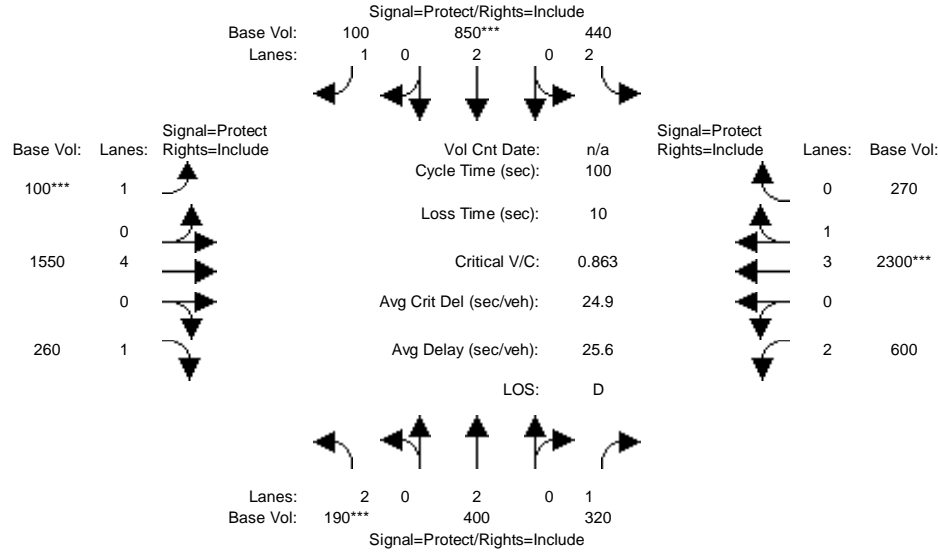


Street Name:	S. Western Ave.						W. 190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	130	1100	140	150	1470	470	180	820	520	560	1120	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	1100	140	150	1470	470	180	820	520	560	1120	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	1100	140	150	1470	470	180	820	520	560	1120	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	1100	140	150	1470	470	180	820	520	560	1120	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	130	1100	140	150	1470	470	180	820	520	560	1120	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.71	0.29
Final Sat.:	5760	4800	1600	5760	4800	1600	5760	4800	1600	5760	4335	465
Capacity Analysis Module:												
Vol/Sat:	0.02	0.23	0.09	0.03	0.31	0.29	0.03	0.17	0.33	0.10	0.26	0.26
Crit Moves:	***			***	***		***		***	***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday AM

Intersection #35: W. Artesia Blvd. & Vermont Av.e

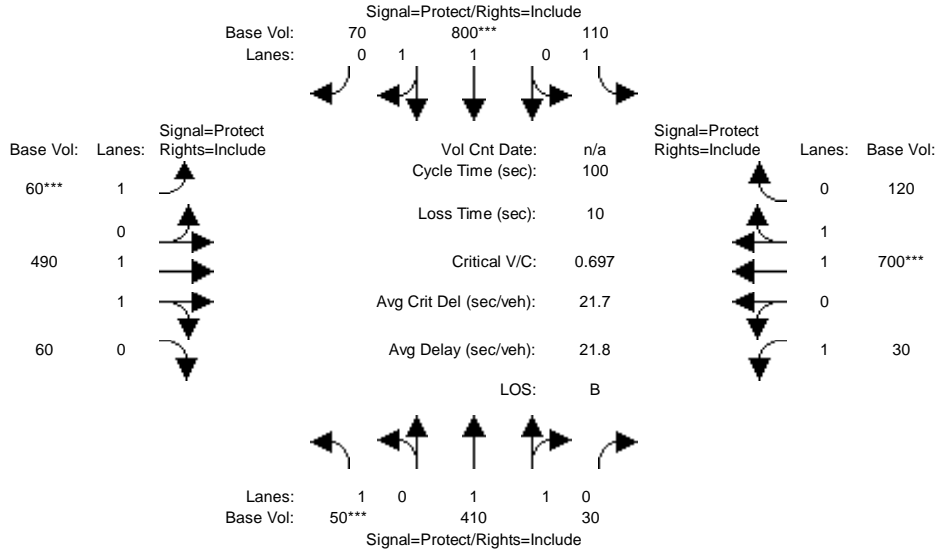


Street Name:	Vermont Ave.						W. Artesia Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	190	400	320	440	850	100	100	1550	260	600	2300	270
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	190	400	320	440	850	100	100	1550	260	600	2300	270
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	190	400	320	440	850	100	100	1550	260	600	2300	270
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	190	400	320	440	850	100	100	1550	260	600	2300	270
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	190	400	320	440	850	100	100	1550	260	600	2300	270
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	1.00	4.00	1.00	2.00	3.58	0.42
Final Sat.:	5760	3200	1600	5760	3200	1600	1600	6400	1600	5760	5728	672
Capacity Analysis Module:												
Vol/Sat:	0.03	0.13	0.20	0.08	0.27	0.06	0.06	0.24	0.16	0.10	0.40	0.40
Crit Moves:	***			***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday AM

Intersection #36: Alameda St. & Compton Blvd.

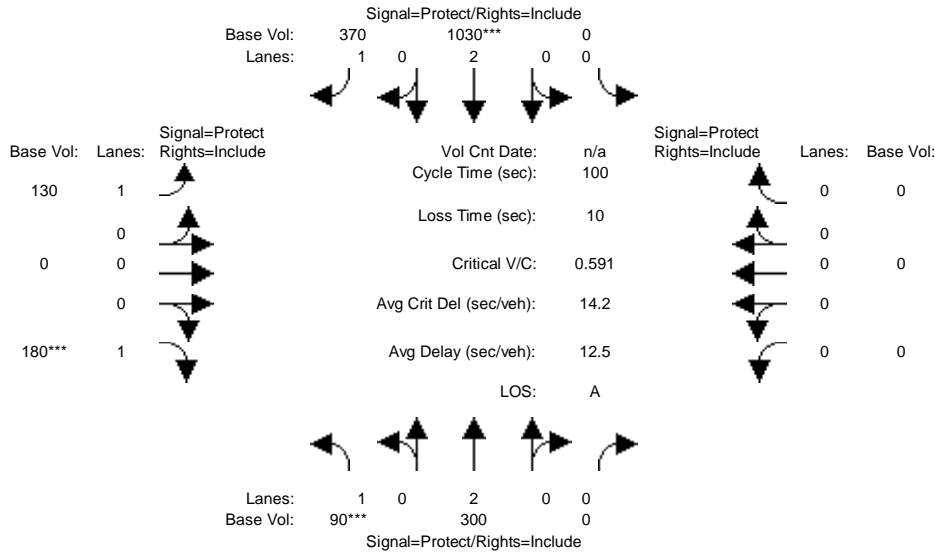


Street Name:	Alameda St.						Compton Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	50	410	30	110	800	70	60	490	60	30	700	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	410	30	110	800	70	60	490	60	30	700	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	410	30	110	800	70	60	490	60	30	700	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	410	30	110	800	70	60	490	60	30	700	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	50	410	30	110	800	70	60	490	60	30	700	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.86	0.14	1.00	1.84	0.16	1.00	1.78	0.22	1.00	1.71	0.29
Final Sat.:	1600	2982	218	1600	2943	257	1600	2851	349	1600	2732	468
Capacity Analysis Module:												
Vol/Sat:	0.03	0.14	0.14	0.07	0.27	0.27	0.04	0.17	0.17	0.02	0.26	0.26
Crit Moves:	***				***		***				***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday AM

Intersection #37: Alameda St. & SR 91 EB Ramps

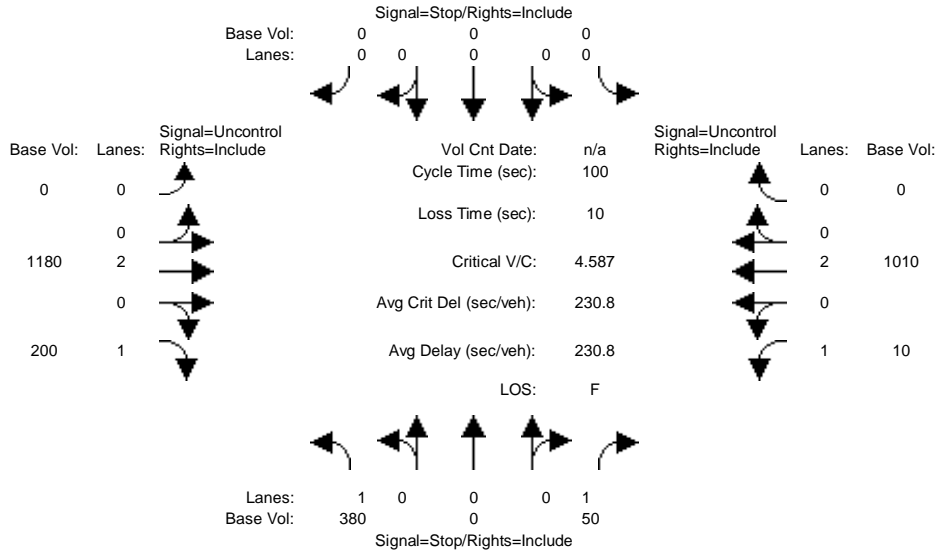


Street Name:	Alameda St.						SR 91 EB Ramps					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	90	300	0	0	1030	370	130	0	180	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	300	0	0	1030	370	130	0	180	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	300	0	0	1030	370	130	0	180	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	300	0	0	1030	370	130	0	180	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	90	300	0	0	1030	370	130	0	180	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	3200	0	0	3200	1600	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.09	0.00	0.00	0.32	0.23	0.08	0.00	0.11	0.00	0.00	0.00
Crit Moves:	***				***				***			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2035 No Project Weekday PM

Intersection #1: Victoria St. & Drive D



Street Name:	Drive D						Victoria St..					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	380	0	50	0	0	0	0	1180	200	10	1010	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	380	0	50	0	0	0	0	1180	200	10	1010	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	380	0	50	0	0	0	0	1180	200	10	1010	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	380	0	50	0	0	0	0	1180	200	10	1010	0
Critical Gap Module:												
Critical Gp:	6.8	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	1705	xxxx	590	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1380	xxxx	xxxxx
Potent Cap.:	84	xxxx	456	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	503	xxxx	xxxxx
Move Cap.:	83	xxxx	456	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	503	xxxx	xxxxx
Volume/Cap:	4.59	xxxx	0.11	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.02	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	40.7	xxxx	0.4	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx
Control Del:	1716	xxxx	13.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	12.3	xxxx	xxxxx
LOS by Move:	F	*	B	*	*	*	*	*	*	B	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	1518.4			xxxxxxx			xxxxxxx			xxxxxxx		

ApproachLOS: F * * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #1 Victoria St. & Drive D

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 2 0 1	1 0 2 0 0
Initial Vol:	380 0 50	0 0 0	0 1180 200	10 1010 0
ApproachDel:	1518.4	xxxxxx	xxxxxx	xxxxxx

Approach[northbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=181.4]

SUCCEED - Vehicle-hours >= 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=430]

SUCCEED - Approach volume >= 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=2830]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #1 Victoria St. & Drive D

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 2 0 1	1 0 2 0 0
Initial Vol:	380 0 50	0 0 0	0 1180 200	10 1010 0

Major Street Volume: 2400

Minor Approach Volume: 430

Minor Approach Volume Threshold: -2 [less than minimum of 150]

SIGNAL WARRANT DISCLAIMER

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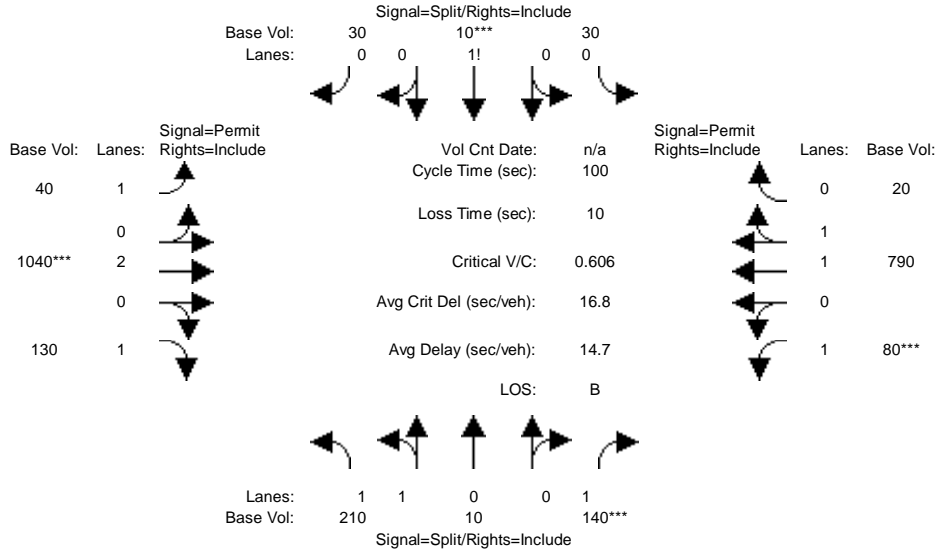
The peak hour warrant analysis in this report is not intended to replace

a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday PM

Intersection #2: Victoria St. & Tamcliff Ave.

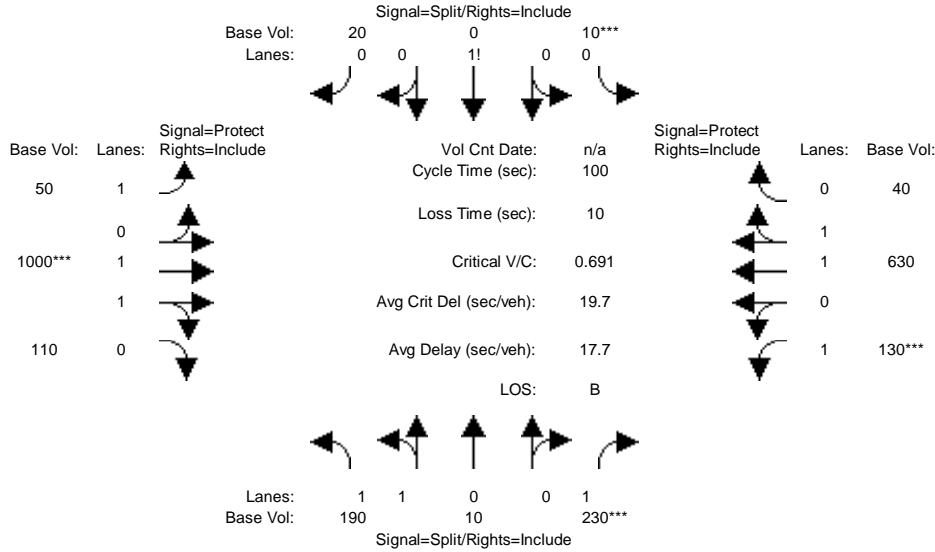


Street Name:	Victoria St.						Tamcliff Ave.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	210	10	140	30	10	30	40	1040	130	80	790	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	210	10	140	30	10	30	40	1040	130	80	790	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	210	10	140	30	10	30	40	1040	130	80	790	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	210	10	140	30	10	30	40	1040	130	80	790	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	210	10	140	30	10	30	40	1040	130	80	790	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.91	0.09	1.00	0.43	0.14	0.43	1.00	2.00	1.00	1.00	1.95	0.05
Final Sat.:	3055	145	1600	686	229	686	1600	3200	1600	1600	3121	79
Capacity Analysis Module:												
Vol/Sat:	0.07	0.07	0.09	0.04	0.04	0.04	0.03	0.33	0.08	0.05	0.25	0.25
Crit Moves:			***			***		***				***

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday PM

Intersection #3: Victoria St. & Birchknoll Dr.

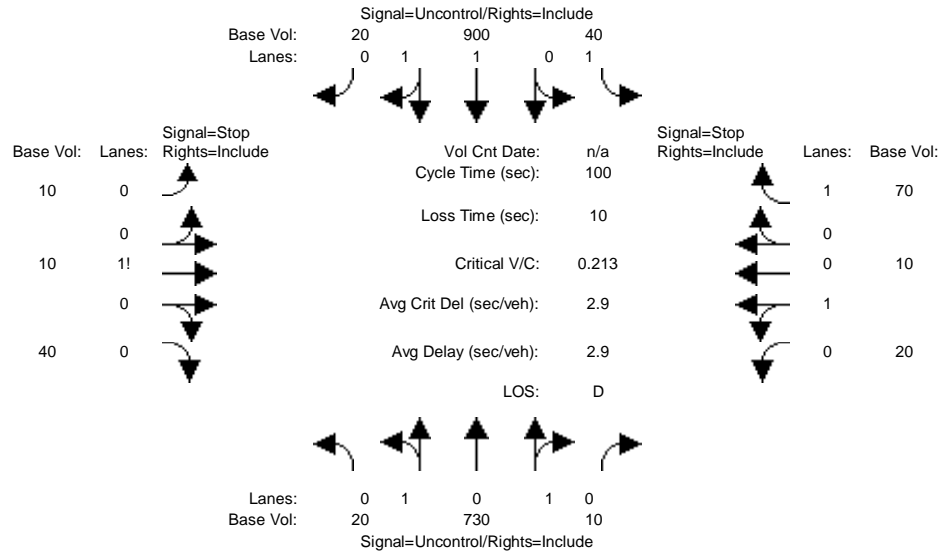


Street Name:	Victoria St.						Birchknoll Dr.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	190	10	230	10	0	20	50	1000	110	130	630	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	190	10	230	10	0	20	50	1000	110	130	630	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	190	10	230	10	0	20	50	1000	110	130	630	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	190	10	230	10	0	20	50	1000	110	130	630	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	190	10	230	10	0	20	50	1000	110	130	630	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.90	0.10	1.00	0.33	0.00	0.67	1.00	1.80	0.20	1.00	1.88	0.12
Final Sat.:	3040	160	1600	533	0	1067	1600	2883	317	1600	3009	191
Capacity Analysis Module:												
Vol/Sat:	0.06	0.06	0.14	0.02	0.00	0.02	0.03	0.35	0.35	0.08	0.21	0.21
Crit Moves:			***	***				***		***		

Transportation Study for CSUDH Campus Master Plan 2018

Level of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2035 No Project Weekday PM

Intersection #5: Central Ave. & Charles Willard St.



Street Name:	Central Ave.						Charles Willard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	20	730	10	40	900	20	10	10	40	20	10	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	730	10	40	900	20	10	10	40	20	10	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	730	10	40	900	20	10	10	40	20	10	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	20	730	10	40	900	20	10	10	40	20	10	70
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	4.1	xxxx	xxxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxxx	2.2	xxxx	xxxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflct Vol:	920	xxxx	xxxxxx	740	xxxx	xxxxxx	1400	1770	460	1310	1775	370
Potent Cap.:	750	xxxx	xxxxxx	876	xxxx	xxxxxx	102	84	554	119	84	633
Move Cap.:	750	xxxx	xxxxxx	876	xxxx	xxxxxx	77	78	554	94	78	633
Volume/Cap:	0.03	xxxx	xxxxxx	0.05	xxxx	xxxxxx	0.13	0.13	0.07	0.21	0.13	0.11
Level of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxxx	0.1	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	0.4
Control Del:	9.9	xxxx	xxxxxx	9.3	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	11.4
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	B
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	182	xxxxxx	88	xxxx	xxxxxx
SharedQueue:	0.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	1.4	xxxxxx	1.3	xxxx	xxxxxx
Shrd ConDel:	9.9	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	34.2	xxxxxx	65.9	xxxx	xxxxxx
Shared LOS:	A	*	*	*	*	*	*	D	*	F	*	*

ApproachDel:	xxxxxx	xxxxxx	34.2	27.7
ApproachLOS:	*	*	D	D

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #5 Central Ave. & Charles Willard St.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 1 0 1 0	1 0 1 1 0	0 0 1! 0 0	0 1 0 0 1
Initial Vol:	20 730 10	40 900 20	10 10 40	20 10 70
ApproachDel:	xxxxxx	xxxxxx	34.2	27.7

Approach[eastbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.6]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=60]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=1880]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Approach[westbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.8]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=100]

FAIL - Approach volume less than 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=1880]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #5 Central Ave. & Charles Willard St.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 1 0 1 0	1 0 1 1 0	0 0 1! 0 0	0 1 0 0 1
Initial Vol:	20 730 10	40 900 20	10 10 40	20 10 70
Major Street Volume:	1720			
Minor Approach Volume:	100			

Minor Approach Volume Threshold: 141 [less than minimum of 150]

SIGNAL WARRANT DISCLAIMER

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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
2035 No Project Weekday PM

Intersection #6: Central Ave. & Project Driveway/Beachey Pl.

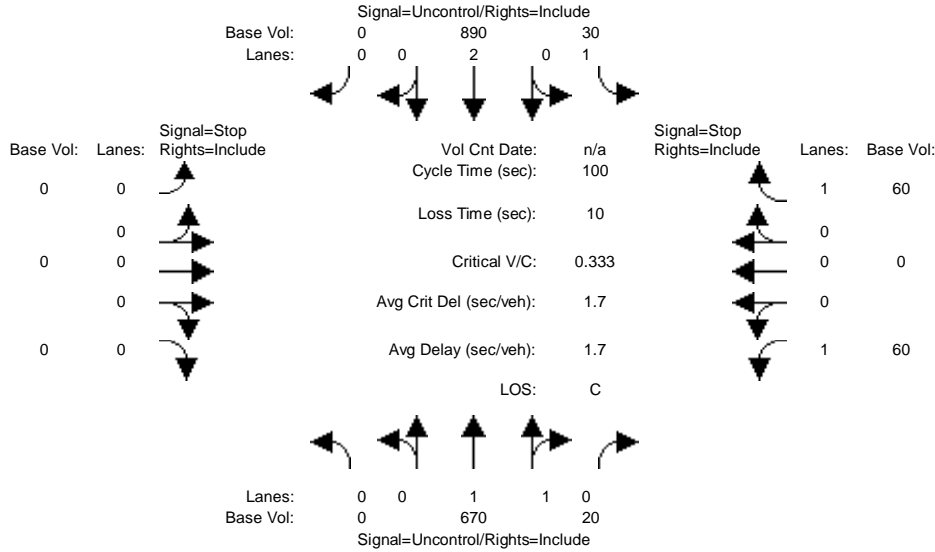


Table with columns for Street Name (Central Ave., Beachey Pl.), Approach (North Bound, South Bound, East Bound, West Bound), and Movement (L, T, R). Rows include Volume Module, Critical Gap Module, Capacity Module, and Level Of Service Module.

ApproachDel:	xxxxxx	xxxxxx	xxxxxx	22.8
ApproachLOS:	*	*	*	C

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #6 Central Ave. & Project Driveway/Beachey Pl.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 0 1 1 0	1 0 2 0 0	0 0 0 0 0	1 0 0 0 1
Initial Vol:	0 670 20	30 890 0	0 0 0 0	60 0 60
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	22.8

-----|-----|-----|-----|-----|

Approach[westbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.8]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=120]

FAIL - Approach volume less than 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=1730]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #6 Central Ave. & Project Driveway/Beachey Pl.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 0 1 1 0	1 0 2 0 0	0 0 0 0 0	1 0 0 0 1
Initial Vol:	0 670 20	30 890 0	0 0 0 0	60 0 60

-----|-----|-----|-----|-----|

Major Street Volume: 1610
 Minor Approach Volume: 120
 Minor Approach Volume Threshold: 169

SIGNAL WARRANT DISCLAIMER

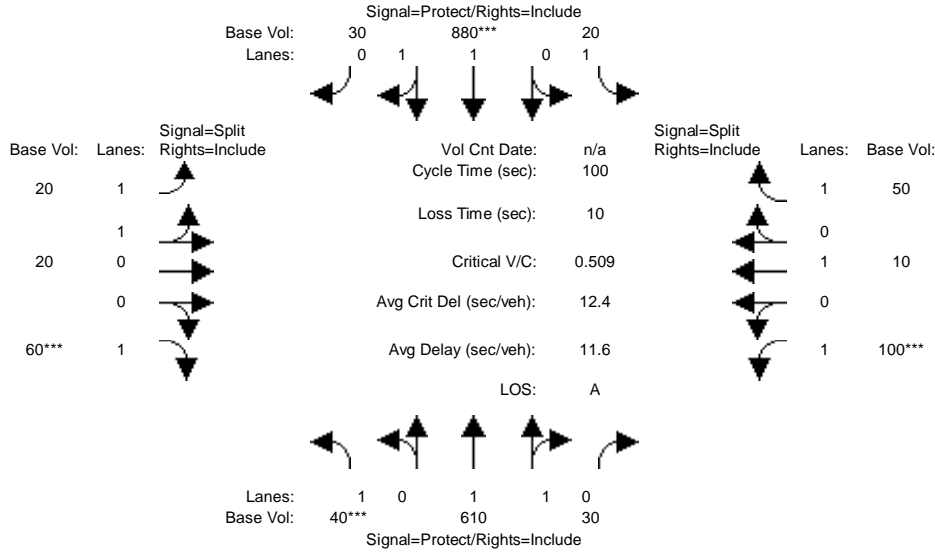
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday PM

Intersection #7: Central Ave. & Glenn Curtiss St.

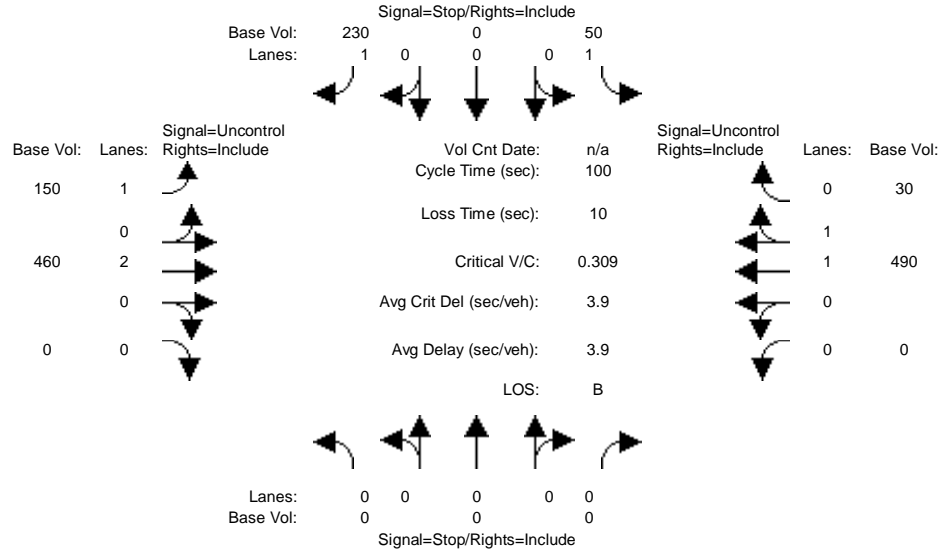


Street Name:	Central Ave.						Glenn Curtiss St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	40	610	30	20	880	30	20	20	60	100	10	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	610	30	20	880	30	20	20	60	100	10	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	610	30	20	880	30	20	20	60	100	10	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	610	30	20	880	30	20	20	60	100	10	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	40	610	30	20	880	30	20	20	60	100	10	50
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.91	0.09	1.00	1.93	0.07	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	3050	150	1600	3095	105	1600	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.20	0.20	0.01	0.28	0.28	0.01	0.01	0.04	0.06	0.01	0.03
Crit Moves:	***			***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2035 No Project Weekday PM

Intersection #9: University Dr. & Toro Center Dr.



Street Name:	University Dr.						Toro Center Dr.						
Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Volume Module:													
Base Vol:	0	0	0	50	0	230	150	460	0	0	0	490	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	50	0	230	150	460	0	0	0	490	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	50	0	230	150	460	0	0	0	490	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	50	0	230	150	460	0	0	0	490	30
Critical Gap Module:													
Critical Gp:	xxxxx	xxxx	xxxxx	6.8	xxxx	6.9	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
Capacity Module:													
Cnflct Vol:	xxxx	xxxx	xxxxx	1035	xxxx	260	520	xxxx	xxxxx	xxxx	xxxx	xxxxx	
Potent Cap.:	xxxx	xxxx	xxxxx	231	xxxx	745	1056	xxxx	xxxxx	xxxx	xxxx	xxxxx	
Move Cap.:	xxxx	xxxx	xxxxx	206	xxxx	745	1056	xxxx	xxxxx	xxxx	xxxx	xxxxx	
Volume/Cap:	xxxx	xxxx	xxxx	0.24	xxxx	0.31	0.14	xxxx	xxxx	xxxx	xxxx	xxxx	
Level Of Service Module:													
2Way95thQ:	xxxx	xxxx	xxxxx	0.9	xxxx	1.3	0.5	xxxx	xxxxx	xxxx	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx	28.0	xxxx	12.0	9.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
LOS by Move:	*	*	*	D	*	B	A	*	*	*	*	*	
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*	

ApproachDel: xxxxxx 14.8 xxxxxx xxxxxx
 ApproachLOS: * B * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #9 University Dr. & Toro Center Dr.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0	0	0	0	0	0	1	0	2	0	0	1
Initial Vol:	0	0	0	50	0	230	150	460	0	0	490	30
ApproachDel:	xxxxxx			14.8			xxxxxx			xxxxxx		

Approach[southbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=1.2]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=280]

SUCCEED - Approach volume >= 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=1410]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #9 University Dr. & Toro Center Dr.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0	0	0	0	0	0	1	0	2	0	0	1
Initial Vol:	0	0	0	50	0	230	150	460	0	0	490	30

Major Street Volume: 1130
 Minor Approach Volume: 280
 Minor Approach Volume Threshold: 322

SIGNAL WARRANT DISCLAIMER

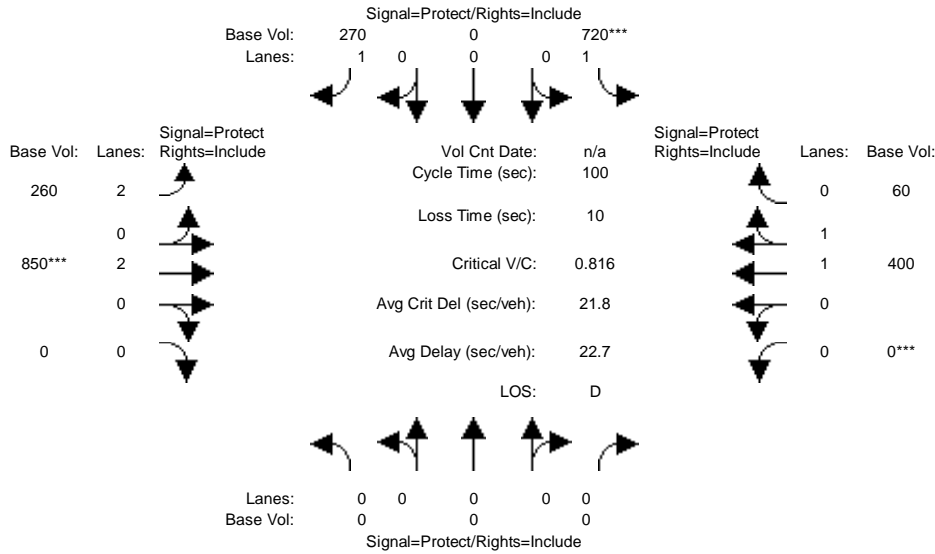
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday PM

Intersection #10: Albertoni St. & SR 91 EB Ramps

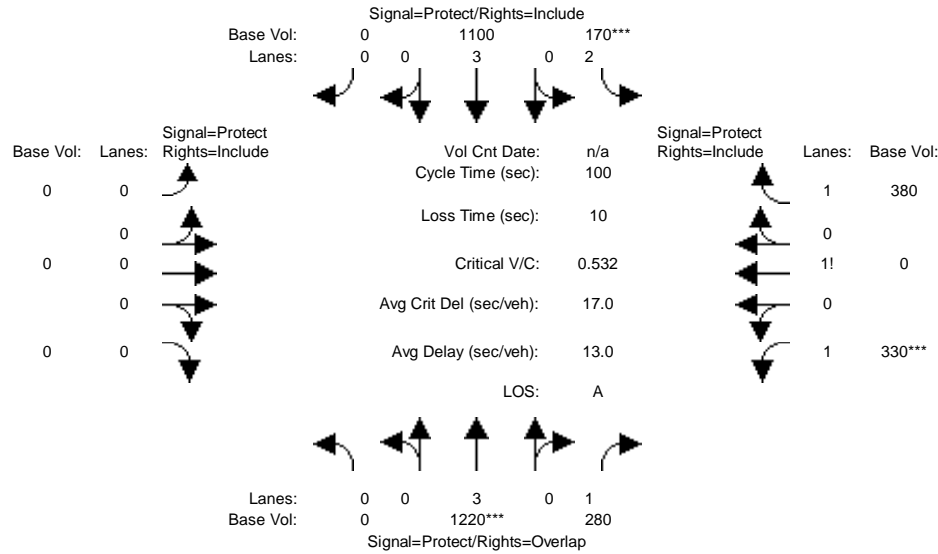


Street Name:	Albertoni St.						SR 91 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	720	0	270	260	850	0	0	400	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	720	0	270	260	850	0	0	400	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	720	0	270	260	850	0	0	400	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	720	0	270	260	850	0	0	400	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	720	0	270	260	850	0	0	400	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.74	0.26
Final Sat.:	0	0	0	1600	0	1600	5760	3200	0	0	2783	417
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.45	0.00	0.17	0.05	0.27	0.00	0.00	0.14	0.14
Crit Moves:				***				***		***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday PM

Intersection #11: Avalon Blvd. & SR 91 WB On-Ramp

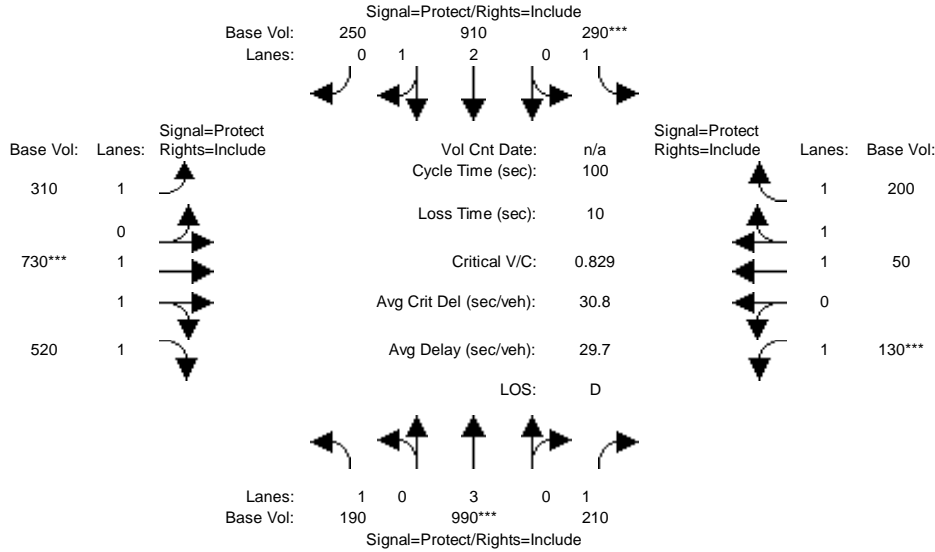


Street Name:	Avalon Blvd.						SR 91 WB On-Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1220	280	170	1100	0	0	0	0	330	0	380
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1220	280	170	1100	0	0	0	0	330	0	380
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1220	280	170	1100	0	0	0	0	330	0	380
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1220	280	170	1100	0	0	0	0	330	0	380
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	1220	280	170	1100	0	0	0	0	330	0	380
OvlAdjVol:	43											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.39	0.00	1.61
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	2231	0	2569
Capacity Analysis Module:												
Vol/Sat:	0.00	0.25	0.17	0.03	0.23	0.00	0.00	0.00	0.00	0.15	0.00	0.15
OvlAdjV/S:	0.03											
Crit Moves:	****			****						****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday PM

Intersection #12: Avalon Blvd. & Albertoni St.

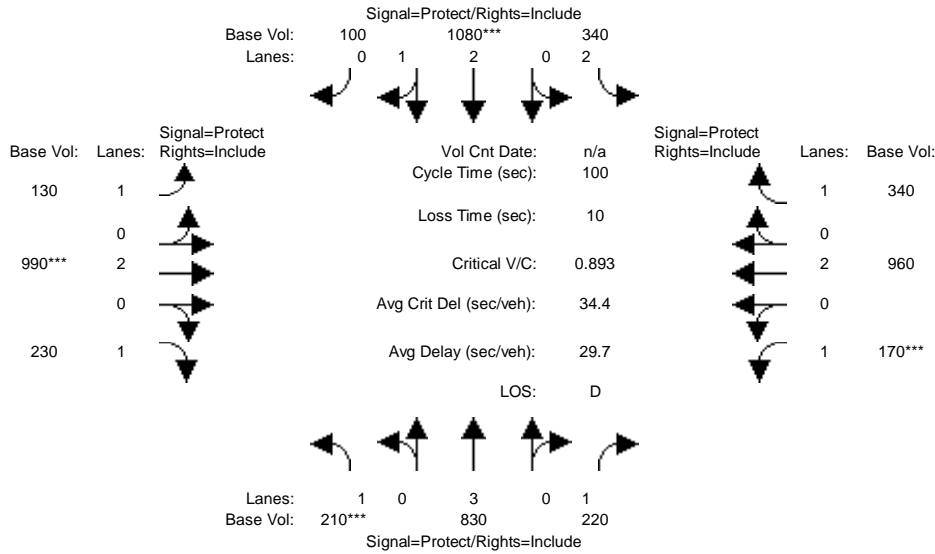


Street Name:	Avalon Blvd.						Albertoni St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	190	990	210	290	910	250	310	730	520	130	50	200
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	190	990	210	290	910	250	310	730	520	130	50	200
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	190	990	210	290	910	250	310	730	520	130	50	200
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	190	990	210	290	910	250	310	730	520	130	50	200
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	190	990	210	290	910	250	310	730	520	130	50	200
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.35	0.65	1.00	1.75	1.25	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3766	1034	1600	2803	1997	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.12	0.21	0.13	0.18	0.24	0.24	0.19	0.26	0.26	0.08	0.03	0.06
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday PM

Intersection #13: Avalon Blvd. & Victoria St.

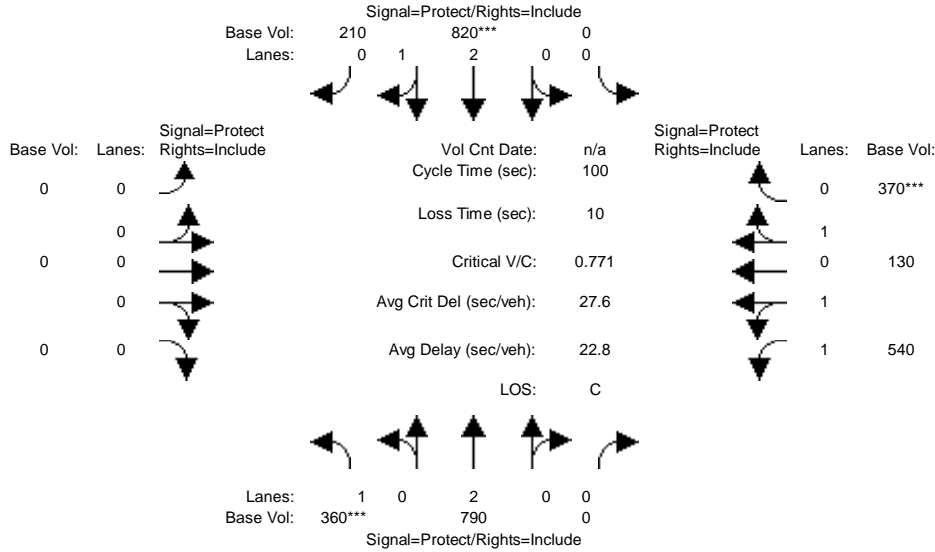


Street Name:	Avalon Blvd.						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	210	830	220	340	1080	100	130	990	230	170	960	340
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	210	830	220	340	1080	100	130	990	230	170	960	340
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	210	830	220	340	1080	100	130	990	230	170	960	340
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	210	830	220	340	1080	100	130	990	230	170	960	340
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	210	830	220	340	1080	100	130	990	230	170	960	340
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.75	0.25	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4393	407	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.13	0.17	0.14	0.06	0.25	0.25	0.08	0.31	0.14	0.11	0.30	0.21
Crit Moves:	***			***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday PM

Intersection #14: Central Ave. & Artesia Blvd.

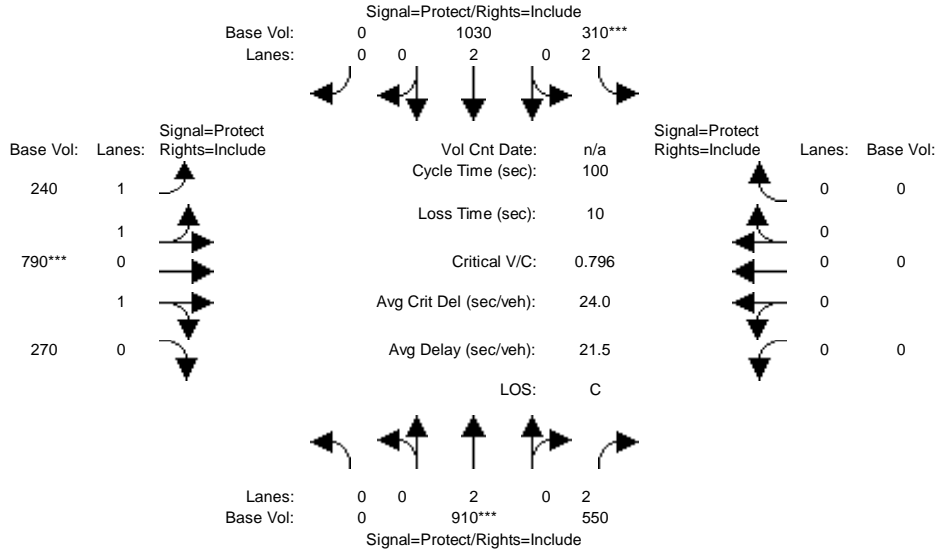


Street Name:	Central Ave.						Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	360	790	0	0	820	210	0	0	0	540	130	370
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	360	790	0	0	820	210	0	0	0	540	130	370
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	360	790	0	0	820	210	0	0	0	540	130	370
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	360	790	0	0	820	210	0	0	0	540	130	370
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	360	790	0	0	820	210	0	0	0	540	130	370
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.39	0.61	0.00	0.00	0.00	1.61	0.39	1.00
Final Sat.:	1600	3200	0	0	3821	979	0	0	0	2579	621	1600
Capacity Analysis Module:												
Vol/Sat:	0.23	0.25	0.00	0.00	0.21	0.21	0.00	0.00	0.00	0.21	0.21	0.23
Crit Moves:	***				***						***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday PM

Intersection #15: Central Ave. & Albertoni St./Artesia Blvd. EB

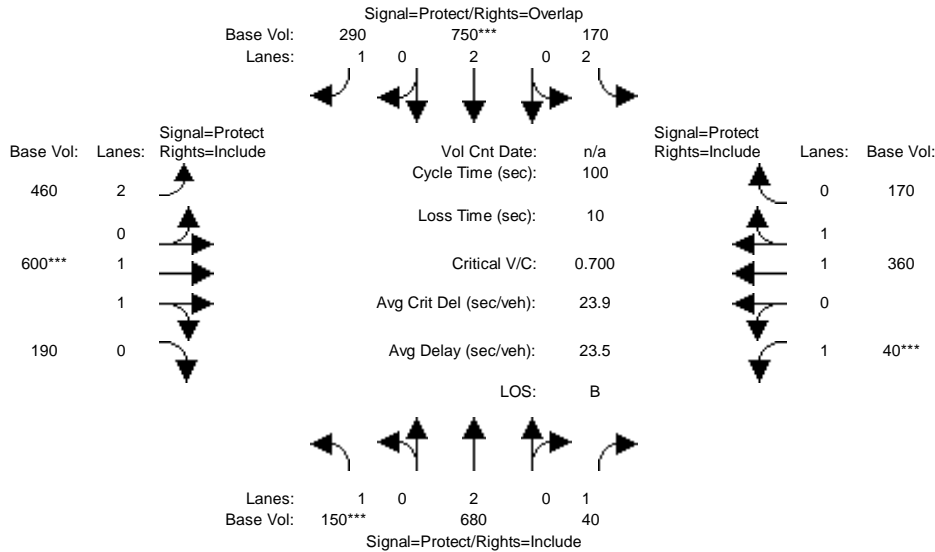


Street Name:	Central Ave.						Albertoni St./Artesia Blvd. EB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	910	550	310	1030	0	240	790	270	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	910	550	310	1030	0	240	790	270	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	910	550	310	1030	0	240	790	270	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	910	550	310	1030	0	240	790	270	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	910	550	310	1030	0	240	790	270	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.00	1.38	0.62	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	1600	2209	991	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.28	0.17	0.05	0.32	0.00	0.15	0.36	0.27	0.00	0.00	0.00
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday PM

Intersection #16: Central Ave. & Victoria St.

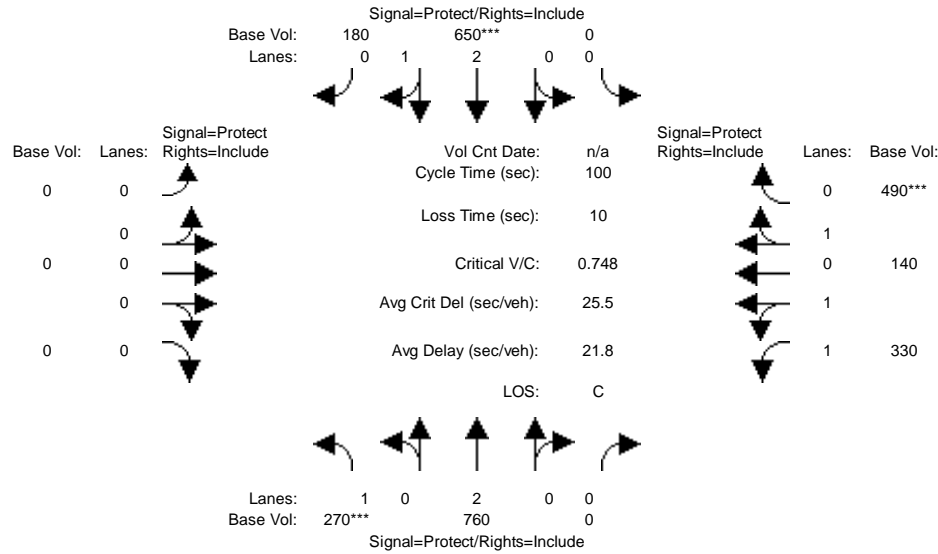


Street Name:	Central Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	150	680	40	170	750	290	460	600	190	40	360	170
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	680	40	170	750	290	460	600	190	40	360	170
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	680	40	170	750	290	460	600	190	40	360	170
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	680	40	170	750	290	460	600	190	40	360	170
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	680	40	170	750	290	460	600	190	40	360	170
OvlAdjVol:	162											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.52	0.48	1.00	1.36	0.64
Final Sat.:	1600	3200	1600	5760	3200	1600	5760	2430	770	1600	2174	1026
Capacity Analysis Module:												
Vol/Sat:	0.09	0.21	0.03	0.03	0.23	0.18	0.08	0.25	0.25	0.03	0.17	0.17
OvlAdjV/S:	0.10											
Crit Moves:	***			***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday PM

Intersection #17: Wilmington Ave. & Artesia Blvd. WB

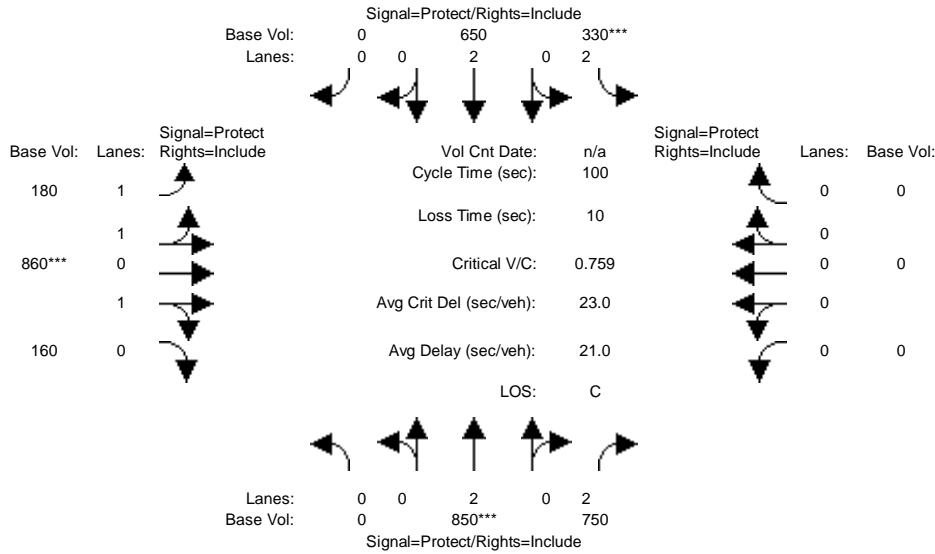


Street Name:	Wilmington Ave.						Artesia Blvd. WB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	270	760	0	0	650	180	0	0	0	330	140	490
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	270	760	0	0	650	180	0	0	0	330	140	490
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	270	760	0	0	650	180	0	0	0	330	140	490
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	270	760	0	0	650	180	0	0	0	330	140	490
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	270	760	0	0	650	180	0	0	0	330	140	490
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.35	0.65	0.00	0.00	0.00	1.40	0.60	1.00
Final Sat.:	1600	3200	0	0	3759	1041	0	0	0	2247	953	1600
Capacity Analysis Module:												
Vol/Sat:	0.17	0.24	0.00	0.00	0.17	0.17	0.00	0.00	0.00	0.15	0.15	0.31
Crit Moves:	***				***							***

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday PM

Intersection #18: Wilmington Ave. & Artesia Blvd. EB

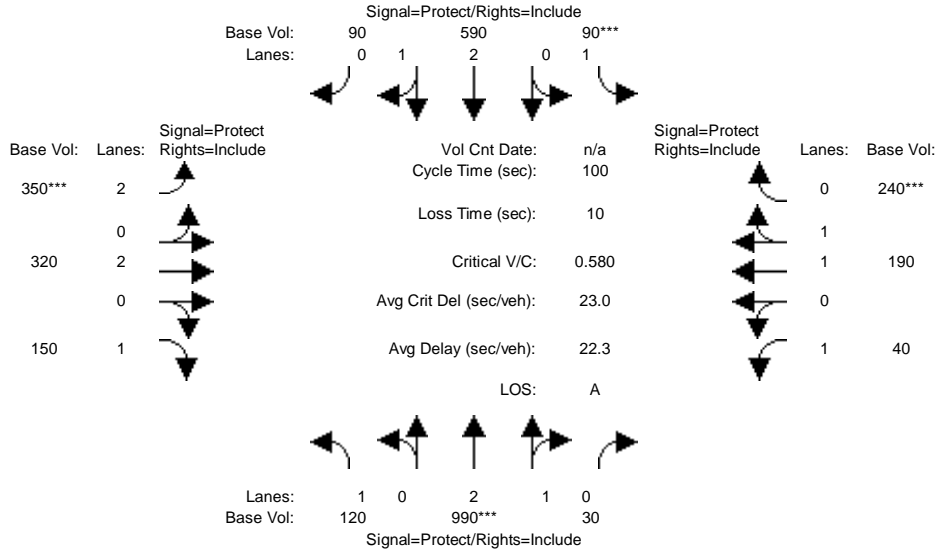


Street Name:	Wilmington Ave.						Artesia Blvd. EB					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	850	750	330	650	0	180	860	160	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	850	750	330	650	0	180	860	160	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	850	750	330	650	0	180	860	160	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	850	750	330	650	0	180	860	160	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	850	750	330	650	0	180	860	160	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.00	1.60	0.40	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	1600	2561	639	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.27	0.23	0.06	0.20	0.00	0.11	0.34	0.25	0.00	0.00	0.00
Crit Moves:		****		****				****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday PM

Intersection #19: Wilmington Ave. & Victoria St.

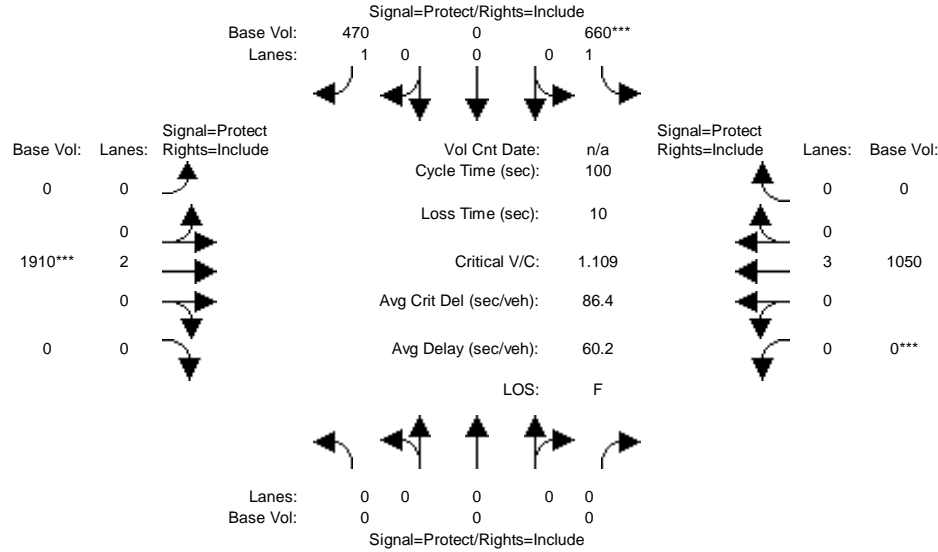


Street Name:	Wilmington Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	120	990	30	90	590	90	350	320	150	40	190	240
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	120	990	30	90	590	90	350	320	150	40	190	240
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	120	990	30	90	590	90	350	320	150	40	190	240
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	990	30	90	590	90	350	320	150	40	190	240
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	120	990	30	90	590	90	350	320	150	40	190	240
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.91	0.09	1.00	2.60	0.40	2.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	4659	141	1600	4165	635	5760	3200	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.21	0.21	0.06	0.14	0.14	0.06	0.10	0.09	0.03	0.12	0.15
Crit Moves:	****			****			****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday PM

Intersection #20: I-110 SB Off-Ramp & 190th St.

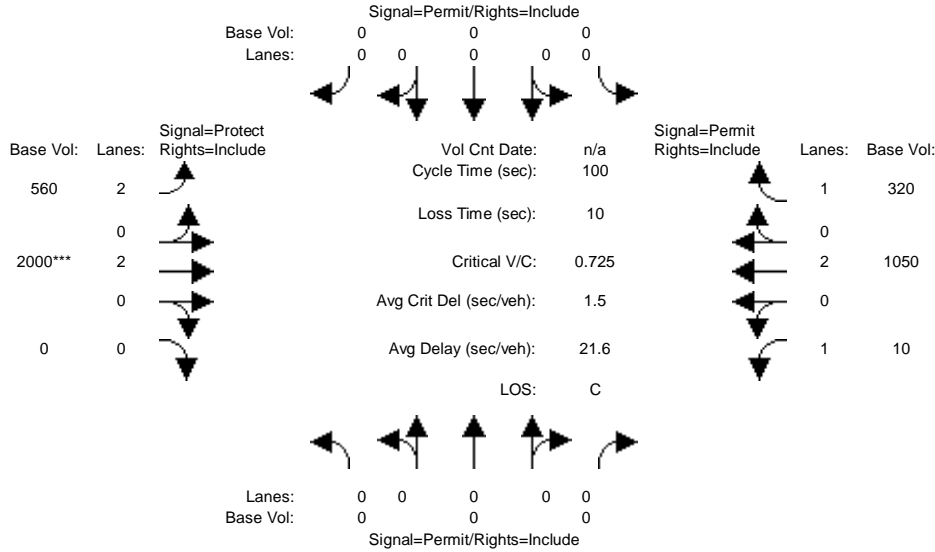


Street Name:	I-110 SB Off-Ramp						190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	660	0	470	0	1910	0	0	1050	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	660	0	470	0	1910	0	0	1050	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	660	0	470	0	1910	0	0	1050	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	660	0	470	0	1910	0	0	1050	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	660	0	470	0	1910	0	0	1050	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.41	0.00	0.29	0.00	0.60	0.00	0.00	0.22	0.00
Crit Moves:				***				***			***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday PM

Intersection #21: I-110 NB On-Ramp & 190th St.

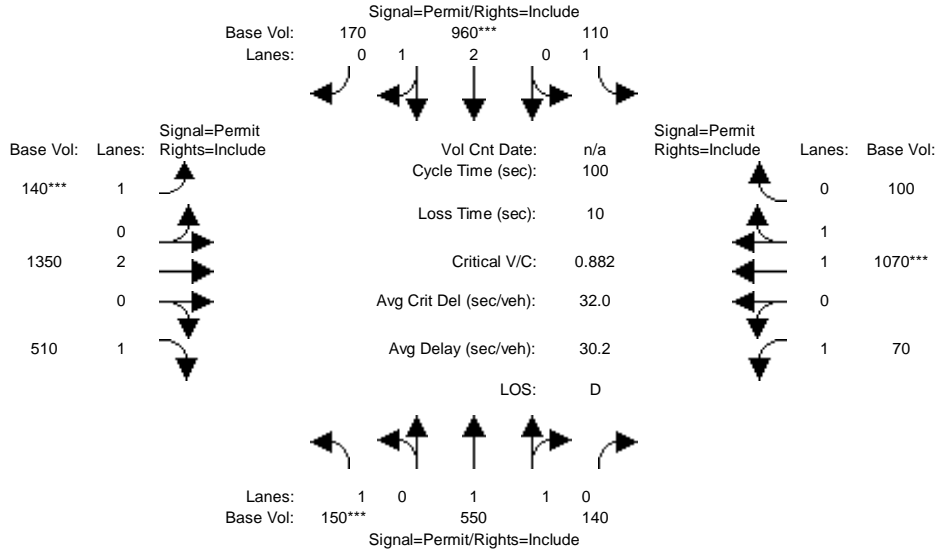


Street Name:	I-110 NB On-Ramp						190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	0	0	0	560	2000	0	10	1050	320
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	560	2000	0	10	1050	320
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	560	2000	0	10	1050	320
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	560	2000	0	10	1050	320
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	0	0	0	560	2000	0	10	1050	320
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	0	0	0	0	0	5760	3200	0	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.63	0.00	0.01	0.33	0.20
Crit Moves:	***											

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday PM

Intersection #22: Figueroa St. & 190th St./Victoria St.

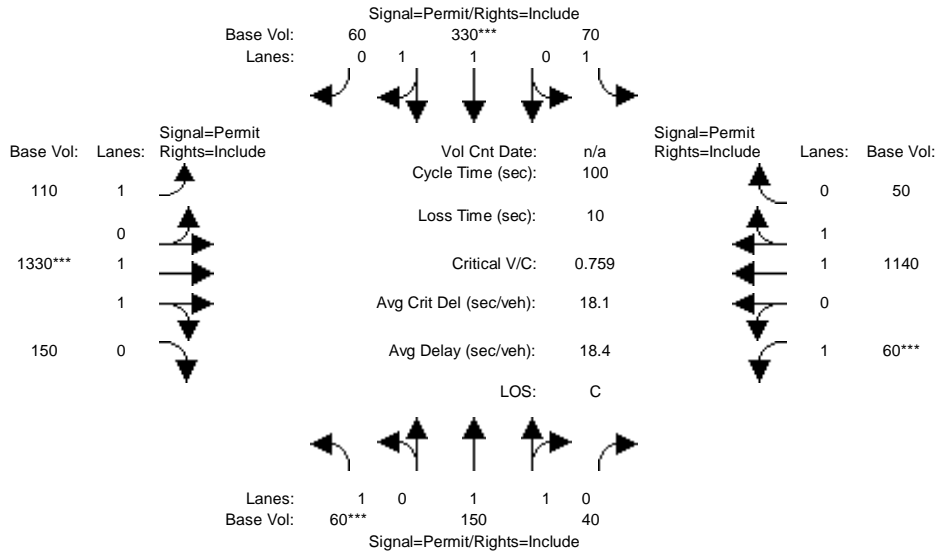


Street Name:	Figueroa St.						190th St./Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	150	550	140	110	960	170	140	1350	510	70	1070	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	550	140	110	960	170	140	1350	510	70	1070	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	550	140	110	960	170	140	1350	510	70	1070	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	550	140	110	960	170	140	1350	510	70	1070	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	150	550	140	110	960	170	140	1350	510	70	1070	100
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.59	0.41	1.00	2.55	0.45	1.00	2.00	1.00	1.00	1.83	0.17
Final Sat.:	1600	2551	649	1600	4078	722	1600	3200	1600	1600	2926	274
Capacity Analysis Module:												
Vol/Sat:	0.09	0.22	0.22	0.07	0.24	0.24	0.09	0.42	0.32	0.04	0.37	0.37
Crit Moves:	***				***		***				***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday PM

Intersection #23: Broadway & Victoria St.

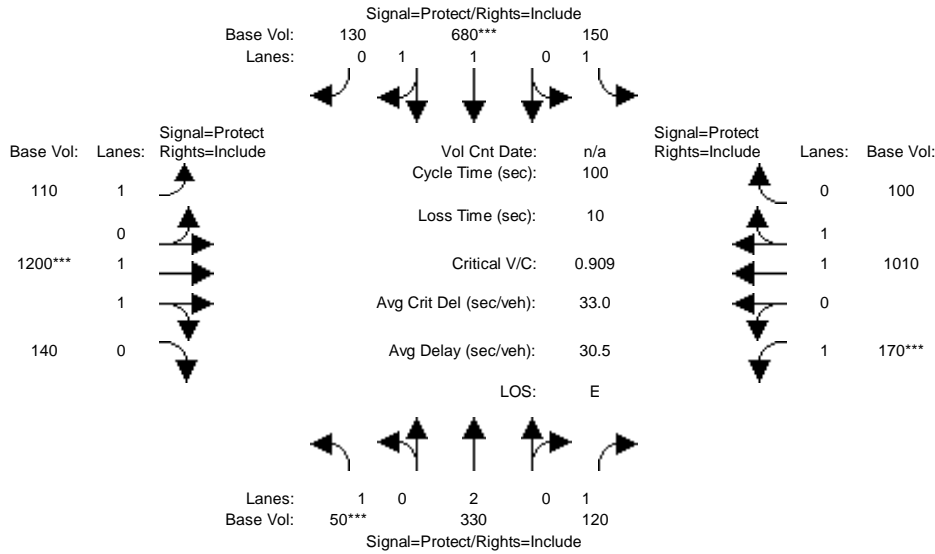


Street Name:	Broadway						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	60	150	40	70	330	60	110	1330	150	60	1140	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	150	40	70	330	60	110	1330	150	60	1140	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	150	40	70	330	60	110	1330	150	60	1140	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	150	40	70	330	60	110	1330	150	60	1140	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	60	150	40	70	330	60	110	1330	150	60	1140	50
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.58	0.42	1.00	1.69	0.31	1.00	1.80	0.20	1.00	1.92	0.08
Final Sat.:	1600	2526	674	1600	2708	492	1600	2876	324	1600	3066	134
Capacity Analysis Module:												
Vol/Sat:	0.04	0.06	0.06	0.04	0.12	0.12	0.07	0.46	0.46	0.04	0.37	0.37
Crit Moves:	***			***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday PM

Intersection #24: Main St. & Victoria St.

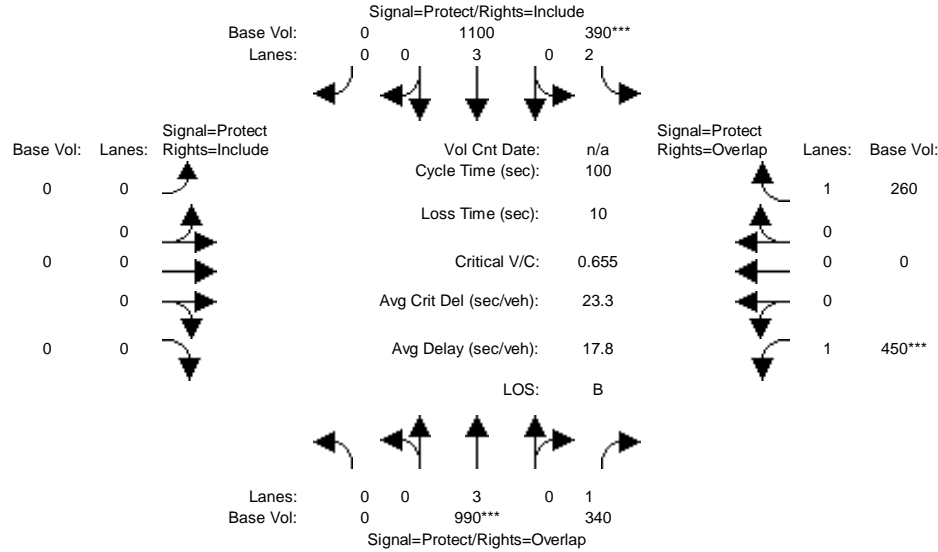


Street Name:	Main St.						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	50	330	120	150	680	130	110	1200	140	170	1010	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	330	120	150	680	130	110	1200	140	170	1010	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	330	120	150	680	130	110	1200	140	170	1010	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	330	120	150	680	130	110	1200	140	170	1010	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	50	330	120	150	680	130	110	1200	140	170	1010	100
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.68	0.32	1.00	1.79	0.21	1.00	1.82	0.18
Final Sat.:	1600	3200	1600	1600	2686	514	1600	2866	334	1600	2912	288
Capacity Analysis Module:												
Vol/Sat:	0.03	0.10	0.08	0.09	0.25	0.25	0.07	0.42	0.42	0.11	0.35	0.35
Crit Moves:	***			***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday PM

Intersection #25: Avalon Blvd. & University Dr.

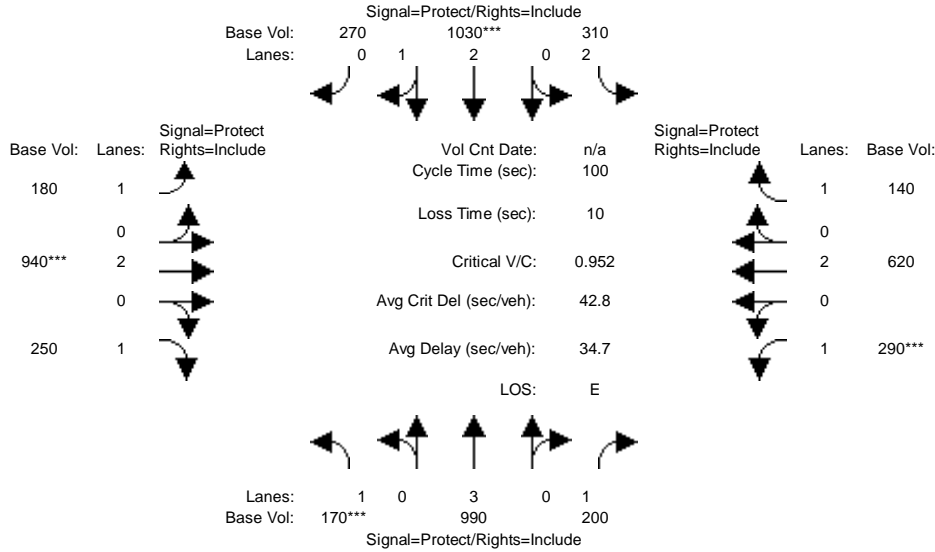


Street Name:	Avalon Blvd.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	990	340	390	1100	0	0	0	0	450	0	260
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	990	340	390	1100	0	0	0	0	450	0	260
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	990	340	390	1100	0	0	0	0	450	0	260
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	990	340	390	1100	0	0	0	0	450	0	260
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	990	340	390	1100	0	0	0	0	450	0	260
OvlAdjVol:												152
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.21	0.21	0.07	0.23	0.00	0.00	0.00	0.00	0.28	0.00	0.16
OvlAdjV/S:												0.09
Crit Moves:	****			****						****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday PM

Intersection #26: Avalon Blvd. & Del Amo Blvd.

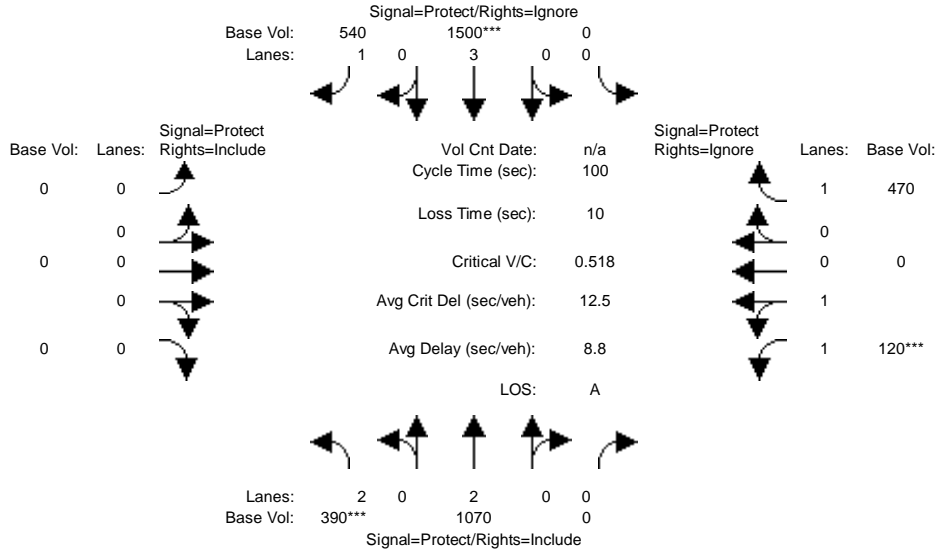


Street Name:	Avalon Blvd.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	170	990	200	310	1030	270	180	940	250	290	620	140
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	170	990	200	310	1030	270	180	940	250	290	620	140
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	170	990	200	310	1030	270	180	940	250	290	620	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	170	990	200	310	1030	270	180	940	250	290	620	140
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	170	990	200	310	1030	270	180	940	250	290	620	140
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.38	0.62	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	3803	997	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.21	0.13	0.05	0.27	0.27	0.11	0.29	0.16	0.18	0.19	0.09
Crit Moves:	***				***			***		***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday PM

Intersection #27: Avalon Blvd. & I-405 NB Ramps

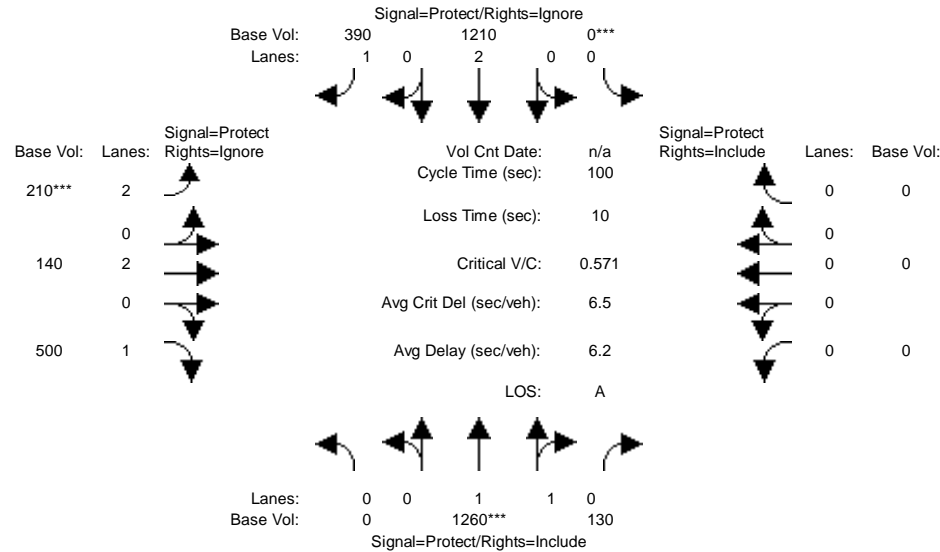


Street Name:	Avalon Blvd.						I-405 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	390	1070	0	0	1500	540	0	0	0	120	0	470
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	390	1070	0	0	1500	540	0	0	0	120	0	470
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	390	1070	0	0	1500	0	0	0	0	120	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	390	1070	0	0	1500	0	0	0	0	120	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Volume:	390	1070	0	0	1500	0	0	0	0	120	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	5760	3200	0	0	4800	1600	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.33	0.00	0.00	0.31	0.00	0.00	0.00	0.00	0.04	0.00	0.00
Crit Moves:	***				***					***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday PM

Intersection #28: Avalon Blvd. & I-405 SB Ramps

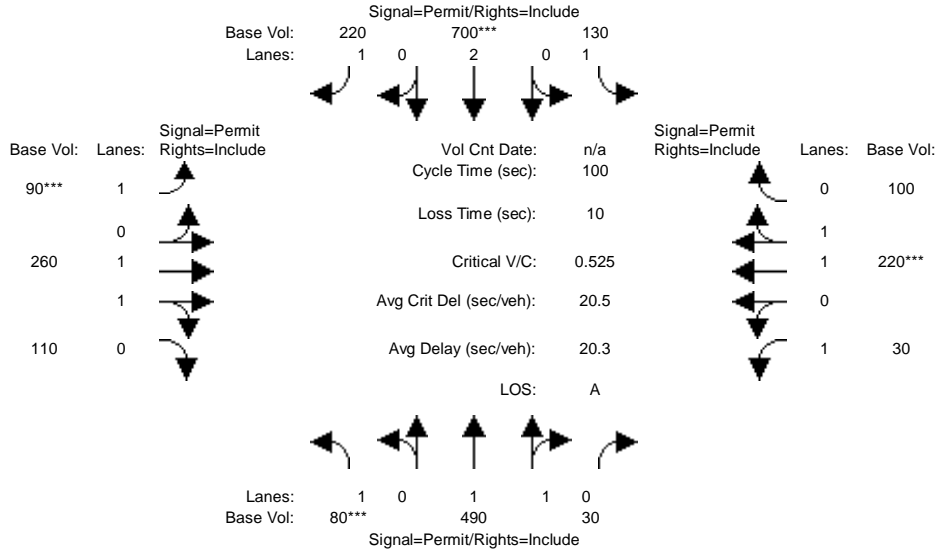


Street Name:	Avalon Blvd.						I-405 SB Ramps					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1260	130	0	1210	390	210	140	500	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1260	130	0	1210	390	210	140	500	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	1260	130	0	1210	0	210	140	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1260	130	0	1210	0	210	140	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Volume:	0	1260	130	0	1210	0	210	140	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.81	0.19	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	0	2901	299	0	3200	1600	5760	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.43	0.43	0.00	0.38	0.00	0.04	0.04	0.00	0.00	0.00	0.00
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday PM

Intersection #29: Central Ave. & University Dr.

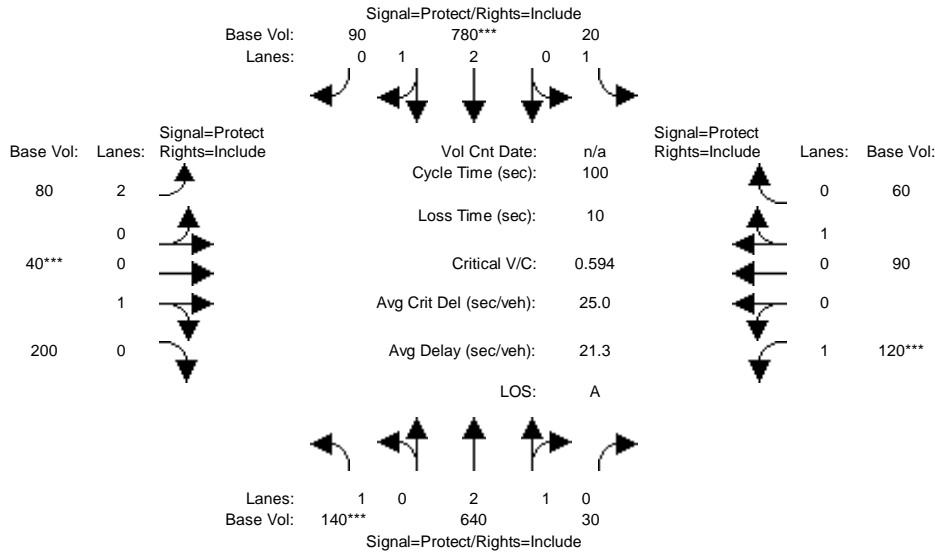


Street Name:	Central Ave.						University Dr.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	80	490	30	130	700	220	90	260	110	30	220	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	490	30	130	700	220	90	260	110	30	220	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	490	30	130	700	220	90	260	110	30	220	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	490	30	130	700	220	90	260	110	30	220	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	80	490	30	130	700	220	90	260	110	30	220	100
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.88	0.12	1.00	2.00	1.00	1.00	1.41	0.59	1.00	1.38	0.62
Final Sat.:	1600	3015	185	1600	3200	1600	1600	2249	951	1600	2200	1000
Capacity Analysis Module:												
Vol/Sat:	0.05	0.16	0.16	0.08	0.22	0.14	0.06	0.12	0.12	0.02	0.10	0.10
Crit Moves:	***				***		***				***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday PM

Intersection #30: Wilmington Ave. & University Dr.

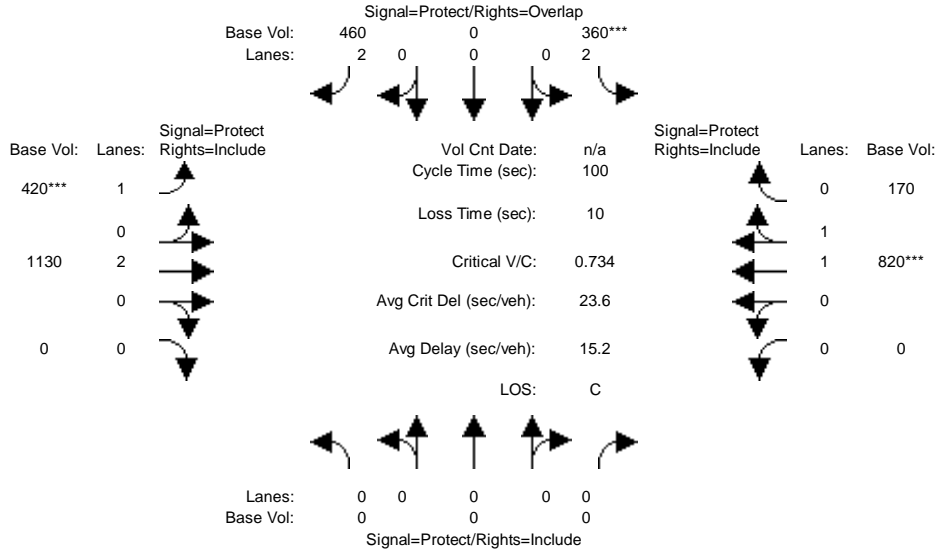


Street Name:	Wilmington Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	140	640	30	20	780	90	80	40	200	120	90	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	640	30	20	780	90	80	40	200	120	90	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	140	640	30	20	780	90	80	40	200	120	90	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	640	30	20	780	90	80	40	200	120	90	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	140	640	30	20	780	90	80	40	200	120	90	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.87	0.13	1.00	2.69	0.31	2.00	0.17	0.83	1.00	0.60	0.40
Final Sat.:	1600	4585	215	1600	4303	497	5760	267	1333	1600	960	640
Capacity Analysis Module:												
Vol/Sat:	0.09	0.14	0.14	0.01	0.18	0.18	0.01	0.15	0.15	0.08	0.09	0.09
Crit Moves:	***				***			***			***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday PM

Intersection #31: Central Ave. & Del Amo Blvd.

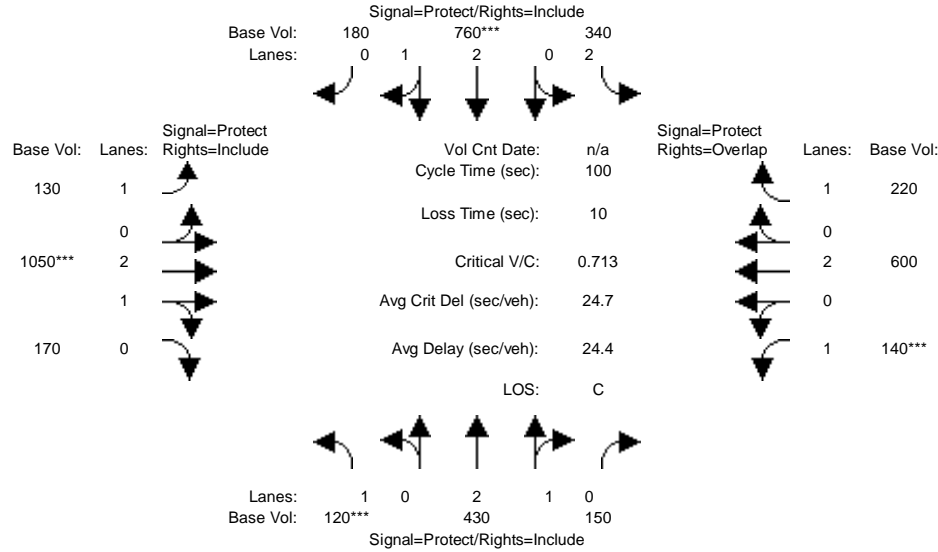


Street Name:	Central Ave.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	360	0	460	420	1130	0	0	820	170
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	360	0	460	420	1130	0	0	820	170
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	360	0	460	420	1130	0	0	820	170
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	360	0	460	420	1130	0	0	820	170
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	360	0	460	420	1130	0	0	820	170
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	2.00	1.00	2.00	0.00	0.00	1.66	0.34
Final Sat.:	0	0	0	5760	0	3200	1600	3200	0	0	2651	549
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.06	0.00	0.14	0.26	0.35	0.00	0.00	0.31	0.31
OvlAdjV/S:	0.00											
Crit Moves:				****				****				****

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday PM

Intersection #32: Wilmington Ave. & Del Amo Blvd.

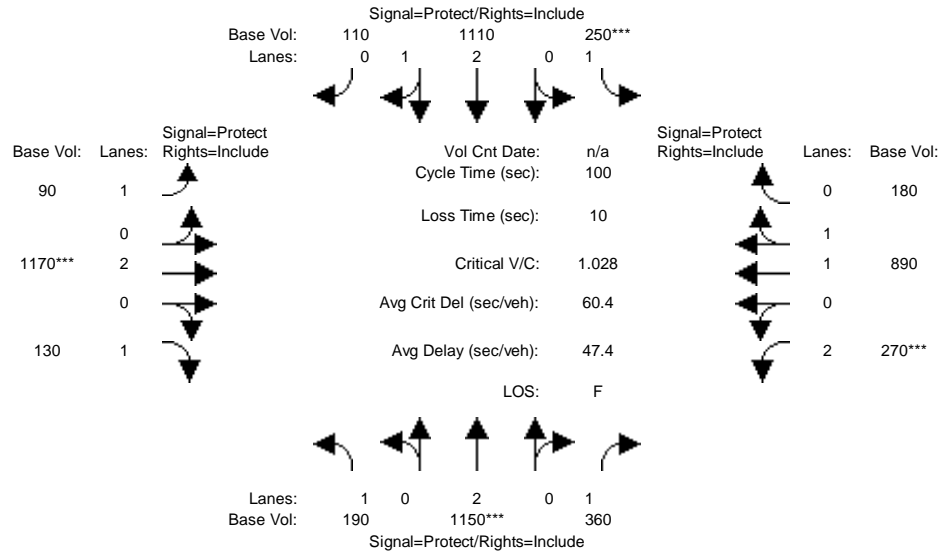


Street Name:	Wilmington Ave.						Del Amo Blvd.						
Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Volume Module:													
Base Vol:	120	430	150	340	760	180	130	1050	170	140	600	220	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	120	430	150	340	760	180	130	1050	170	140	600	220	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:	120	430	150	340	760	180	130	1050	170	140	600	220	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	120	430	150	340	760	180	130	1050	170	140	600	220	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
FinalVolume:	120	430	150	340	760	180	130	1050	170	140	600	220	
OvlAdjVol:												126	
Saturation Flow Module:													
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Lanes:	1.00	2.22	0.78	2.00	2.43	0.57	1.00	2.58	0.42	1.00	2.00	1.00	
Final Sat.:	1600	3559	1241	5760	3881	919	1600	4131	669	1600	3200	1600	
Capacity Analysis Module:													
Vol/Sat:	0.08	0.12	0.12	0.06	0.20	0.20	0.08	0.25	0.25	0.09	0.19	0.14	
OvlAdjV/S:												0.08	
Crit Moves:	****						****	****					****

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday PM

Intersection #33: W. Artesia Blvd. & Crenshaw Blvd.

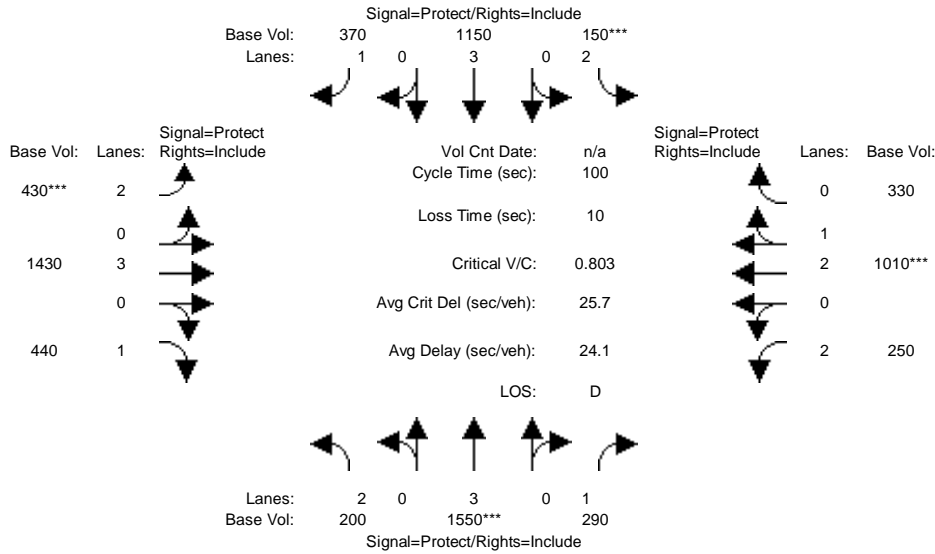


Street Name:	Crenshaw Blvd.						W. Artesia Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	190	1150	360	250	1110	110	90	1170	130	270	890	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	190	1150	360	250	1110	110	90	1170	130	270	890	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	190	1150	360	250	1110	110	90	1170	130	270	890	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	190	1150	360	250	1110	110	90	1170	130	270	890	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	190	1150	360	250	1110	110	90	1170	130	270	890	180
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.73	0.27	1.00	2.00	1.00	2.00	1.66	0.34
Final Sat.:	1600	3200	1600	1600	4367	433	1600	3200	1600	5760	2662	538
Capacity Analysis Module:												
Vol/Sat:	0.12	0.36	0.23	0.16	0.25	0.25	0.06	0.37	0.08	0.05	0.33	0.33
Crit Moves:	****			****				****		****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday PM

Intersection #34: W 190th St. & South Western Ave.

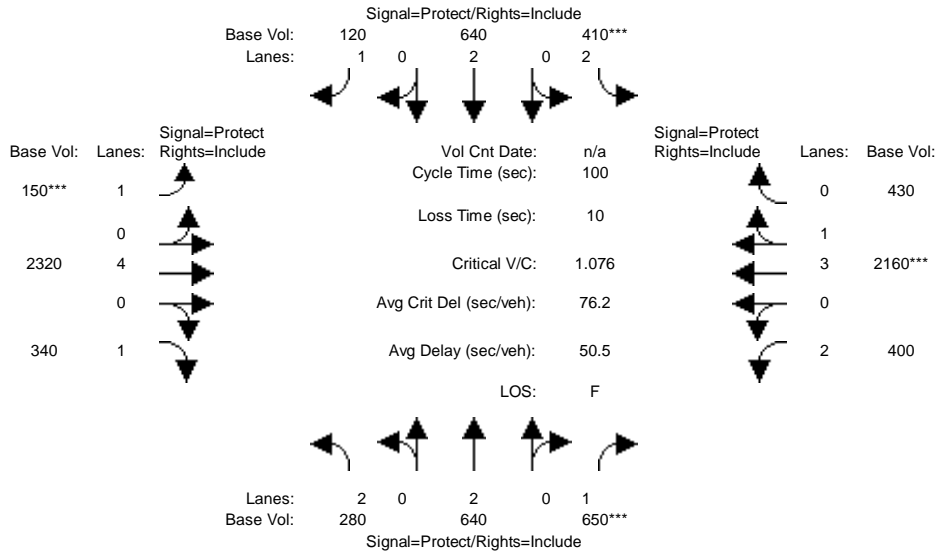


Street Name:	S. Western Ave.						W. 190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	200	1550	290	150	1150	370	430	1430	440	250	1010	330
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	200	1550	290	150	1150	370	430	1430	440	250	1010	330
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	200	1550	290	150	1150	370	430	1430	440	250	1010	330
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	200	1550	290	150	1150	370	430	1430	440	250	1010	330
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	200	1550	290	150	1150	370	430	1430	440	250	1010	330
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.26	0.74
Final Sat.:	5760	4800	1600	5760	4800	1600	5760	4800	1600	5760	3618	1182
Capacity Analysis Module:												
Vol/Sat:	0.03	0.32	0.18	0.03	0.24	0.23	0.07	0.30	0.28	0.04	0.28	0.28
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday PM

Intersection #35: W. Artesia Blvd. & Vermont Av.e

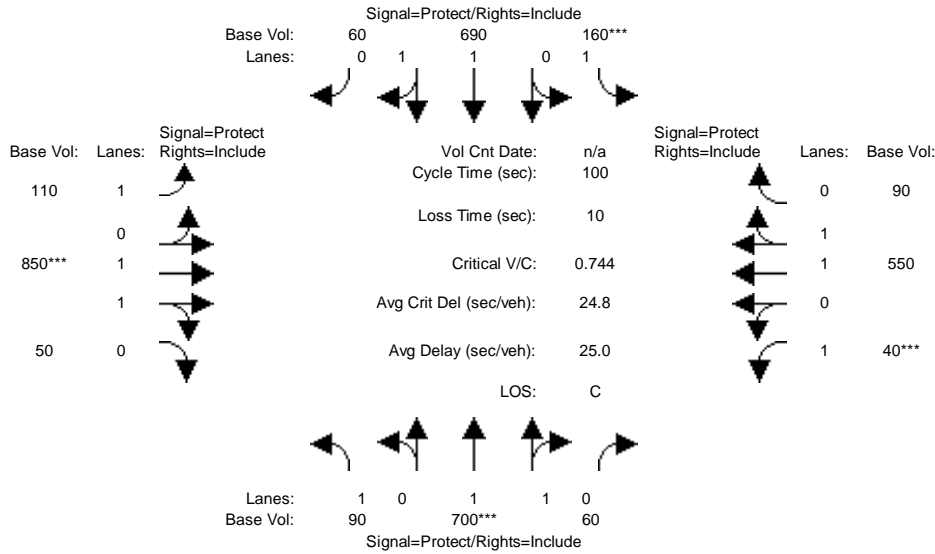


Street Name:	Vermont Ave.						W. Artesia Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	280	640	650	410	640	120	150	2320	340	400	2160	430
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	280	640	650	410	640	120	150	2320	340	400	2160	430
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	280	640	650	410	640	120	150	2320	340	400	2160	430
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	280	640	650	410	640	120	150	2320	340	400	2160	430
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	280	640	650	410	640	120	150	2320	340	400	2160	430
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	1.00	4.00	1.00	2.00	3.34	0.66
Final Sat.:	5760	3200	1600	5760	3200	1600	1600	6400	1600	5760	5337	1063
Capacity Analysis Module:												
Vol/Sat:	0.05	0.20	0.41	0.07	0.20	0.08	0.09	0.36	0.21	0.07	0.40	0.40
Crit Moves:			***	***			***				***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday PM

Intersection #36: Alameda St. & Compton Blvd.

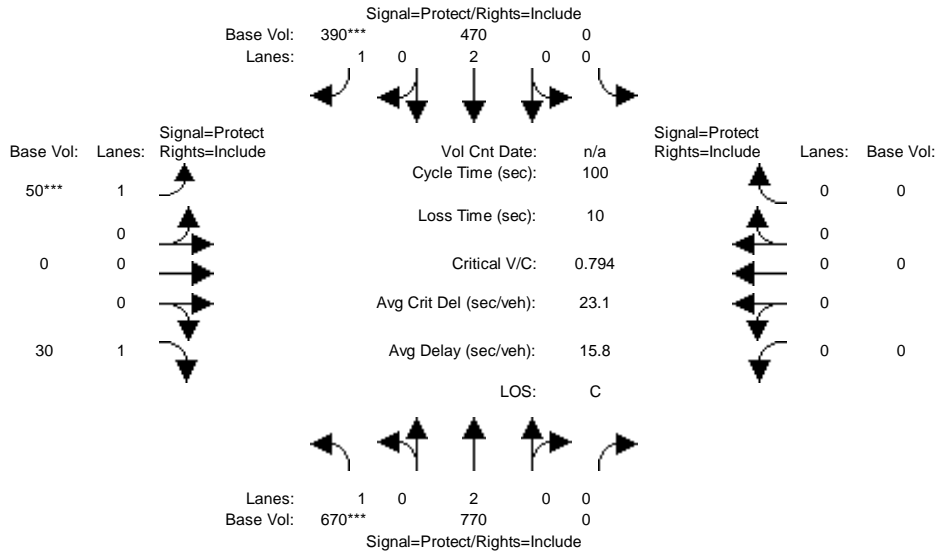


Street Name:	Alameda St.						Compton Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	90	700	60	160	690	60	110	850	50	40	550	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	700	60	160	690	60	110	850	50	40	550	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	700	60	160	690	60	110	850	50	40	550	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	700	60	160	690	60	110	850	50	40	550	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	90	700	60	160	690	60	110	850	50	40	550	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.84	0.16	1.00	1.84	0.16	1.00	1.89	0.11	1.00	1.72	0.28
Final Sat.:	1600	2947	253	1600	2944	256	1600	3022	178	1600	2750	450
Capacity Analysis Module:												
Vol/Sat:	0.06	0.24	0.24	0.10	0.23	0.23	0.07	0.28	0.28	0.03	0.20	0.20
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 No Project Weekday PM

Intersection #37: Alameda St. & SR 91 EB Ramps



Street Name:	Alameda St.						SR 91 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	670	770	0	0	470	390	50	0	30	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	670	770	0	0	470	390	50	0	30	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	670	770	0	0	470	390	50	0	30	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	670	770	0	0	470	390	50	0	30	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	670	770	0	0	470	390	50	0	30	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	3200	0	0	3200	1600	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.42	0.24	0.00	0.00	0.15	0.24	0.03	0.00	0.02	0.00	0.00	0.00
Crit Moves:	***					***	***					

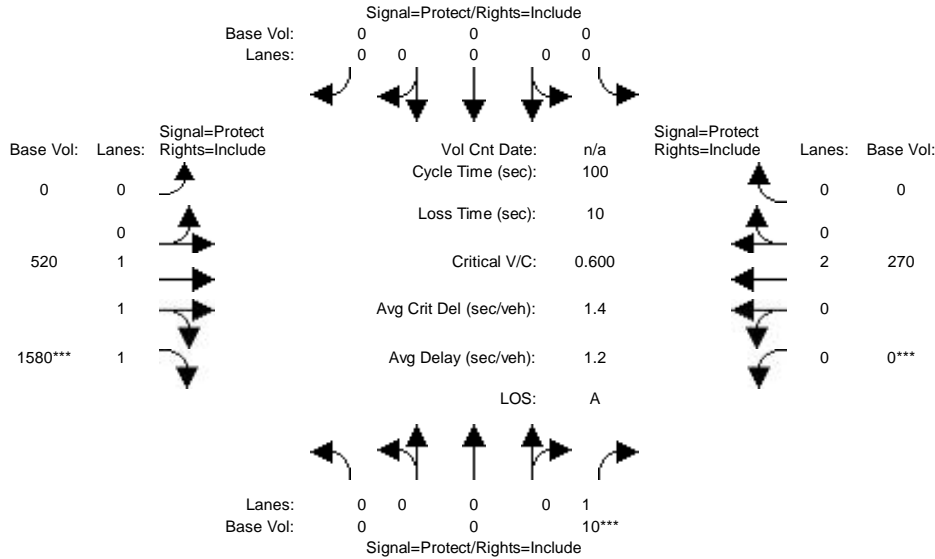
Appendix P

Intersection LOS Worksheets for 2035 Sunday No Project (27,000-Seats) Conditions

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Pre-Game

Intersection #1: Victoria St. & Drive D

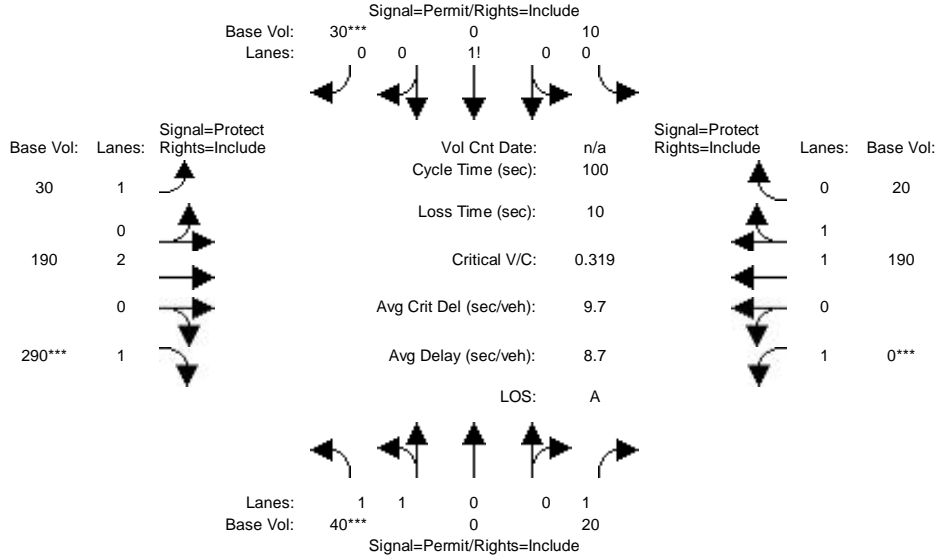


Street Name:	Drive D						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	10	0	0	0	0	520	1580	0	270	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	10	0	0	0	0	520	1580	0	270	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	10	0	0	0	0	520	1580	0	270	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	10	0	0	0	0	520	1580	0	270	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	10	0	0	0	0	520	1580	0	270	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	2.00	0.00	2.00	0.00
Final Sat.:	0	0	1600	0	0	0	0	1600	3200	0	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.33	0.49	0.00	0.08	0.00
Crit Moves:			****					****	****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Pre-Game

Intersection #2: Victoria St & Tamcliff Ave

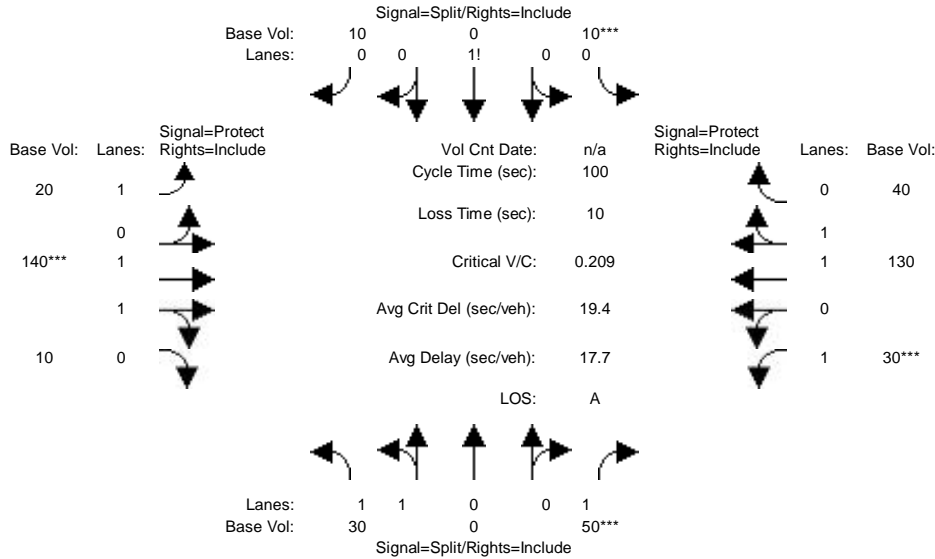


Street Name:	Victoria St						Tamcliff Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	40	0	20	10	0	30	30	190	290	0	190	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	0	20	10	0	30	30	190	290	0	190	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	0	20	10	0	30	30	190	290	0	190	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	0	20	10	0	30	30	190	290	0	190	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	0	20	10	0	30	30	190	290	0	190	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.25	0.00	0.75	1.00	2.00	1.00	1.00	1.81	0.19
Final Sat.:	3200	0	1600	400	0	1200	1600	3200	1600	1600	2895	305
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.01	0.01	0.00	0.03	0.02	0.06	0.18	0.00	0.07	0.07
Crit Moves:	****				****		****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Pre-Game

Intersection #3: Victoria St. & Birchknoll Dr.

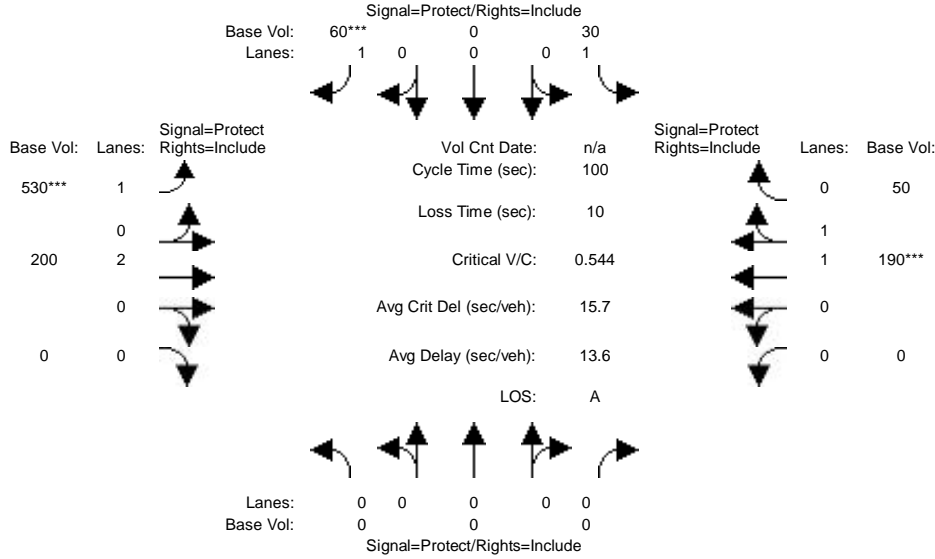


Street Name:	Victoria St.						Birchknoll Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	30	0	50	10	0	10	20	140	10	30	130	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	0	50	10	0	10	20	140	10	30	130	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	0	50	10	0	10	20	140	10	30	130	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	0	50	10	0	10	20	140	10	30	130	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	0	50	10	0	10	20	140	10	30	130	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.50	0.00	0.50	1.00	1.87	0.13	1.00	1.53	0.47
Final Sat.:	3200	0	1600	800	0	800	1600	2987	213	1600	2447	753
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.03	0.01	0.00	0.01	0.01	0.05	0.05	0.02	0.05	0.05
Crit Moves:			****	****			****		****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Pre-Game

Intersection #9: University Dr. & Toro Center Dr.

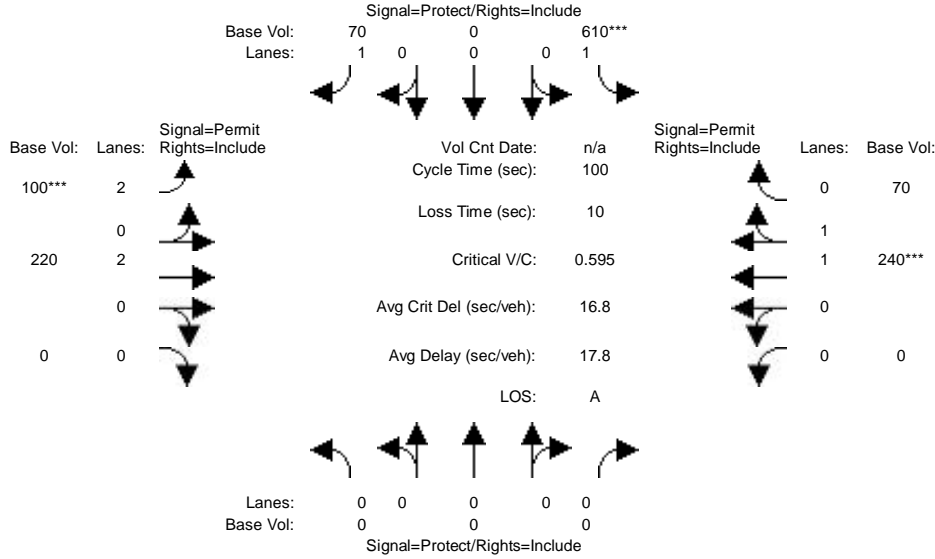


Street Name:	University Dr.						Toro Center Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	30	0	60	530	200	0	0	190	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	30	0	60	530	200	0	0	190	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	30	0	60	530	200	0	0	190	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	30	0	60	530	200	0	0	190	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	30	0	60	530	200	0	0	190	50
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.58	0.42
Final Sat.:	0	0	0	1600	0	1600	1600	3200	0	0	2533	667
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.00	0.04	0.33	0.06	0.00	0.00	0.08	0.07
Crit Moves:				****		****				****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Pre-Game

Intersection #10: Albertoni St. & SR 91 EB Ramps [Moved from Main St & Albertoni St]

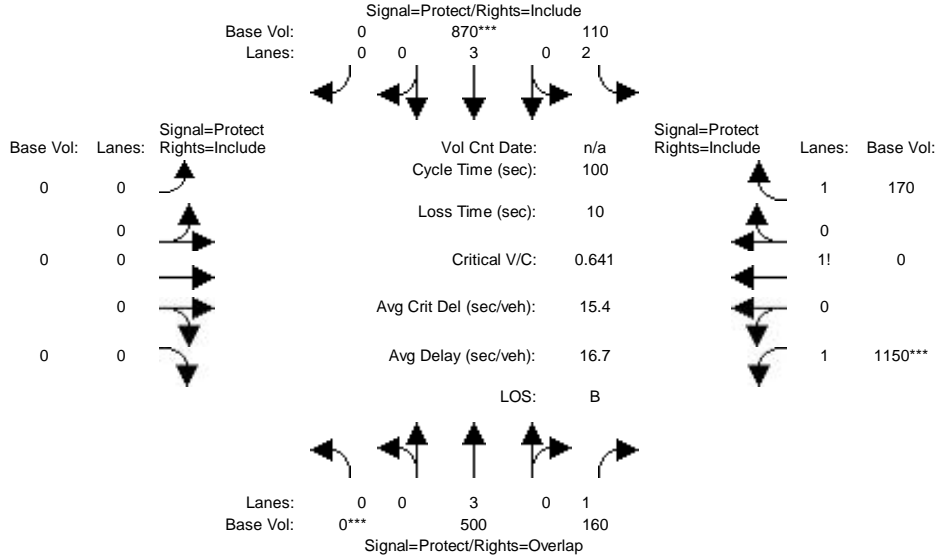


Street Name:	Sr 91 EB Ramps						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	610	0	70	100	220	0	0	240	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	610	0	70	100	220	0	0	240	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	610	0	70	100	220	0	0	240	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	610	0	70	100	220	0	0	240	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	610	0	70	100	220	0	0	240	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.55	0.45
Final Sat.:	0	0	0	1600	0	1600	5760	3200	0	0	2477	723
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.38	0.00	0.04	0.02	0.07	0.00	0.00	0.10	0.10
Crit Moves:				****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Pre-Game

Intersection #11: Avalon Blvd. & SR 91 WB On-Ramp

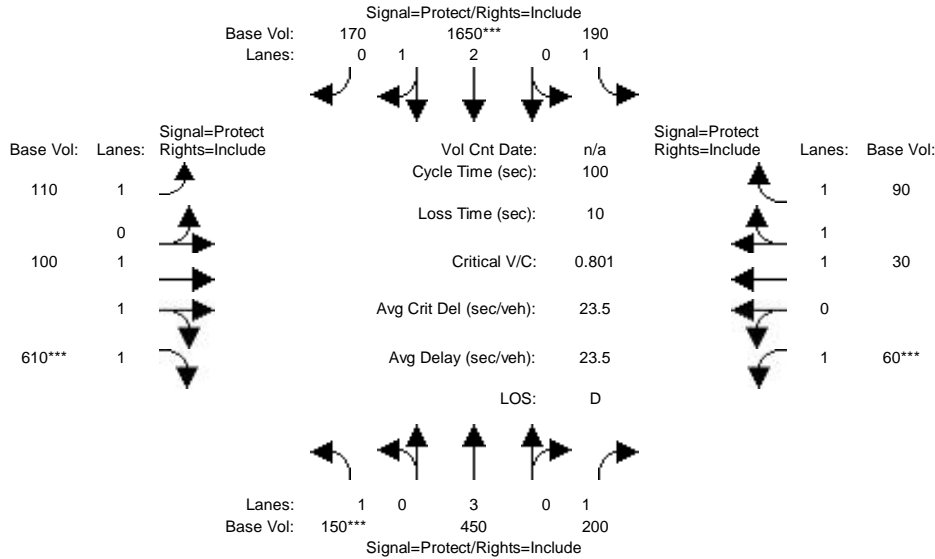


Street Name:	Avalon Blvd.						SR 91 WB On-Ramp						
Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Volume Module:													
Base Vol:	0	500	160	110	870	0	0	0	0	0	1150	0	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	0	500	160	110	870	0	0	0	0	1150	0	170	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:	0	500	160	110	870	0	0	0	0	1150	0	170	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	0	500	160	110	870	0	0	0	0	1150	0	170	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
FinalVolume:	0	500	160	110	870	0	0	0	0	1150	0	170	
OvlAdjVol:	0												
Saturation Flow Module:													
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	3200	0	1600	
Capacity Analysis Module:													
Vol/Sat:	0.00	0.10	0.10	0.02	0.18	0.00	0.00	0.00	0.00	0.00	0.36	0.00	
OvlAdjV/S:	0.00												
Crit Moves:	****	****						****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Pre-Game

Intersection #12: Avalon Blvd. & Albertoni St.

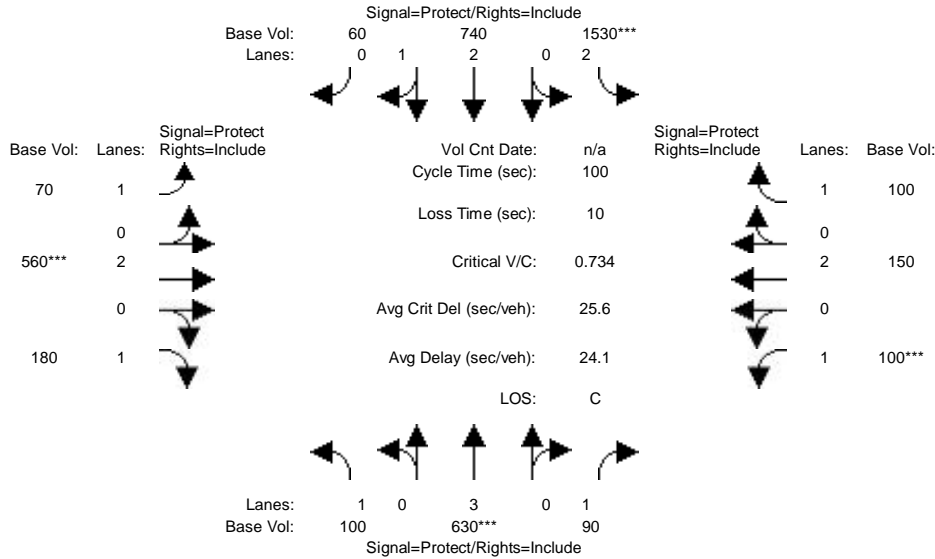


Street Name:	Avalon Blvd.						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	150	450	200	190	1650	170	110	100	610	60	30	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	450	200	190	1650	170	110	100	610	60	30	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	450	200	190	1650	170	110	100	610	60	30	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	450	200	190	1650	170	110	100	610	60	30	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	450	200	190	1650	170	110	100	610	60	30	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.72	0.28	1.00	1.00	2.00	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	4352	448	1600	1600	3200	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.13	0.12	0.38	0.38	0.07	0.06	0.19	0.04	0.02	0.03
Crit Moves:	****			****			****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Pre-Game

Intersection #13: Avalon Blvd. & Victoria St.

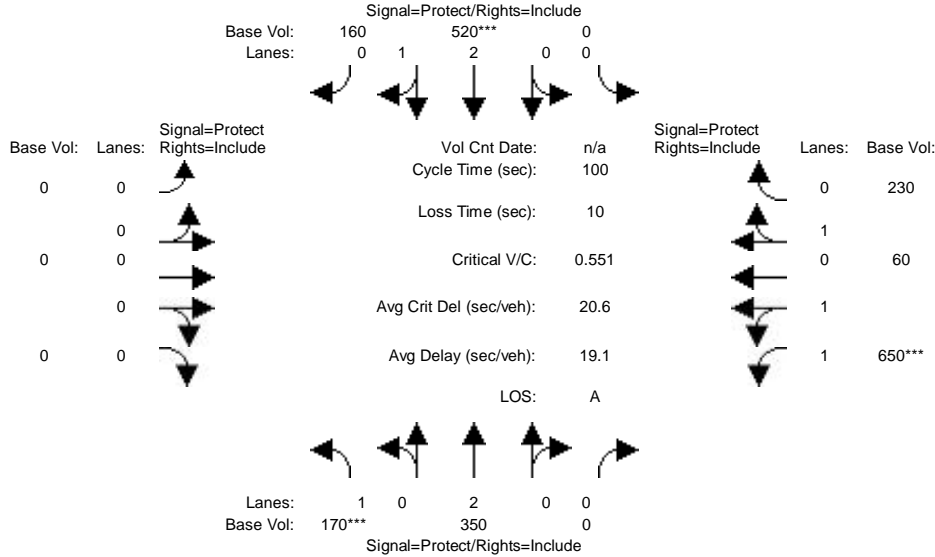


Street Name:	Avalon Blvd.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	100	630	90	1530	740	60	70	560	180	100	150	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	100	630	90	1530	740	60	70	560	180	100	150	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	100	630	90	1530	740	60	70	560	180	100	150	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	100	630	90	1530	740	60	70	560	180	100	150	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	100	630	90	1530	740	60	70	560	180	100	150	100
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.78	0.22	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4440	360	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.13	0.06	0.27	0.17	0.17	0.04	0.17	0.11	0.06	0.05	0.06
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Pre-Game

Intersection #14: Central Ave. & Artesia Blvd.

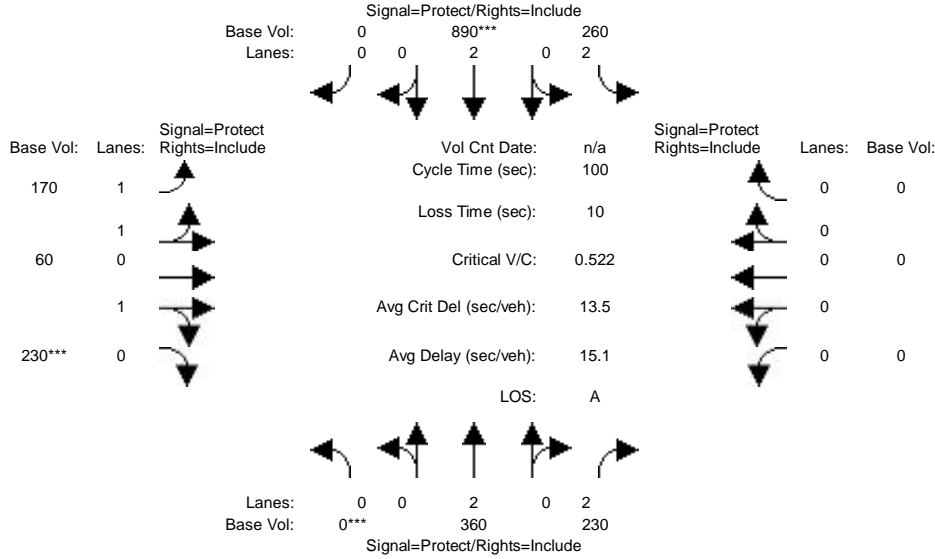


Street Name:	Central Ave.						Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	170	350	0	0	520	160	0	0	0	650	60	230
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	170	350	0	0	520	160	0	0	0	650	60	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	170	350	0	0	520	160	0	0	0	650	60	230
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	170	350	0	0	520	160	0	0	0	650	60	230
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	170	350	0	0	520	160	0	0	0	650	60	230
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.29	0.71	0.00	0.00	0.00	2.00	0.21	0.79
Final Sat.:	1600	3200	0	0	3671	1129	0	0	0	3200	331	1269
Capacity Analysis Module:												
Vol/Sat:	0.11	0.11	0.00	0.00	0.14	0.14	0.00	0.00	0.00	0.20	0.18	0.18
Crit Moves:	****				****					****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Pre-Game

Intersection #15: Central Ave. & Albertoni St.

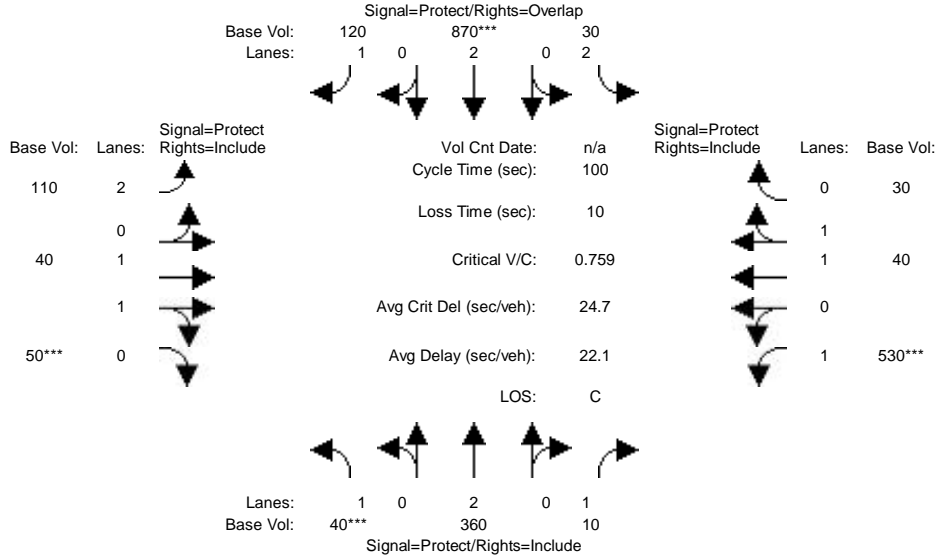


Street Name:	Central Ave.						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	360	230	260	890	0	170	60	230	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	360	230	260	890	0	170	60	230	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	360	230	260	890	0	170	60	230	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	360	230	260	890	0	170	60	230	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	360	230	260	890	0	170	60	230	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.48	0.52	1.00	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	2365	835	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.11	0.07	0.05	0.28	0.00	0.07	0.07	0.14	0.00	0.00	0.00
Crit Moves:	****				****			****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Pre-Game

Intersection #16: Central Ave. & Victoria St.

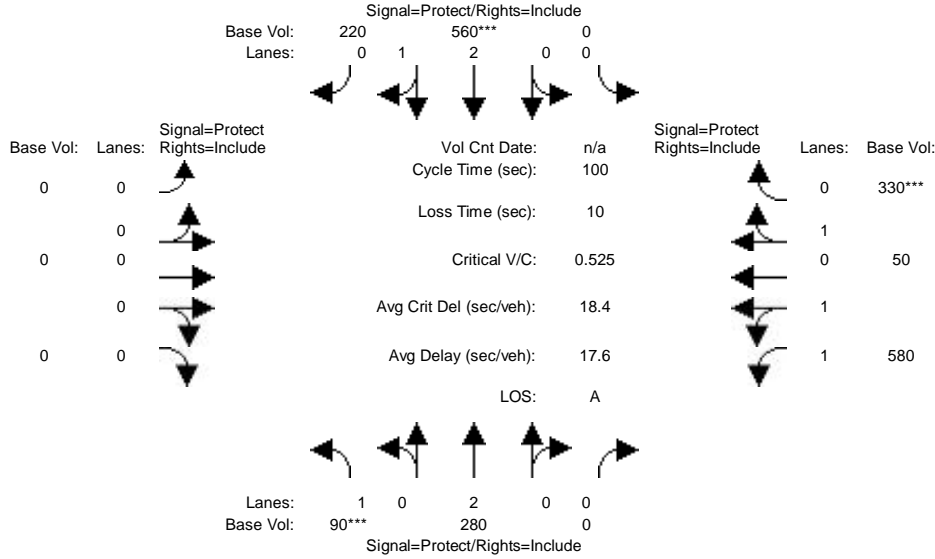


Street Name:	Central Ave.				Victoria St.								
Approach:	North Bound		South Bound		East Bound		West Bound						
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Volume Module:													
Base Vol:	40	360	10	30	870	120	110	40	50	530	40	30	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	40	360	10	30	870	120	110	40	50	530	40	30	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:	40	360	10	30	870	120	110	40	50	530	40	30	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	40	360	10	30	870	120	110	40	50	530	40	30	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
FinalVolume:	40	360	10	30	870	120	110	40	50	530	40	30	
OvlAdjVol:	89												
Saturation Flow Module:													
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.00	1.00	1.00	1.14	0.86	
Final Sat.:	1600	3200	1600	5760	3200	1600	5760	1600	1600	1600	1829	1371	
Capacity Analysis Module:													
Vol/Sat:	0.03	0.11	0.01	0.01	0.27	0.08	0.02	0.03	0.03	0.33	0.02	0.02	
OvlAdjV/S:	0.06												
Crit Moves:	****	****				****	****	****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Pre-Game

Intersection #17: Wilmington Ave. & Artesia Blvd. WB

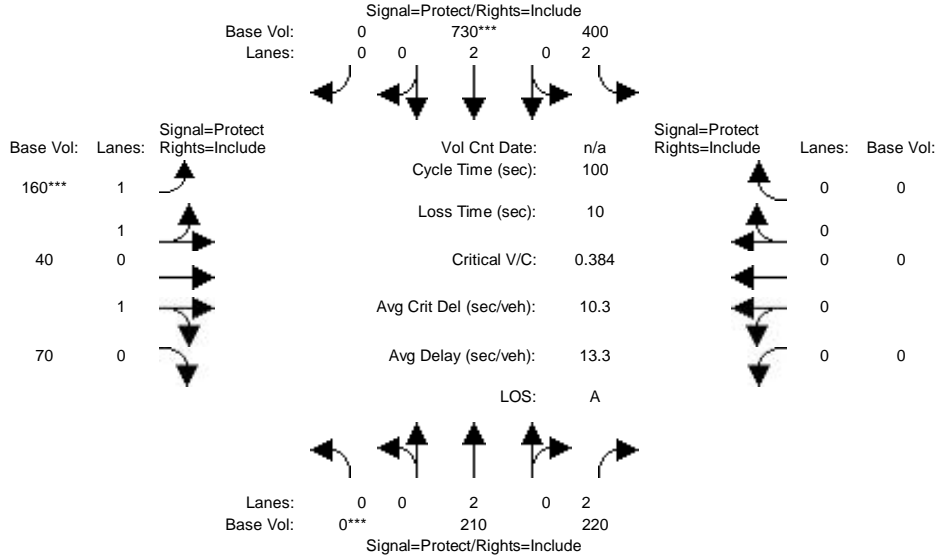


Street Name:	Wilmington Ave.						Artesia Blvd. WB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	90	280	0	0	560	220	0	0	0	580	50	330
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	280	0	0	560	220	0	0	0	580	50	330
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	280	0	0	560	220	0	0	0	580	50	330
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	280	0	0	560	220	0	0	0	580	50	330
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	280	0	0	560	220	0	0	0	580	50	330
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.15	0.85	0.00	0.00	0.00	1.84	0.16	1.00
Final Sat.:	1600	3200	0	0	3446	1354	0	0	0	2946	254	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.09	0.00	0.00	0.16	0.16	0.00	0.00	0.00	0.20	0.20	0.21
Crit Moves:	****				****					****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Pre-Game

Intersection #18: Wilmington Ave. & Artesia Blvd. EB

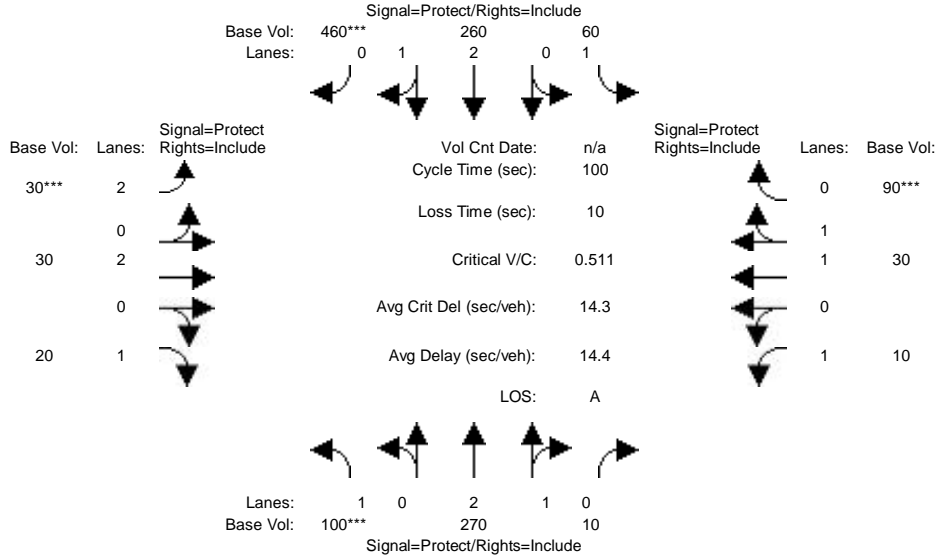


Street Name:	Wilmington Ave.				Artesia Blvd. EB							
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	210	220	400	730	0	160	40	70	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	210	220	400	730	0	160	40	70	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	210	220	400	730	0	160	40	70	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	210	220	400	730	0	160	40	70	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	210	220	400	730	0	160	40	70	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.78	0.44	0.78	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	2844	711	1244	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.07	0.07	0.07	0.23	0.00	0.06	0.06	0.06	0.00	0.00	0.00
Crit Moves:	****			****		****						

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Pre-Game

Intersection #19: Wilmington Ave. & Victoria St.

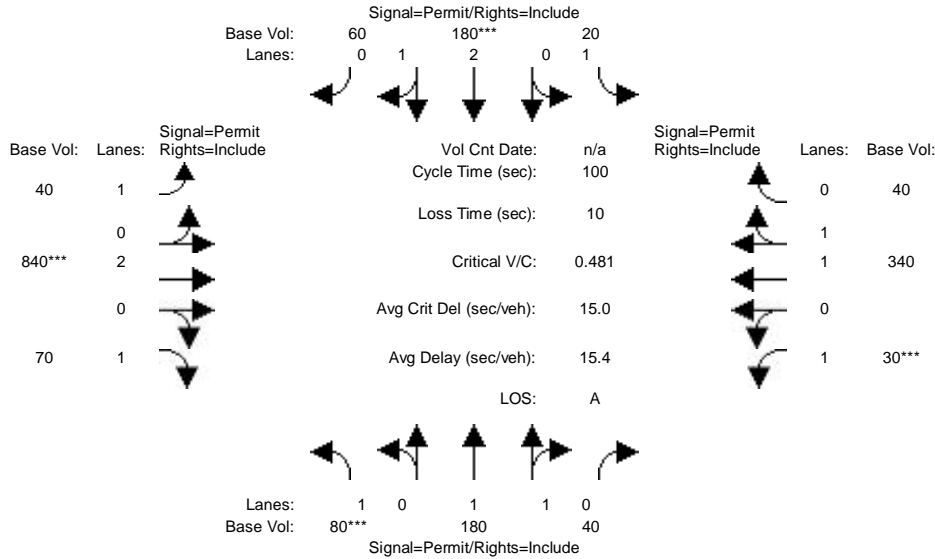


Street Name:	Wilmington Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	100	270	10	60	260	460	30	30	20	10	30	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	100	270	10	60	260	460	30	30	20	10	30	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	100	270	10	60	260	460	30	30	20	10	30	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	100	270	10	60	260	460	30	30	20	10	30	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	100	270	10	60	260	460	30	30	20	10	30	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.89	0.11	1.00	2.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	4629	171	1600	3200	1600	5760	3200	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.06	0.06	0.04	0.08	0.29	0.01	0.01	0.01	0.01	0.02	0.06
Crit Moves:	****				****	****					****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Pre-Game

Intersection #22: Figueroa St. & 190th St./Victoria St.

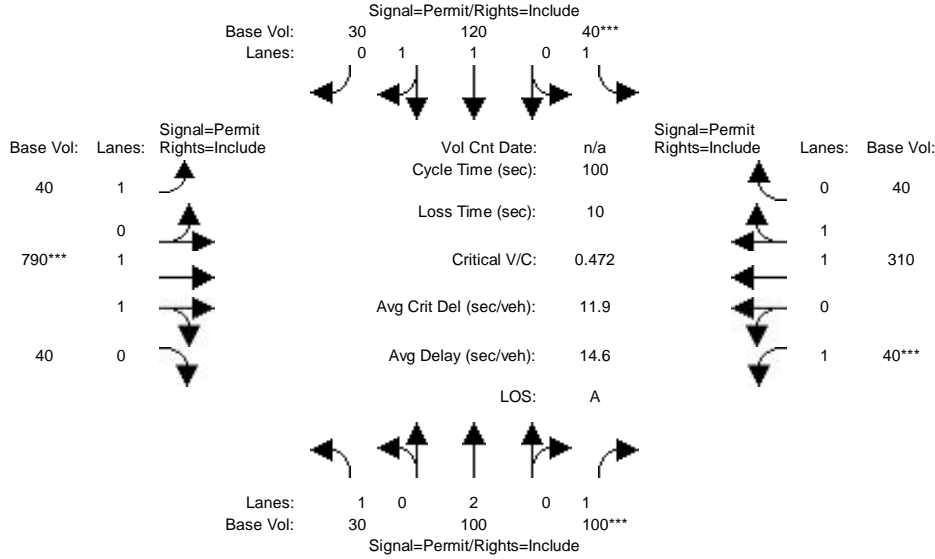


Street Name:	Figueroa St.						190th St./Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	80	180	40	20	180	60	40	840	70	30	340	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	180	40	20	180	60	40	840	70	30	340	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	180	40	20	180	60	40	840	70	30	340	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	180	40	20	180	60	40	840	70	30	340	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	180	40	20	180	60	40	840	70	30	340	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.64	0.36	1.00	2.25	0.75	1.00	2.00	1.00	1.00	1.79	0.21
Final Sat.:	1600	2618	582	1600	3600	1200	1600	3200	1600	1600	2863	337
Capacity Analysis Module:												
Vol/Sat:	0.05	0.07	0.07	0.01	0.05	0.05	0.03	0.26	0.04	0.02	0.12	0.12
Crit Moves:	****			****			****		****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Pre-Game

Intersection #24: Main St. & Victoria St.

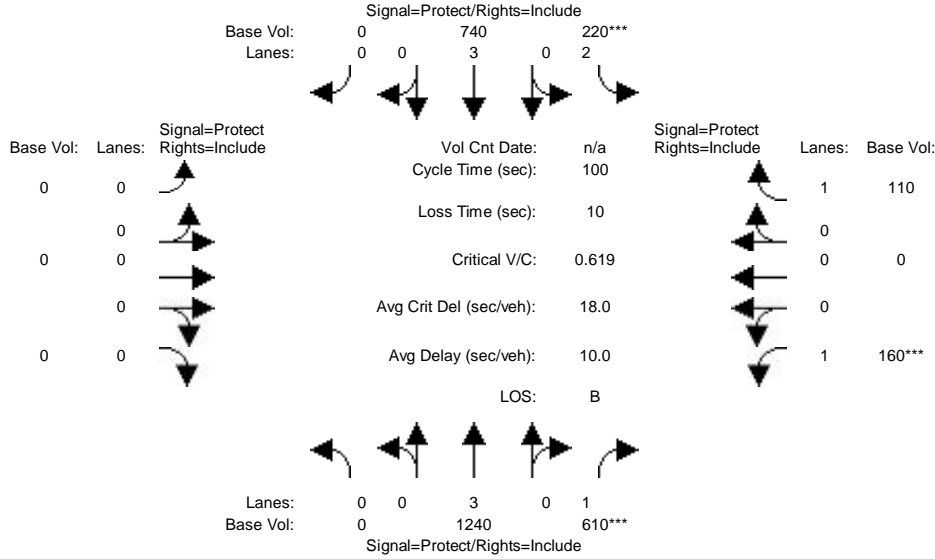


Street Name:	Main St.						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	30	100	100	40	120	30	40	790	40	40	310	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	100	100	40	120	30	40	790	40	40	310	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	100	100	40	120	30	40	790	40	40	310	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	100	100	40	120	30	40	790	40	40	310	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	100	100	40	120	30	40	790	40	40	310	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.60	0.40	1.00	1.90	0.10	1.00	1.77	0.23
Final Sat.:	1600	3200	1600	1600	2560	640	1600	3046	154	1600	2834	366
Capacity Analysis Module:												
Vol/Sat:	0.02	0.03	0.06	0.03	0.05	0.05	0.03	0.26	0.26	0.03	0.11	0.11
Crit Moves:		****	****				****		****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Pre-Game

Intersection #25: Avalon Blvd. & University Dr.

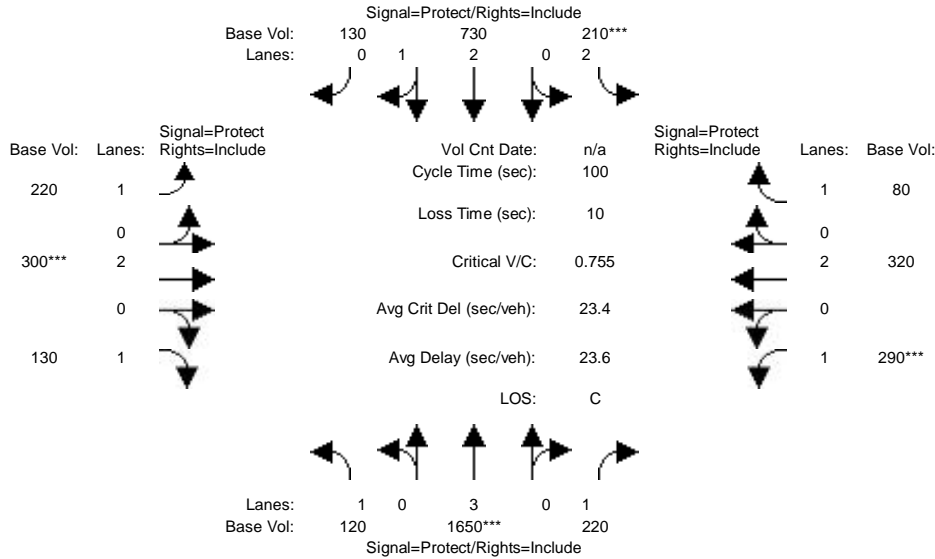


Street Name:	Avalon Blvd.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1240	610	220	740	0	0	0	0	160	0	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1240	610	220	740	0	0	0	0	160	0	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1240	610	220	740	0	0	0	0	160	0	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1240	610	220	740	0	0	0	0	160	0	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1240	610	220	740	0	0	0	0	160	0	110
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.38	0.04	0.15	0.00	0.00	0.00	0.00	0.00	0.10	0.00
Crit Moves:		****	****							****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Pre-Game

Intersection #26: Avalon Blvd. & Del Amo Blvd.

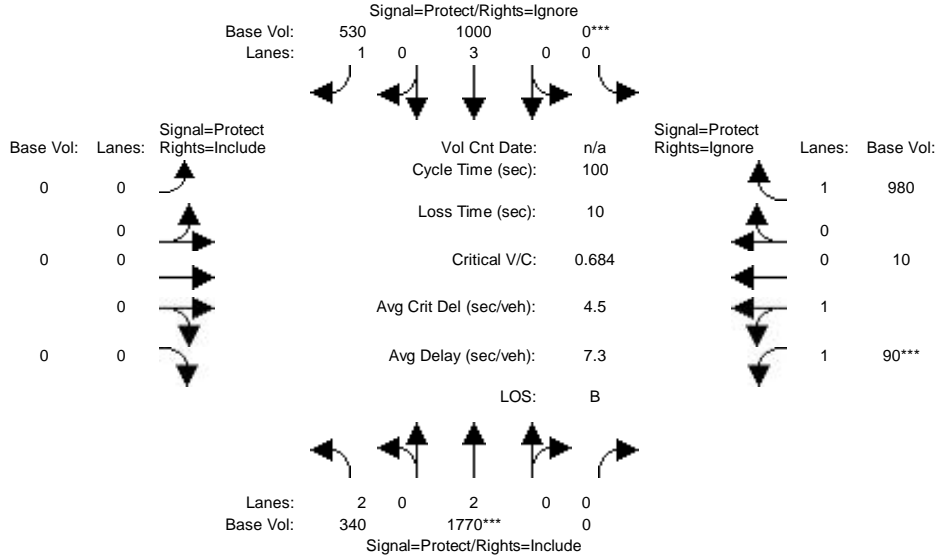


Street Name:	Avalon Blvd.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	120	1650	220	210	730	130	220	300	130	290	320	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	120	1650	220	210	730	130	220	300	130	290	320	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	120	1650	220	210	730	130	220	300	130	290	320	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	1650	220	210	730	130	220	300	130	290	320	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	120	1650	220	210	730	130	220	300	130	290	320	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.55	0.45	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4074	726	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.34	0.14	0.04	0.18	0.18	0.14	0.09	0.08	0.18	0.10	0.05
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Pre-Game

Intersection #27: Avalon Blvd. & I-405 NB Ramps

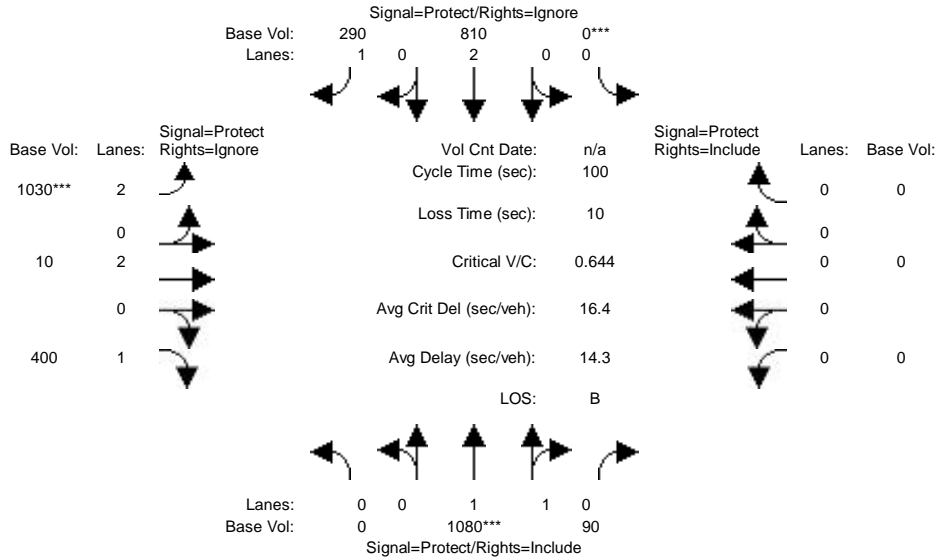


Street Name:	Avalon Blvd.						I-405 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	340	1770	0	0	1000	530	0	0	0	90	10	980
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	340	1770	0	0	1000	530	0	0	0	90	10	980
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	340	1770	0	0	1000	0	0	0	0	90	10	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	340	1770	0	0	1000	0	0	0	0	90	10	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Volume:	340	1770	0	0	1000	0	0	0	0	90	10	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.80	0.20	1.00
Final Sat.:	5760	3200	0	0	4800	1600	0	0	0	2880	320	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.55	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.03	0.03
Crit Moves:	****			****						****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Pre-Game

Intersection #28: Avalon Blvd. & I-405 SB Ramps

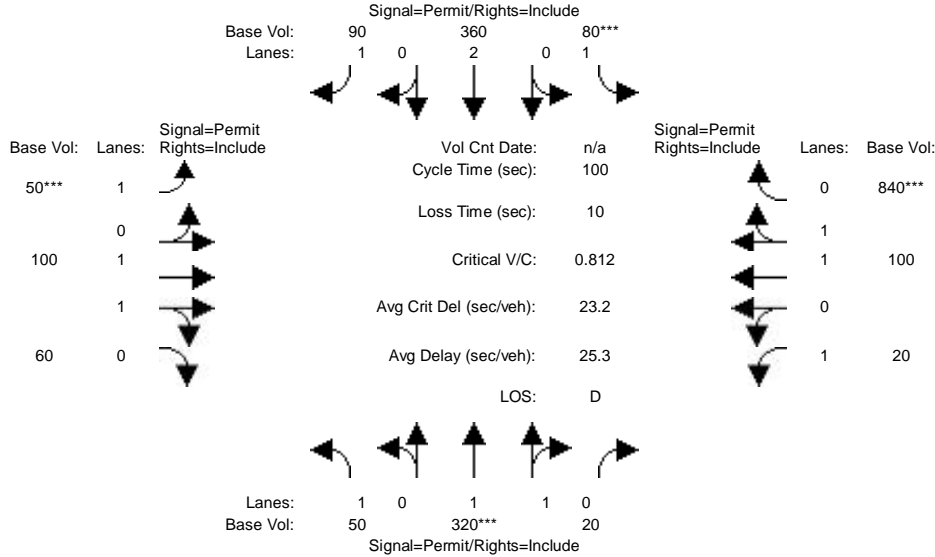


Street Name:	Avalon Blvd.						I-405 SB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1080	90	0	810	290	1030	10	400	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1080	90	0	810	290	1030	10	400	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	1080	90	0	810	0	1030	10	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1080	90	0	810	0	1030	10	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Volume:	0	1080	90	0	810	0	1030	10	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.85	0.15	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	0	2954	246	0	3200	1600	5760	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.37	0.37	0.00	0.25	0.00	0.18	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Pre-Game

Intersection #29: Central Ave. & University Dr.

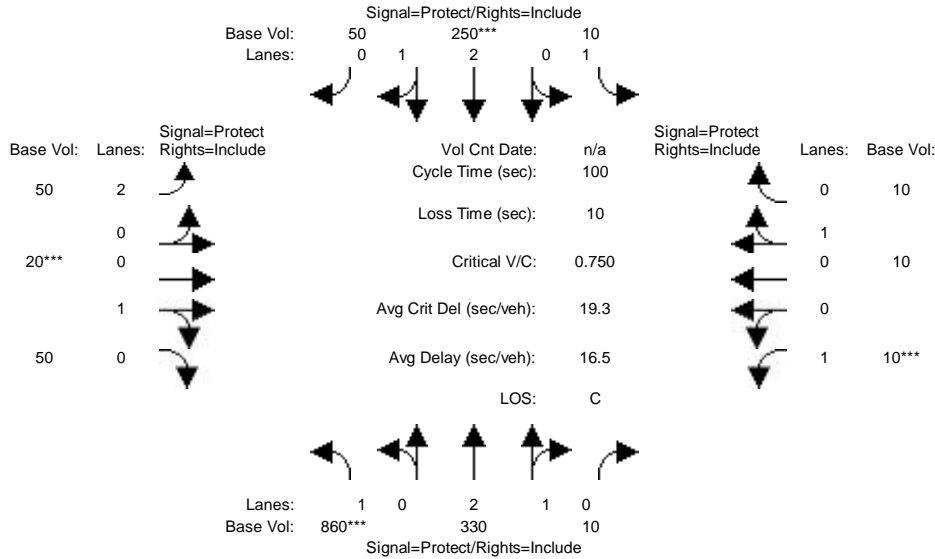


Street Name:	Central Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	50	320	20	80	360	90	50	100	60	20	100	840
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	320	20	80	360	90	50	100	60	20	100	840
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	320	20	80	360	90	50	100	60	20	100	840
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	320	20	80	360	90	50	100	60	20	100	840
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	320	20	80	360	90	50	100	60	20	100	840
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.88	0.12	1.00	2.00	1.00	1.00	1.25	0.75	1.00	1.00	1.00
Final Sat.:	1600	3012	188	1600	3200	1600	1600	2000	1200	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.11	0.11	0.05	0.11	0.06	0.03	0.05	0.05	0.01	0.06	0.53
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Pre-Game

Intersection #30: Wilmington Ave. & University Dr.

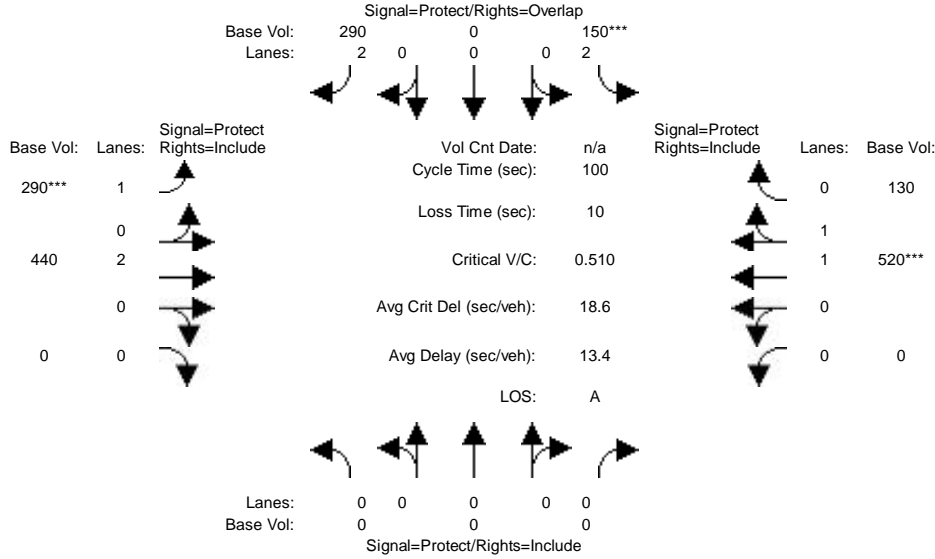


Street Name:	Wilmington Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	860	330	10	10	250	50	50	20	50	10	10	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	860	330	10	10	250	50	50	20	50	10	10	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	860	330	10	10	250	50	50	20	50	10	10	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	860	330	10	10	250	50	50	20	50	10	10	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	860	330	10	10	250	50	50	20	50	10	10	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.91	0.09	1.00	2.50	0.50	2.00	0.29	0.71	1.00	0.50	0.50
Final Sat.:	1600	4659	141	1600	4000	800	5760	457	1143	1600	800	800
Capacity Analysis Module:												
Vol/Sat:	0.54	0.07	0.07	0.01	0.06	0.06	0.01	0.04	0.04	0.01	0.01	0.01
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Pre-Game

Intersection #31: Central Ave. & Del Amo Blvd.

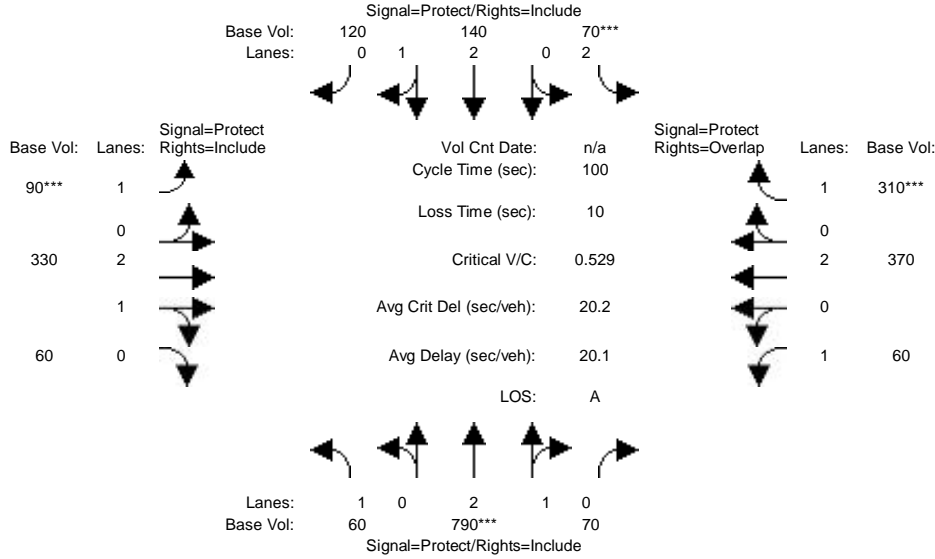


Street Name:	Central Ave.						Del Amo Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	150	0	290	290	440	0	0	520	130
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	150	0	290	290	440	0	0	520	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	150	0	290	290	440	0	0	520	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	150	0	290	290	440	0	0	520	130
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	150	0	290	290	440	0	0	520	130
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	2.00	1.00	2.00	0.00	0.00	1.60	0.40
Final Sat.:	0	0	0	5760	0	3200	1600	3200	0	0	2560	640
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.03	0.00	0.09	0.18	0.14	0.00	0.00	0.20	0.20
OvlAdjV/S:	0.00											
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Pre-Game

Intersection #32: Wilmington Ave. & Del Amo Blvd.

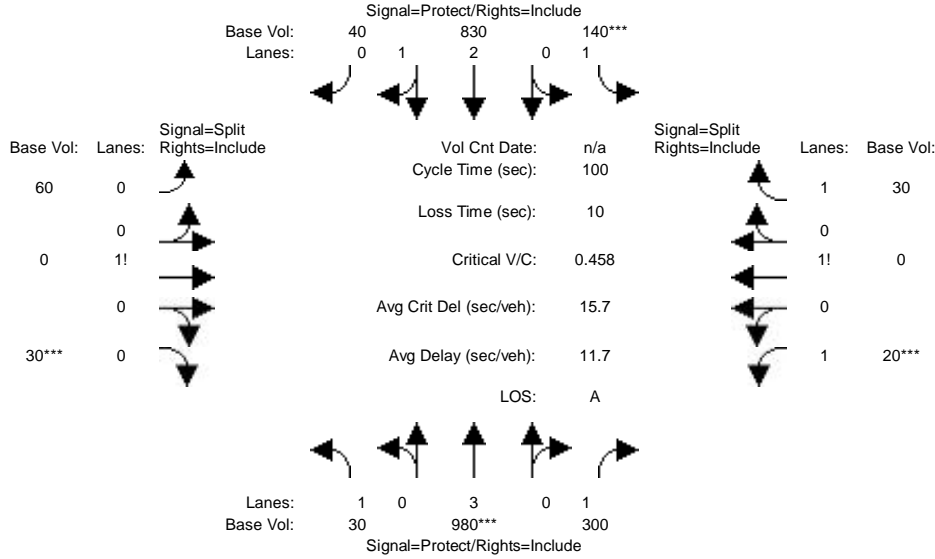


Street Name:	Wilmington Ave.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	60	790	70	70	140	120	90	330	60	60	370	310
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	790	70	70	140	120	90	330	60	60	370	310
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	790	70	70	140	120	90	330	60	60	370	310
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	790	70	70	140	120	90	330	60	60	370	310
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	60	790	70	70	140	120	90	330	60	60	370	310
OvlAdjVol:												291
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.76	0.24	2.00	2.00	1.00	1.00	2.54	0.46	1.00	2.00	1.00
Final Sat.:	1600	4409	391	5760	3200	1600	1600	4062	738	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.18	0.18	0.01	0.04	0.08	0.06	0.08	0.08	0.04	0.12	0.19
OvlAdjV/S:												0.18
Crit Moves:	****	****		****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Pre-Game

Intersection #38: Avalon Blvd. & 184th St. - Drive A

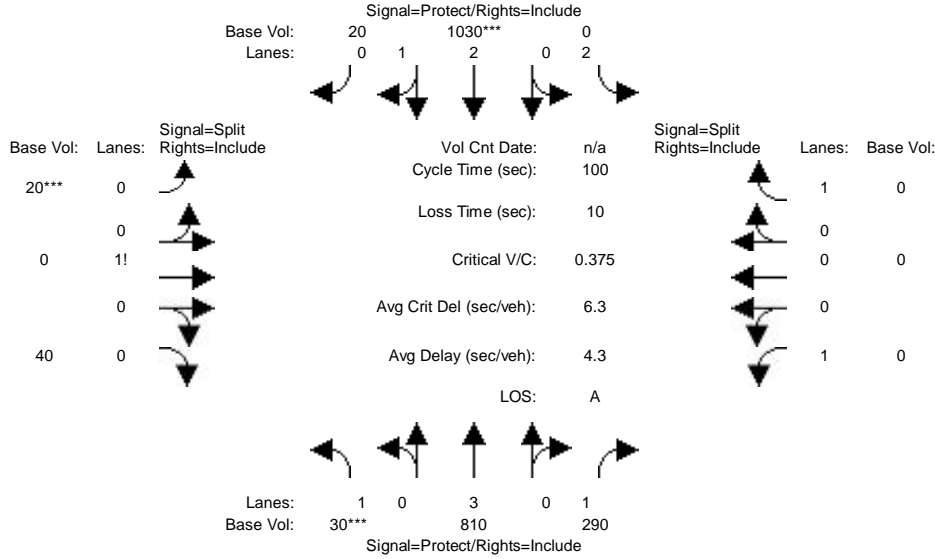


Street Name:	S. Avolon Blvd.						184th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	30	980	300	140	830	40	60	0	30	20	0	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	980	300	140	830	40	60	0	30	20	0	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	980	300	140	830	40	60	0	30	20	0	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	980	300	140	830	40	60	0	30	20	0	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	980	300	140	830	40	60	0	30	20	0	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.86	0.14	0.67	0.00	0.33	1.20	0.01	1.79
Final Sat.:	1600	4800	1600	1600	4579	221	1067	0	533	1920	0	2880
Capacity Analysis Module:												
Vol/Sat:	0.02	0.20	0.19	0.09	0.18	0.18	0.06	0.00	0.06	0.01	0.00	0.01
Crit Moves:	****			****			****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Pre-Game

Intersection #39: Avalon Blvd. & 182nd St. - Drive B

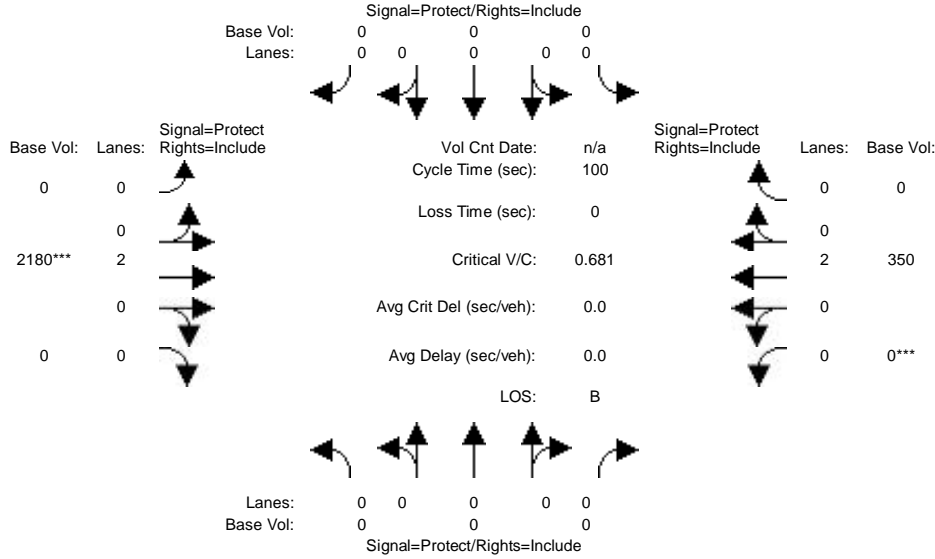


Street Name:	S. Avalon Blvd.				182nd St.							
Approach:	North Bound			South Bound			East Bound		West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	30	810	290	0	1030	20	20	0	40	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	810	290	0	1030	20	20	0	40	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	810	290	0	1030	20	20	0	40	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	810	290	0	1030	20	20	0	40	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	810	290	0	1030	20	20	0	40	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.94	0.06	0.33	0.00	0.67	1.00	0.00	1.00
Final Sat.:	1600	4800	1600	5760	4709	91	533	0	1067	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.17	0.18	0.00	0.22	0.22	0.04	0.00	0.04	0.00	0.00	0.00
Crit Moves:	****			****		****						

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Pre-Game

Intersection #40: Victoria St. & Drive C

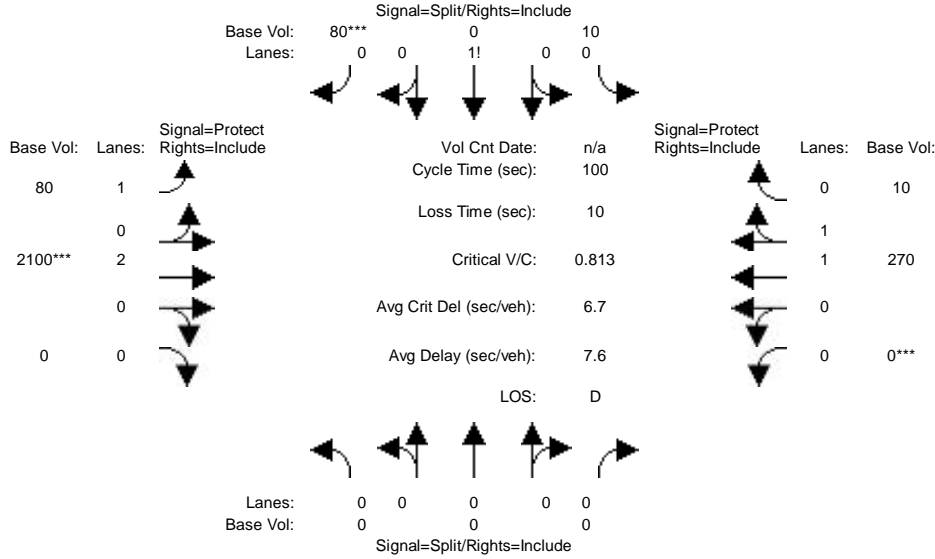


Street Name:	Drive C						E. Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	2180	0	0	0	350
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	2180	0	0	0	350
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	0	2180	0	0	0	350
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	0	2180	0	0	0	350
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	0	2180	0	0	0	350
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00
Final Sat.:	0	0	0	0	0	0	0	3200	0	0	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68	0.00	0.00	0.11	0.00
Crit Moves:							****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Pre-Game

Intersection #41: Victoria St. & Rainsbury Ave.

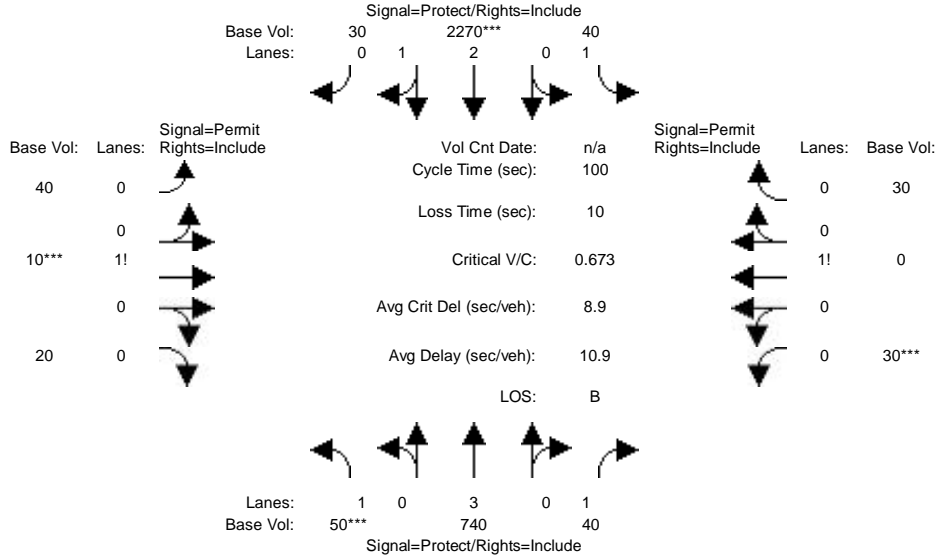


Street Name:	E. Victoria St.						Rainsbury Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	10	0	80	80	2100	0	0	270	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	10	0	80	80	2100	0	0	270	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	10	0	80	80	2100	0	0	270	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	10	0	80	80	2100	0	0	270	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	10	0	80	80	2100	0	0	270	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.11	0.00	0.89	1.00	2.00	0.00	0.00	1.93	0.07
Final Sat.:	0	0	0	178	0	1422	1600	3200	0	0	3086	114
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.06	0.00	0.06	0.05	0.66	0.00	0.00	0.09	0.09
Crit Moves:				****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Pre-Game

Intersection #42: Avalon Blvd. & Harbor Village / Colony Cove

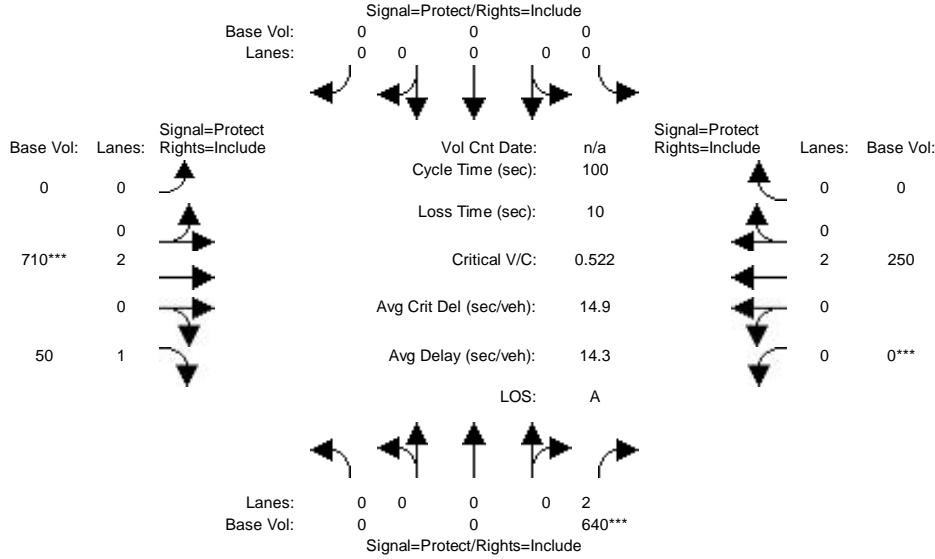


Street Name:	Avalon Blvd.						Harbor Village / Colony Cove					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	50	740	40	40	2270	30	40	10	20	30	0	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	740	40	40	2270	30	40	10	20	30	0	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	740	40	40	2270	30	40	10	20	30	0	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	740	40	40	2270	30	40	10	20	30	0	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	740	40	40	2270	30	40	10	20	30	0	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.96	0.04	0.57	0.14	0.29	0.50	0.00	0.50
Final Sat.:	1600	4800	1600	1600	4737	63	914	229	457	800	0	800
Capacity Analysis Module:												
Vol/Sat:	0.03	0.15	0.03	0.03	0.48	0.48	0.03	0.04	0.04	0.02	0.00	0.04
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Post-Game

Intersection #1: Victoria St. & Drive D

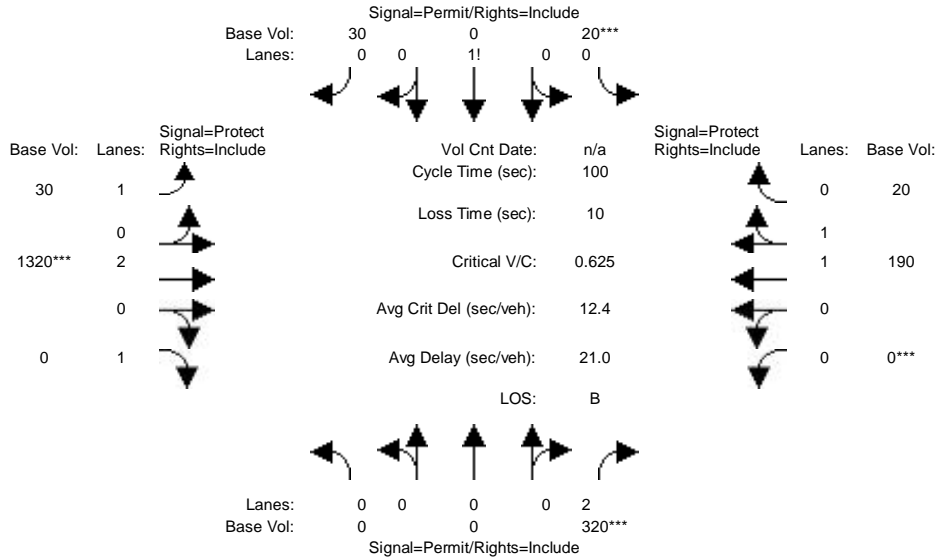


Street Name:	Drive D						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	640	0	0	0	0	710	50	0	250	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	640	0	0	0	0	710	50	0	250	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	640	0	0	0	0	710	50	0	250	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	640	0	0	0	0	710	50	0	250	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	640	0	0	0	0	710	50	0	250	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00	1.00	0.00	2.00	0.00
Final Sat.:	0	0	3200	0	0	0	0	3200	1600	0	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.22	0.03	0.00	0.08	0.00
Crit Moves:			****				****		****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Post-Game

Intersection #2: Victoria St & Tamcliff Ave

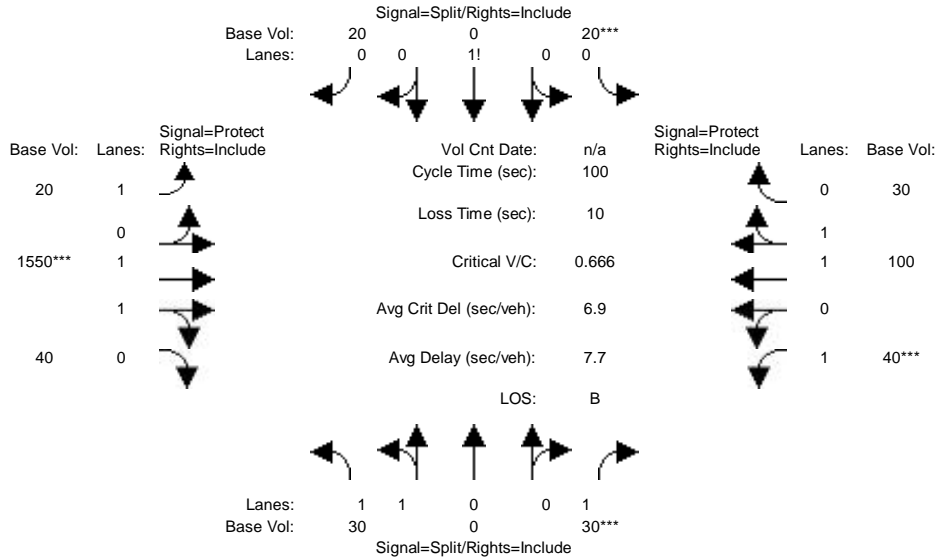


Street Name:	Victoria St						Tamcliff Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	320	20	0	30	30	1320	0	0	190	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	320	20	0	30	30	1320	0	0	190	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	320	20	0	30	30	1320	0	0	190	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	320	20	0	30	30	1320	0	0	190	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	320	20	0	30	30	1320	0	0	190	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	2.00	0.40	0.00	0.60	1.00	2.00	1.00	0.00	1.81	0.19
Final Sat.:	0	0	3200	640	0	960	1600	3200	1600	0	2895	305
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.10	0.01	0.00	0.03	0.02	0.41	0.00	0.00	0.07	0.07
Crit Moves:			****	****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Post-Game

Intersection #3: Victoria St. & Birchknoll Dr.

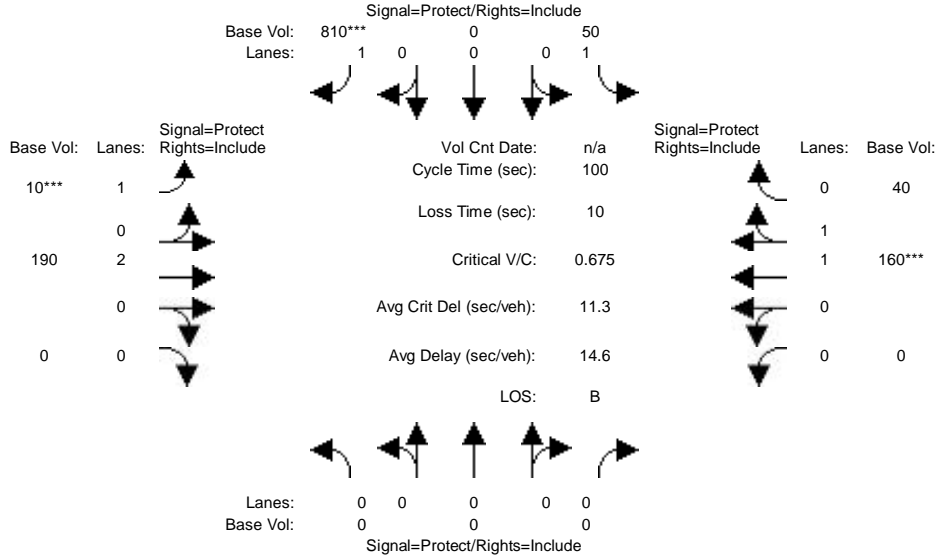


Street Name:	Victoria St.						Birchknoll Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	30	0	30	20	0	20	20	1550	40	40	100	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	0	30	20	0	20	20	1550	40	40	100	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	0	30	20	0	20	20	1550	40	40	100	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	0	30	20	0	20	20	1550	40	40	100	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	0	30	20	0	20	20	1550	40	40	100	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.50	0.00	0.50	1.00	1.95	0.05	1.00	1.54	0.46
Final Sat.:	3200	0	1600	800	0	800	1600	3119	81	1600	2462	738
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.02	0.03	0.00	0.03	0.01	0.50	0.50	0.03	0.04	0.04
Crit Moves:			****	****			****		****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Post-Game

Intersection #9: University Dr. & Toro Center Dr.

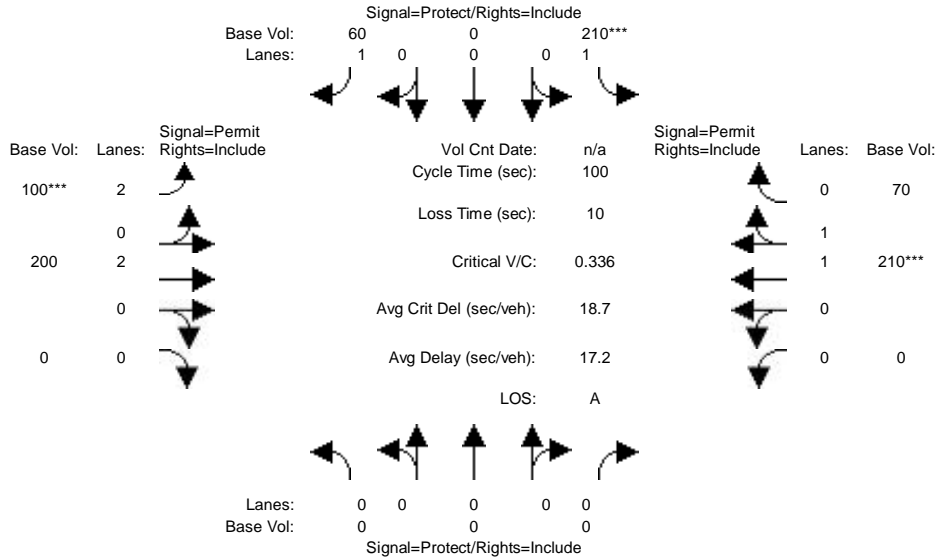


Street Name:	University Dr.						Toro Center Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	50	0	810	10	190	0	0	160	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	50	0	810	10	190	0	0	160	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	50	0	810	10	190	0	0	160	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	50	0	810	10	190	0	0	160	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	50	0	810	10	190	0	0	160	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.60	0.40
Final Sat.:	0	0	0	1600	0	1600	1600	3200	0	0	2560	640
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.03	0.00	0.51	0.01	0.06	0.00	0.00	0.06	0.06
Crit Moves:				****		****				****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Post-Game

Intersection #10: Albertoni St. & SR 91 EB Ramps [Moved from Main St & Albertoni St]

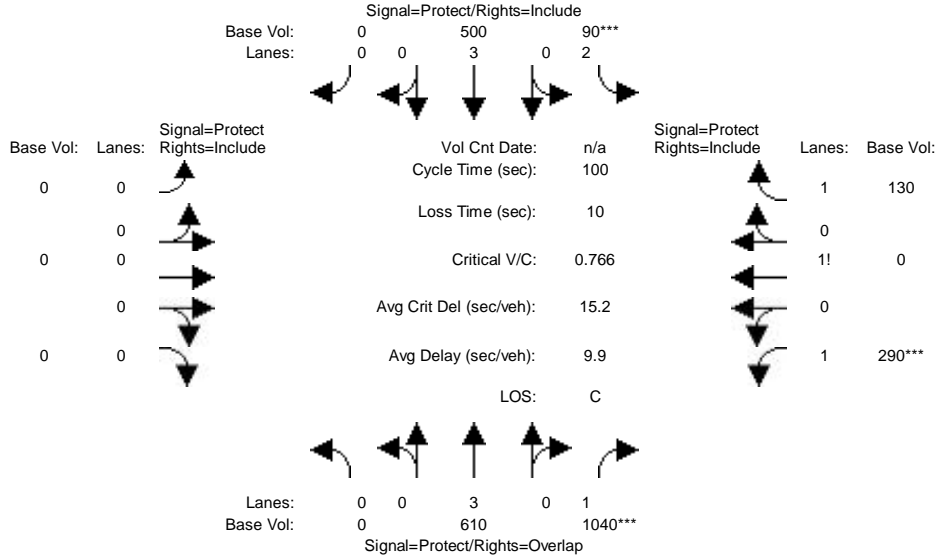


Street Name:			Sr 91 EB Ramps						Albertoni St.						
Approach:			North Bound			South Bound			East Bound		West Bound				
Movement:			L	T	R	L	T	R	L	T	R	L	T	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:															
Base Vol:	0	0	0	210	0	60	100	200	0	0	210	70			
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	0	0	0	210	0	60	100	200	0	0	210	70			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:	0	0	0	210	0	60	100	200	0	0	210	70			
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0			
Reduced Vol:	0	0	0	210	0	60	100	200	0	0	210	70			
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Final Volume:	0	0	0	210	0	60	100	200	0	0	210	70			
Saturation Flow Module:															
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.50	0.50			
Final Sat.:	0	0	0	1600	0	1600	5760	3200	0	0	2400	800			
Capacity Analysis Module:															
Vol/Sat:	0.00	0.00	0.00	0.13	0.00	0.04	0.02	0.06	0.00	0.00	0.09	0.09			
Crit Moves:				****			****				****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Post-Game

Intersection #11: Avalon Blvd. & SR 91 WB On-Ramp

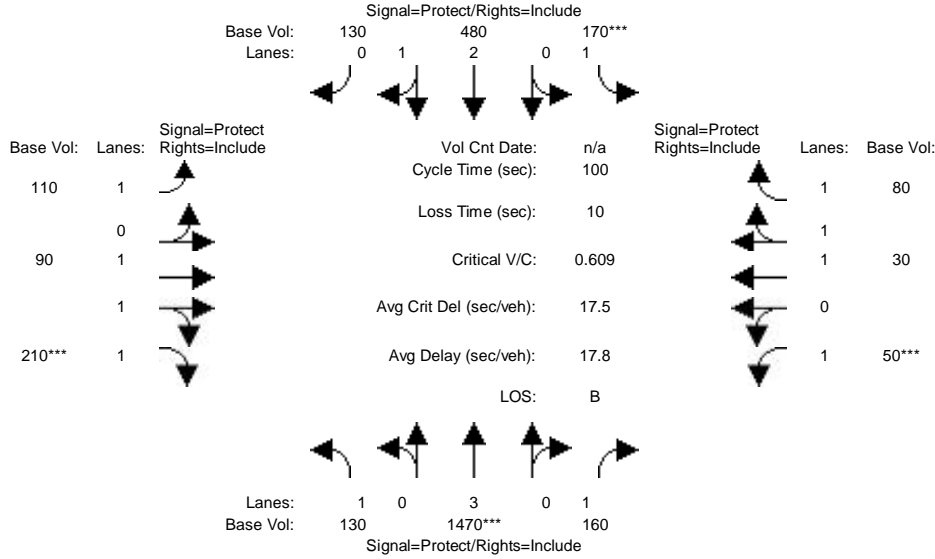


Street Name:	Avalon Blvd.						SR 91 WB On-Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	610	1040	90	500	0	0	0	0	0	290	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	610	1040	90	500	0	0	0	0	290	0	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	610	1040	90	500	0	0	0	0	290	0	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	610	1040	90	500	0	0	0	0	290	0	130
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	610	1040	90	500	0	0	0	0	290	0	130
OvlAdjVol:	895											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.13	0.65	0.02	0.10	0.00	0.00	0.00	0.00	0.00	0.09	0.00
OvlAdjV/S:	0.56											
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Post-Game

Intersection #12: Avalon Blvd. & Albertoni St.

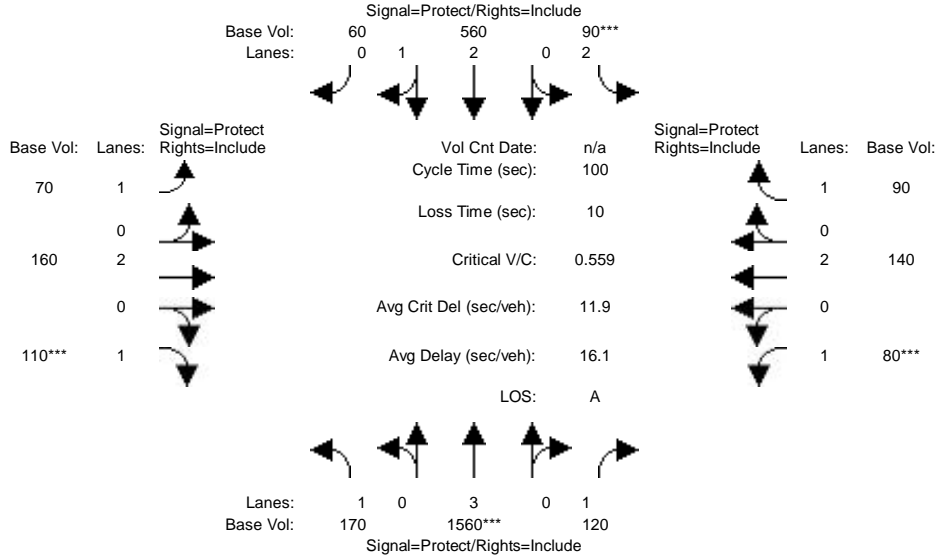


Street Name:	Avalon Blvd.						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	130	1470	160	170	480	130	110	90	210	50	30	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	1470	160	170	480	130	110	90	210	50	30	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	1470	160	170	480	130	110	90	210	50	30	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	1470	160	170	480	130	110	90	210	50	30	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	1470	160	170	480	130	110	90	210	50	30	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.36	0.64	1.00	1.00	2.00	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3777	1023	1600	1600	3200	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.08	0.31	0.10	0.11	0.13	0.13	0.07	0.06	0.07	0.03	0.02	0.03
Crit Moves:	****			****			****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Post-Game

Intersection #13: Avalon Blvd. & Victoria St.

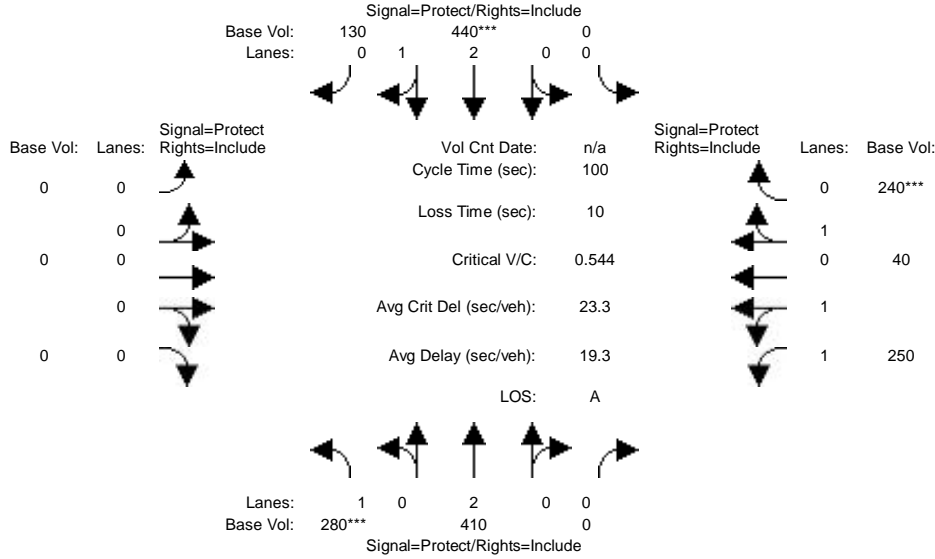


Street Name:	Avalon Blvd.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	170	1560	120	90	560	60	70	160	110	80	140	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	170	1560	120	90	560	60	70	160	110	80	140	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	170	1560	120	90	560	60	70	160	110	80	140	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	170	1560	120	90	560	60	70	160	110	80	140	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	170	1560	120	90	560	60	70	160	110	80	140	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.71	0.29	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4335	465	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.33	0.08	0.02	0.13	0.13	0.04	0.05	0.07	0.05	0.04	0.06
Crit Moves:	****			****			****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Post-Game

Intersection #14: Central Ave. & Artesia Blvd.

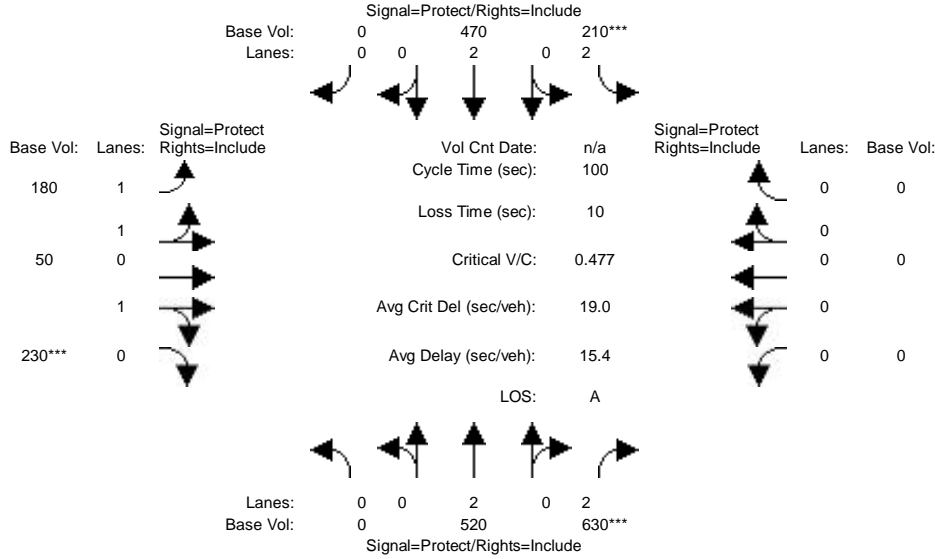


Street Name:	Central Ave.						Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	280	410	0	0	440	130	0	0	0	250	40	240
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	280	410	0	0	440	130	0	0	0	250	40	240
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	280	410	0	0	440	130	0	0	0	250	40	240
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	280	410	0	0	440	130	0	0	0	250	40	240
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	280	410	0	0	440	130	0	0	0	250	40	240
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.32	0.68	0.00	0.00	0.00	1.72	0.28	1.00
Final Sat.:	1600	3200	0	0	3705	1095	0	0	0	2759	441	1600
Capacity Analysis Module:												
Vol/Sat:	0.17	0.13	0.00	0.00	0.12	0.12	0.00	0.00	0.00	0.09	0.09	0.15
Crit Moves:	****				****					****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Post-Game

Intersection #15: Central Ave. & Albertoni St.

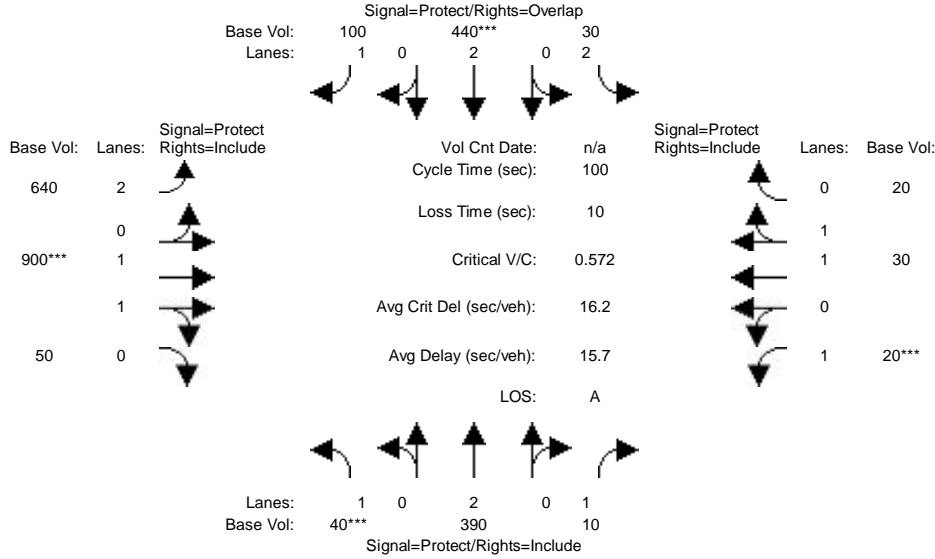


Street Name:	Central Ave.						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	520	630	210	470	0	180	50	230	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	520	630	210	470	0	180	50	230	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	520	630	210	470	0	180	50	230	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	520	630	210	470	0	180	50	230	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	520	630	210	470	0	180	50	230	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.57	0.43	1.00	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	2504	696	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.16	0.20	0.04	0.15	0.00	0.07	0.07	0.14	0.00	0.00	0.00
Crit Moves:		****	****				****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Post-Game

Intersection #16: Central Ave. & Victoria St.

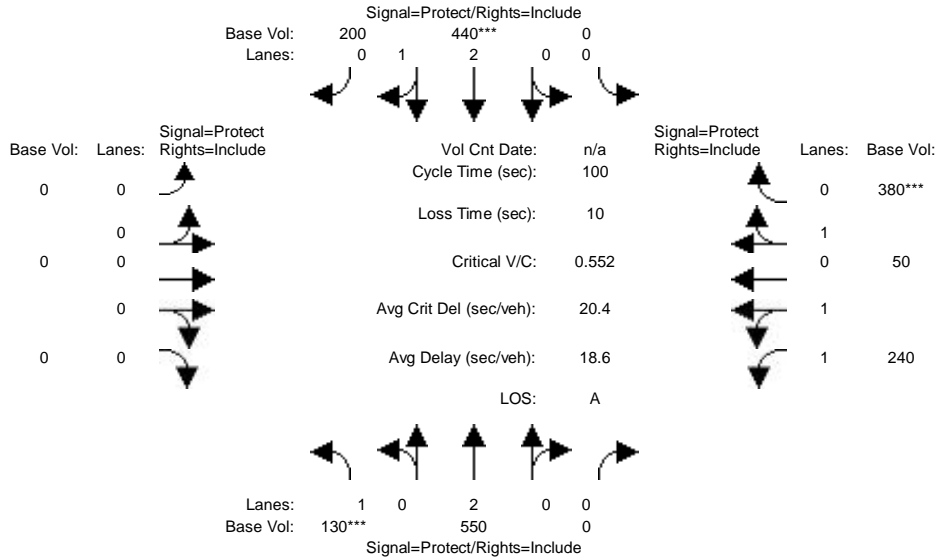


Street Name:	Central Ave.				Victoria St.							
Approach:	North Bound		South Bound		East Bound		West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	40	390	10	30	440	100	640	900	50	20	30	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	390	10	30	440	100	640	900	50	20	30	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	390	10	30	440	100	640	900	50	20	30	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	390	10	30	440	100	640	900	50	20	30	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	40	390	10	30	440	100	640	900	50	20	30	20
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.89	0.11	1.00	1.20	0.80
Final Sat.:	1600	3200	1600	5760	3200	1600	5760	3032	168	1600	1920	1280
Capacity Analysis Module:												
Vol/Sat:	0.03	0.12	0.01	0.01	0.14	0.06	0.11	0.30	0.30	0.01	0.02	0.02
OvlAdjV/S:	0.00											
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Post-Game

Intersection #17: Wilmington Ave. & Artesia Blvd. WB

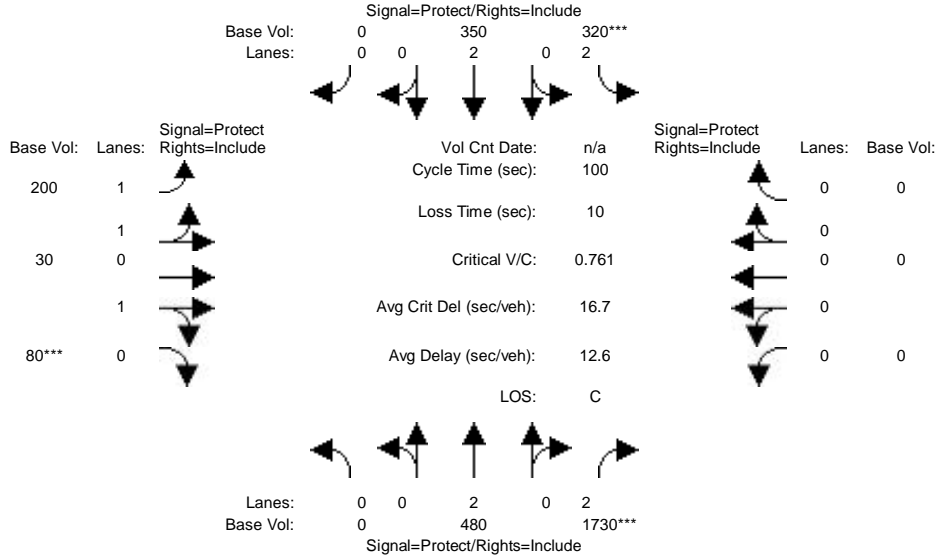


Street Name:	Wilmington Ave.						Artesia Blvd. WB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	130	550	0	0	440	200	0	0	0	240	50	380
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	550	0	0	440	200	0	0	0	240	50	380
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	550	0	0	440	200	0	0	0	240	50	380
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	550	0	0	440	200	0	0	0	240	50	380
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	550	0	0	440	200	0	0	0	240	50	380
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.06	0.94	0.00	0.00	0.00	1.66	0.34	1.00
Final Sat.:	1600	3200	0	0	3300	1500	0	0	0	2648	552	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.17	0.00	0.00	0.13	0.13	0.00	0.00	0.00	0.09	0.09	0.24
Crit Moves:	****				****					****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Post-Game

Intersection #18: Wilmington Ave. & Artesia Blvd. EB

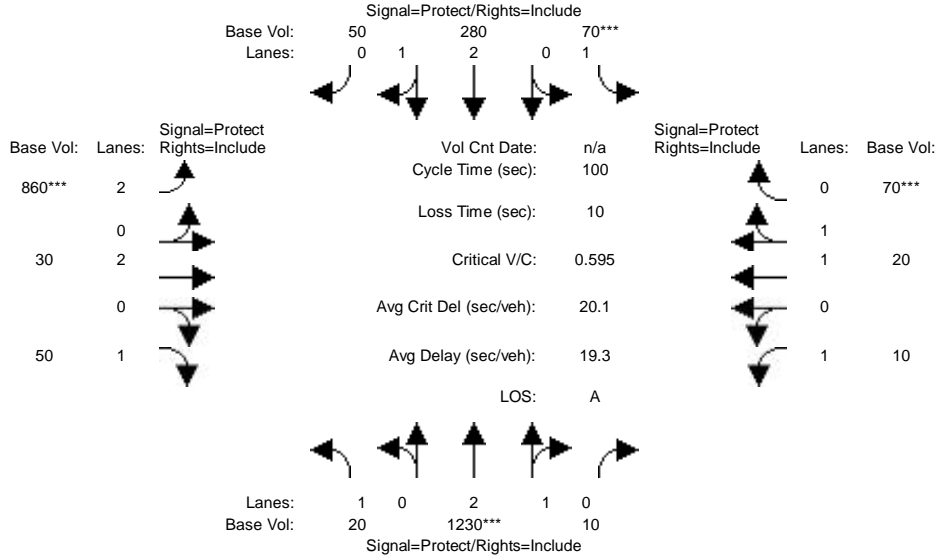


Street Name:	Wilmington Ave.						Artesia Blvd. EB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	480	1730	320	350	0	200	30	80	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	480	1730	320	350	0	200	30	80	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	480	1730	320	350	0	200	30	80	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	480	1730	320	350	0	200	30	80	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	480	1730	320	350	0	200	30	80	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.94	0.29	0.77	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	3107	462	1231	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.15	0.54	0.06	0.11	0.00	0.06	0.06	0.07	0.00	0.00	0.00
Crit Moves:		****	****				****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Post-Game

Intersection #19: Wilmington Ave. & Victoria St.

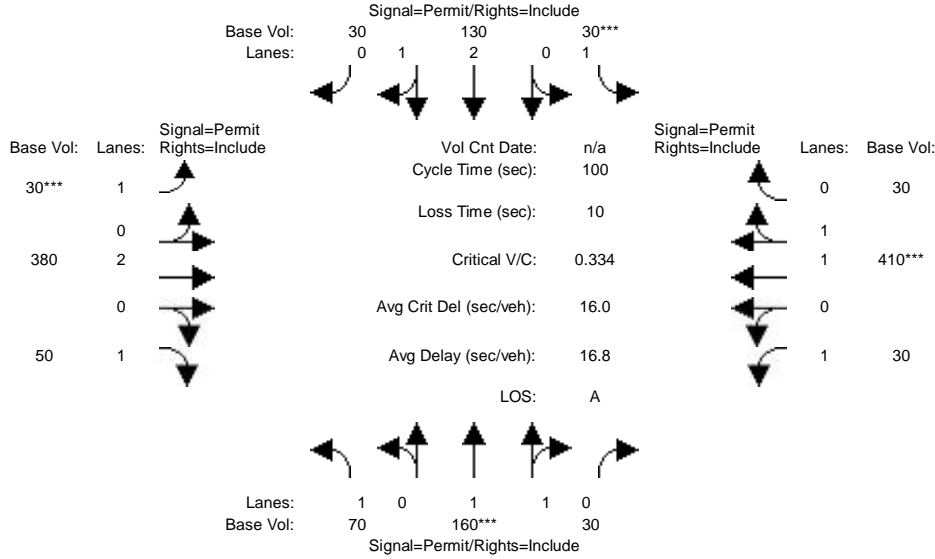


Street Name:	Wilmington Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	20	1230	10	70	280	50	860	30	50	10	20	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	1230	10	70	280	50	860	30	50	10	20	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	1230	10	70	280	50	860	30	50	10	20	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	1230	10	70	280	50	860	30	50	10	20	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	1230	10	70	280	50	860	30	50	10	20	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.98	0.02	1.00	2.55	0.45	2.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	4761	39	1600	4073	727	5760	3200	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.26	0.26	0.04	0.07	0.07	0.15	0.01	0.03	0.01	0.01	0.04
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Post-Game

Intersection #22: Figueroa St. & 190th St./Victoria St.

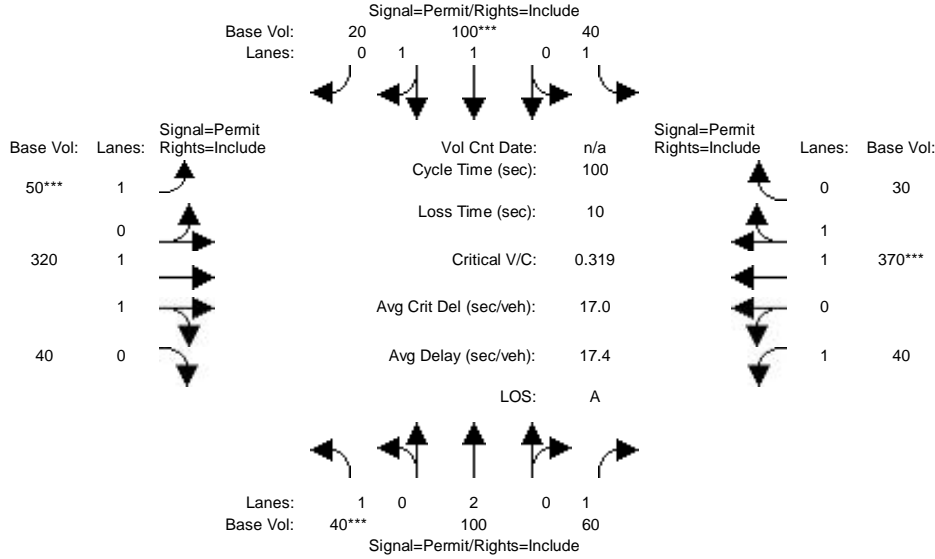


Street Name:	Figueroa St.						190th St./Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	70	160	30	30	130	30	30	380	50	30	410	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	160	30	30	130	30	30	380	50	30	410	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	160	30	30	130	30	30	380	50	30	410	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	160	30	30	130	30	30	380	50	30	410	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	70	160	30	30	130	30	30	380	50	30	410	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.68	0.32	1.00	2.44	0.56	1.00	2.00	1.00	1.00	1.86	0.14
Final Sat.:	1600	2695	505	1600	3900	900	1600	3200	1600	1600	2982	218
Capacity Analysis Module:												
Vol/Sat:	0.04	0.06	0.06	0.02	0.03	0.03	0.02	0.12	0.03	0.02	0.14	0.14
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Post-Game

Intersection #24: Main St. & Victoria St.

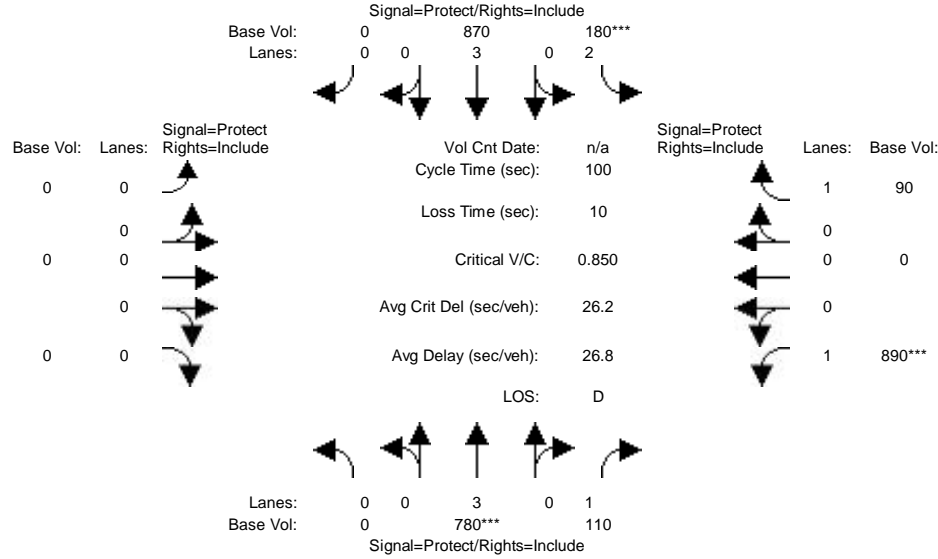


Street Name:	Main St.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	40	100	60	40	100	20	50	320	40	40	370	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	100	60	40	100	20	50	320	40	40	370	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	100	60	40	100	20	50	320	40	40	370	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	100	60	40	100	20	50	320	40	40	370	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	100	60	40	100	20	50	320	40	40	370	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.67	0.33	1.00	1.78	0.22	1.00	1.85	0.15
Final Sat.:	1600	3200	1600	1600	2667	533	1600	2844	356	1600	2960	240
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.04	0.03	0.04	0.04	0.03	0.11	0.11	0.03	0.13	0.13
Crit Moves:	****			****		****	****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Post-Game

Intersection #25: Avalon Blvd. & University Dr.

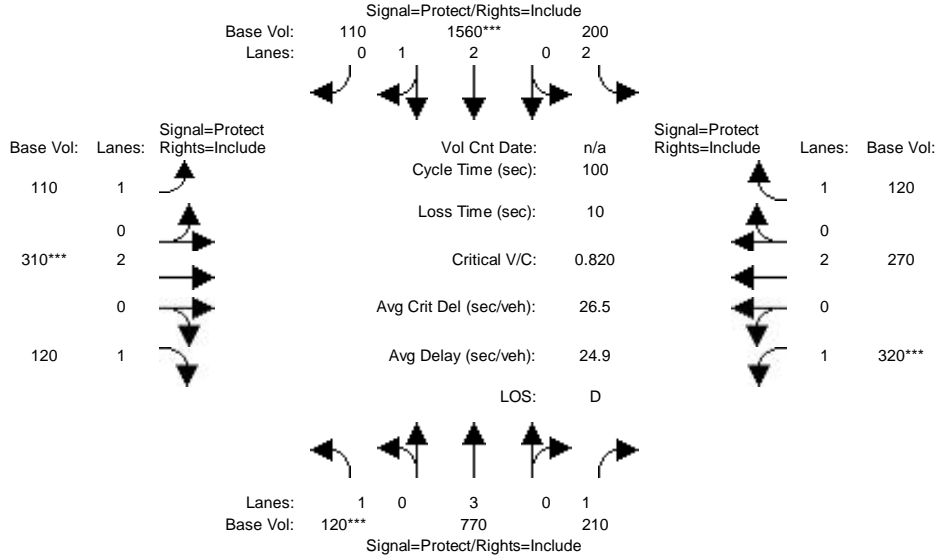


Street Name:	Avalon Blvd.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	780	110	180	870	0	0	0	0	0	890	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	780	110	180	870	0	0	0	0	890	0	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	780	110	180	870	0	0	0	0	890	0	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	780	110	180	870	0	0	0	0	890	0	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	780	110	180	870	0	0	0	0	890	0	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.16	0.07	0.03	0.18	0.00	0.00	0.00	0.00	0.00	0.56	0.00
Crit Moves:	****			****						****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Post-Game

Intersection #26: Avalon Blvd. & Del Amo Blvd.

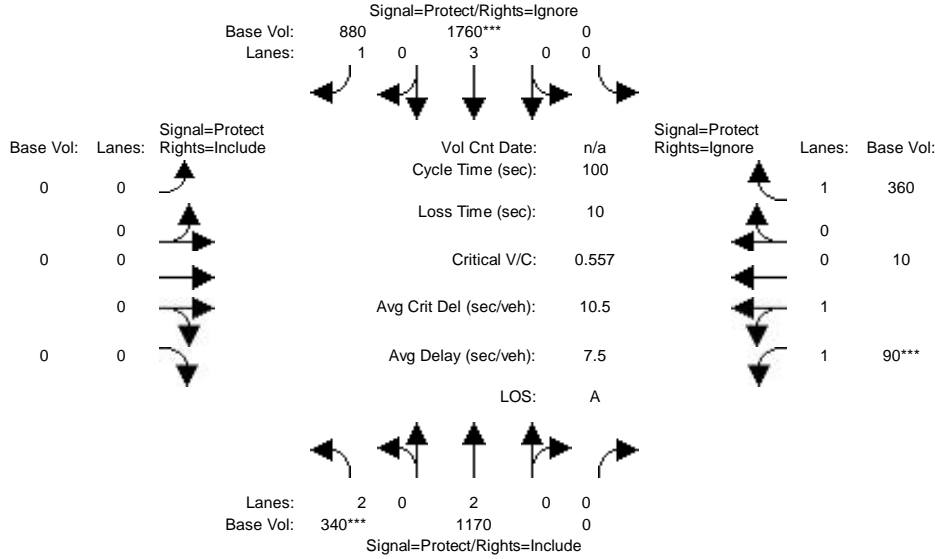


Street Name:	Avalon Blvd.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	120	770	210	200	1560	110	110	310	120	320	270	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	120	770	210	200	1560	110	110	310	120	320	270	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	120	770	210	200	1560	110	110	310	120	320	270	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	770	210	200	1560	110	110	310	120	320	270	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	120	770	210	200	1560	110	110	310	120	320	270	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.80	0.20	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4484	316	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.16	0.13	0.03	0.35	0.35	0.07	0.10	0.08	0.20	0.08	0.08
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Post-Game

Intersection #27: Avalon Blvd. & I-405 NB Ramps

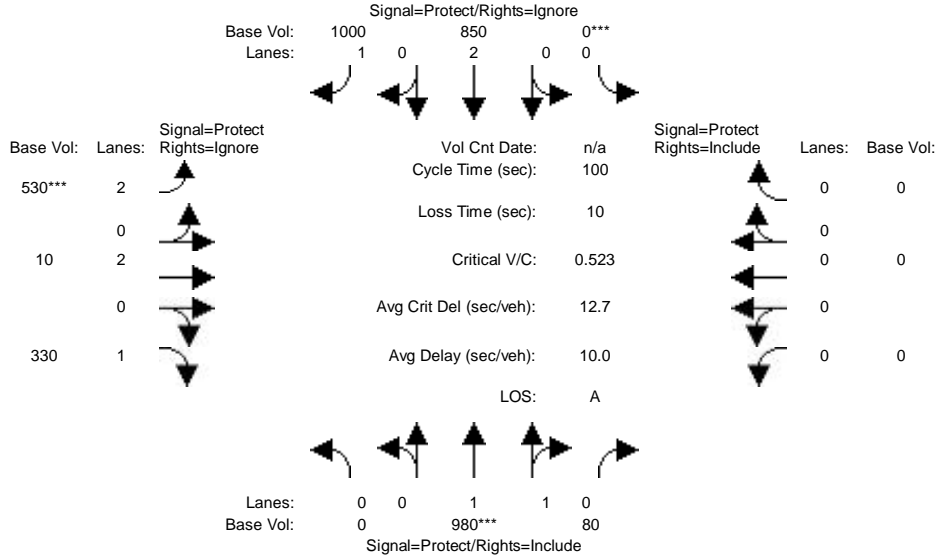


Street Name:	Avalon Blvd.						I-405 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	340	1170	0	0	1760	880	0	0	0	90	10	360
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	340	1170	0	0	1760	880	0	0	0	90	10	360
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	340	1170	0	0	1760	0	0	0	0	90	10	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	340	1170	0	0	1760	0	0	0	0	90	10	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	340	1170	0	0	1760	0	0	0	0	90	10	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.80	0.20	1.00
Final Sat.:	5760	3200	0	0	4800	1600	0	0	0	2880	320	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.37	0.00	0.00	0.37	0.00	0.00	0.00	0.00	0.00	0.03	0.03
Crit Moves:	****				****					****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Post-Game

Intersection #28: Avalon Blvd. & I-405 SB Ramps

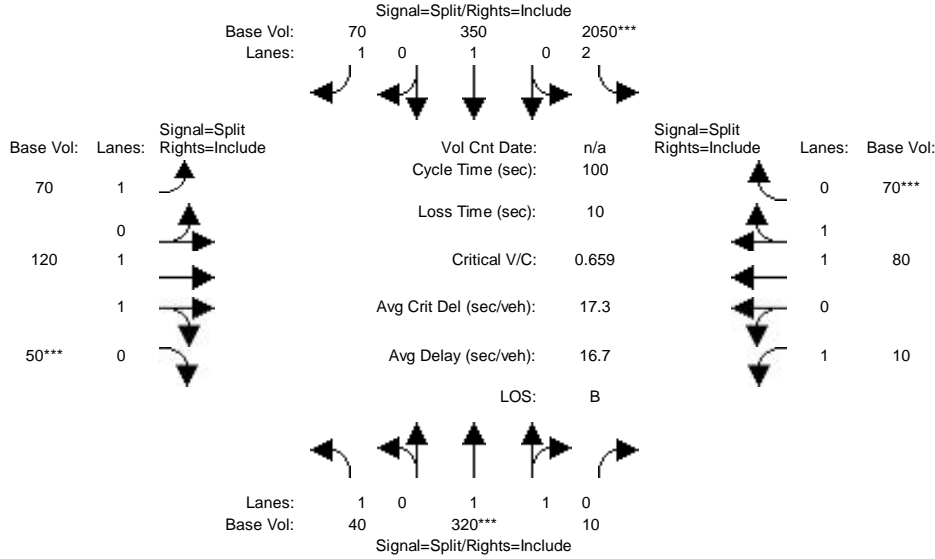


Street Name:	Avalon Blvd.						I-405 SB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	980	80	0	850	1000	530	10	330	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	980	80	0	850	1000	530	10	330	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	980	80	0	850	0	530	10	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	980	80	0	850	0	530	10	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Volume:	0	980	80	0	850	0	530	10	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.85	0.15	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	0	2958	242	0	3200	1600	5760	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.33	0.33	0.00	0.27	0.00	0.09	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Post-Game

Intersection #29: Central Ave. & University Dr.

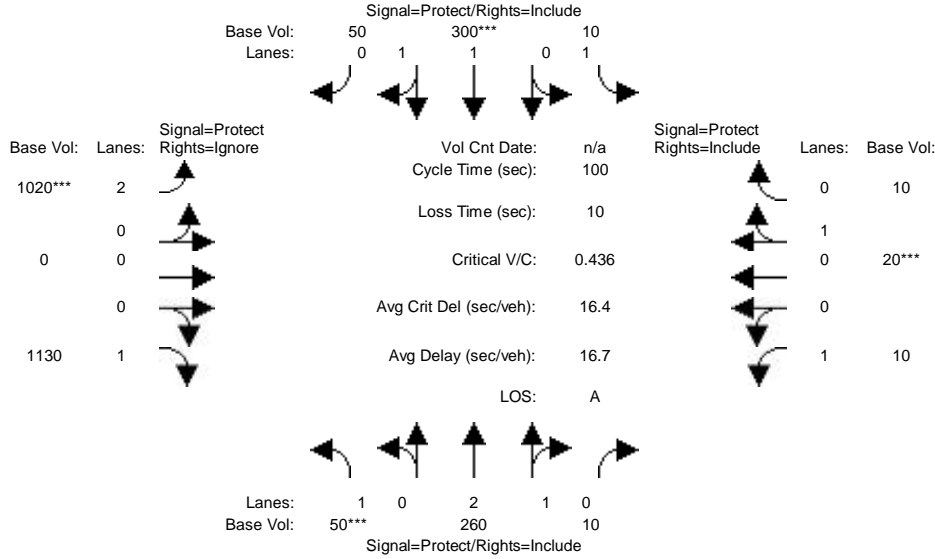


Street Name:	Central Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	40	320	10	2050	350	70	70	120	50	10	80	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	320	10	2050	350	70	70	120	50	10	80	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	320	10	2050	350	70	70	120	50	10	80	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	320	10	2050	350	70	70	120	50	10	80	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	320	10	2050	350	70	70	120	50	10	80	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.94	0.06	2.00	1.00	1.00	1.00	1.41	0.59	1.00	1.07	0.93
Final Sat.:	1600	3103	97	5760	1600	1600	1600	2259	941	1600	1707	1493
Capacity Analysis Module:												
Vol/Sat:	0.03	0.10	0.10	0.36	0.22	0.04	0.04	0.05	0.05	0.01	0.05	0.05
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Post-Game

Intersection #30: Wilmington Ave. & University Dr.

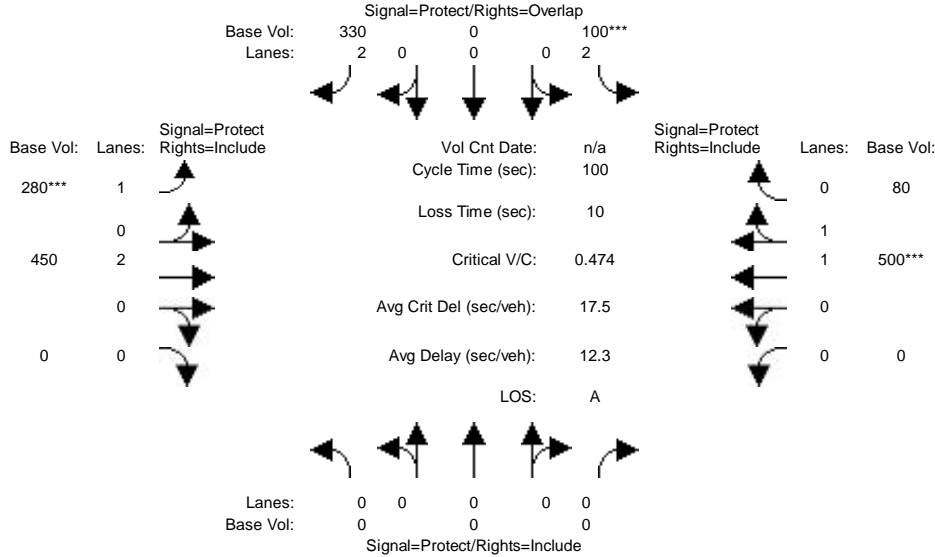


Street Name:	Wilmington Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	50	260	10	10	300	50	1020	0	1130	10	20	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	260	10	10	300	50	1020	0	1130	10	20	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
PHF Volume:	50	260	10	10	300	50	1020	0	0	10	20	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	260	10	10	300	50	1020	0	0	10	20	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
FinalVolume:	50	260	10	10	300	50	1020	0	0	10	20	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.89	0.11	1.00	1.71	0.29	2.00	0.00	1.00	1.00	0.67	0.33
Final Sat.:	1600	4622	178	1600	2743	457	5760	0	1600	1600	1067	533
Capacity Analysis Module:												
Vol/Sat:	0.03	0.06	0.06	0.01	0.11	0.11	0.18	0.00	0.00	0.01	0.02	0.02
Crit Moves:	****			****		****				****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Post-Game

Intersection #31: Central Ave. & Del Amo Blvd.

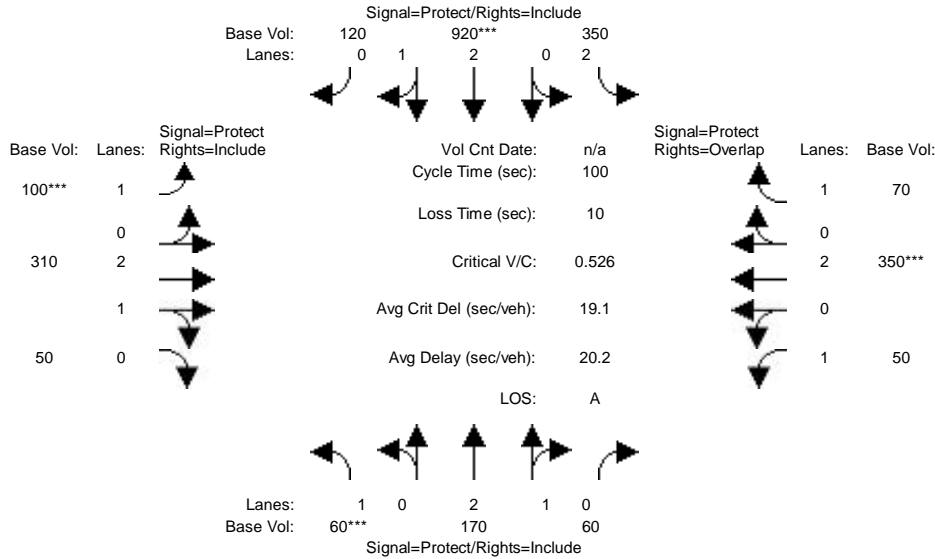


Street Name:	Central Ave.						Del Amo Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	100	0	330	280	450	0	0	500	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	100	0	330	280	450	0	0	500	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	100	0	330	280	450	0	0	500	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	100	0	330	280	450	0	0	500	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	100	0	330	280	450	0	0	500	80
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	2.00	1.00	2.00	0.00	0.00	1.72	0.28
Final Sat.:	0	0	0	5760	0	3200	1600	3200	0	0	2759	441
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.02	0.00	0.10	0.17	0.14	0.00	0.00	0.18	0.18
OvlAdjV/S:	0.00											
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Post-Game

Intersection #32: Wilmington Ave. & Del Amo Blvd.

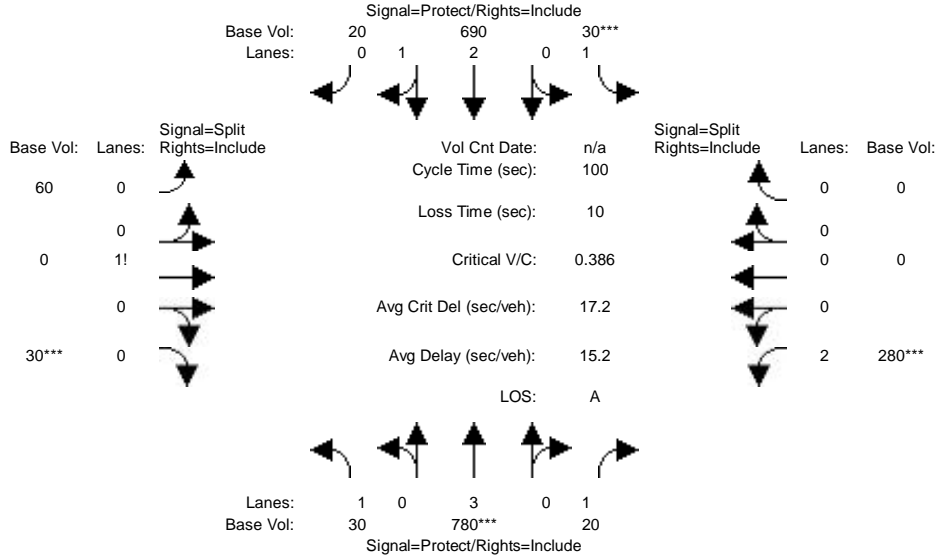


Street Name: Wilmington Ave.						Del Amo Blvd.						
Approach: North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	60	170	60	350	920	120	100	310	50	50	350	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	170	60	350	920	120	100	310	50	50	350	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	170	60	350	920	120	100	310	50	50	350	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	170	60	350	920	120	100	310	50	50	350	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	170	60	350	920	120	100	310	50	50	350	70
OvlAdjVol:												0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.22	0.78	2.00	2.65	0.35	1.00	2.58	0.42	1.00	2.00	1.00
Final Sat.:	1600	3548	1252	5760	4246	554	1600	4133	667	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.05	0.05	0.06	0.22	0.22	0.06	0.08	0.07	0.03	0.11	0.04
OvlAdjV/S:												0.00
Crit Moves:	****			****		****				****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Post-Game

Intersection #38: Avalon Blvd. & 184th St. - Drive A

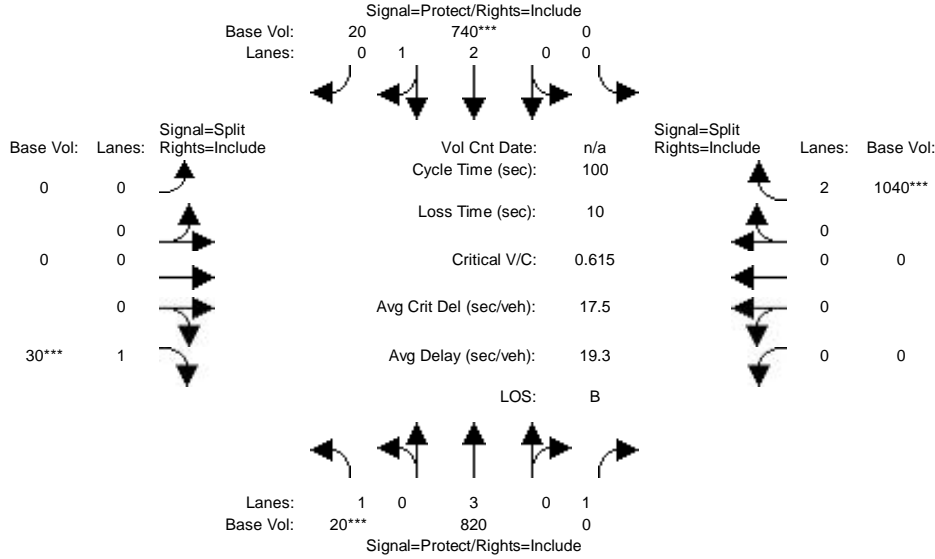


Street Name:	S. Avolon Blvd.						184th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	30	780	20	30	690	20	60	0	30	280	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	780	20	30	690	20	60	0	30	280	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	780	20	30	690	20	60	0	30	280	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	780	20	30	690	20	60	0	30	280	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	780	20	30	690	20	60	0	30	280	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.92	0.08	0.67	0.00	0.33	2.00	0.00	0.00
Final Sat.:	1600	4800	1600	1600	4665	135	1067	0	533	5760	0	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.16	0.01	0.02	0.15	0.15	0.06	0.00	0.06	0.05	0.00	0.00
Crit Moves:	****			****			****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Post-Game

Intersection #39: Avalon Blvd. & 182nd St. - Drive B

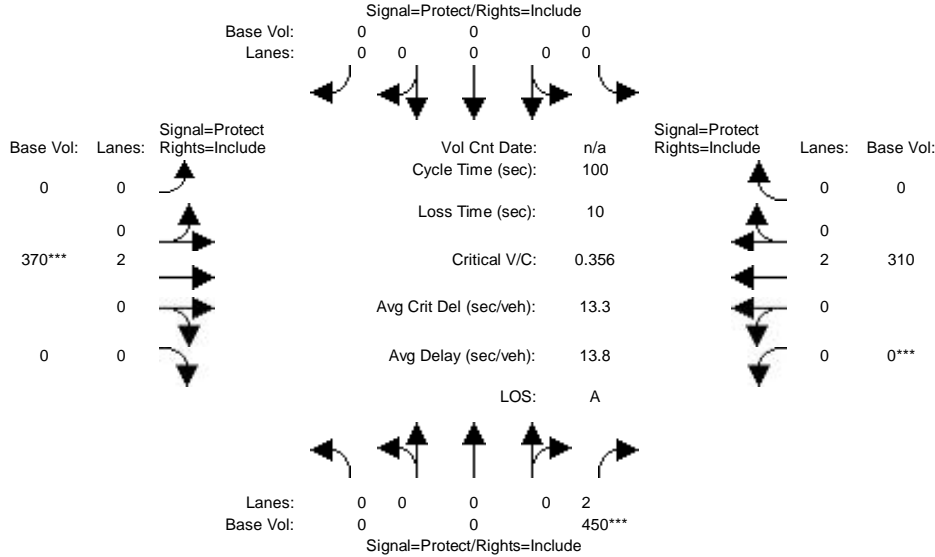


Street Name:	S. Avalon Blvd.						182nd St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	20	820	0	0	740	20	0	0	30	0	0	1040
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	820	0	0	740	20	0	0	30	0	0	1040
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	820	0	0	740	20	0	0	30	0	0	1040
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	820	0	0	740	20	0	0	30	0	0	1040
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	820	0	0	740	20	0	0	30	0	0	1040
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	0.00	2.92	0.08	0.00	0.00	1.00	0.00	0.00	2.00
Final Sat.:	1600	4800	1600	0	4674	126	0	0	1600	0	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.01	0.17	0.00	0.00	0.16	0.16	0.00	0.00	0.02	0.00	0.00	0.33
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Post-Game

Intersection #40: Victoria St. & Drive C

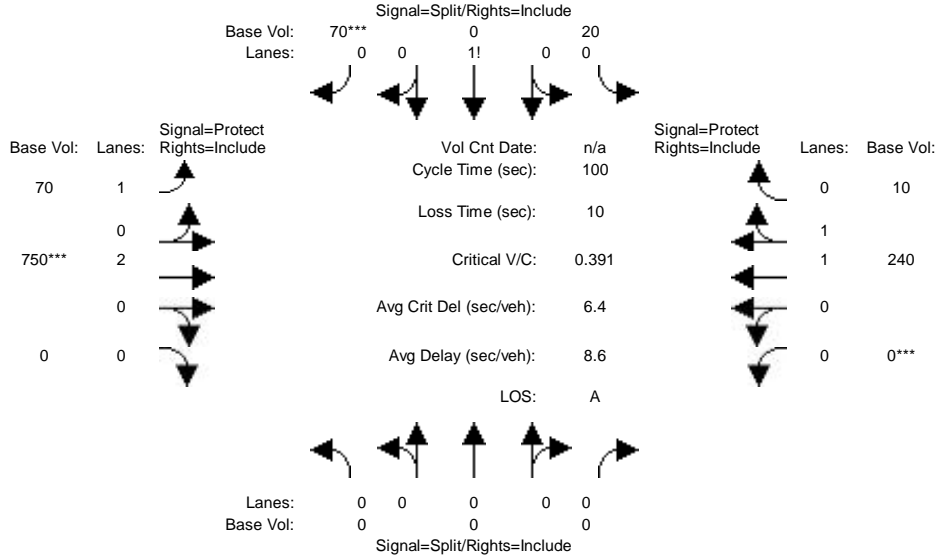


Street Name:	Drive C						E. Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	450	0	0	0	0	370	0	0	0	310
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	450	0	0	0	0	370	0	0	0	310
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	450	0	0	0	0	370	0	0	0	310
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	450	0	0	0	0	370	0	0	0	310
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	450	0	0	0	0	370	0	0	0	310
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	2.00
Final Sat.:	0	0	3200	0	0	0	0	3200	0	0	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.10
Crit Moves:			****				****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Post-Game

Intersection #41: Victoria St. & Rainsbury Ave.

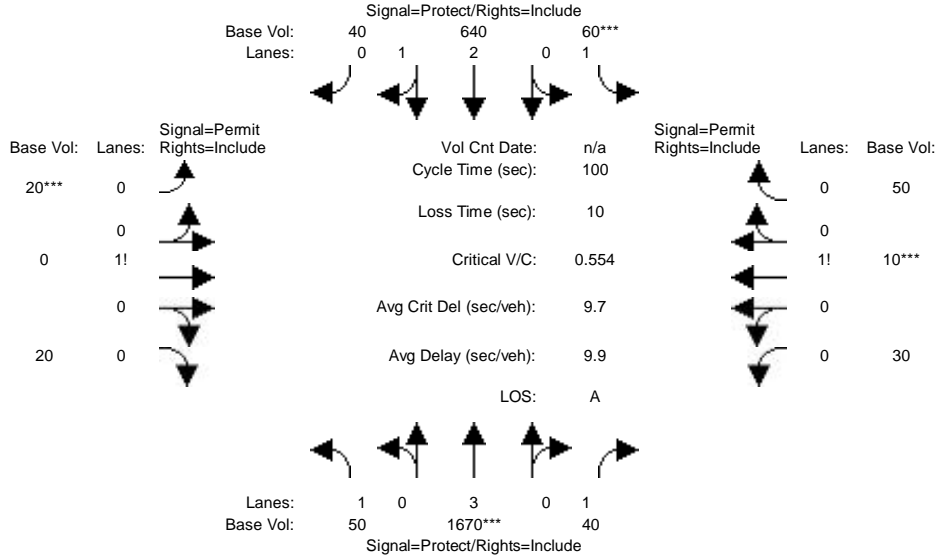


Street Name:	E. Victoria St.						Rainsbury Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	20	0	70	70	750	0	0	240	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	20	0	70	70	750	0	0	240	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	20	0	70	70	750	0	0	240	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	20	0	70	70	750	0	0	240	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	20	0	70	70	750	0	0	240	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.22	0.00	0.78	1.00	2.00	0.00	0.00	1.92	0.08
Final Sat.:	0	0	0	356	0	1244	1600	3200	0	0	3072	128
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.06	0.00	0.06	0.04	0.23	0.00	0.00	0.08	0.08
Crit Moves:				****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 27k-Seat Sunday Post-Game

Intersection #42: Avalon Blvd. & Harbor Village / Colony Cove



Street Name:	Avalon Blvd.						Harbor Village / Colony Cove					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	50	1670	40	60	640	40	20	0	20	30	10	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	1670	40	60	640	40	20	0	20	30	10	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	1670	40	60	640	40	20	0	20	30	10	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	1670	40	60	640	40	20	0	20	30	10	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	50	1670	40	60	640	40	20	0	20	30	10	50
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.82	0.18	0.50	0.00	0.50	0.33	0.11	0.56
Final Sat.:	1600	4800	1600	1600	4518	282	800	0	800	533	178	889
Capacity Analysis Module:												
Vol/Sat:	0.03	0.35	0.03	0.04	0.14	0.14	0.01	0.00	0.03	0.02	0.06	0.06
Crit Moves:	****			****			****			****		

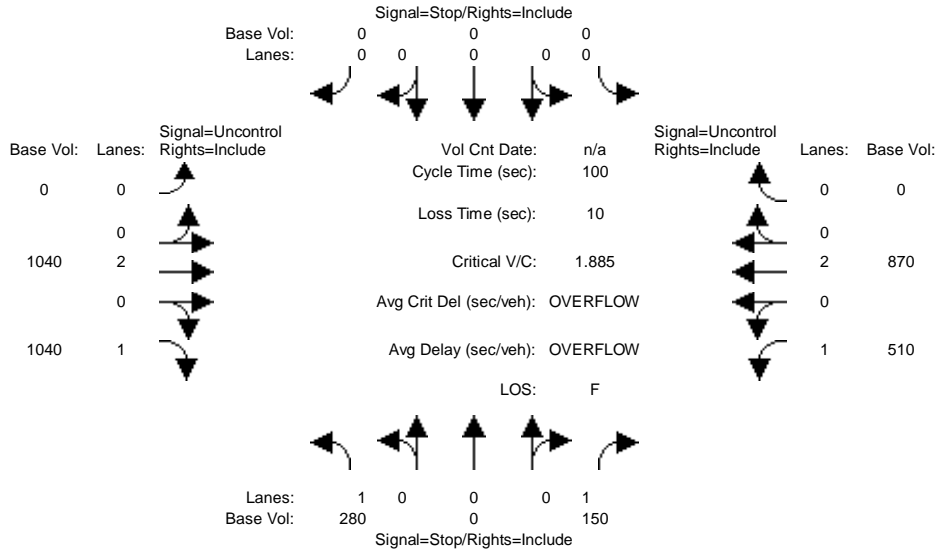
Appendix Q

Intersection LOS Worksheets for 2035 Weekday Plus Project Alternative 1 Conditions

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2035 Plus Project Weekday AM

Intersection #1: Victoria St. & Drive D



Street Name:	Drive D						Victoria St..					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	280	0	150	0	0	0	0	1040	1040	510	870	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	280	0	150	0	0	0	0	1040	1040	510	870	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	280	0	150	0	0	0	0	1040	1040	510	870	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	280	0	150	0	0	0	0	1040	1040	510	870	0
Critical Gap Module:												
Critical Gp:	6.8	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	2495	xxxx	520	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	2080	xxxx	xxxxx
Potent Cap.:	25	xxxx	506	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	271	xxxx	xxxxx
Move Cap.:	0	xxxx	506	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	271	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.30	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	1.89	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	1.2	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	35.3	xxxx	xxxxx
Control Del:	xxxxx	xxxx	15.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	443.1	xxxx	xxxxx
LOS by Move:	*	*	C	*	*	*	*	*	*	F	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	+Inf			xxxxxxx			xxxxxxx			xxxxxxx		

ApproachLOS: F * * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #1 Victoria St. & Drive D

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 2 0 1	1 0 2 0 0
Initial Vol:	280 0 150	0 0 0	0 1040 1040	510 870 0
ApproachDel:	+Inf	xxxxxx	xxxxxx	xxxxxx

Approach[northbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=OVERFLOW]

SUCCEED - Vehicle-hours >= 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=430]

SUCCEED - Approach volume >= 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=3890]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #1 Victoria St. & Drive D

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 2 0 1	1 0 2 0 0
Initial Vol:	280 0 150	0 0 0	0 1040 1040	510 870 0

Major Street Volume: 3460

Minor Approach Volume: 430

Minor Approach Volume Threshold: -160 [less than minimum of 150]

SIGNAL WARRANT DISCLAIMER

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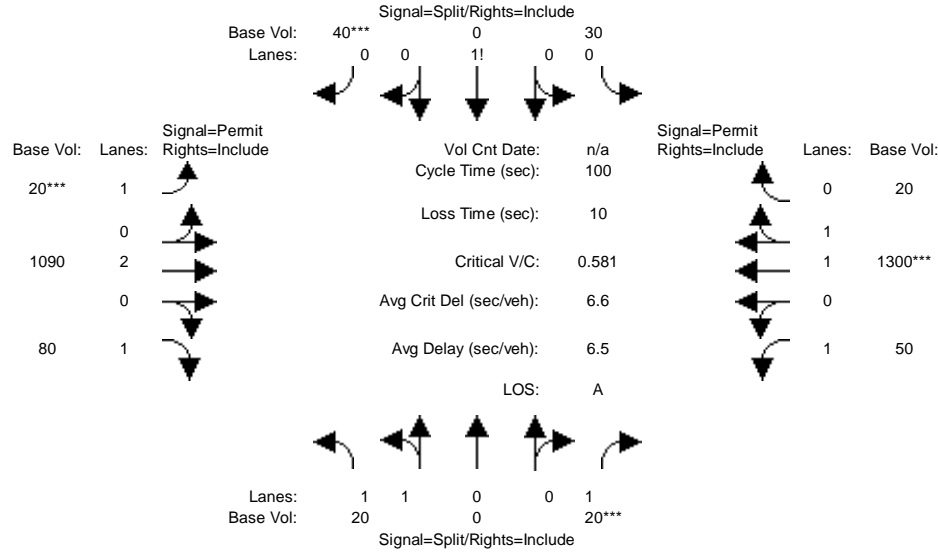
The peak hour warrant analysis in this report is not intended to replace

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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM

Intersection #2: Victoria St. & Tamcliff Ave.

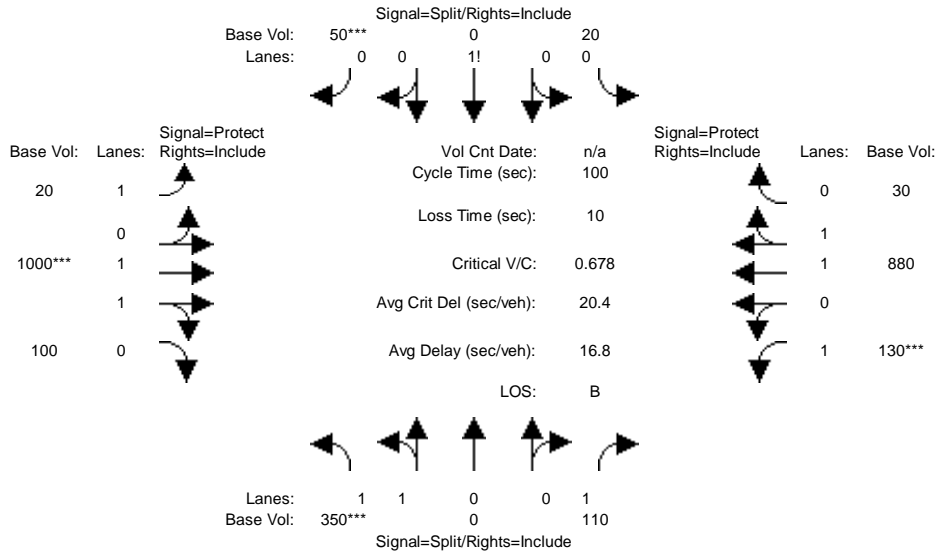


Street Name:	Victoria St.						Tamcliff Ave.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	20	0	20	30	0	40	20	1090	80	50	1300	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	0	20	30	0	40	20	1090	80	50	1300	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	0	20	30	0	40	20	1090	80	50	1300	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	0	20	30	0	40	20	1090	80	50	1300	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	20	0	20	30	0	40	20	1090	80	50	1300	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.43	0.00	0.57	1.00	2.00	1.00	1.00	1.97	0.03
Final Sat.:	3200	0	1600	686	0	914	1600	3200	1600	1600	3152	48
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.01	0.04	0.00	0.04	0.01	0.34	0.05	0.03	0.41	0.41
Crit Moves:			***			***	***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM

Intersection #3: Victoria St. & Birchknoll Dr.

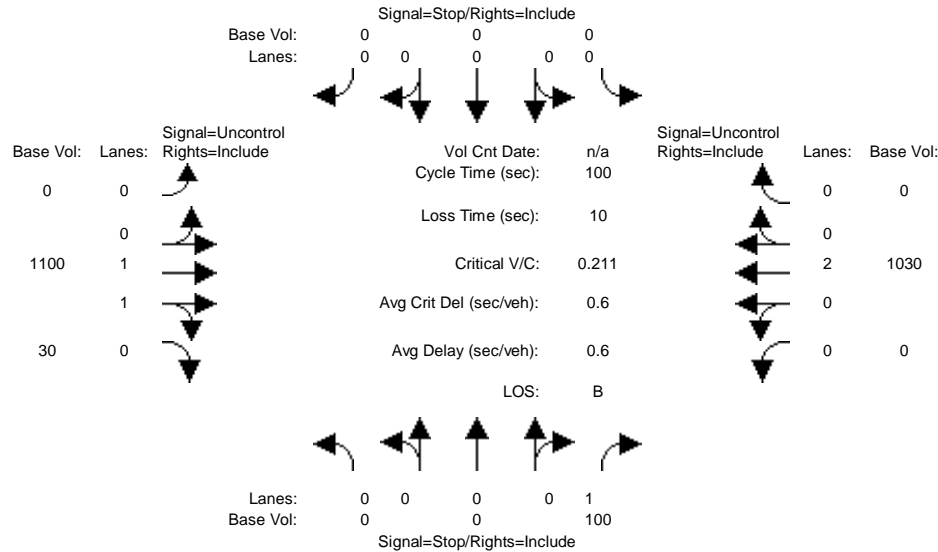


Street Name:	Victoria St.						Birchknoll Dr.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	350	0	110	20	0	50	20	1000	100	130	880	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	350	0	110	20	0	50	20	1000	100	130	880	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	350	0	110	20	0	50	20	1000	100	130	880	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	350	0	110	20	0	50	20	1000	100	130	880	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	350	0	110	20	0	50	20	1000	100	130	880	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.29	0.00	0.71	1.00	1.82	0.18	1.00	1.93	0.07
Final Sat.:	3200	0	1600	457	0	1143	1600	2909	291	1600	3095	105
Capacity Analysis Module:												
Vol/Sat:	0.11	0.00	0.07	0.04	0.00	0.04	0.01	0.34	0.34	0.08	0.28	0.28
Crit Moves:	***					***		***		***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2035 Plus Project Weekday AM

Intersection #4: Victoria St. & Project Service Rd.



Street Name:	Project Service Rd.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	100	0	0	0	0	1100	30	0	1030	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	100	0	0	0	0	1100	30	0	1030	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	100	0	0	0	0	1100	30	0	1030	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	0	0	100	0	0	0	0	1100	30	0	1030	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	xxxx	xxxx	565	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	473	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	473	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.21	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	0.8	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	14.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	B	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shared Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*

ApproachDel: 14.6 xxxxxxx xxxxxxx xxxxxxx
 ApproachLOS: B * * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #4 Victoria St. & Project Service Rd.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 1	0 0 0 0 0	0 0 1 1 0	0 0 2 0 0
Initial Vol:	0 0 100	0 0 0	0 1100 30	0 1030 0
ApproachDel:	14.6	xxxxxxx	xxxxxxx	xxxxxxx

Approach[northbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.4]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=100]

SUCCEED - Approach volume greater than or equal to 100 for one lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=2260]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #4 Victoria St. & Project Service Rd.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 1	0 0 0 0 0	0 0 1 1 0	0 0 2 0 0
Initial Vol:	0 0 100	0 0 0	0 1100 30	0 1030 0

Major Street Volume: 2160

Minor Approach Volume: 100

Minor Approach Volume Threshold: 20 [less than minimum of 100]

SIGNAL WARRANT DISCLAIMER

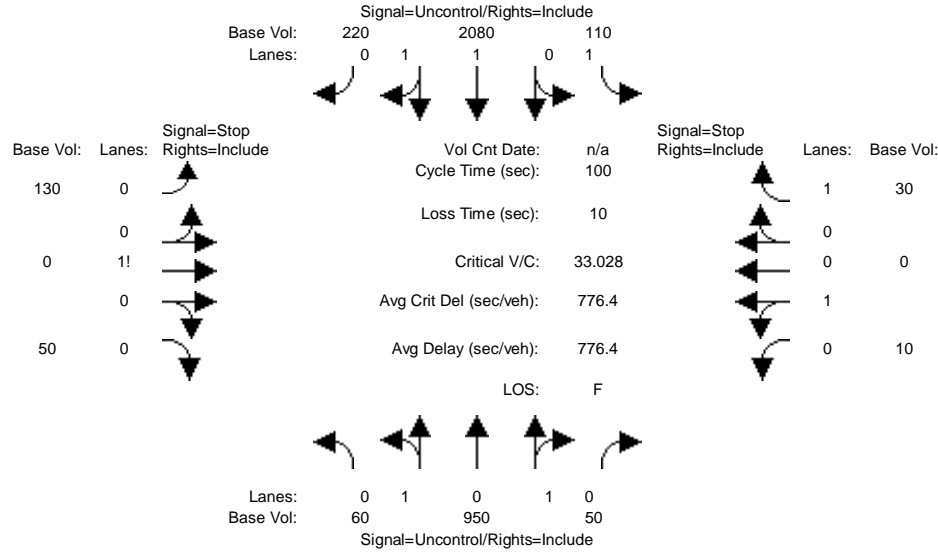
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2035 Plus Project Weekday AM

Intersection #5: Central Ave. & Charles Willard St.



Street Name:	Central Ave.						Charles Willard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	60	950	50	110	2080	220	130	0	50	10	0	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	950	50	110	2080	220	130	0	50	10	0	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	950	50	110	2080	220	130	0	50	10	0	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	60	950	50	110	2080	220	130	0	50	10	0	30
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	4.1	xxxx	xxxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxxx	2.2	xxxx	xxxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflct Vol:	2300	xxxx	xxxxxx	1000	xxxx	xxxxxx	3005	3530	1150	2355	3615	500
Potent Cap.:	222	xxxx	xxxxxx	700	xxxx	xxxxxx	6	6	195	19	5	522
Move Cap.:	222	xxxx	xxxxxx	700	xxxx	xxxxxx	4	4	195	10	3	522
Volume/Cap:	0.27	xxxx	xxxxxx	0.16	xxxx	xxxxxx	33.03	0.00	0.26	1.01	0.00	0.06
Level Of Service Module:												
2Way95thQ:	1.1	xxxx	xxxxxx	0.6	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	0.2
Control Del:	27.1	xxxx	xxxxxx	11.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	12.3
LOS by Move:	D	*	*	B	*	*	*	*	*	*	*	B
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	5	xxxxxx	10	xxxx	xxxxxx
SharedQueue:	1.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	24.6	xxxxxx	1.9	xxxx	xxxxxx
Shrd ConDel:	27.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	775.4	xxxx	xxxxxx
Shared LOS:	D	*	*	*	*	*	*	F	*	F	*	*

ApproachDel: xxxxxxx xxxxxxx xxxxxxx 203.1
 ApproachLOS: * * F F

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #5 Central Ave. & Charles Willard St.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 1 0 1 0	1 0 1 1 0	0 0 1! 0 0	0 1 0 0 1
Initial Vol:	60 950 50	110 2080 220	130 0 50	10 0 30
ApproachDel:	xxxxxxx	xxxxxxx	xxxxxxx	203.1

-----|-----|-----|-----|-----|

Approach[eastbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=792.8]

SUCCEED - Vehicle-hours greater than or equal to 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=180]

SUCCEED - Approach volume greater than or equal to 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=3690]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

-----|-----|-----|-----|-----|

Approach[westbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=2.3]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=40]

FAIL - Approach volume less than 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=3690]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

-----|-----|-----|-----|-----|

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #5 Central Ave. & Charles Willard St.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 1 0 1 0	1 0 1 1 0	0 0 1! 0 0	0 1 0 0 1
Initial Vol:	60 950 50	110 2080 220	130 0 50	10 0 30

Major Street Volume: 3470

Minor Approach Volume: 180

Minor Approach Volume Threshold: -144 [less than minimum of 100]

SIGNAL WARRANT DISCLAIMER

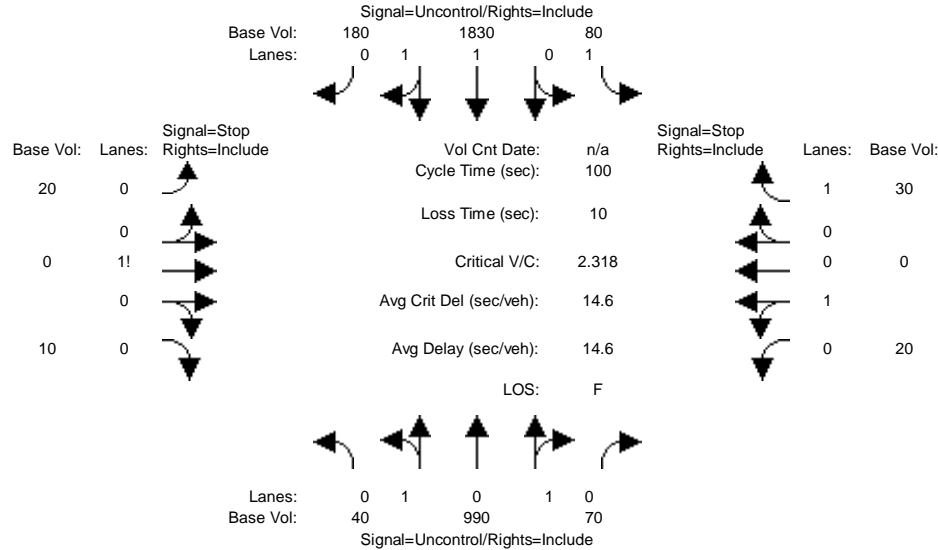
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2035 Plus Project Weekday AM

Intersection #6: Central Ave. & Project Driveway/Beachey Pl.



Street Name:	Central Ave.						Beachey Pl.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	40	990	70	80	1830	180	20	0	10	20	0	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	990	70	80	1830	180	20	0	10	20	0	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	990	70	80	1830	180	20	0	10	20	0	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	40	990	70	80	1830	180	20	0	10	20	0	30
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	4.1	xxxx	xxxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxxx	2.2	xxxx	xxxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	2010	xxxx	xxxxxx	1060	xxxx	xxxxxx	2655	3220	1005	2180	3275	530
Potent Cap.:	288	xxxx	xxxxxx	665	xxxx	xxxxxx	11	10	243	26	9	499
Move Cap.:	288	xxxx	xxxxxx	665	xxxx	xxxxxx	9	7	243	20	7	499
Volume/Cap:	0.14	xxxx	xxxx	0.12	xxxx	xxxx	2.32	0.00	0.04	0.98	0.00	0.06
Level Of Service Module:												
2Way95thQ:	0.5	xxxx	xxxxxx	0.4	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	0.2
Control Del:	19.5	xxxx	xxxxxx	11.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	12.7
LOS by Move:	C	*	*	B	*	*	*	*	*	*	*	B
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	13	xxxxxx	20	xxxx	xxxxxx
Shared Queue:	0.5	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	4.6	xxxxxx	2.7	xxxx	xxxxxx
Shrd ConDel:	19.5	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	1222	xxxxxx	455.4	xxxx	xxxxxx
Shared LOS:	C	*	*	*	*	*	*	F	*	F	*	*

ApproachDel: xxxxxxx xxxxxxx 1221.8 189.8
 ApproachLOS: * * F F

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #6 Central Ave. & Project Driveway/Beachey Pl.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 1 0 1 0	1 0 1 1 0	0 0 1 0 0	0 1 0 0 1
Initial Vol:	40 990 70	80 1830 180	20 0 10	20 0 30
ApproachDel:	xxxxxxx	xxxxxxx	1221.8	189.8

-----|-----|-----|-----|-----|

Approach[eastbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=10.2]

SUCCEED - Vehicle-hours greater than or equal to 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=30]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=3270]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

-----|-----|-----|-----|-----|

Approach[westbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=2.6]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=50]

FAIL - Approach volume less than 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=3270]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

-----|-----|-----|-----|-----|

SIGNAL WARRANT DISCLAIMER

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The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #6 Central Ave. & Project Driveway/Beachey Pl.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 1 0 1 0	1 0 1 1 0	0 0 1 0 0	0 1 0 0 1
Initial Vol:	40 990 70	80 1830 180	20 0 10	20 0 30

Major Street Volume: 3190

Minor Approach Volume: 50

Minor Approach Volume Threshold: -125 [less than minimum of 150]

SIGNAL WARRANT DISCLAIMER

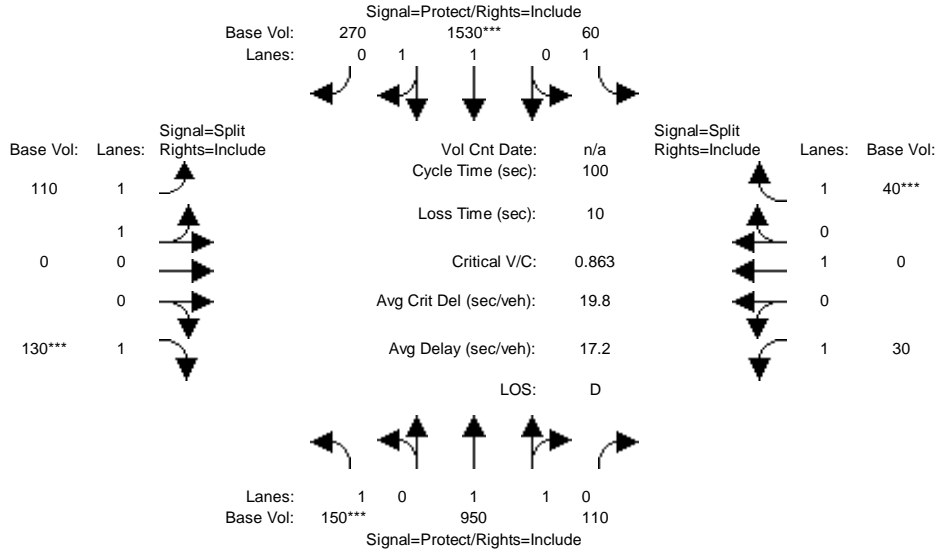
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM

Intersection #7: Central Ave. & Glenn Curtiss St.

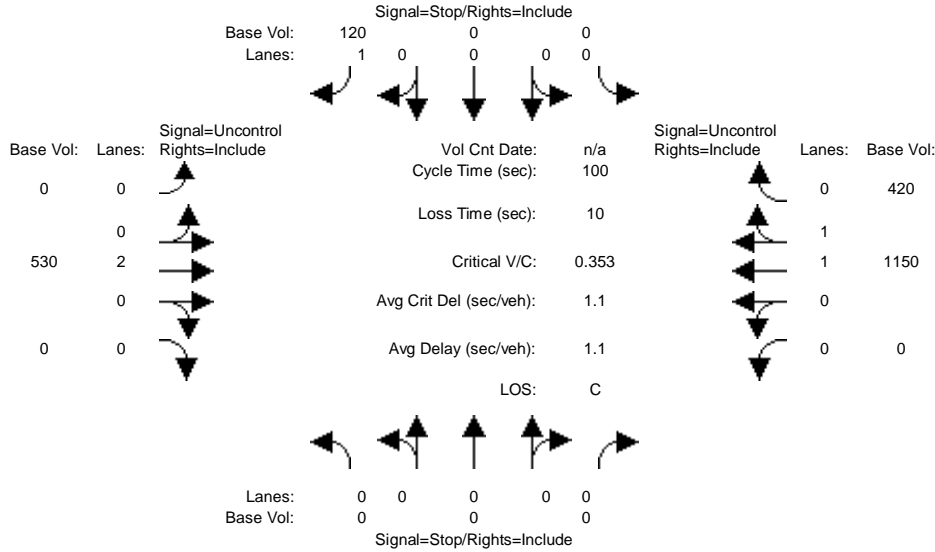


Street Name:	Central Ave.						Glenn Curtiss St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	150	950	110	60	1530	270	110	0	130	30	0	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	950	110	60	1530	270	110	0	130	30	0	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	950	110	60	1530	270	110	0	130	30	0	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	950	110	60	1530	270	110	0	130	30	0	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	150	950	110	60	1530	270	110	0	130	30	0	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.79	0.21	1.00	1.70	0.30	2.00	0.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	2868	332	1600	2720	480	3200	0	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.33	0.33	0.04	0.56	0.56	0.03	0.00	0.08	0.02	0.00	0.03
Crit Moves:	***			***	***		***		***	***		***

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
2035 Plus Project Weekday AM

Intersection #8: University Dr./Birchknoll Dr. Ext.



Street Name:	Birchknoll Dr. Ext.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	0	0	120	0	530	0	0	1150	420
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	120	0	530	0	0	1150	420
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	120	0	530	0	0	1150	420
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	120	0	530	0	0	1150	420
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	785	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	340	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	340	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	0.35	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	1.6	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	21.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	C	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*

ApproachDel: xxxxxxx 21.3 xxxxxxx xxxxxxx
 ApproachLOS: * C * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #8 University Dr./Birchknoll Dr. Ext.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0	0	0	0	0	0	0	0	2	0	0	1
Initial Vol:	0	0	0	0	0	120	0	530	0	0	1150	420
ApproachDel:	xxxxxxx			21.3			xxxxxxx			xxxxxxx		

Approach[southbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.7]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=120]

SUCCEED - Approach volume greater than or equal to 100 for one lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=2220]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #8 University Dr./Birchknoll Dr. Ext.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0	0	0	0	0	0	0	0	2	0	0	1
Initial Vol:	0	0	0	0	0	120	0	530	0	0	1150	420

Major Street Volume: 2100

Minor Approach Volume: 120

Minor Approach Volume Threshold: 29 [less than minimum of 100]

SIGNAL WARRANT DISCLAIMER

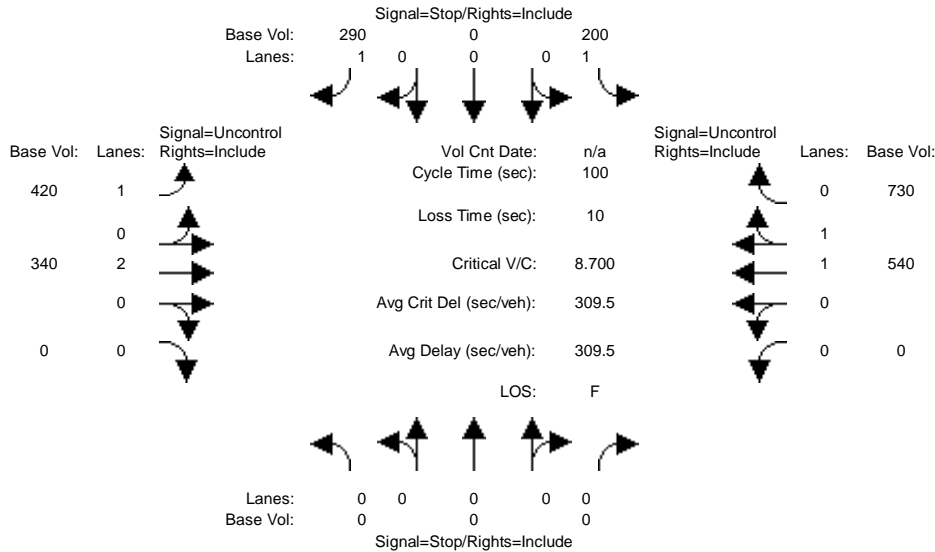
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2035 Plus Project Weekday AM

Intersection #9: University Dr. & Toro Center Dr.



Street Name:	University Dr.						Toro Center Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	200	0	290	420	340	0	0	540	730
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	200	0	290	420	340	0	0	540	730
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	200	0	290	420	340	0	0	540	730
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	0	0	0	200	0	290	420	340	0	0	540	730
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.8	xxxx	6.9	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	xxxx	xxxx	xxxxx	1915	xxxx	635	1270	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	61	xxxx	426	554	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	23	xxxx	426	554	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	8.70	xxxx	0.68	0.76	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	25.1	xxxx	5.0	6.7	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	3795	xxxx	29.6	29.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	F	*	D	D	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shared Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*

ApproachDel: xxxxxxx 1566.6 xxxxxxx xxxxxxx
 ApproachLOS: * F * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #9 University Dr. & Toro Center Dr.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0	0	0	0	0	0	1	0	2	0	0	1
Initial Vol:	0	0	0	200	0	290	420	340	0	0	540	730
ApproachDel:	xxxxxxx			1566.6			xxxxxxx			xxxxxxx		

Approach[southbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=213.2]

SUCCEED - Vehicle-hours >= 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=490]

SUCCEED - Approach volume >= 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=2520]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #9 University Dr. & Toro Center Dr.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0	0	0	0	0	0	1	0	2	0	0	1
Initial Vol:	0	0	0	200	0	290	420	340	0	0	540	730

Major Street Volume: 2030

Minor Approach Volume: 490

Minor Approach Volume Threshold: 70 [less than minimum of 150]

SIGNAL WARRANT DISCLAIMER

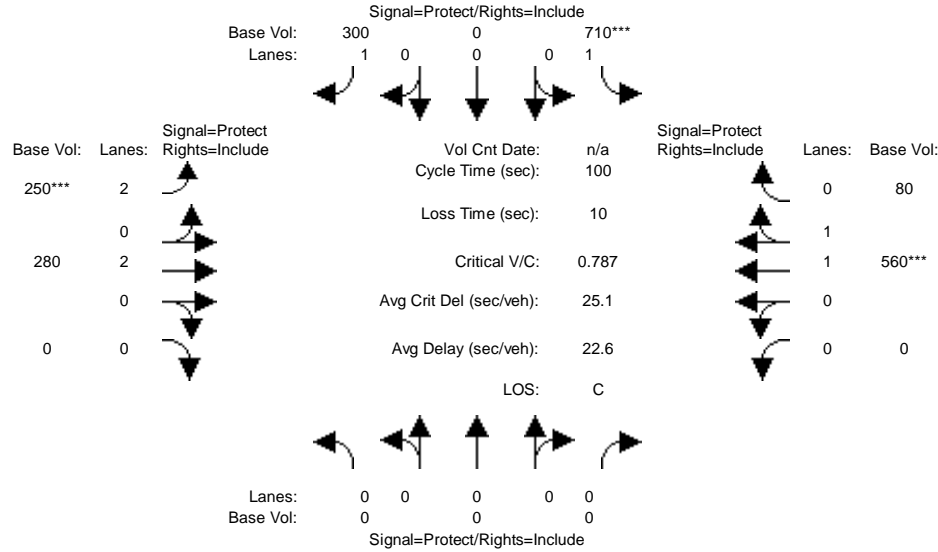
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM

Intersection #10: Albertoni St. & SR 91 EB Ramps

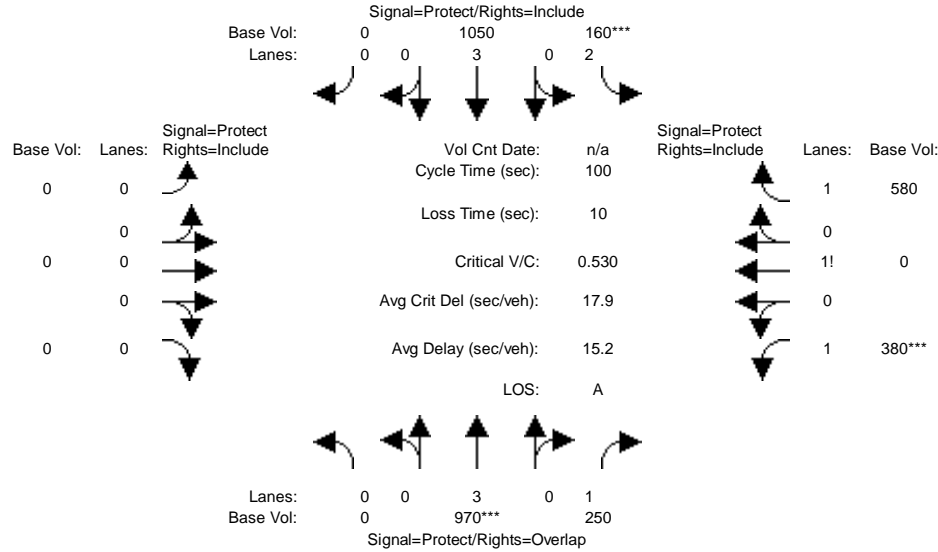


Street Name:	Albertoni St.						SR 91 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	710	0	300	250	280	0	0	560	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	710	0	300	250	280	0	0	560	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	710	0	300	250	280	0	0	560	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	710	0	300	250	280	0	0	560	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	710	0	300	250	280	0	0	560	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.75	0.25
Final Sat.:	0	0	0	1600	0	1600	5760	3200	0	0	2800	400
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.44	0.00	0.19	0.04	0.09	0.00	0.00	0.20	0.20
Crit Moves:				****			****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM

Intersection #11: Avalon Blvd. & SR 91 WB On-Ramp

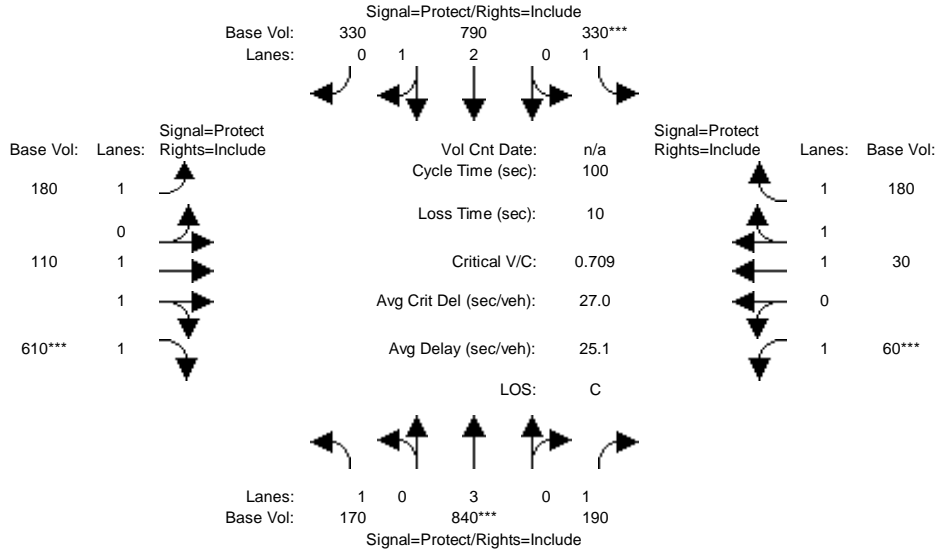


Street Name:	Avalon Blvd.						SR 91 WB On-Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	970	250	160	1050	0	0	0	0	380	0	580
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	970	250	160	1050	0	0	0	0	380	0	580
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	970	250	160	1050	0	0	0	0	380	0	580
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	970	250	160	1050	0	0	0	0	380	0	580
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	970	250	160	1050	0	0	0	0	380	0	580
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.19	0.00	1.81
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	1900	0	2900
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.16	0.03	0.22	0.00	0.00	0.00	0.00	0.20	0.00	0.20
OvlAdjV/S:	0.00											
Crit Moves:	****			****						****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM

Intersection #12: Avalon Blvd. & Albertoni St.

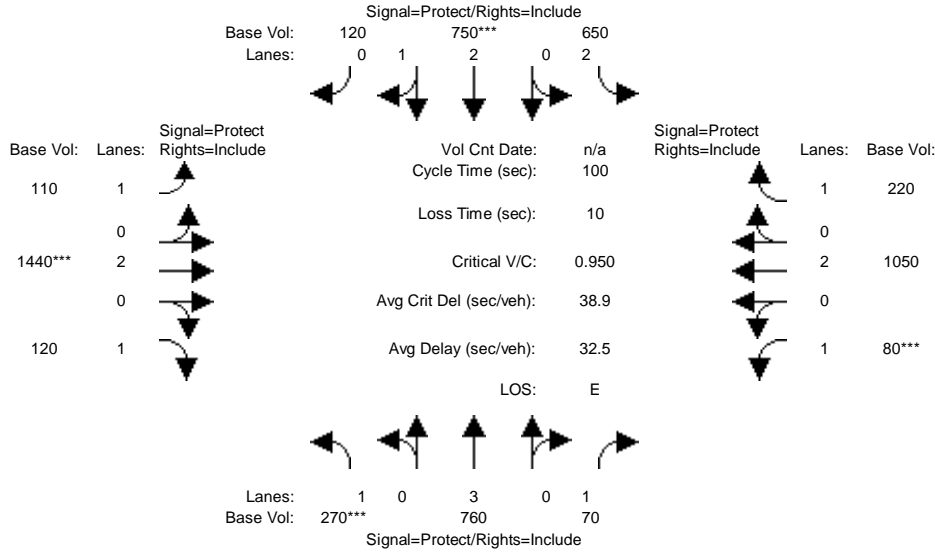


Street Name:	Avalon Blvd.						Albertoni St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	170	840	190	330	790	330	180	110	610	60	30	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	170	840	190	330	790	330	180	110	610	60	30	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	170	840	190	330	790	330	180	110	610	60	30	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	170	840	190	330	790	330	180	110	610	60	30	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	170	840	190	330	790	330	180	110	610	60	30	180
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.12	0.88	1.00	1.00	2.00	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3386	1414	1600	1600	3200	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.11	0.17	0.12	0.21	0.23	0.23	0.11	0.07	0.19	0.04	0.02	0.06
Crit Moves:	****			****					****	****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM

Intersection #13: Avalon Blvd. & Victoria St.

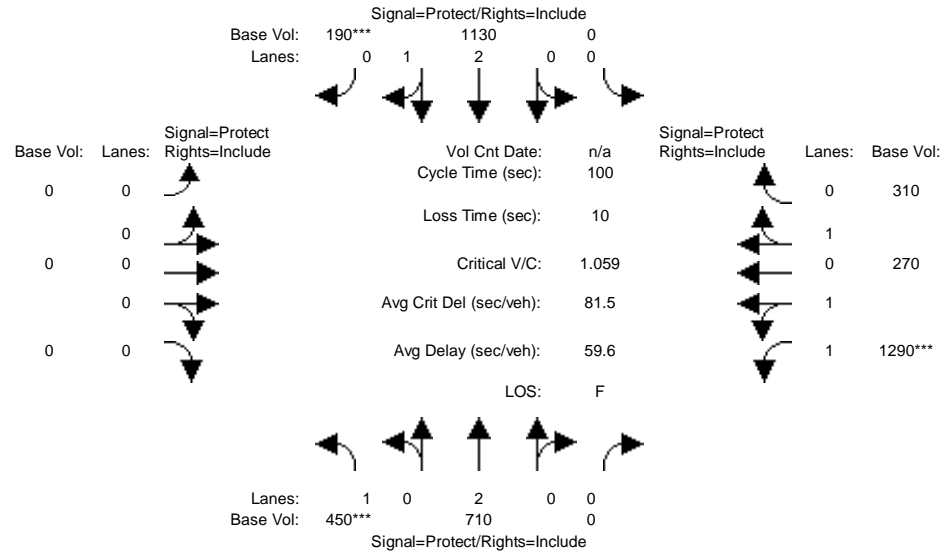


Street Name:	Avalon Blvd.						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	270	760	70	650	750	120	110	1440	120	80	1050	220
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	270	760	70	650	750	120	110	1440	120	80	1050	220
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	270	760	70	650	750	120	110	1440	120	80	1050	220
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	270	760	70	650	750	120	110	1440	120	80	1050	220
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	270	760	70	650	750	120	110	1440	120	80	1050	220
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.59	0.41	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4138	662	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.17	0.16	0.04	0.11	0.18	0.18	0.07	0.45	0.08	0.05	0.33	0.14
Crit Moves:	***			***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM

Intersection #14: Central Ave. & Artesia Blvd.

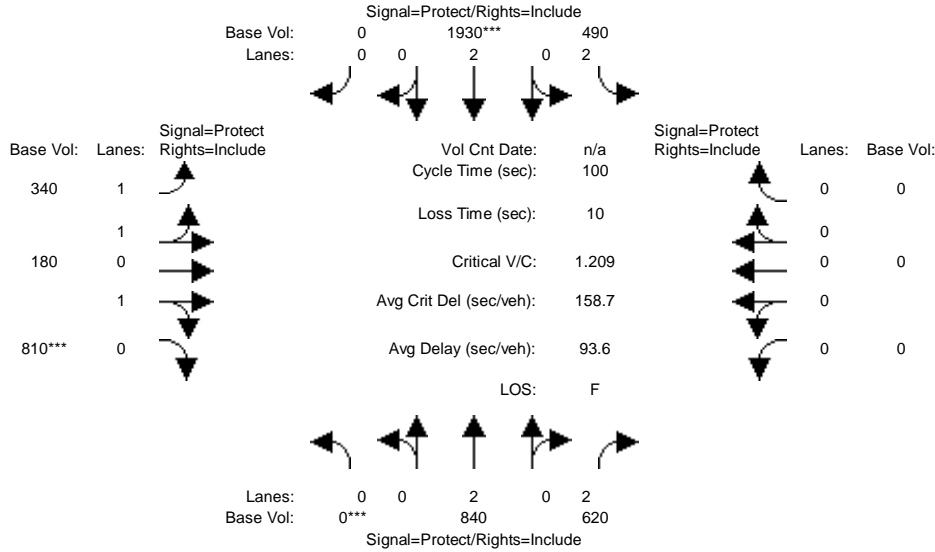


Street Name:	Central Ave.						Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	450	710	0	0	1130	190	0	0	0	1290	270	310
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	450	710	0	0	1130	190	0	0	0	1290	270	310
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	450	710	0	0	1130	190	0	0	0	1290	270	310
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	450	710	0	0	1130	190	0	0	0	1290	270	310
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	450	710	0	0	1130	190	0	0	0	1290	270	310
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.57	0.43	0.00	0.00	0.00	2.00	0.47	0.53
Final Sat.:	1600	3200	0	0	4109	691	0	0	0	3200	745	855
Capacity Analysis Module:												
Vol/Sat:	0.28	0.22	0.00	0.00	0.27	0.28	0.00	0.00	0.00	0.40	0.36	0.36
Crit Moves:	***					***				***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM

Intersection #15: Central Ave. & Albertoni St./Artesia Blvd. EB



Street Name: Central Ave. Albertoni St./Artesia Blvd. EB

Approach: North Bound South Bound East Bound West Bound

Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0

Volume Module:

	North Bound			South Bound			East Bound			West Bound		
Base Vol:	0	840	620	490	1930	0	340	180	810	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	840	620	490	1930	0	340	180	810	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	840	620	490	1930	0	340	180	810	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	840	620	490	1930	0	340	180	810	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	840	620	490	1930	0	340	180	810	0	0	0

Saturation Flow Module:

	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.31	0.69	1.00	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	2092	1108	1600	0	0	0

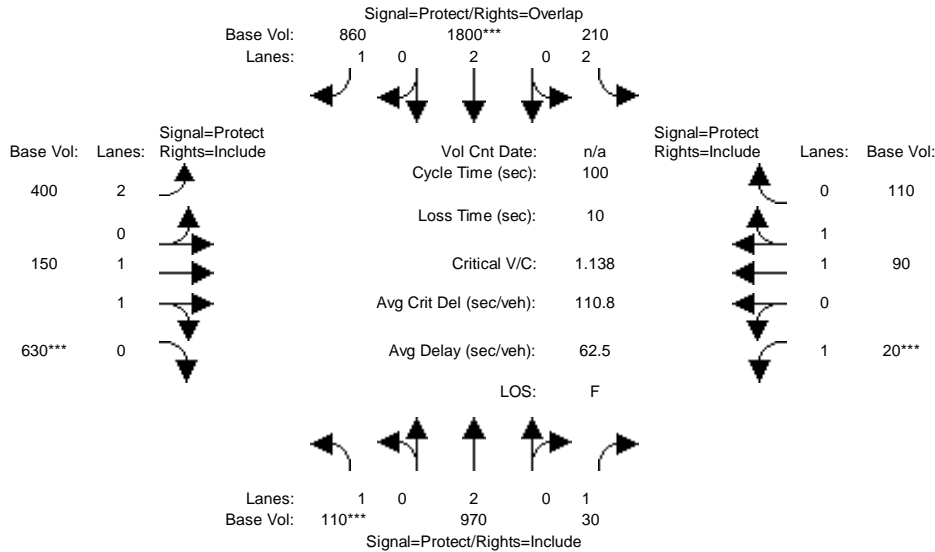
Capacity Analysis Module:

	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.00	0.26	0.19	0.09	0.60	0.00	0.16	0.16	0.51	0.00	0.00	0.00
Crit Moves:	***				***				***			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM

Intersection #16: Central Ave. & Victoria St.

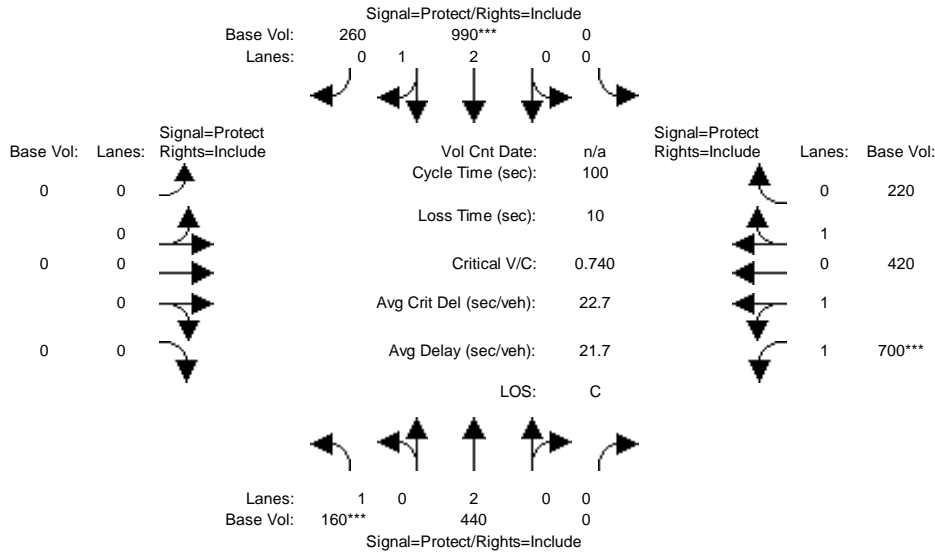


Street Name:	Central Ave.						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	110	970	30	210	1800	860	400	150	630	20	90	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	970	30	210	1800	860	400	150	630	20	90	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	110	970	30	210	1800	860	400	150	630	20	90	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	970	30	210	1800	860	400	150	630	20	90	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	110	970	30	210	1800	860	400	150	630	20	90	110
OvlAdjVol:												749
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	5760	3200	1600	5760	1600	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.30	0.02	0.04	0.56	0.54	0.07	0.09	0.39	0.01	0.06	0.07
OvlAdjV/S:												0.47
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM

Intersection #17: Wilmington Ave. & Artesia Blvd. WB

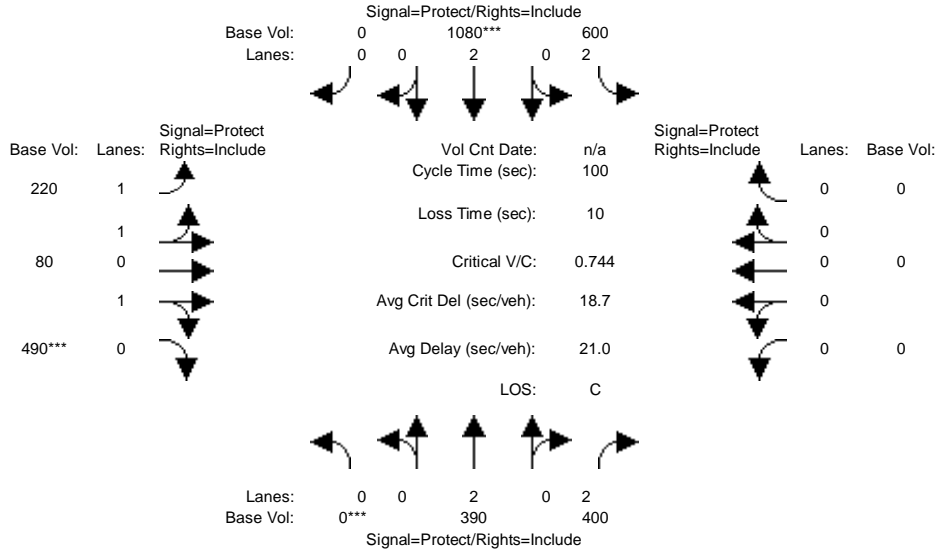


Street Name:	Wilmington Ave.						Artesia Blvd. WB					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	160	440	0	0	990	260	0	0	0	700	420	220
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	160	440	0	0	990	260	0	0	0	700	420	220
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	160	440	0	0	990	260	0	0	0	700	420	220
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	160	440	0	0	990	260	0	0	0	700	420	220
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	160	440	0	0	990	260	0	0	0	700	420	220
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.38	0.62	0.00	0.00	0.00	1.57	0.94	0.49
Final Sat.:	1600	3200	0	0	3802	998	0	0	0	2508	1504	788
Capacity Analysis Module:												
Vol/Sat:	0.10	0.14	0.00	0.00	0.26	0.26	0.00	0.00	0.00	0.28	0.28	0.28
Crit Moves:	***				***					***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM

Intersection #18: Wilmington Ave. & Artesia Blvd. EB

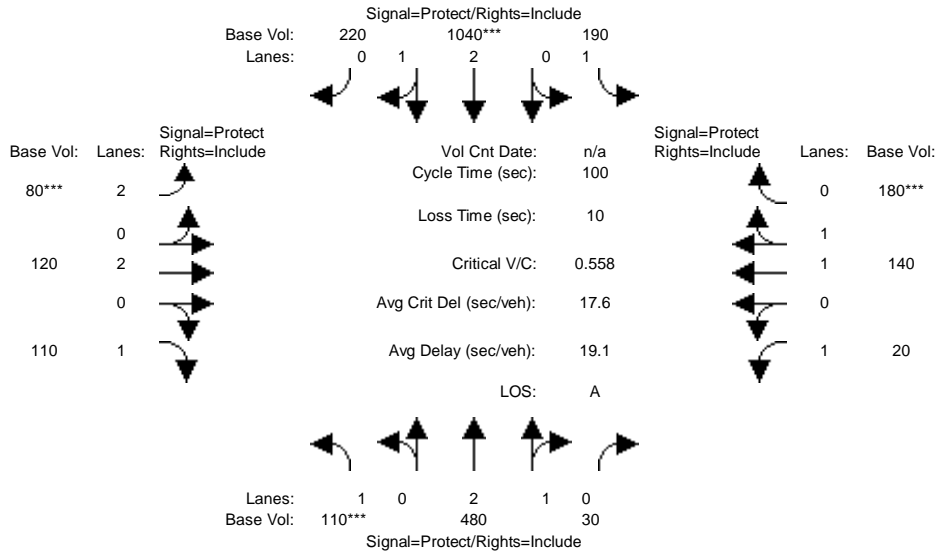


Street Name:	Wilmington Ave.						Artesia Blvd. EB					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	390	400	600	1080	0	220	80	490	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	390	400	600	1080	0	220	80	490	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	390	400	600	1080	0	220	80	490	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	390	400	600	1080	0	220	80	490	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	390	400	600	1080	0	220	80	490	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.47	0.53	1.00	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	2347	853	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.12	0.13	0.10	0.34	0.00	0.09	0.09	0.31	0.00	0.00	0.00
Crit Moves:	***			***	***		***		***			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM

Intersection #19: Wilmington Ave. & Victoria St.

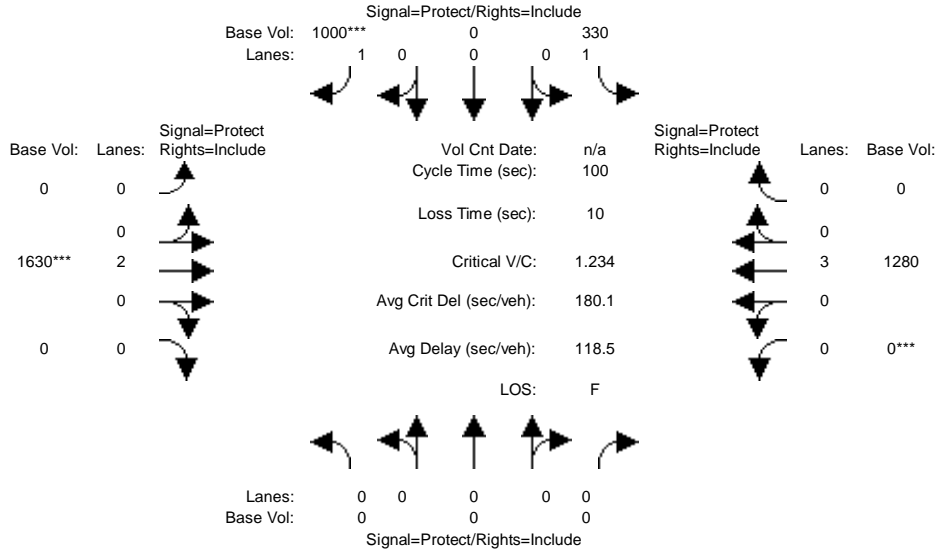


Street Name:	Wilmington Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	110	480	30	190	1040	220	80	120	110	20	140	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	480	30	190	1040	220	80	120	110	20	140	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	110	480	30	190	1040	220	80	120	110	20	140	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	480	30	190	1040	220	80	120	110	20	140	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	110	480	30	190	1040	220	80	120	110	20	140	180
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.82	0.18	1.00	2.48	0.52	2.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	4518	282	1600	3962	838	5760	3200	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.11	0.11	0.12	0.26	0.26	0.01	0.04	0.07	0.01	0.09	0.11
Crit Moves:	***				***		***				***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM

Intersection #20: I-110 SB Off-Ramp & 190th St.

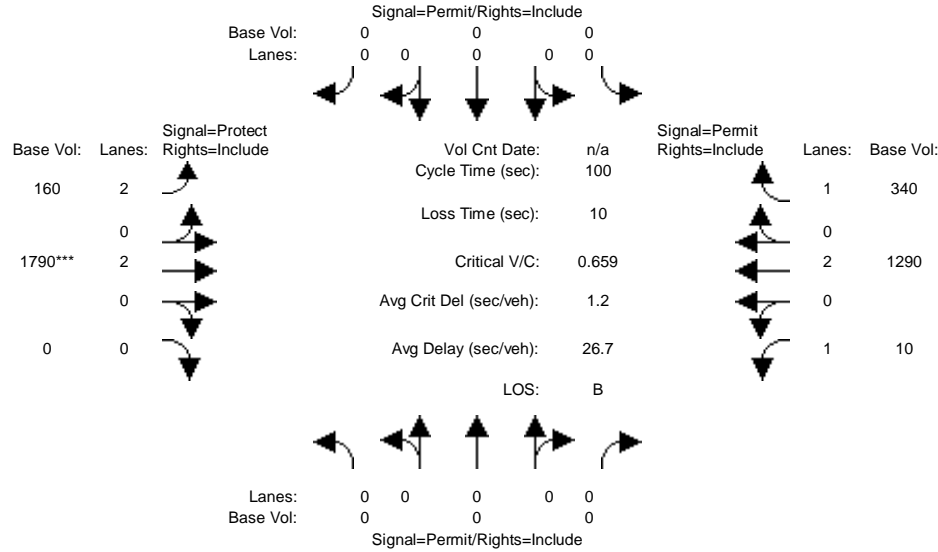


Street Name:	I-110 SB Off-Ramp						190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	330	0	1000	0	1630	0	0	1280	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	330	0	1000	0	1630	0	0	1280	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	330	0	1000	0	1630	0	0	1280	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	330	0	1000	0	1630	0	0	1280	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	330	0	1000	0	1630	0	0	1280	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.21	0.00	0.63	0.00	0.51	0.00	0.00	0.27	0.00
Crit Moves:				***		***		***		***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM

Intersection #21: I-110 NB On-Ramp & 190th St.

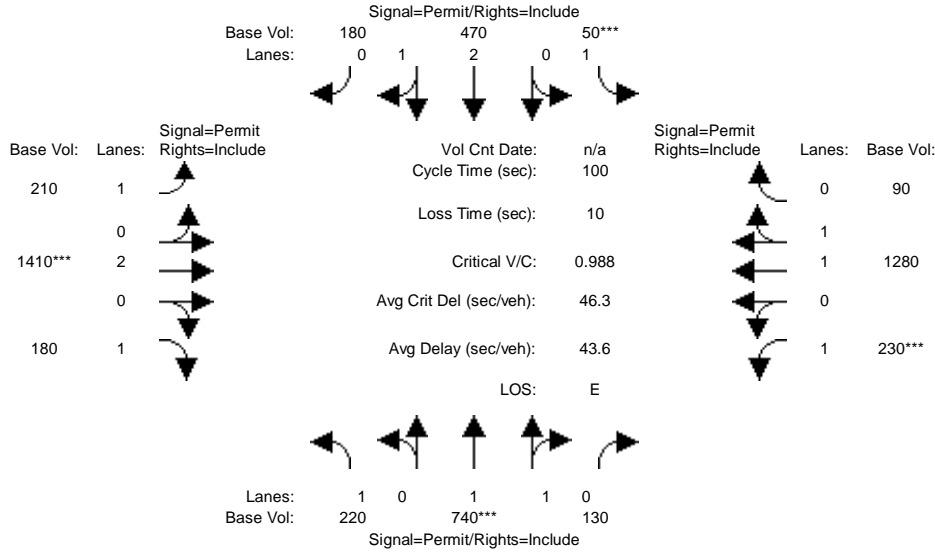


Street Name:	I-110 NB On-Ramp						190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	0	0	0	160	1790	0	10	1290	340
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	160	1790	0	10	1290	340
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	160	1790	0	10	1290	340
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	160	1790	0	10	1290	340
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	0	0	0	160	1790	0	10	1290	340
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	0	0	0	0	0	5760	3200	0	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.56	0.00	0.01	0.40	0.21
Crit Moves:	****											

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM

Intersection #22: Figueroa St. & 190th St./Victoria St.

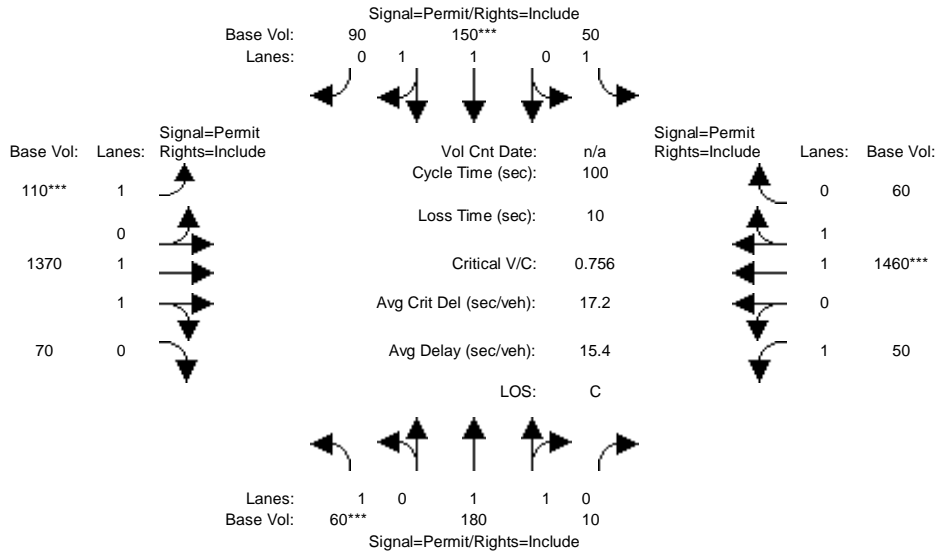


Street Name:	Figueroa St.						190th St./Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	220	740	130	50	470	180	210	1410	180	230	1280	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	220	740	130	50	470	180	210	1410	180	230	1280	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	220	740	130	50	470	180	210	1410	180	230	1280	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	220	740	130	50	470	180	210	1410	180	230	1280	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	220	740	130	50	470	180	210	1410	180	230	1280	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.70	0.30	1.00	2.17	0.83	1.00	2.00	1.00	1.00	1.87	0.13
Final Sat.:	1600	2722	478	1600	3471	1329	1600	3200	1600	1600	2990	210
Capacity Analysis Module:												
Vol/Sat:	0.14	0.27	0.27	0.03	0.14	0.14	0.13	0.44	0.11	0.14	0.43	0.43
Crit Moves:	****			****				****		****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM

Intersection #23: Broadway & Victoria St.

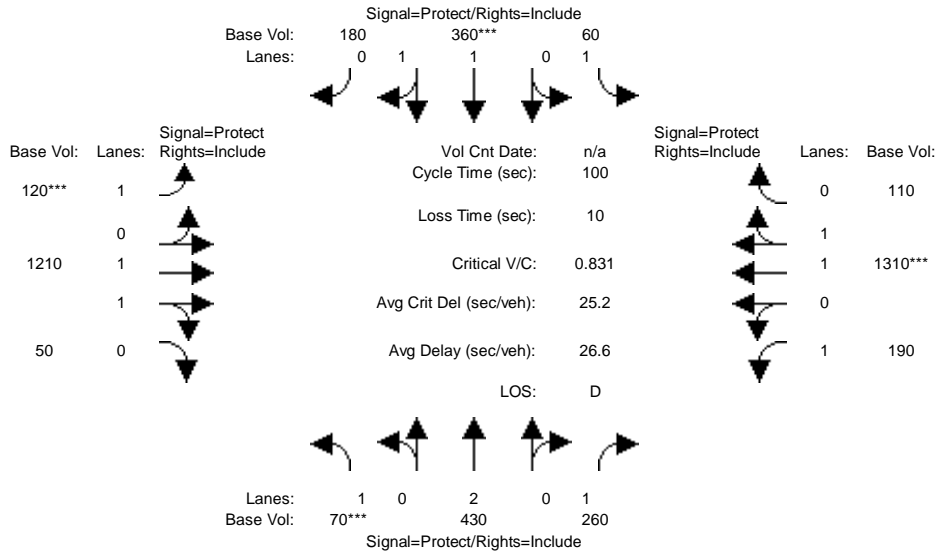


Street Name:	Broadway						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	60	180	10	50	150	90	110	1370	70	50	1460	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	180	10	50	150	90	110	1370	70	50	1460	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	180	10	50	150	90	110	1370	70	50	1460	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	180	10	50	150	90	110	1370	70	50	1460	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	60	180	10	50	150	90	110	1370	70	50	1460	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.89	0.11	1.00	1.25	0.75	1.00	1.90	0.10	1.00	1.92	0.08
Final Sat.:	1600	3032	168	1600	2000	1200	1600	3044	156	1600	3074	126
Capacity Analysis Module:												
Vol/Sat:	0.04	0.06	0.06	0.03	0.08	0.08	0.07	0.45	0.45	0.03	0.48	0.47
Crit Moves:	***				***		***				***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM

Intersection #24: Main St. & Victoria St.

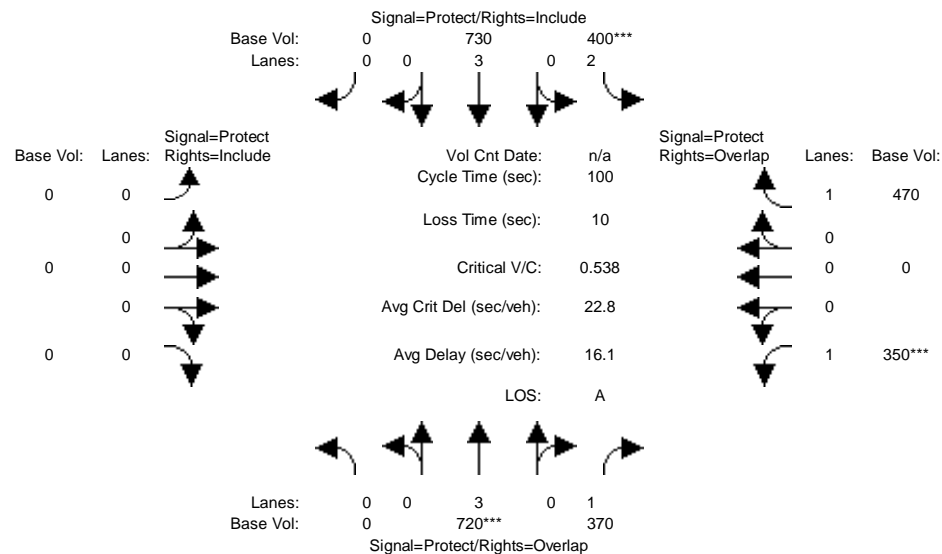


Street Name:	Main St.						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	70	430	260	60	360	180	120	1210	50	190	1310	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	430	260	60	360	180	120	1210	50	190	1310	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	430	260	60	360	180	120	1210	50	190	1310	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	430	260	60	360	180	120	1210	50	190	1310	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	70	430	260	60	360	180	120	1210	50	190	1310	110
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.33	0.67	1.00	1.92	0.08	1.00	1.85	0.15
Final Sat.:	1600	3200	1600	1600	2133	1067	1600	3073	127	1600	2952	248
Capacity Analysis Module:												
Vol/Sat:	0.04	0.13	0.16	0.04	0.17	0.17	0.08	0.39	0.39	0.12	0.44	0.44
Crit Moves:	***			***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM

Intersection #25: Avalon Blvd. & University Dr.

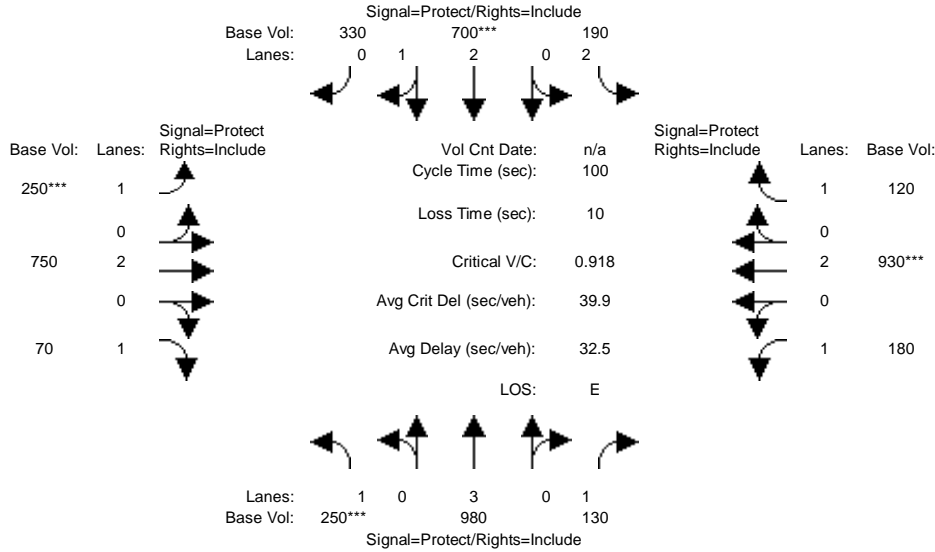


Street Name:	Avalon Blvd.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	720	370	400	730	0	0	0	0	350	0	470
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	720	370	400	730	0	0	0	0	350	0	470
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	720	370	400	730	0	0	0	0	350	0	470
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	720	370	400	730	0	0	0	0	350	0	470
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	720	370	400	730	0	0	0	0	350	0	470
OvlAdjVol:	20									359		
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.15	0.23	0.07	0.15	0.00	0.00	0.00	0.00	0.22	0.00	0.29
OvlAdjV/S:	0.01									0.22		
Crit Moves:	****			****						****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM

Intersection #26: Avalon Blvd. & Del Amo Blvd.

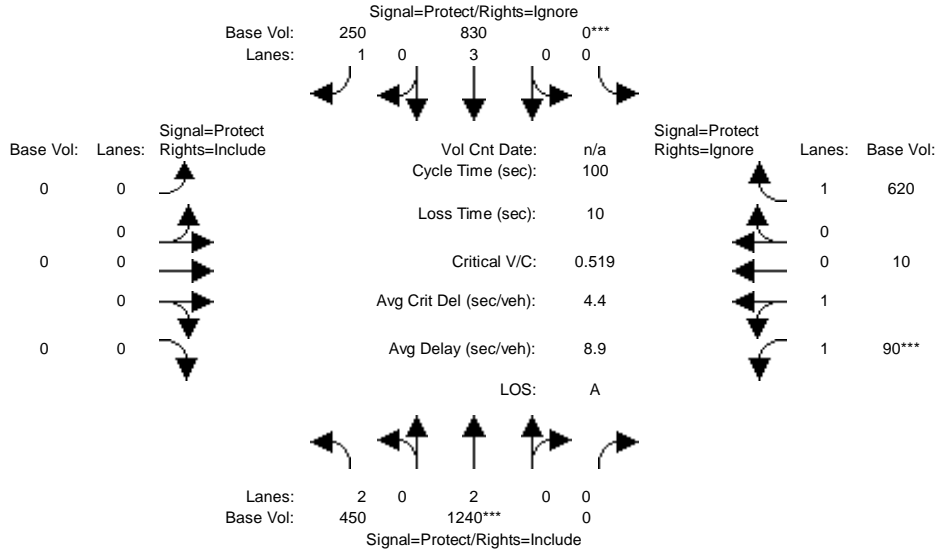


Street Name:	Avalon Blvd.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	250	980	130	190	700	330	250	750	70	180	930	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	250	980	130	190	700	330	250	750	70	180	930	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	250	980	130	190	700	330	250	750	70	180	930	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	250	980	130	190	700	330	250	750	70	180	930	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	250	980	130	190	700	330	250	750	70	180	930	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.04	0.96	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	3262	1538	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.16	0.20	0.08	0.03	0.21	0.21	0.16	0.23	0.04	0.11	0.29	0.08
Crit Moves:	***				***		***				***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM

Intersection #27: Avalon Blvd. & I-405 NB Ramps

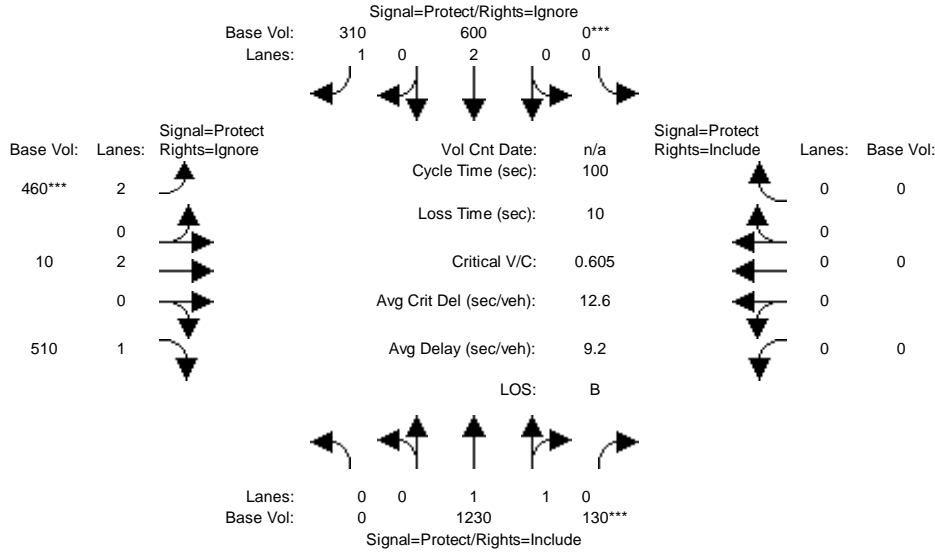


Street Name:	Avalon Blvd.						I-405 NB Ramps					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	450	1240	0	0	830	250	0	0	0	90	10	620
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	450	1240	0	0	830	250	0	0	0	90	10	620
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	450	1240	0	0	830	0	0	0	0	90	10	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	450	1240	0	0	830	0	0	0	0	90	10	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Volume:	450	1240	0	0	830	0	0	0	0	90	10	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.80	0.20	1.00
Final Sat.:	5760	3200	0	0	4800	1600	0	0	0	2880	320	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.39	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.03	0.03	0.00
Crit Moves:	****			****						****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM

Intersection #28: Avalon Blvd. & I-405 SB Ramps

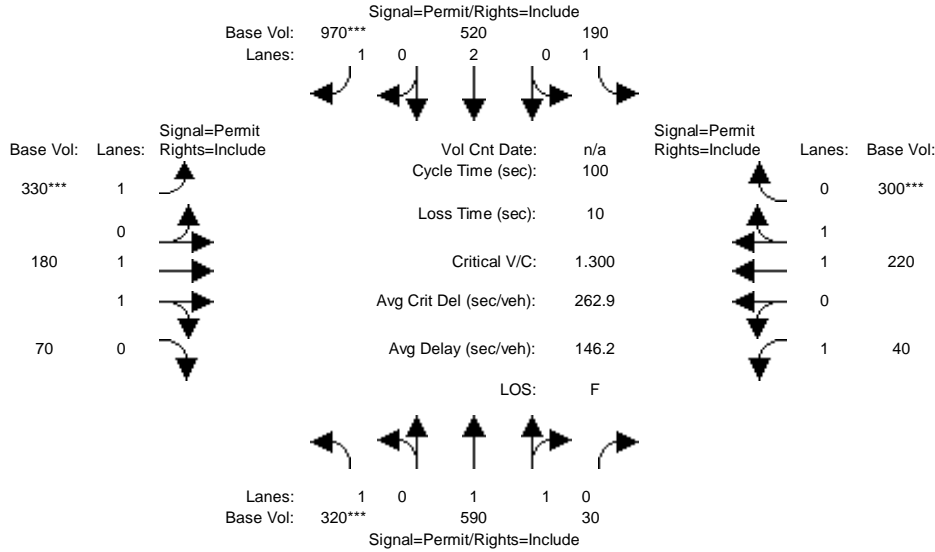


Street Name:	Avalon Blvd.						I-405 SB Ramps					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1230	130	0	600	310	460	10	510	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1230	130	0	600	310	460	10	510	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	1230	130	0	600	0	460	10	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1230	130	0	600	0	460	10	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Volume:	0	1230	130	0	600	0	460	10	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.81	0.19	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	0	2894	306	0	3200	1600	5760	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.42	0.43	0.00	0.19	0.00	0.08	0.00	0.00	0.00	0.00	0.00
Crit Moves:			****	****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM

Intersection #29: Central Ave. & University Dr.

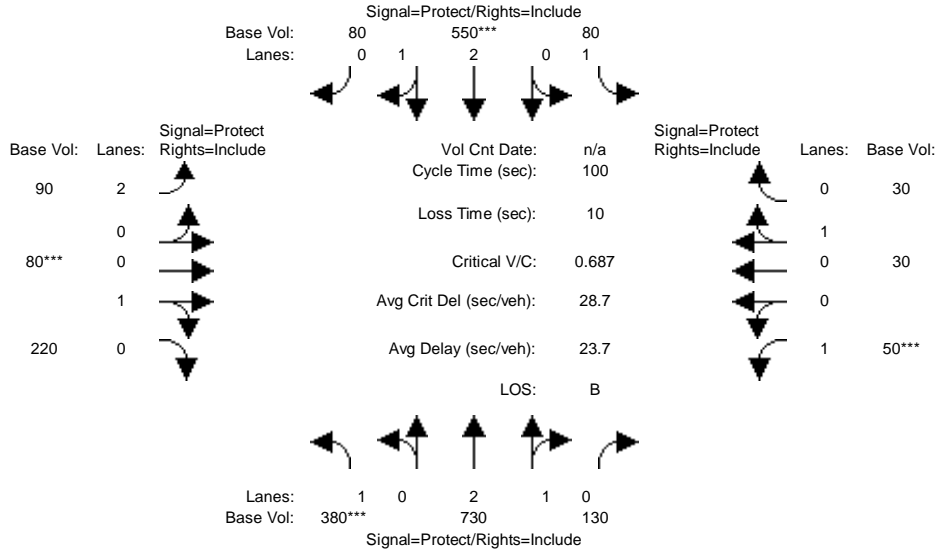


Street Name:	Central Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	320	590	30	190	520	970	330	180	70	40	220	300
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	320	590	30	190	520	970	330	180	70	40	220	300
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	320	590	30	190	520	970	330	180	70	40	220	300
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	320	590	30	190	520	970	330	180	70	40	220	300
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	320	590	30	190	520	970	330	180	70	40	220	300
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.90	0.10	1.00	2.00	1.00	1.00	1.44	0.56	1.00	1.00	1.00
Final Sat.:	1600	3045	155	1600	3200	1600	1600	2304	896	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.20	0.19	0.19	0.12	0.16	0.61	0.21	0.08	0.08	0.03	0.14	0.19
Crit Moves:	***					***	***					***

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM

Intersection #30: Wilmington Ave. & University Dr.

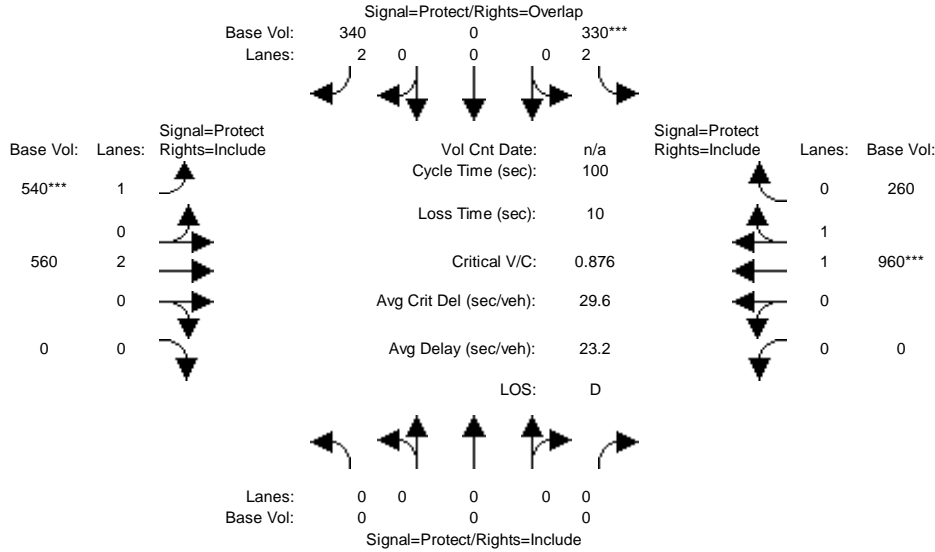


Street Name:	Wilmington Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	380	730	130	80	550	80	90	80	220	50	30	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	380	730	130	80	550	80	90	80	220	50	30	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	380	730	130	80	550	80	90	80	220	50	30	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	380	730	130	80	550	80	90	80	220	50	30	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	380	730	130	80	550	80	90	80	220	50	30	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.55	0.45	1.00	2.62	0.38	2.00	0.27	0.73	1.00	0.50	0.50
Final Sat.:	1600	4074	726	1600	4190	610	5760	427	1173	1600	800	800
Capacity Analysis Module:												
Vol/Sat:	0.24	0.18	0.18	0.05	0.13	0.13	0.02	0.19	0.19	0.03	0.04	0.04
Crit Moves:	***				***			***			***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM

Intersection #31: Central Ave. & Del Amo Blvd.

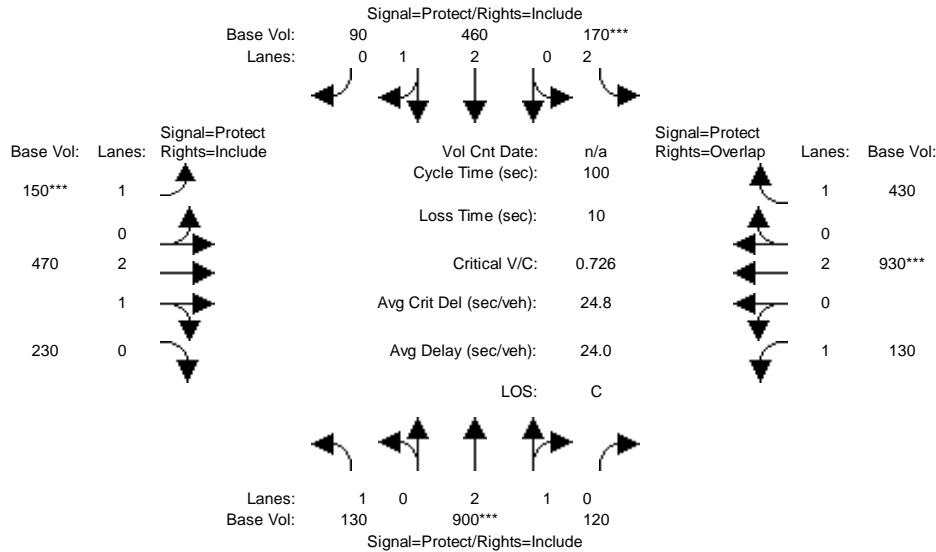


Street Name:	Central Ave.						Del Amo Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	330	0	340	540	560	0	0	960	260
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	330	0	340	540	560	0	0	960	260
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	330	0	340	540	560	0	0	960	260
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	330	0	340	540	560	0	0	960	260
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	330	0	340	540	560	0	0	960	260
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	2.00	1.00	2.00	0.00	0.00	1.57	0.43
Final Sat.:	0	0	0	5760	0	3200	1600	3200	0	0	2518	682
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.06	0.00	0.11	0.34	0.17	0.00	0.00	0.38	0.38
OvlAdjV/S:	0.00											
Crit Moves:				****				****				****

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM

Intersection #32: Wilmington Ave. & Del Amo Blvd.

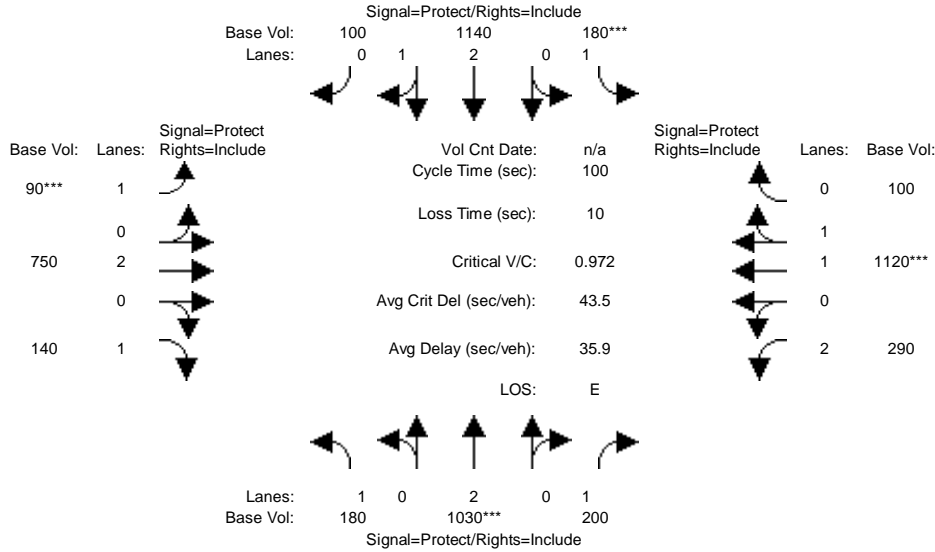


Street Name:	Wilmington Ave.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	130	900	120	170	460	90	150	470	230	130	930	430
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	900	120	170	460	90	150	470	230	130	930	430
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	900	120	170	460	90	150	470	230	130	930	430
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	900	120	170	460	90	150	470	230	130	930	430
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	130	900	120	170	460	90	150	470	230	130	930	430
OvlAdjVol:												383
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.65	0.35	2.00	2.51	0.49	1.00	2.01	0.99	1.00	2.00	1.00
Final Sat.:	1600	4235	565	5760	4015	785	1600	3223	1577	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.21	0.21	0.03	0.11	0.11	0.09	0.15	0.15	0.08	0.29	0.27
OvlAdjV/S:												0.24
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM

Intersection #33: W. Artesia Blvd. & Crenshaw Blvd.

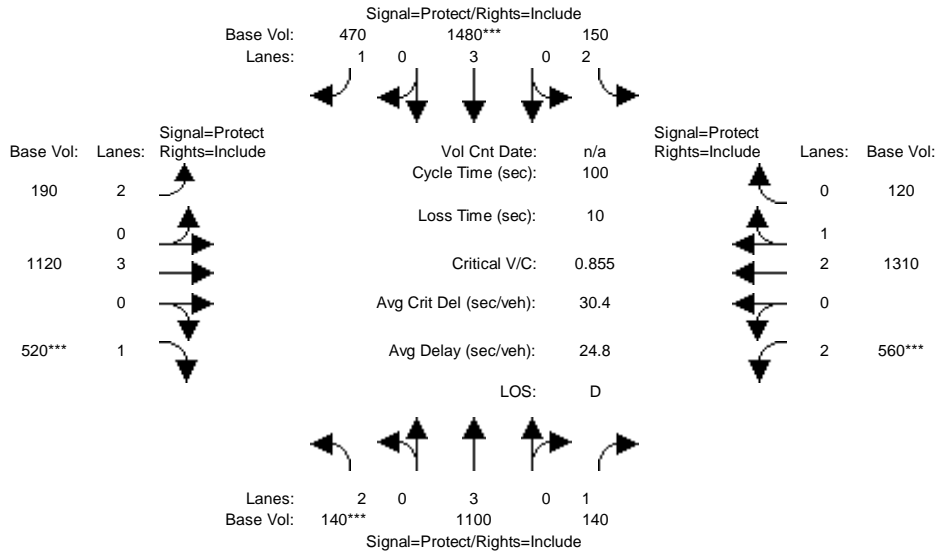


Street Name:	Crenshaw Blvd.						W. Artesia Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	180	1030	200	180	1140	100	90	750	140	290	1120	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	180	1030	200	180	1140	100	90	750	140	290	1120	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	180	1030	200	180	1140	100	90	750	140	290	1120	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	180	1030	200	180	1140	100	90	750	140	290	1120	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	180	1030	200	180	1140	100	90	750	140	290	1120	100
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.76	0.24	1.00	2.00	1.00	2.00	1.84	0.16
Final Sat.:	1600	3200	1600	1600	4413	387	1600	3200	1600	5760	2938	262
Capacity Analysis Module:												
Vol/Sat:	0.11	0.32	0.13	0.11	0.26	0.26	0.06	0.23	0.09	0.05	0.38	0.38
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM

Intersection #34: W 190th St. & South Western Ave.

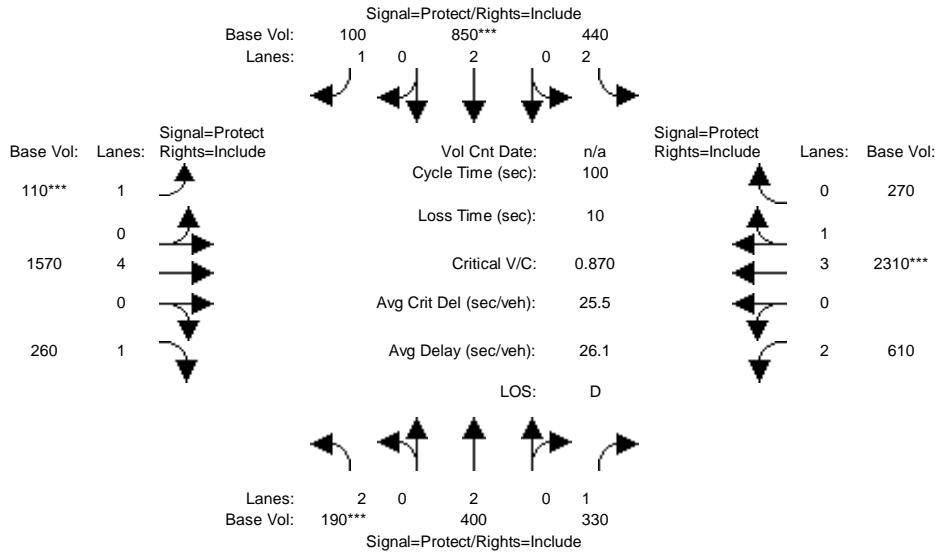


Street Name:	S. Western Ave.						W. 190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	140	1100	140	150	1480	470	190	1120	520	560	1310	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	1100	140	150	1480	470	190	1120	520	560	1310	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	140	1100	140	150	1480	470	190	1120	520	560	1310	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	1100	140	150	1480	470	190	1120	520	560	1310	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	140	1100	140	150	1480	470	190	1120	520	560	1310	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.75	0.25
Final Sat.:	5760	4800	1600	5760	4800	1600	5760	4800	1600	5760	4397	403
Capacity Analysis Module:												
Vol/Sat:	0.02	0.23	0.09	0.03	0.31	0.29	0.03	0.23	0.33	0.10	0.30	0.30
Crit Moves:	***			***	***		***		***	***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM

Intersection #35: W. Artesia Blvd. & Vermont Av.e

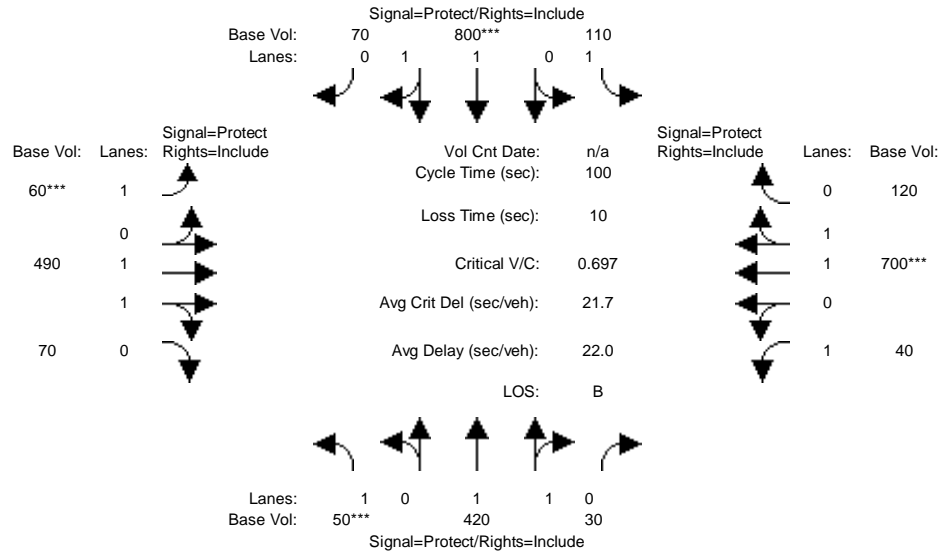


Street Name:	Vermont Ave.						W. Artesia Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Movement:												
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	190	400	330	440	850	100	110	1570	260	610	2310	270
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	190	400	330	440	850	100	110	1570	260	610	2310	270
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	190	400	330	440	850	100	110	1570	260	610	2310	270
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	190	400	330	440	850	100	110	1570	260	610	2310	270
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	190	400	330	440	850	100	110	1570	260	610	2310	270
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	1.00	4.00	1.00	2.00	3.58	0.42
Final Sat.:	5760	3200	1600	5760	3200	1600	1600	6400	1600	5760	5730	670
Capacity Analysis Module:												
Vol/Sat:	0.03	0.13	0.21	0.08	0.27	0.06	0.07	0.25	0.16	0.11	0.40	0.40
Crit Moves:	***				***		***				***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM

Intersection #36: Alameda St. & Compton Blvd.

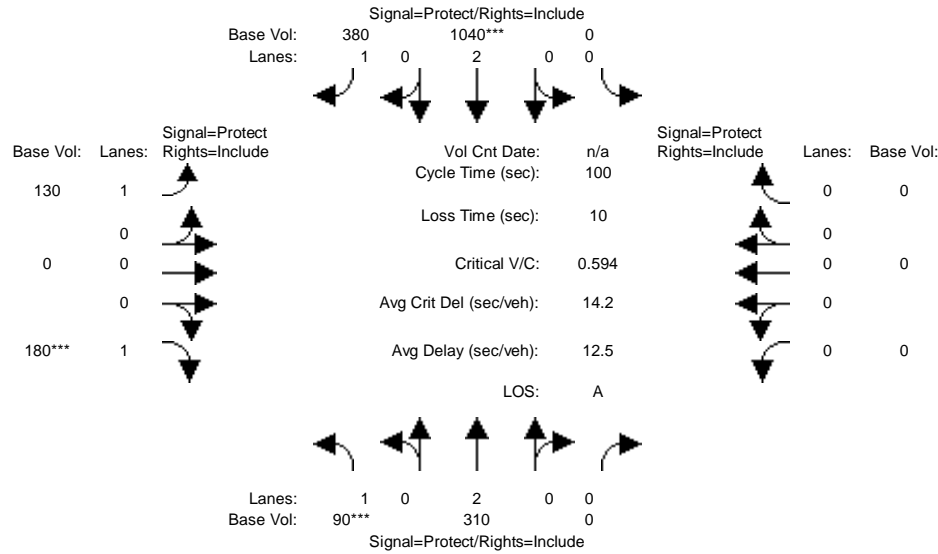


Street Name:	Alameda St.						Compton Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	50	420	30	110	800	70	60	490	70	40	700	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	420	30	110	800	70	60	490	70	40	700	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	420	30	110	800	70	60	490	70	40	700	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	420	30	110	800	70	60	490	70	40	700	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	50	420	30	110	800	70	60	490	70	40	700	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.87	0.13	1.00	1.84	0.16	1.00	1.75	0.25	1.00	1.71	0.29
Final Sat.:	1600	2987	213	1600	2943	257	1600	2800	400	1600	2732	468
Capacity Analysis Module:												
Vol/Sat:	0.03	0.14	0.14	0.07	0.27	0.27	0.04	0.17	0.17	0.03	0.26	0.26
Crit Moves:	***				***		***				***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM

Intersection #37: Alameda St. & SR 91 EB Ramps

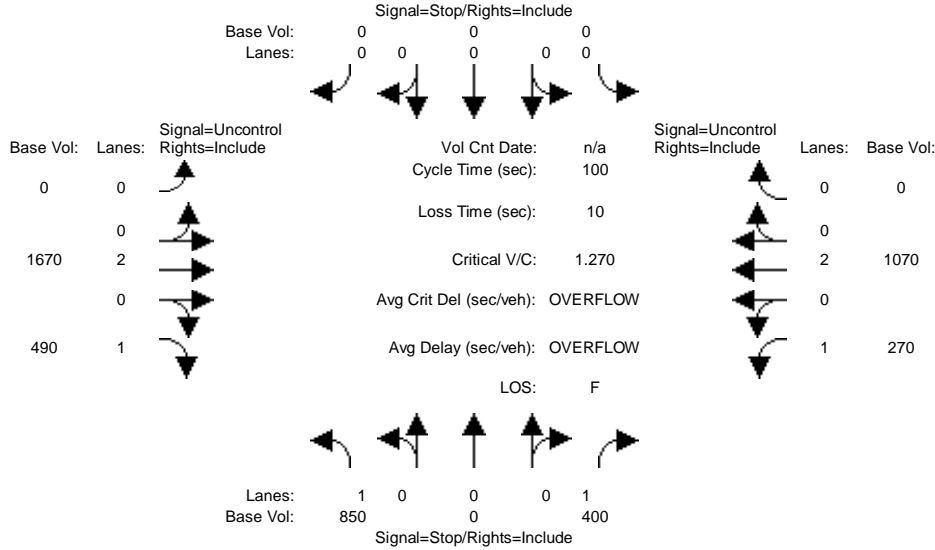


Street Name:	Alameda St.						SR 91 EB Ramps					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	90	310	0	0	1040	380	130	0	180	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	310	0	0	1040	380	130	0	180	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	310	0	0	1040	380	130	0	180	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	310	0	0	1040	380	130	0	180	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	90	310	0	0	1040	380	130	0	180	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	3200	0	0	3200	1600	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.10	0.00	0.00	0.33	0.24	0.08	0.00	0.11	0.00	0.00	0.00
Crit Moves:	***				***				***			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2035 Plus Project Weekday PM

Intersection #1: Victoria St. & Drive D



Street Name:	Drive D						Victoria St..					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	850	0	400	0	0	0	0	1670	490	270	1070	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	850	0	400	0	0	0	0	1670	490	270	1070	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	850	0	400	0	0	0	0	1670	490	270	1070	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	850	0	400	0	0	0	0	1670	490	270	1070	0
Critical Gap Module:												
Critical Gp:	6.8	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	2745	xxxx	835	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	2160	xxxx	xxxxx
Potent Cap.:	17	xxxx	315	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	252	xxxx	xxxxx
Move Cap.:	0	xxxx	315	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	252	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	1.27	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	1.07	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	18.7	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	11.3	xxxx	xxxxx
Control Del:	xxxxx	xxxx	178.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	120.2	xxxx	xxxxx
LOS by Move:	*	*	F	*	*	*	*	*	*	F	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:		+Inf		xxxxxxx			xxxxxxx			xxxxxxx		

ApproachLOS: F * * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #1 Victoria St. & Drive D

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 2 0 1	1 0 2 0 0
Initial Vol:	850 0 400	0 0 0 0	0 1670 490	270 1070 0
ApproachDel:	+Inf	xxxxxx	xxxxxx	xxxxxx

Approach[northbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=OVERFLOW]

SUCCEED - Vehicle-hours >= 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=1250]

SUCCEED - Approach volume >= 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=4750]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #1 Victoria St. & Drive D

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 2 0 1	1 0 2 0 0
Initial Vol:	850 0 400	0 0 0 0	0 1670 490	270 1070 0

Major Street Volume: 3500

Minor Approach Volume: 1250

Minor Approach Volume Threshold: -165 [less than minimum of 150]

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

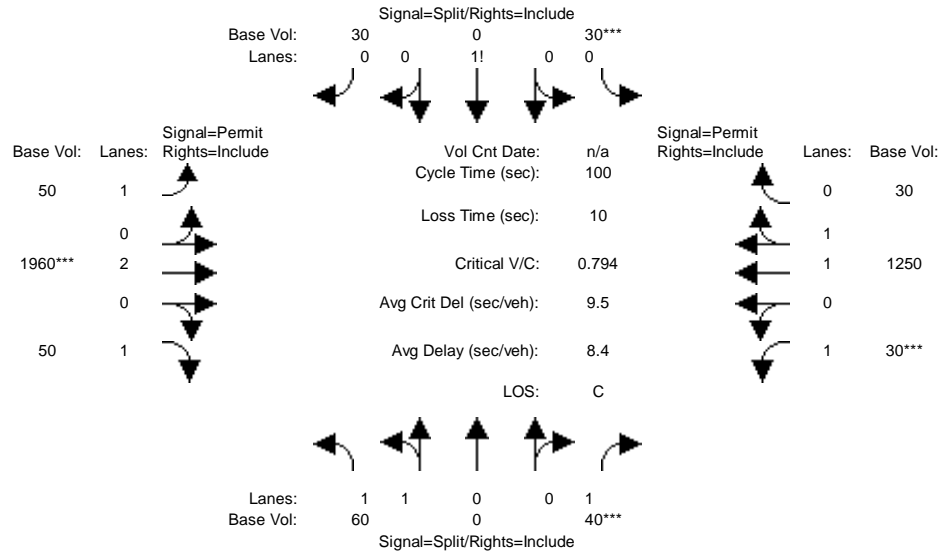
The peak hour warrant analysis in this report is not intended to replace

a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM

Intersection #2: Victoria St. & Tamcliff Ave.

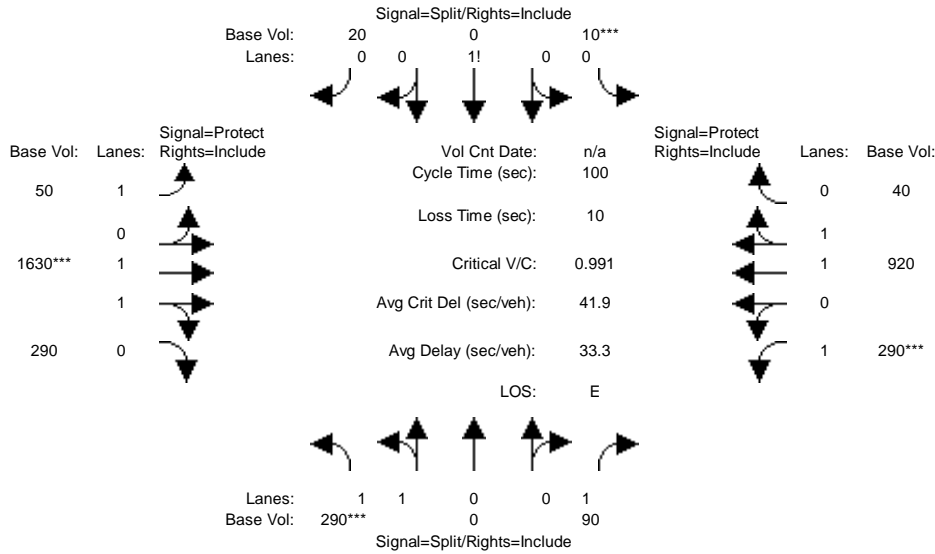


Street Name:	Victoria St.						Tamcliff Ave.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	60	0	40	30	0	30	50	1960	50	30	1250	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	0	40	30	0	30	50	1960	50	30	1250	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	0	40	30	0	30	50	1960	50	30	1250	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	0	40	30	0	30	50	1960	50	30	1250	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	60	0	40	30	0	30	50	1960	50	30	1250	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.50	0.00	0.50	1.00	2.00	1.00	1.00	1.95	0.05
Final Sat.:	3200	0	1600	800	0	800	1600	3200	1600	1600	3125	75
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.03	0.04	0.00	0.04	0.03	0.61	0.03	0.02	0.40	0.40
Crit Moves:			***	***				***		***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM

Intersection #3: Victoria St. & Birchknoll Dr.

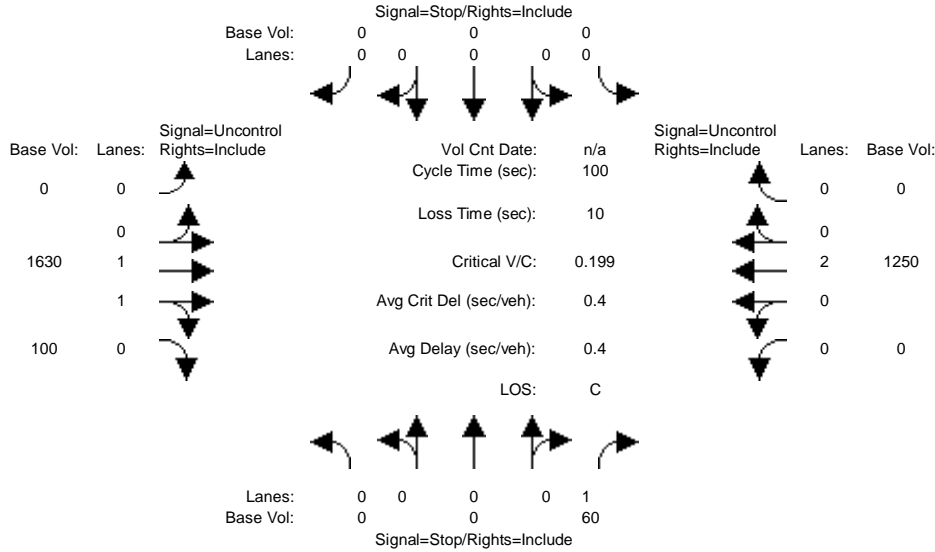


Street Name:	Victoria St.						Birchknoll Dr.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	290	0	90	10	0	20	50	1630	290	290	920	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	290	0	90	10	0	20	50	1630	290	290	920	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	290	0	90	10	0	20	50	1630	290	290	920	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	290	0	90	10	0	20	50	1630	290	290	920	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	290	0	90	10	0	20	50	1630	290	290	920	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.33	0.00	0.67	1.00	1.70	0.30	1.00	1.92	0.08
Final Sat.:	3200	0	1600	533	0	1067	1600	2717	483	1600	3067	133
Capacity Analysis Module:												
Vol/Sat:	0.09	0.00	0.06	0.02	0.00	0.02	0.03	0.60	0.60	0.18	0.30	0.30
Crit Moves:	***			***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2035 Plus Project Weekday PM

Intersection #4: Victoria St. & Project Service Rd.



Street Name:	Project Service Rd.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	60	0	0	0	0	1630	100	0	1250	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	60	0	0	0	0	1630	100	0	1250	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	60	0	0	0	0	1630	100	0	1250	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	60	0	0	0	0	1630	100	0	1250	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	xxxx	xxxx	865	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	301	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	301	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.20	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	0.7	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	19.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	C	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*

ApproachDel: 19.9 xxxxxxx xxxxxxx xxxxxxx
 ApproachLOS: C * * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #4 Victoria St. & Project Service Rd.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 1	0 0 0 0 0	0 0 1 1 0	0 0 2 0 0
Initial Vol:	0 0 60	0 0 0	0 1630 100	0 1250 0
ApproachDel:	19.9	xxxxxxx	xxxxxxx	xxxxxxx

Approach[northbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.3]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=60]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=3040]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #4 Victoria St. & Project Service Rd.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 1	0 0 0 0 0	0 0 1 1 0	0 0 2 0 0
Initial Vol:	0 0 60	0 0 0	0 1630 100	0 1250 0

Major Street Volume: 2980

Minor Approach Volume: 60

Minor Approach Volume Threshold: -91 [less than minimum of 100]

SIGNAL WARRANT DISCLAIMER

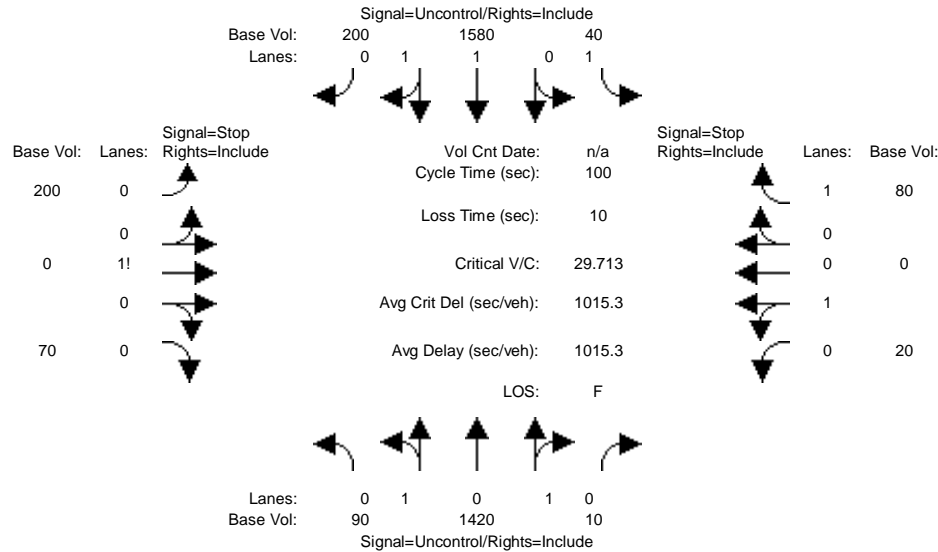
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2035 Plus Project Weekday PM

Intersection #5: Central Ave. & Charles Willard St.



Street Name:	Central Ave.						Charles Willard St.								
Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R			
Volume Module:															
Base Vol:	90	1420	10	40	1580	200	200	0	70	20	0	80			
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Initial Bse:	90	1420	10	40	1580	200	200	0	70	20	0	80			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Volume:	90	1420	10	40	1580	200	200	0	70	20	0	80			
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0			
FinalVolume:	90	1420	10	40	1580	200	200	0	70	20	0	80			
Critical Gap Module:															
Critical Gp:	4.1	xxxx	xxxxxx	4.1	xxxx	xxxxxx	7.5	6.5	6.9	7.5	6.5	6.9			
FollowUpTim:	2.2	xxxx	xxxxxx	2.2	xxxx	xxxxxx	3.5	4.0	3.3	3.5	4.0	3.3			
Capacity Module:															
Cnflct Vol:	1780	xxxx	xxxxxx	1430	xxxx	xxxxxx	2650	3370	890	2475	3465	715			
Potent Cap.:	354	xxxx	xxxxxx	482	xxxx	xxxxxx	11	8	290	16	7	378			
Move Cap.:	354	xxxx	xxxxxx	482	xxxx	xxxxxx	7	5	290	9	5	378			
Volume/Cap:	0.25	xxxx	xxxxxx	0.08	xxxx	xxxxxx	29.71	0.00	0.24	2.26	0.00	0.21			
Level Of Service Module:															
2Way95thQ:	1.0	xxxx	xxxxxx	0.3	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	0.8			
Control Del:	18.6	xxxx	xxxxxx	13.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	17.1			
LOS by Move:	C	*	*	B	*	*	*	*	*	*	*	C			
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	9	xxxxxx	9	xxxx	xxxxxx			
SharedQueue:	1.0	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	35.5	xxxxxx	3.5	xxxx	xxxxxx			
Shrd ConDel:	18.6	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	1399	xxxx	xxxxxx			
Shared LOS:	C	*	*	*	*	*	*	F	*	F	*	*			

ApproachDel: xxxxxxx xxxxxxx xxxxxxx 293.5
 ApproachLOS: * * F F

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #5 Central Ave. & Charles Willard St.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 1 0 1 0	1 0 1 1 0	0 0 1! 0 0	0 1 0 0 1
Initial Vol:	90 1420 10	40 1580 200	200 0 70	20 0 80
ApproachDel:	xxxxxxx	xxxxxxx	xxxxxxx	293.5

-----|-----|-----|-----|-----|

Approach[eastbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=1037.6]

SUCCEED - Vehicle-hours greater than or equal to 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=270]

SUCCEED - Approach volume greater than or equal to 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=3710]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

-----|-----|-----|-----|-----|

Approach[westbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=8.2]

SUCCEED - Vehicle-hours >= 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=100]

FAIL - Approach volume less than 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=3710]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

-----|-----|-----|-----|-----|

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #5 Central Ave. & Charles Willard St.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 1 0 1 0	1 0 1 1 0	0 0 1! 0 0	0 1 0 0 1
Initial Vol:	90 1420 10	40 1580 200	200 0 70	20 0 80

Major Street Volume: 3340

Minor Approach Volume: 270

Minor Approach Volume Threshold: -131 [less than minimum of 100]

SIGNAL WARRANT DISCLAIMER

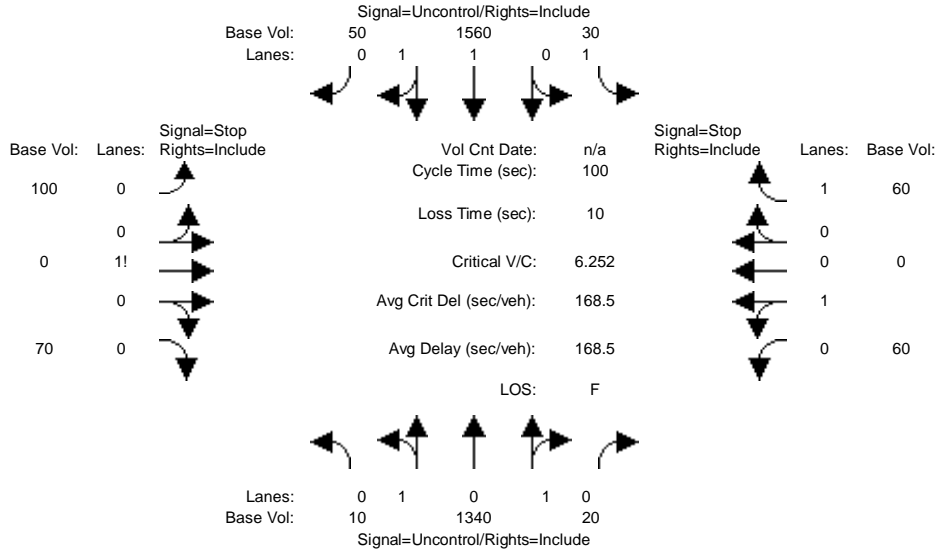
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2035 Plus Project Weekday PM

Intersection #6: Centrral Ave. & Project Driveway/Beachey Pl.



Street Name:	Central Ave.						Beachey Pl.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	10	1340	20	30	1560	50	100	0	70	60	0	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	1340	20	30	1560	50	100	0	70	60	0	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	10	1340	20	30	1560	50	100	0	70	60	0	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	10	1340	20	30	1560	50	100	0	70	60	0	60
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	4.1	xxxx	xxxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxxx	2.2	xxxx	xxxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	1610	xxxx	xxxxxx	1360	xxxx	xxxxxx	2335	3025	805	2210	3040	680
Potent Cap.:	411	xxxx	xxxxxx	512	xxxx	xxxxxx	20	13	330	25	13	398
Move Cap.:	411	xxxx	xxxxxx	512	xxxx	xxxxxx	16	12	330	18	12	398
Volume/Cap:	0.02	xxxx	xxxx	0.06	xxxx	xxxx	6.25	0.00	0.21	3.24	0.00	0.15
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxxx	0.2	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	0.5
Control Del:	14.0	xxxx	xxxxxx	12.5	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	15.6
LOS by Move:	B	*	*	B	*	*	*	*	*	*	*	C
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	26	xxxxxx	18	xxxx	xxxxxx
SharedQueue:	0.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	21.0	xxxxxx	8.0	xxxx	xxxxxx
Shrd ConDel:	14.0	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	2754	xxxxxx	1439	xxxx	xxxxxx
Shared LOS:	B	*	*	*	*	*	*	F	*	F	*	*

ApproachDel: xxxxxxx xxxxxxx 2753.5 727.4
 ApproachLOS: * * F F

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #6 Central Ave. & Project Driveway/Beachey Pl.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 1 0 1 0	1 0 1 1 0	0 0 1 0 0	0 1 0 0 1
Initial Vol:	10 1340 20	30 1560 50	100 0 70	60 0 60
ApproachDel:	xxxxxxx	xxxxxxx	2753.5	727.4

-----|-----|-----|-----|-----|

Approach[eastbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=130.0]

SUCCEED - Vehicle-hours greater than or equal to 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=170]

SUCCEED - Approach volume greater than or equal to 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=3300]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

-----|-----|-----|-----|-----|

Approach[westbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=24.2]

SUCCEED - Vehicle-hours >= 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=120]

FAIL - Approach volume less than 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=3300]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

-----|-----|-----|-----|-----|

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #6 Central Ave. & Project Driveway/Beachey Pl.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 1 0 1 0	1 0 1 1 0	0 0 1 0 0	0 1 0 0 1
Initial Vol:	10 1340 20	30 1560 50	100 0 70	60 0 60

Major Street Volume: 3010

Minor Approach Volume: 170

Minor Approach Volume Threshold: -95 [less than minimum of 100]

SIGNAL WARRANT DISCLAIMER

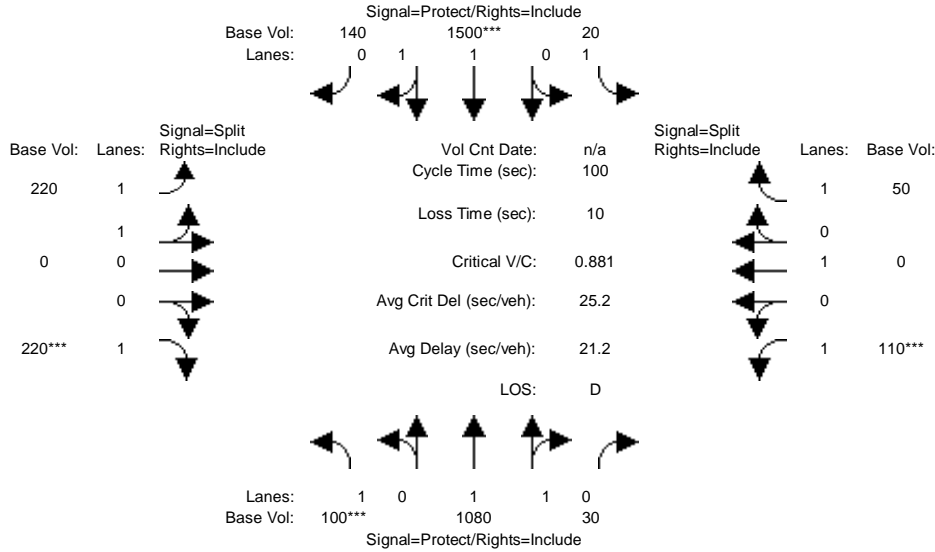
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM

Intersection #7: Central Ave. & Glenn Curtiss St.

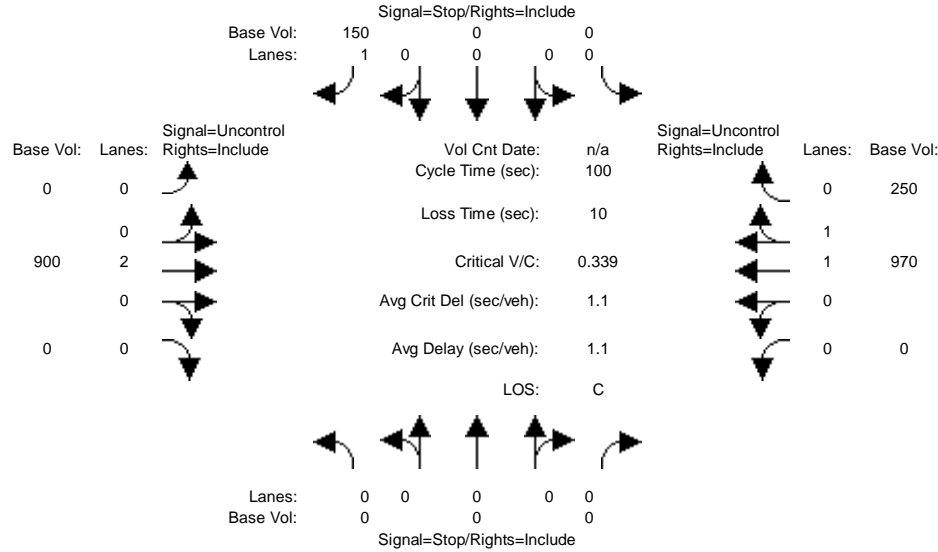


Street Name:	Central Ave.						Glenn Curtiss St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	100	1080	30	20	1500	140	220	0	220	110	0	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	100	1080	30	20	1500	140	220	0	220	110	0	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	100	1080	30	20	1500	140	220	0	220	110	0	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	100	1080	30	20	1500	140	220	0	220	110	0	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	100	1080	30	20	1500	140	220	0	220	110	0	50
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.95	0.05	1.00	1.83	0.17	2.00	0.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	3114	86	1600	2927	273	3200	0	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.35	0.35	0.01	0.51	0.51	0.07	0.00	0.14	0.07	0.00	0.03
Crit Moves:	***				***				***	***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
2035 Plus Project Weekday PM

Intersection #8: University Dr./Birchknoll Dr. Ext.



Street Name:	Birchknoll Dr. Ext.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	0	0	150	0	900	0	0	970	250
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	150	0	900	0	0	970	250
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	150	0	900	0	0	970	250
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	150	0	900	0	0	970	250
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	610	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	442	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	442	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	0.34	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	1.5	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	17.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	C	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*

ApproachDel: xxxxxx 17.3 xxxxxx xxxxxx
 ApproachLOS: * C * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #8 University Dr./Birchknoll Dr. Ext.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 0	0 0 0 0 1	0 0 2 0 0	0 0 1 1 0
Initial Vol:	0 0 0 0	0 0 150	0 900 0	0 970 250
ApproachDel:	xxxxxx	17.3	xxxxxx	xxxxxx

Approach[southbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.7]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=150]

SUCCEED - Approach volume greater than or equal to 100 for one lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=2270]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #8 University Dr./Birchknoll Dr. Ext.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 0	0 0 0 0 1	0 0 2 0 0	0 0 1 1 0
Initial Vol:	0 0 0 0	0 0 150	0 900 0	0 970 250

Major Street Volume: 2120

Minor Approach Volume: 150

Minor Approach Volume Threshold: 26 [less than minimum of 100]

SIGNAL WARRANT DISCLAIMER

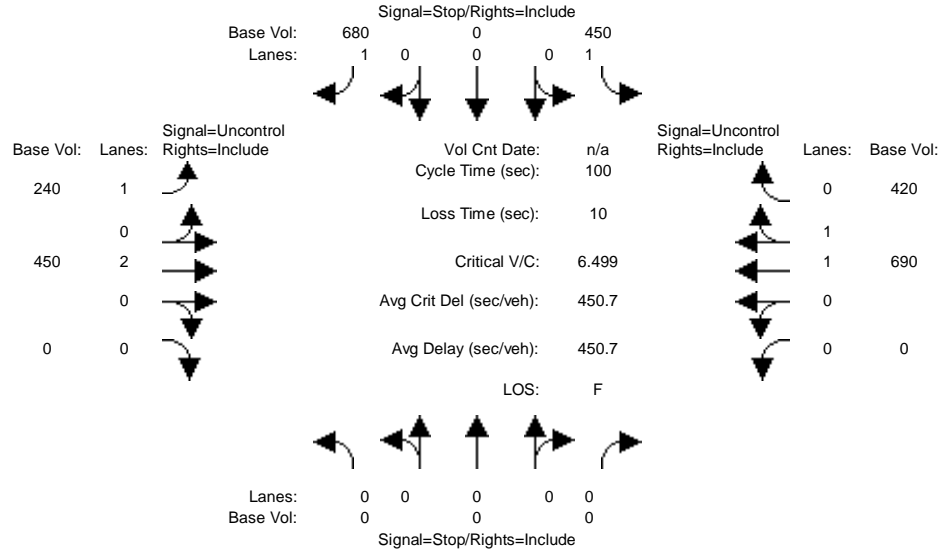
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2035 Plus Project Weekday PM

Intersection #9: University Dr. & Toro Center Dr.



Street Name:	University Dr.						Toro Center Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	450	0	680	240	450	0	0	690	420
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	450	0	680	240	450	0	0	690	420
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	450	0	680	240	450	0	0	690	420
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	0	0	0	450	0	680	240	450	0	0	690	420
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.8	xxxx	6.9	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	xxxx	xxxx	xxxxx	1605	xxxx	555	1110	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	98	xxxx	480	637	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	69	xxxx	480	637	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	6.50	xxxx	1.42	0.38	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	50.9	xxxx	32.7	1.8	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	2591	xxxx	222.2	14.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	F	*	F	B	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shared Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*

```

ApproachDel:   xxxxxx          1165.7          xxxxxx          xxxxxx
ApproachLOS:   *                F                *                *

```

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #9 University Dr. & Toro Center Dr.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0	0	0	0	0	0	1	0	2	0	0	1
Initial Vol:	0	0	0	450	0	680	240	450	0	0	690	420
ApproachDel:	xxxxxx			1165.7			xxxxxx			xxxxxx		

Approach[southbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=365.9]

SUCCEED - Vehicle-hours >= 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=1130]

SUCCEED - Approach volume >= 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=2930]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #9 University Dr. & Toro Center Dr.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0	0	0	0	0	0	1	0	2	0	0	1
Initial Vol:	0	0	0	450	0	680	240	450	0	0	690	420

Major Street Volume: 1800

Minor Approach Volume: 1130

Minor Approach Volume Threshold: 121 [less than minimum of 150]

SIGNAL WARRANT DISCLAIMER

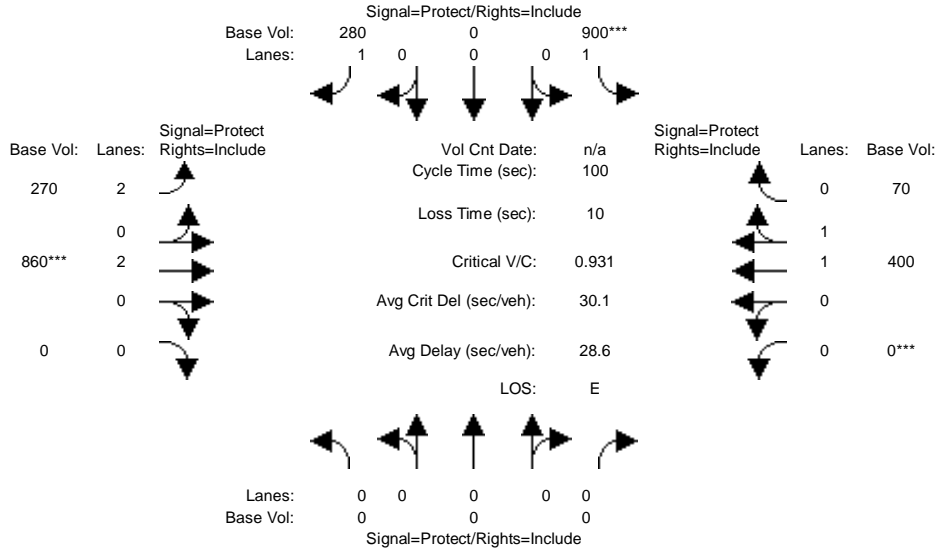
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM

Intersection #10: Albertoni St. & SR 91 EB Ramps

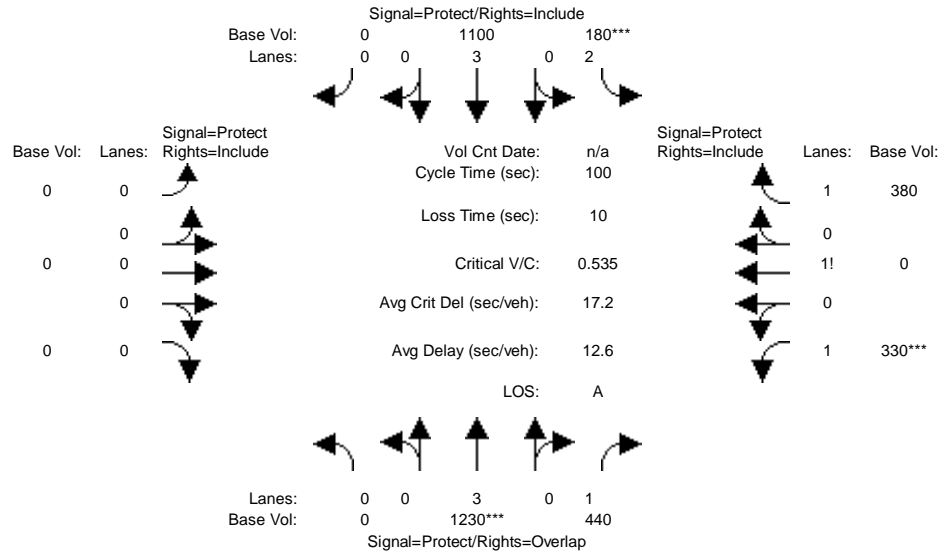


Street Name:	Albertoni St.						SR 91 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	900	0	280	270	860	0	0	400	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	900	0	280	270	860	0	0	400	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	900	0	280	270	860	0	0	400	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	900	0	280	270	860	0	0	400	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	900	0	280	270	860	0	0	400	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.70	0.30
Final Sat.:	0	0	0	1600	0	1600	5760	3200	0	0	2723	477
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.56	0.00	0.17	0.05	0.27	0.00	0.00	0.15	0.15
Crit Moves:				***				***		***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM

Intersection #11: Avalon Blvd. & SR 91 WB On-Ramp

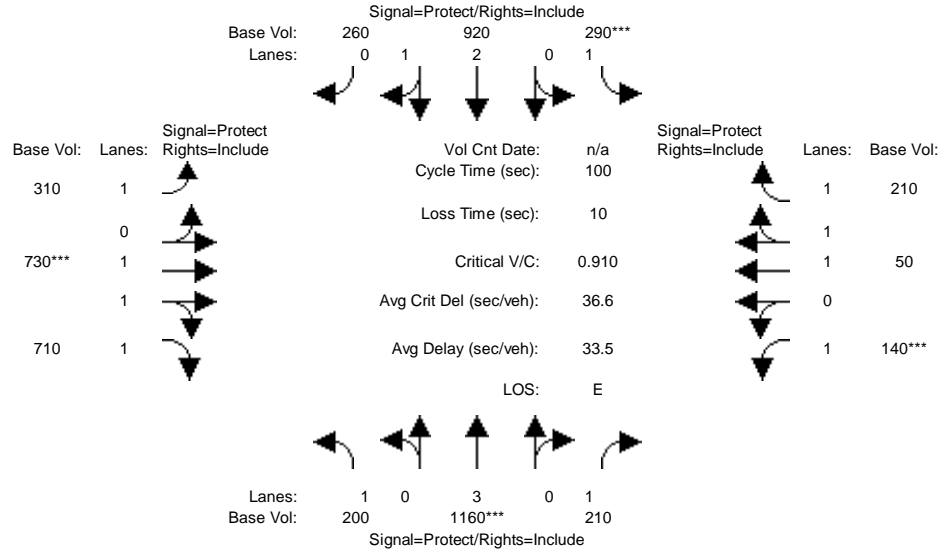


Street Name:	Avalon Blvd.						SR 91 WB On-Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1230	440	180	1100	0	0	0	0	330	0	380
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1230	440	180	1100	0	0	0	0	330	0	380
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1230	440	180	1100	0	0	0	0	330	0	380
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1230	440	180	1100	0	0	0	0	330	0	380
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	1230	440	180	1100	0	0	0	0	330	0	380
OvlAdjVol:	203											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.39	0.00	1.61
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	2231	0	2569
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.28	0.03	0.23	0.00	0.00	0.00	0.00	0.15	0.00	0.15
OvlAdjV/S:	0.13											
Crit Moves:	****			****						****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM

Intersection #12: Avalon Blvd. & Albertoni St.

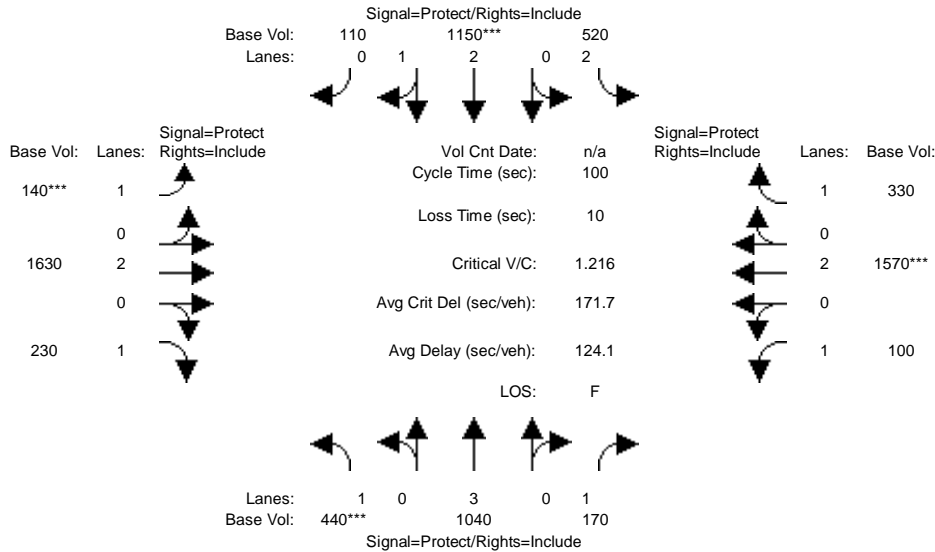


Street Name:	Avalon Blvd.						Albertoni St.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	200	1160	210	290	920	260	310	730	710	140	50	210
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	200	1160	210	290	920	260	310	730	710	140	50	210
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	200	1160	210	290	920	260	310	730	710	140	50	210
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	200	1160	210	290	920	260	310	730	710	140	50	210
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	200	1160	210	290	920	260	310	730	710	140	50	210
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.34	0.66	1.00	1.52	1.48	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3742	1058	1600	2433	2367	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.13	0.24	0.13	0.18	0.25	0.25	0.19	0.30	0.30	0.09	0.03	0.07
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM

Intersection #13: Avalon Blvd. & Victoria St.

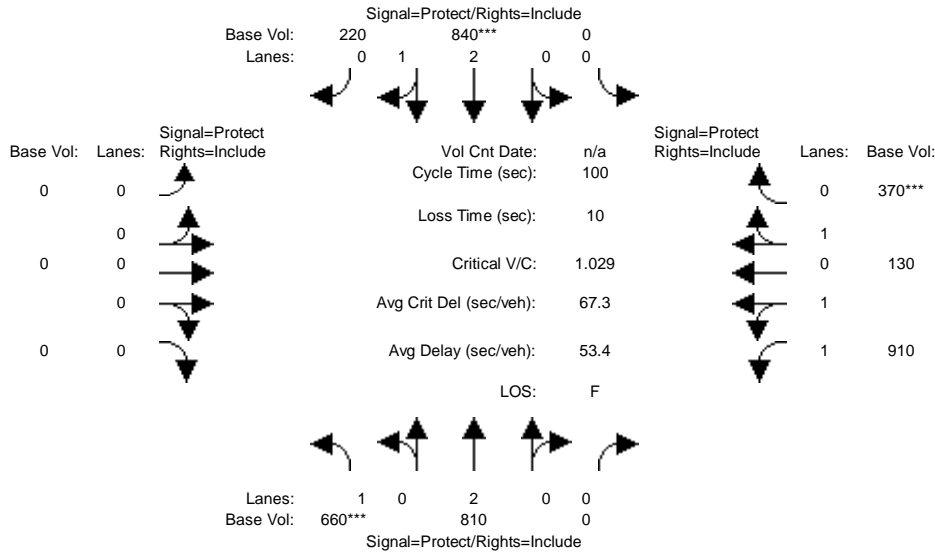


Street Name:	Avalon Blvd.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	440	1040	170	520	1150	110	140	1630	230	100	1570	330
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	440	1040	170	520	1150	110	140	1630	230	100	1570	330
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	440	1040	170	520	1150	110	140	1630	230	100	1570	330
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	440	1040	170	520	1150	110	140	1630	230	100	1570	330
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	440	1040	170	520	1150	110	140	1630	230	100	1570	330
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.74	0.26	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4381	419	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.28	0.22	0.11	0.09	0.26	0.26	0.09	0.51	0.14	0.06	0.49	0.21
Crit Moves:	***				***		***				***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM

Intersection #14: Central Ave. & Artesia Blvd.

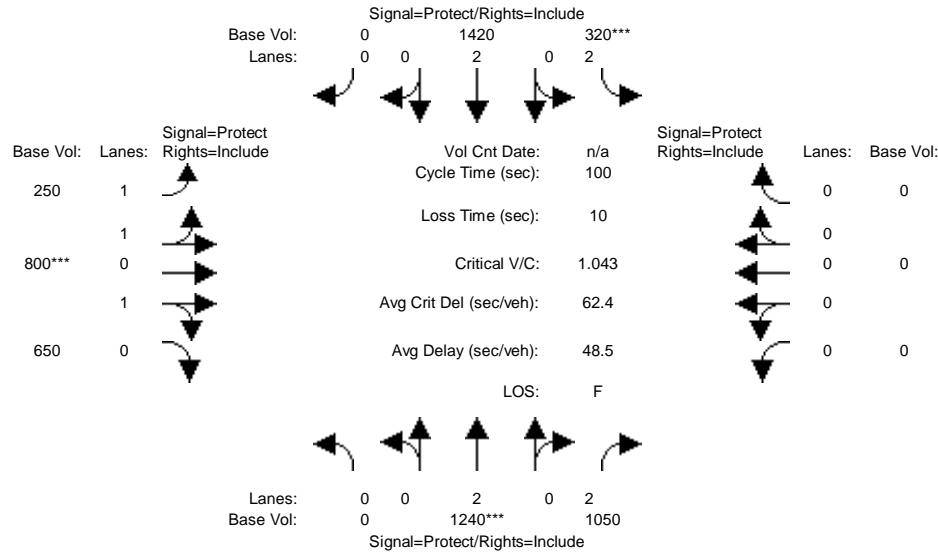


Street Name:	Central Ave.						Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	660	810	0	0	840	220	0	0	0	910	130	370
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	660	810	0	0	840	220	0	0	0	910	130	370
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	660	810	0	0	840	220	0	0	0	910	130	370
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	660	810	0	0	840	220	0	0	0	910	130	370
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	660	810	0	0	840	220	0	0	0	910	130	370
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.38	0.62	0.00	0.00	0.00	1.94	0.28	0.78
Final Sat.:	1600	3200	0	0	3804	996	0	0	0	3107	441	1252
Capacity Analysis Module:												
Vol/Sat:	0.41	0.25	0.00	0.00	0.22	0.22	0.00	0.00	0.00	0.29	0.29	0.30
Crit Moves:	***				***							***

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM

Intersection #15: Central Ave. & Albertoni St./Artesia Blvd. EB



Street Name:	Central Ave.						Albertoni St./Artesia Blvd. EB					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0

Volume Module:												
Base Vol:	0	1240	1050	320	1420	0	250	800	650	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1240	1050	320	1420	0	250	800	650	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1240	1050	320	1420	0	250	800	650	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1240	1050	320	1420	0	250	800	650	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	1240	1050	320	1420	0	250	800	650	0	0	0

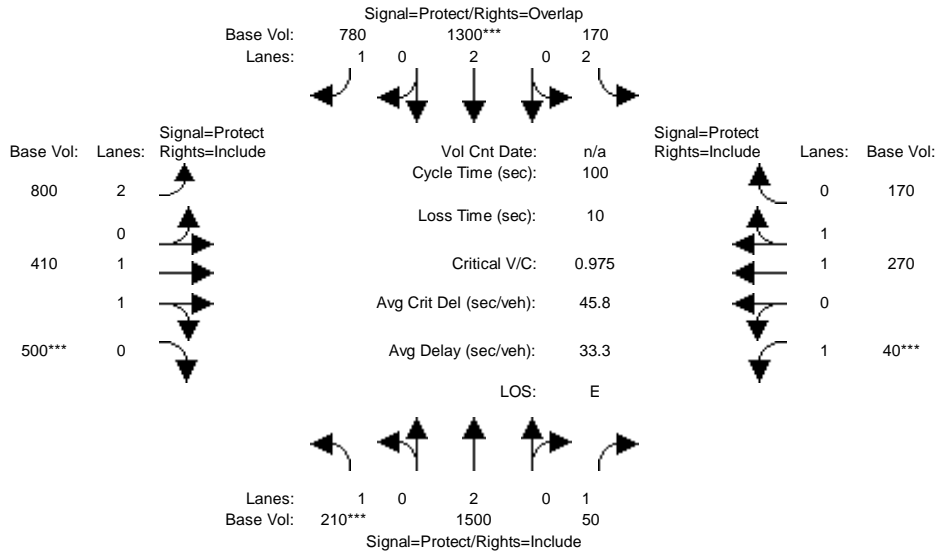
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	1600	1600	1600	0	0	0

Capacity Analysis Module:												
Vol/Sat:	0.00	0.39	0.33	0.06	0.44	0.00	0.16	0.50	0.41	0.00	0.00	0.00
Crit Moves:		****		****				****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM

Intersection #16: Central Ave. & Victoria St.

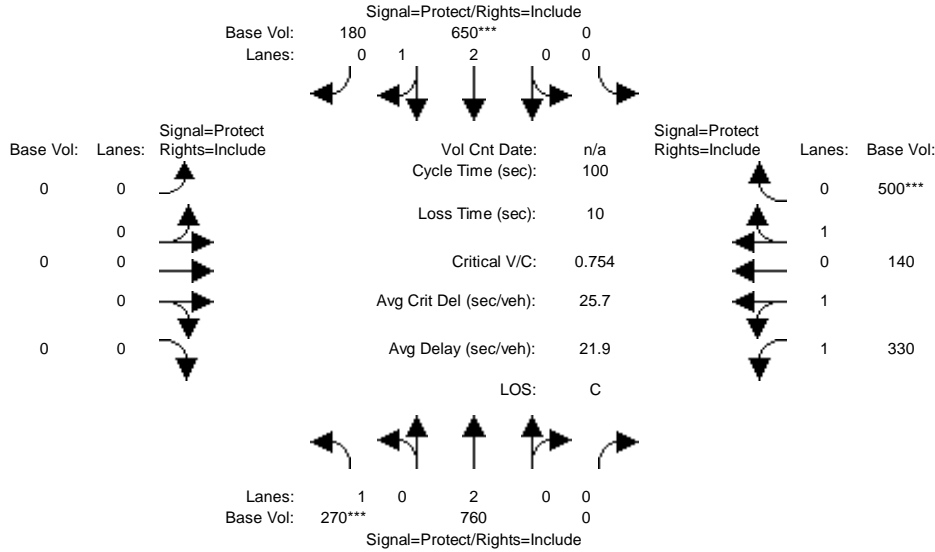


Street Name:	Central Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	210	1500	50	170	1300	780	800	410	500	40	270	170
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	210	1500	50	170	1300	780	800	410	500	40	270	170
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	210	1500	50	170	1300	780	800	410	500	40	270	170
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	210	1500	50	170	1300	780	800	410	500	40	270	170
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	210	1500	50	170	1300	780	800	410	500	40	270	170
OvlAdjVol:												558
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.00	1.00	1.00	1.23	0.77
Final Sat.:	1600	3200	1600	5760	3200	1600	5760	1600	1600	1600	1964	1236
Capacity Analysis Module:												
Vol/Sat:	0.13	0.47	0.03	0.03	0.41	0.49	0.14	0.26	0.31	0.03	0.14	0.14
OvlAdjV/S:												0.35
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM

Intersection #17: Wilmington Ave. & Artesia Blvd. WB

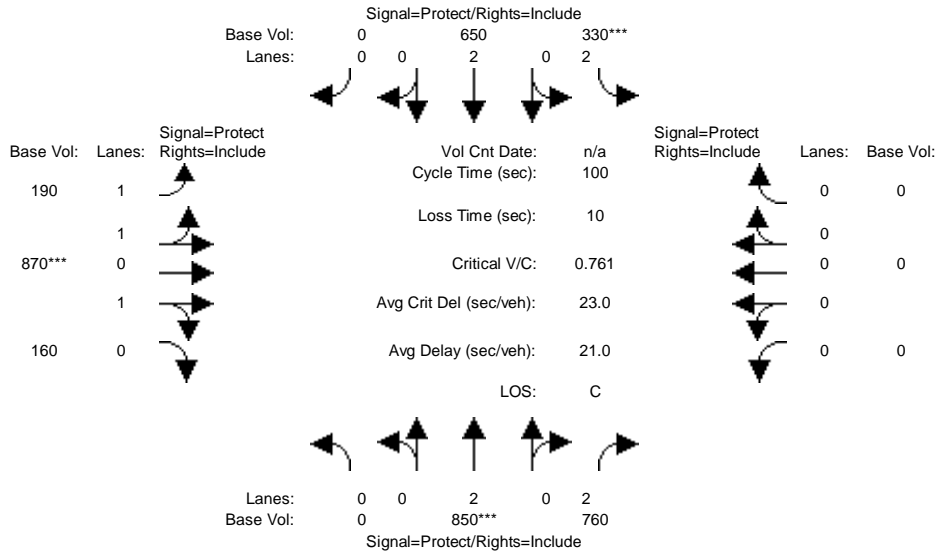


Street Name:	Wilmington Ave.						Artesia Blvd. WB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	270	760	0	0	650	180	0	0	0	330	140	500
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	270	760	0	0	650	180	0	0	0	330	140	500
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	270	760	0	0	650	180	0	0	0	330	140	500
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	270	760	0	0	650	180	0	0	0	330	140	500
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	270	760	0	0	650	180	0	0	0	330	140	500
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.35	0.65	0.00	0.00	0.00	1.40	0.60	1.00
Final Sat.:	1600	3200	0	0	3759	1041	0	0	0	2247	953	1600
Capacity Analysis Module:												
Vol/Sat:	0.17	0.24	0.00	0.00	0.17	0.17	0.00	0.00	0.00	0.15	0.15	0.31
Crit Moves:	***				***							***

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM

Intersection #18: Wilmington Ave. & Artesia Blvd. EB

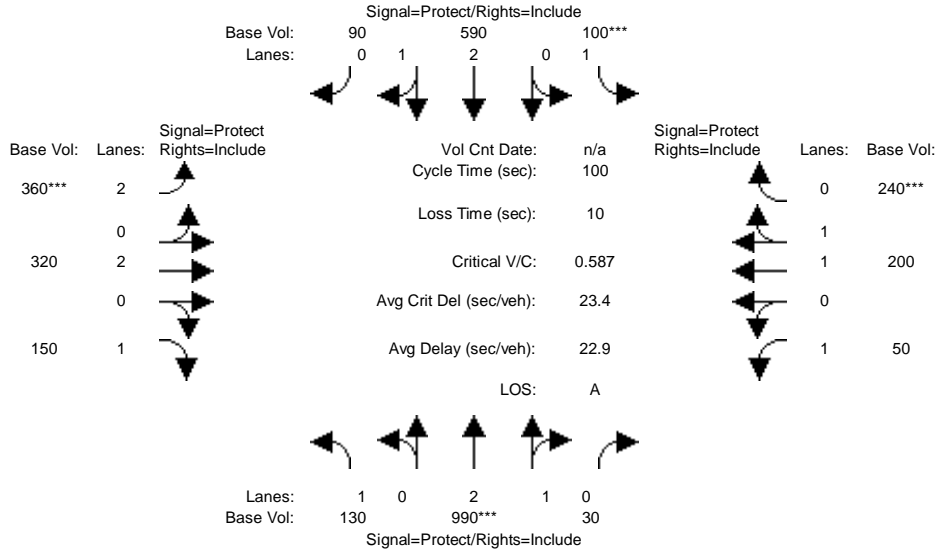


Street Name:	Wilmington Ave.						Artesia Blvd. EB					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	850	760	330	650	0	190	870	160	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	850	760	330	650	0	190	870	160	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	850	760	330	650	0	190	870	160	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	850	760	330	650	0	190	870	160	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	850	760	330	650	0	190	870	160	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.00	1.61	0.39	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	1600	2574	626	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.27	0.24	0.06	0.20	0.00	0.12	0.34	0.26	0.00	0.00	0.00
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM

Intersection #19: Wilmington Ave. & Victoria St.

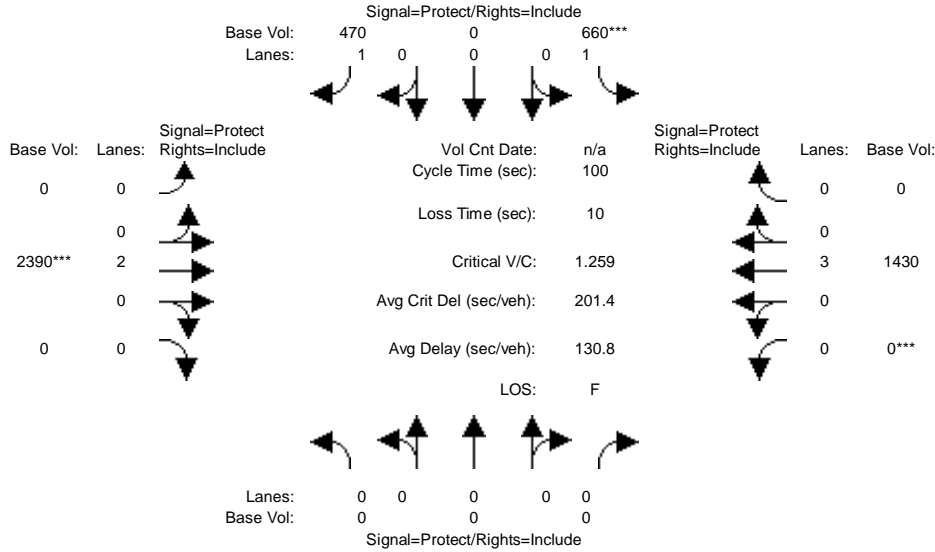


Street Name:	Wilmington Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	130	990	30	100	590	90	360	320	150	50	200	240
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	990	30	100	590	90	360	320	150	50	200	240
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	990	30	100	590	90	360	320	150	50	200	240
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	990	30	100	590	90	360	320	150	50	200	240
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	130	990	30	100	590	90	360	320	150	50	200	240
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.91	0.09	1.00	2.60	0.40	2.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	4659	141	1600	4165	635	5760	3200	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.21	0.21	0.06	0.14	0.14	0.06	0.10	0.09	0.03	0.13	0.15
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM

Intersection #20: I-110 SB Off-Ramp & 190th St.

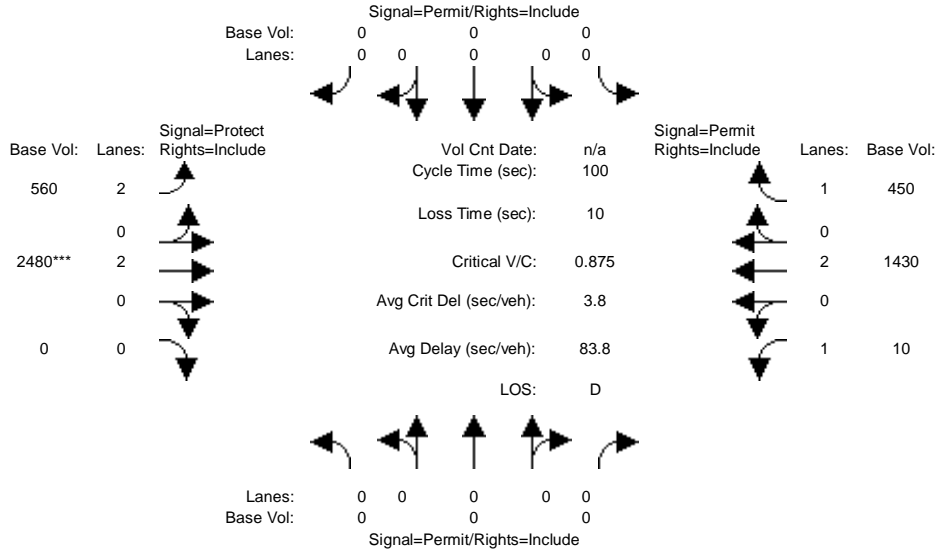


Street Name:	I-110 SB Off-Ramp						190th St.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	660	0	470	0	2390	0	0	1430	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	660	0	470	0	2390	0	0	1430	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	660	0	470	0	2390	0	0	1430	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	660	0	470	0	2390	0	0	1430	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	660	0	470	0	2390	0	0	1430	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.41	0.00	0.29	0.00	0.75	0.00	0.00	0.30	0.00
Crit Moves:				***				***		***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM

Intersection #21: I-110 NB On-Ramp & 190th St.

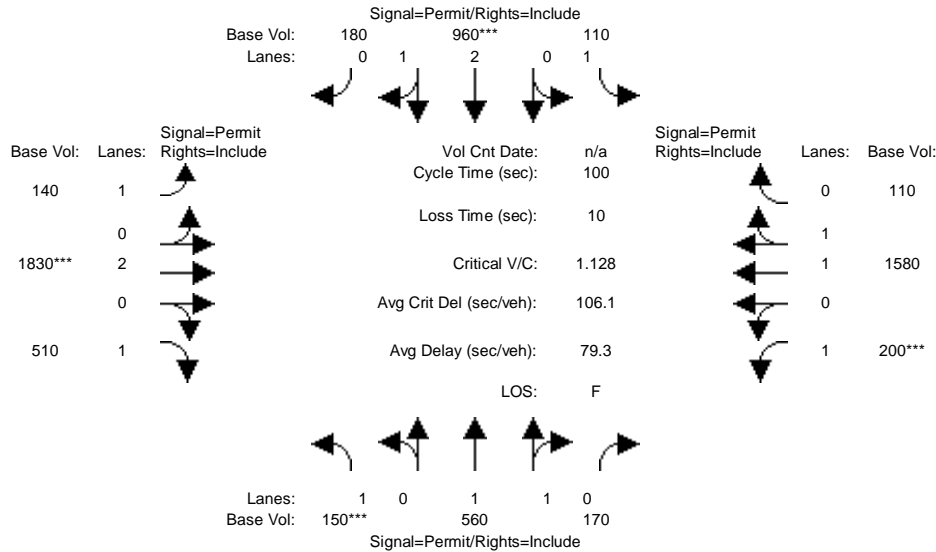


Street Name:	I-110 NB On-Ramp						190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	0	0	0	560	2480	0	10	1430	450
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	560	2480	0	10	1430	450
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	560	2480	0	10	1430	450
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	560	2480	0	10	1430	450
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	0	0	0	560	2480	0	10	1430	450
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00
Final Sat.:	0	0	0	0	0	0	5760	3200	0	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.78	0.00	0.01	0.45	0.28
Crit Moves:	****											

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM

Intersection #22: Figueroa St. & 190th St./Victoria St.

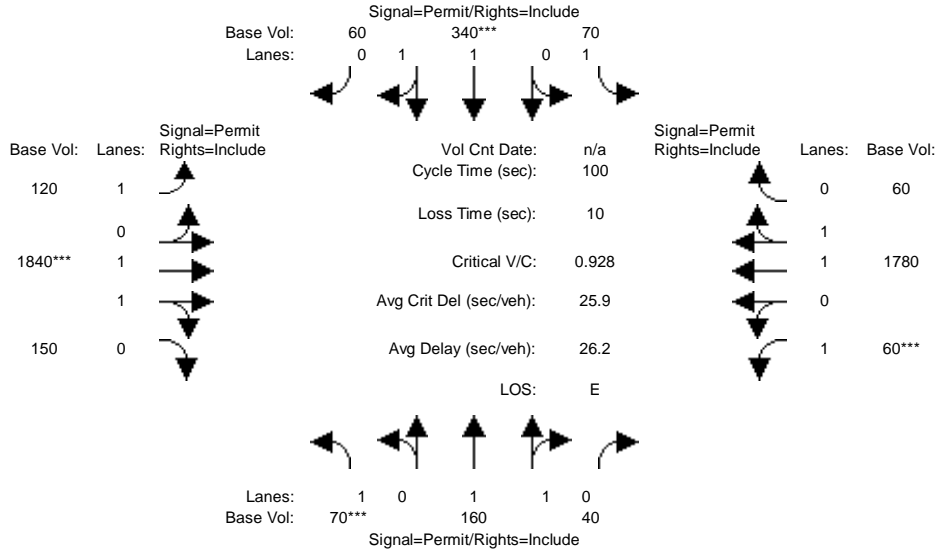


Street Name:	Figueroa St.						190th St./Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	150	560	170	110	960	180	140	1830	510	200	1580	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	560	170	110	960	180	140	1830	510	200	1580	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	560	170	110	960	180	140	1830	510	200	1580	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	560	170	110	960	180	140	1830	510	200	1580	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	150	560	170	110	960	180	140	1830	510	200	1580	110
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.53	0.47	1.00	2.53	0.47	1.00	2.00	1.00	1.00	1.87	0.13
Final Sat.:	1600	2455	745	1600	4042	758	1600	3200	1600	1600	2992	208
Capacity Analysis Module:												
Vol/Sat:	0.09	0.23	0.23	0.07	0.24	0.24	0.09	0.57	0.32	0.13	0.53	0.53
Crit Moves:	***			***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM

Intersection #23: Broadway & Victoria St.

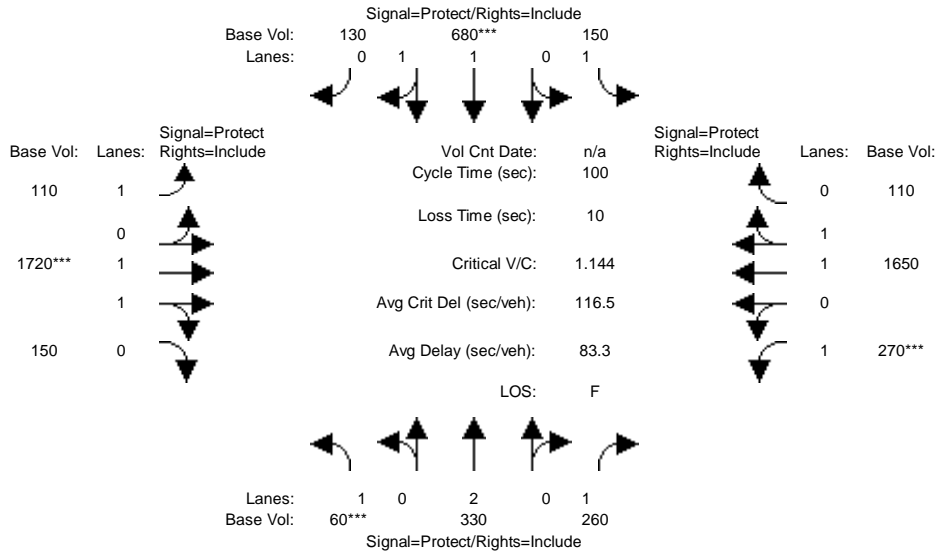


Street Name:	Broadway						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	70	160	40	70	340	60	120	1840	150	60	1780	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	160	40	70	340	60	120	1840	150	60	1780	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	160	40	70	340	60	120	1840	150	60	1780	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	160	40	70	340	60	120	1840	150	60	1780	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	70	160	40	70	340	60	120	1840	150	60	1780	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.60	0.40	1.00	1.70	0.30	1.00	1.85	0.15	1.00	1.93	0.07
Final Sat.:	1600	2560	640	1600	2720	480	1600	2959	241	1600	3096	104
Capacity Analysis Module:												
Vol/Sat:	0.04	0.06	0.06	0.04	0.13	0.13	0.08	0.62	0.62	0.04	0.58	0.57
Crit Moves:	***			***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM

Intersection #24: Main St. & Victoria St.

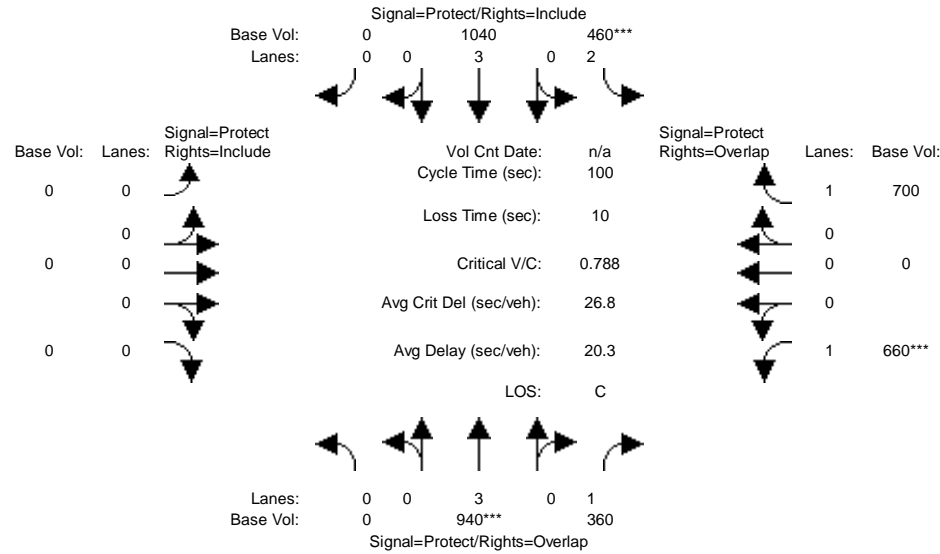


Street Name:	Main St.						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	60	330	260	150	680	130	110	1720	150	270	1650	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	330	260	150	680	130	110	1720	150	270	1650	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	330	260	150	680	130	110	1720	150	270	1650	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	330	260	150	680	130	110	1720	150	270	1650	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	60	330	260	150	680	130	110	1720	150	270	1650	110
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.68	0.32	1.00	1.84	0.16	1.00	1.88	0.12
Final Sat.:	1600	3200	1600	1600	2686	514	1600	2943	257	1600	3000	200
Capacity Analysis Module:												
Vol/Sat:	0.04	0.10	0.16	0.09	0.25	0.25	0.07	0.58	0.58	0.17	0.55	0.55
Crit Moves:	***				***			***			***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM

Intersection #25: Avalon Blvd. & University Dr.

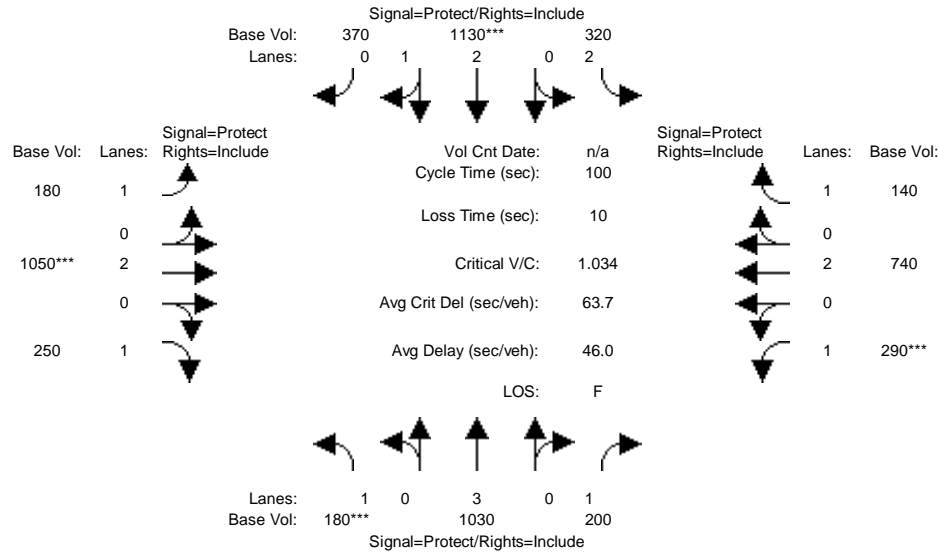


Street Name:	Avalon Blvd.						University Dr.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	940	360	460	1040	0	0	0	0	660	0	700
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	940	360	460	1040	0	0	0	0	660	0	700
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	940	360	460	1040	0	0	0	0	660	0	700
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	940	360	460	1040	0	0	0	0	660	0	700
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	940	360	460	1040	0	0	0	0	660	0	700
OvlAdjVol:												572
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.23	0.08	0.22	0.00	0.00	0.00	0.00	0.41	0.00	0.44
OvlAdjV/S:												0.36
Crit Moves:	****			****						****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM

Intersection #26: Avalon Blvd. & Del Amo Blvd.

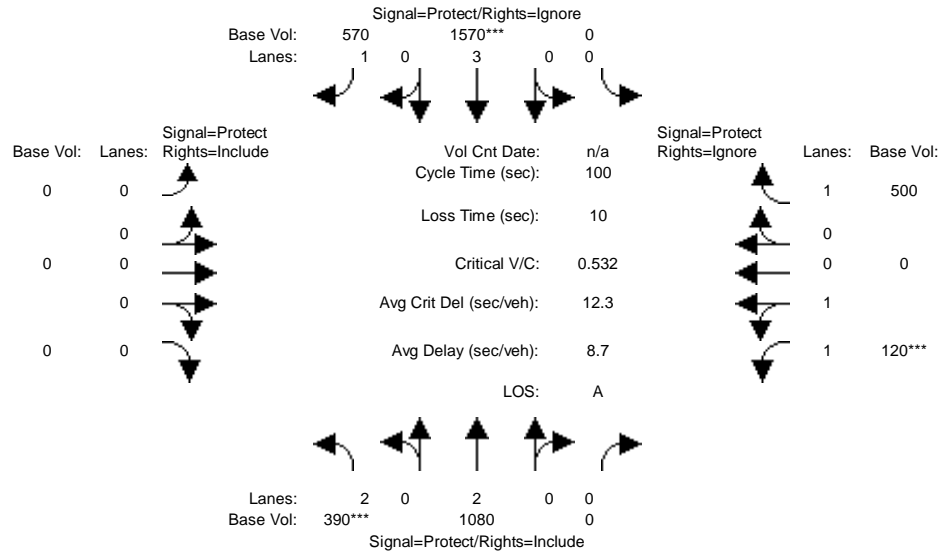


Street Name:	Avalon Blvd.						Del Amo Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	180	1030	200	320	1130	370	180	1050	250	290	740	140
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	180	1030	200	320	1130	370	180	1050	250	290	740	140
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	180	1030	200	320	1130	370	180	1050	250	290	740	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	180	1030	200	320	1130	370	180	1050	250	290	740	140
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	180	1030	200	320	1130	370	180	1050	250	290	740	140
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.26	0.74	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	3616	1184	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.11	0.21	0.13	0.06	0.31	0.31	0.11	0.33	0.16	0.18	0.23	0.09
Crit Moves:	***			***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM

Intersection #27: Avalon Blvd. & I-405 NB Ramps

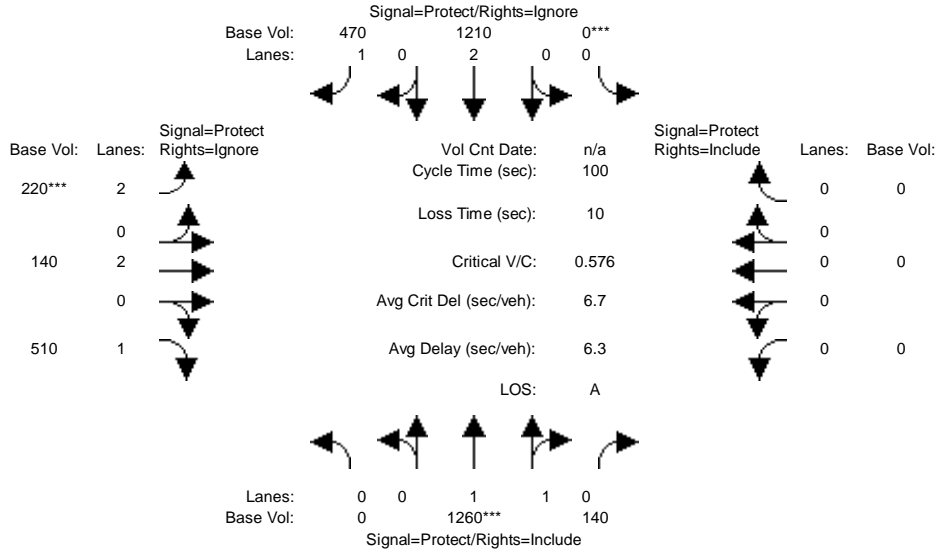


Street Name:	Avalon Blvd.						I-405 NB Ramps					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	390	1080	0	0	1570	570	0	0	0	120	0	500
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	390	1080	0	0	1570	570	0	0	0	120	0	500
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	390	1080	0	0	1570	0	0	0	0	120	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	390	1080	0	0	1570	0	0	0	0	120	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Volume:	390	1080	0	0	1570	0	0	0	0	120	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	5760	3200	0	0	4800	1600	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.34	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.04	0.00	0.00
Crit Moves:	***				***					***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM

Intersection #28: Avalon Blvd. & I-405 SB Ramps

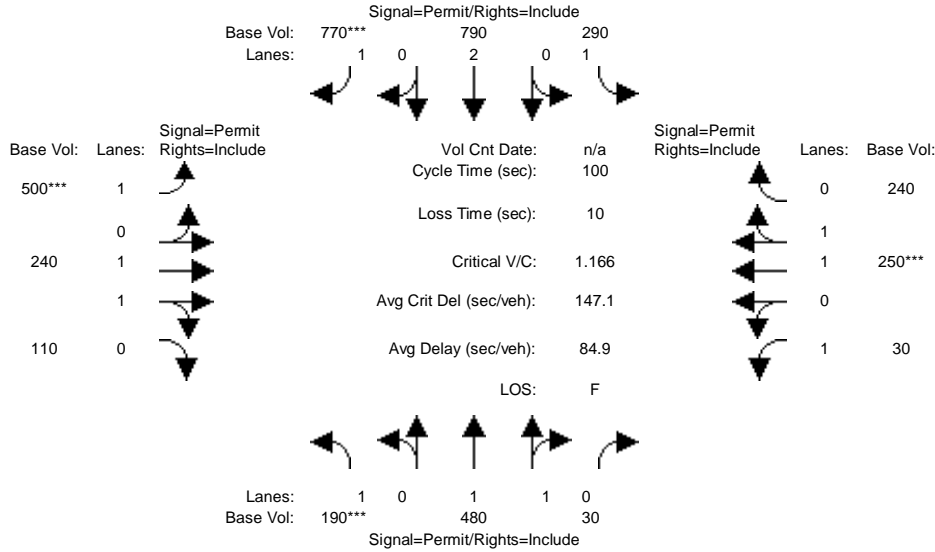


Street Name:	Avalon Blvd.						I-405 SB Ramps					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1260	140	0	1210	470	220	140	510	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1260	140	0	1210	470	220	140	510	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	1260	140	0	1210	0	220	140	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1260	140	0	1210	0	220	140	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Volume:	0	1260	140	0	1210	0	220	140	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.80	0.20	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	0	2880	320	0	3200	1600	5760	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.44	0.44	0.00	0.38	0.00	0.04	0.04	0.00	0.00	0.00	0.00
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM

Intersection #29: Central Ave. & University Dr.

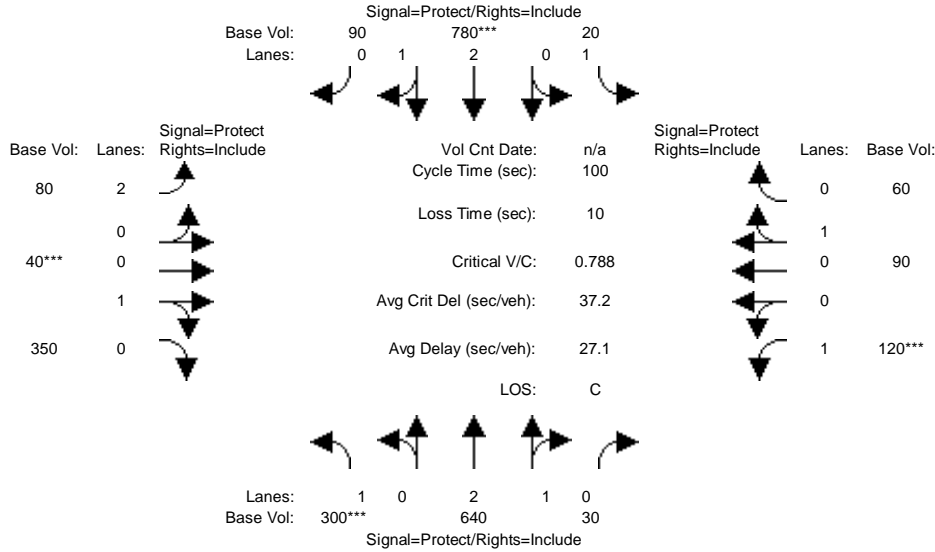


Street Name:	Central Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	190	480	30	290	790	770	500	240	110	30	250	240
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	190	480	30	290	790	770	500	240	110	30	250	240
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	190	480	30	290	790	770	500	240	110	30	250	240
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	190	480	30	290	790	770	500	240	110	30	250	240
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	190	480	30	290	790	770	500	240	110	30	250	240
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.88	0.12	1.00	2.00	1.00	1.00	1.37	0.63	1.00	1.02	0.98
Final Sat.:	1600	3012	188	1600	3200	1600	1600	2194	1006	1600	1633	1567
Capacity Analysis Module:												
Vol/Sat:	0.12	0.16	0.16	0.18	0.25	0.48	0.31	0.11	0.11	0.02	0.15	0.15
Crit Moves:	***					***	***				***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM

Intersection #30: Wilmington Ave. & University Dr.

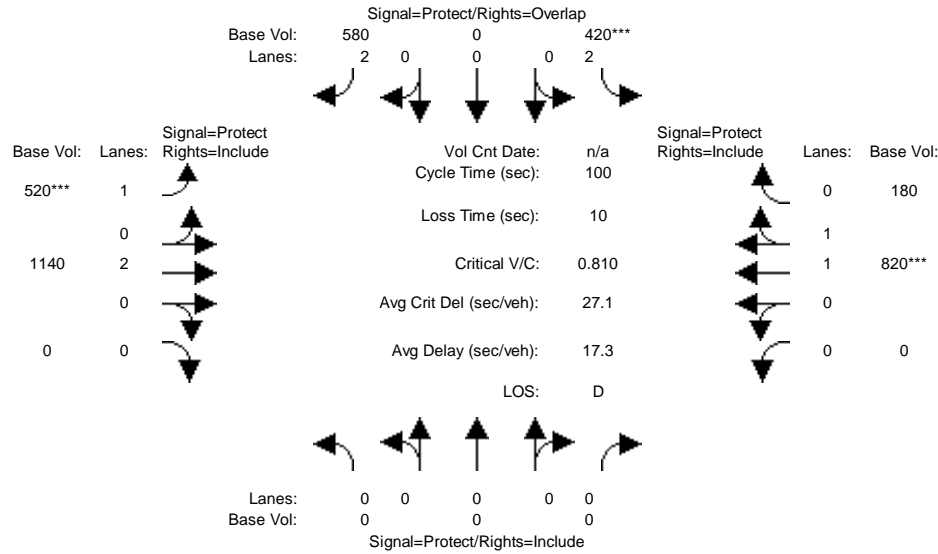


Street Name:	Wilmington Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	300	640	30	20	780	90	80	40	350	120	90	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	300	640	30	20	780	90	80	40	350	120	90	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	300	640	30	20	780	90	80	40	350	120	90	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	300	640	30	20	780	90	80	40	350	120	90	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	300	640	30	20	780	90	80	40	350	120	90	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.87	0.13	1.00	2.69	0.31	2.00	0.10	0.90	1.00	0.60	0.40
Final Sat.:	1600	4585	215	1600	4303	497	5760	164	1436	1600	960	640
Capacity Analysis Module:												
Vol/Sat:	0.19	0.14	0.14	0.01	0.18	0.18	0.01	0.24	0.24	0.08	0.09	0.09
Crit Moves:	***				***			***			***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM

Intersection #31: Central Ave. & Del Amo Blvd.

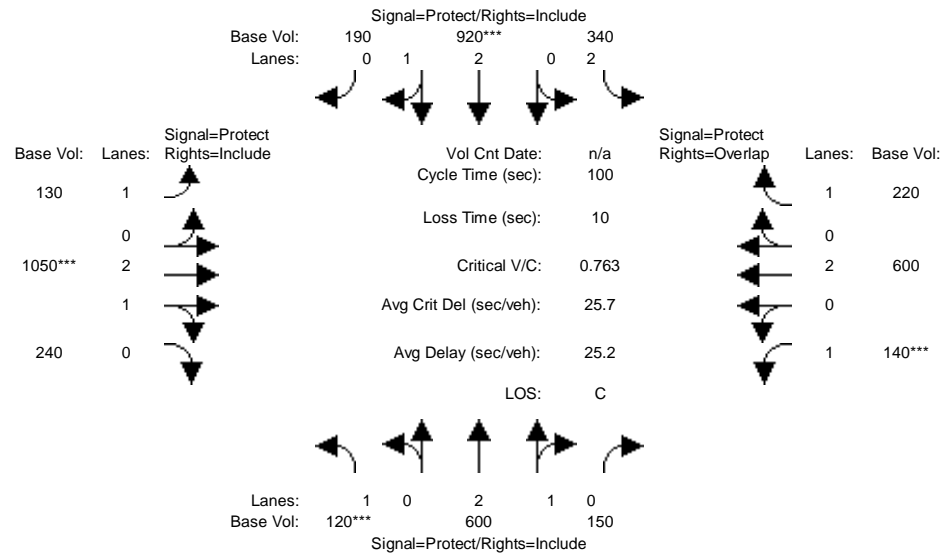


Street Name:	Central Ave.						Del Amo Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	420	0	580	520	1140	0	0	820	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	420	0	580	520	1140	0	0	820	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	420	0	580	520	1140	0	0	820	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	420	0	580	520	1140	0	0	820	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	420	0	580	520	1140	0	0	820	180
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	2.00	1.00	2.00	0.00	0.00	1.64	0.36
Final Sat.:	0	0	0	5760	0	3200	1600	3200	0	0	2624	576
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.07	0.00	0.18	0.33	0.36	0.00	0.00	0.31	0.31
OvlAdjV/S:	0.00											
Crit Moves:				****				****				****

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM

Intersection #32: Wilmington Ave. & Del Amo Blvd.

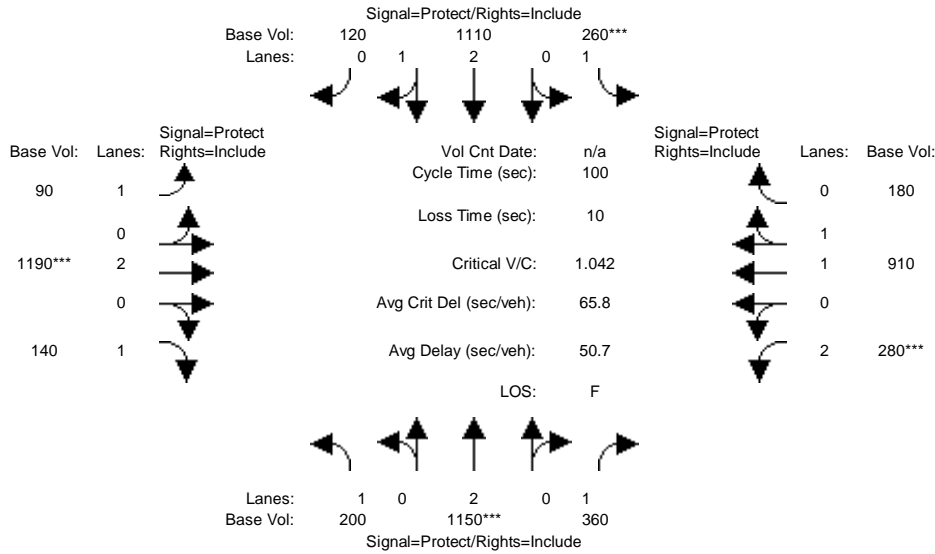


Street Name:	Wilmington Ave.						Del Amo Blvd.						
Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Volume Module:													
Base Vol:	120	600	150	340	920	190	130	1050	240	140	600	220	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	120	600	150	340	920	190	130	1050	240	140	600	220	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:	120	600	150	340	920	190	130	1050	240	140	600	220	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	120	600	150	340	920	190	130	1050	240	140	600	220	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
FinalVolume:	120	600	150	340	920	190	130	1050	240	140	600	220	
OvlAdjVol:												126	
Saturation Flow Module:													
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Lanes:	1.00	2.40	0.60	2.00	2.49	0.51	1.00	2.44	0.56	1.00	2.00	1.00	
Final Sat.:	1600	3840	960	5760	3978	822	1600	3907	893	1600	3200	1600	
Capacity Analysis Module:													
Vol/Sat:	0.08	0.16	0.16	0.06	0.23	0.23	0.08	0.27	0.27	0.09	0.19	0.14	
OvlAdjV/S:												0.08	
Crit Moves:	****						****	****					****

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM

Intersection #33: W. Artesia Blvd. & Crenshaw Blvd.



Street Name:	Crenshaw Blvd.						W. Artesia Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0

Volume Module:	200	1150	360	260	1110	120	90	1190	140	280	910	180
Base Vol:	200	1150	360	260	1110	120	90	1190	140	280	910	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	200	1150	360	260	1110	120	90	1190	140	280	910	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	200	1150	360	260	1110	120	90	1190	140	280	910	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	200	1150	360	260	1110	120	90	1190	140	280	910	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	200	1150	360	260	1110	120	90	1190	140	280	910	180

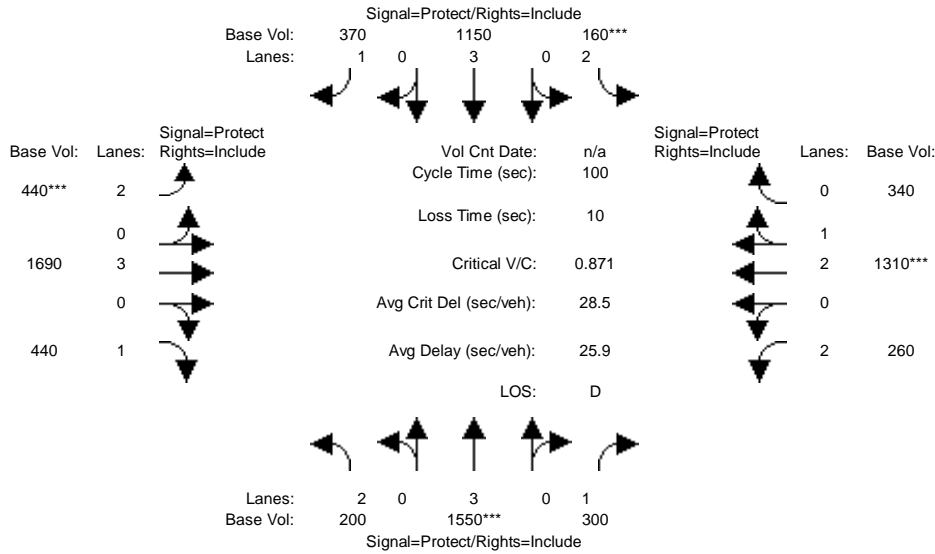
Saturation Flow Module:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.71	0.29	1.00	2.00	1.00	2.00	1.67	0.33
Final Sat.:	1600	3200	1600	1600	4332	468	1600	3200	1600	5760	2672	528

Capacity Analysis Module:	0.13	0.36	0.23	0.16	0.26	0.26	0.06	0.37	0.09	0.05	0.34	0.34
Vol/Sat:	0.13	0.36	0.23	0.16	0.26	0.26	0.06	0.37	0.09	0.05	0.34	0.34
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM

Intersection #34: W 190th St. & South Western Ave.

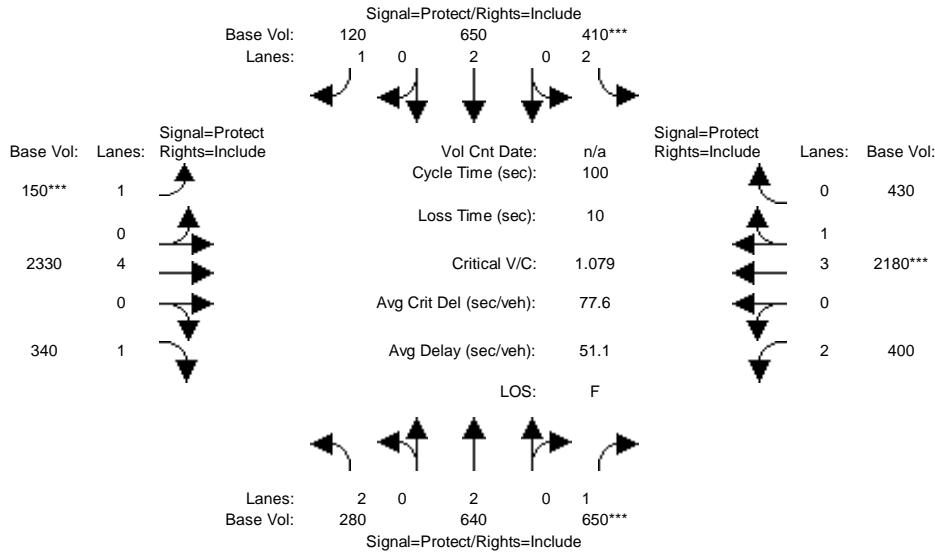


Street Name:	S. Western Ave.						W. 190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	200	1550	300	160	1150	370	440	1690	440	260	1310	340
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	200	1550	300	160	1150	370	440	1690	440	260	1310	340
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	200	1550	300	160	1150	370	440	1690	440	260	1310	340
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	200	1550	300	160	1150	370	440	1690	440	260	1310	340
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	200	1550	300	160	1150	370	440	1690	440	260	1310	340
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.38	0.62
Final Sat.:	5760	4800	1600	5760	4800	1600	5760	4800	1600	5760	3811	989
Capacity Analysis Module:												
Vol/Sat:	0.03	0.32	0.19	0.03	0.24	0.23	0.08	0.35	0.28	0.05	0.34	0.34
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM

Intersection #35: W. Artesia Blvd. & Vermont Av.e

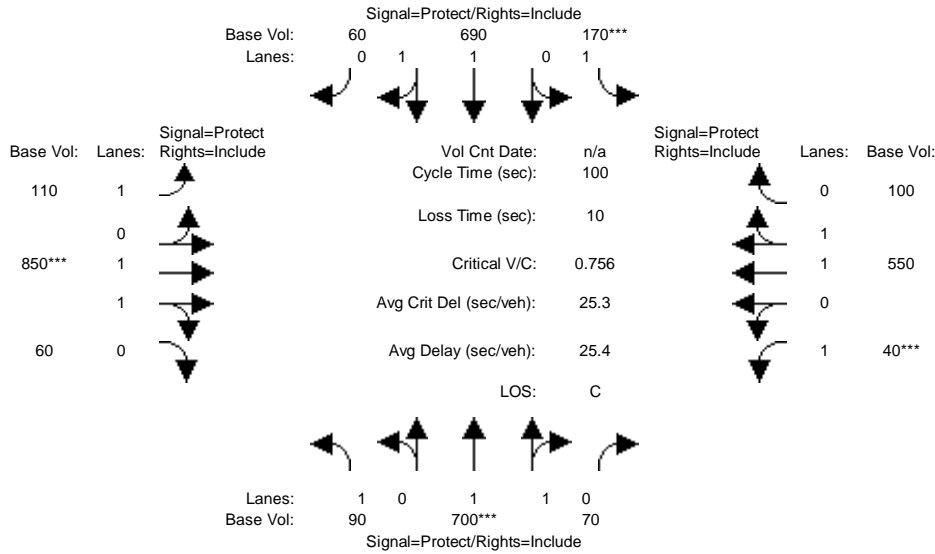


Street Name:	Vermont Ave.						W. Artesia Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	280	640	650	410	650	120	150	2330	340	400	2180	430
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	280	640	650	410	650	120	150	2330	340	400	2180	430
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	280	640	650	410	650	120	150	2330	340	400	2180	430
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	280	640	650	410	650	120	150	2330	340	400	2180	430
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	280	640	650	410	650	120	150	2330	340	400	2180	430
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	1.00	4.00	1.00	2.00	3.34	0.66
Final Sat.:	5760	3200	1600	5760	3200	1600	1600	6400	1600	5760	5346	1054
Capacity Analysis Module:												
Vol/Sat:	0.05	0.20	0.41	0.07	0.20	0.08	0.09	0.36	0.21	0.07	0.41	0.41
Crit Moves:			***	***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM

Intersection #36: Alameda St. & Compton Blvd.

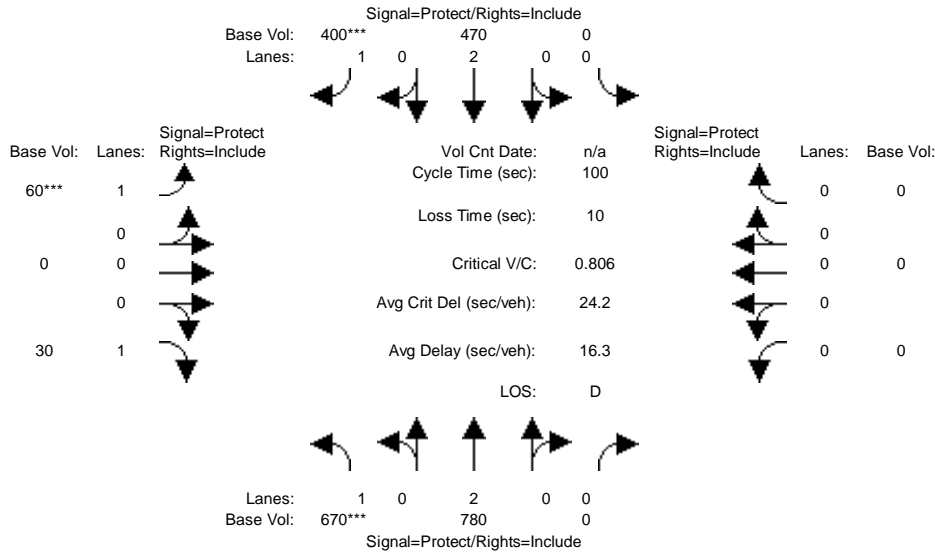


Street Name:	Alameda St.						Compton Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	90	700	70	170	690	60	110	850	60	40	550	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	700	70	170	690	60	110	850	60	40	550	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	700	70	170	690	60	110	850	60	40	550	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	700	70	170	690	60	110	850	60	40	550	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	90	700	70	170	690	60	110	850	60	40	550	100
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.82	0.18	1.00	1.84	0.16	1.00	1.87	0.13	1.00	1.69	0.31
Final Sat.:	1600	2909	291	1600	2944	256	1600	2989	211	1600	2708	492
Capacity Analysis Module:												
Vol/Sat:	0.06	0.24	0.24	0.11	0.23	0.23	0.07	0.28	0.28	0.03	0.20	0.20
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM

Intersection #37: Alameda St. & SR 91 EB Ramps

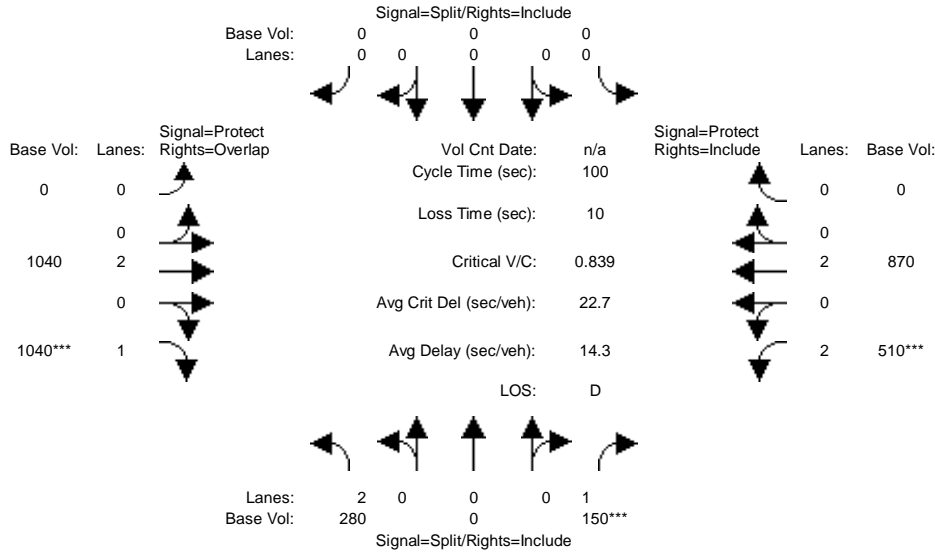


Street Name:	Alameda St.						SR 91 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	670	780	0	0	470	400	60	0	30	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	670	780	0	0	470	400	60	0	30	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	670	780	0	0	470	400	60	0	30	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	670	780	0	0	470	400	60	0	30	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	670	780	0	0	470	400	60	0	30	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	3200	0	0	3200	1600	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.42	0.24	0.00	0.00	0.15	0.25	0.04	0.00	0.02	0.00	0.00	0.00
Crit Moves:	***					***	***					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM Mitigated

Intersection #1: Victoria St. & Drive D

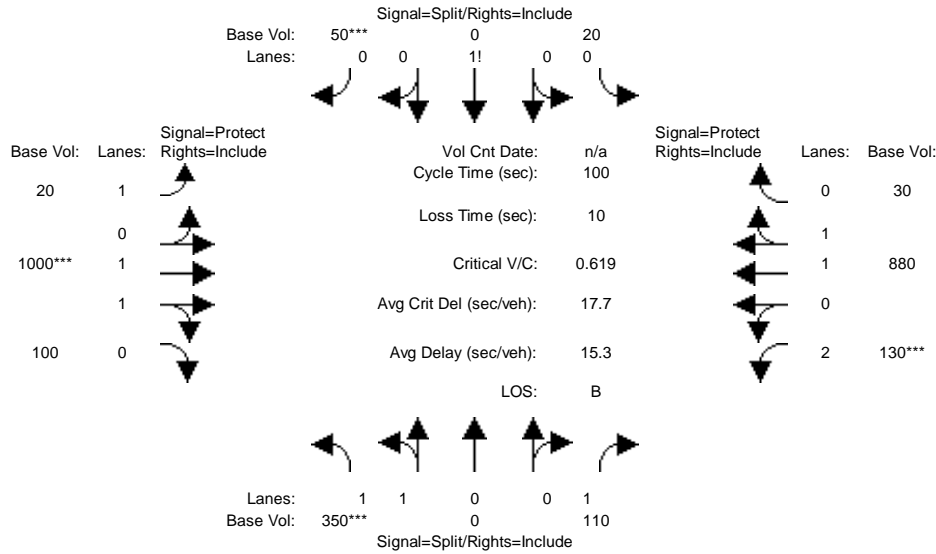


Street Name:	Drive D						Victoria St..					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	280	0	150	0	0	0	0	1040	1040	510	870	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	280	0	150	0	0	0	0	1040	1040	510	870	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	280	0	150	0	0	0	0	1040	1040	510	870	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	280	0	150	0	0	0	0	1040	1040	510	870	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	280	0	150	0	0	0	0	1040	1040	510	870	0
OvlAdjVol:												890
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	1.00	2.00	2.00	0.00
Final Sat.:	5760	0	1600	0	0	0	0	3200	1600	5760	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.09	0.00	0.00	0.00	0.00	0.33	0.65	0.09	0.27	0.00
OvlAdjV/S:												0.56
Crit Moves:												****

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM Mitigated

Intersection #3: Victoria St. & Birchknoll Dr.

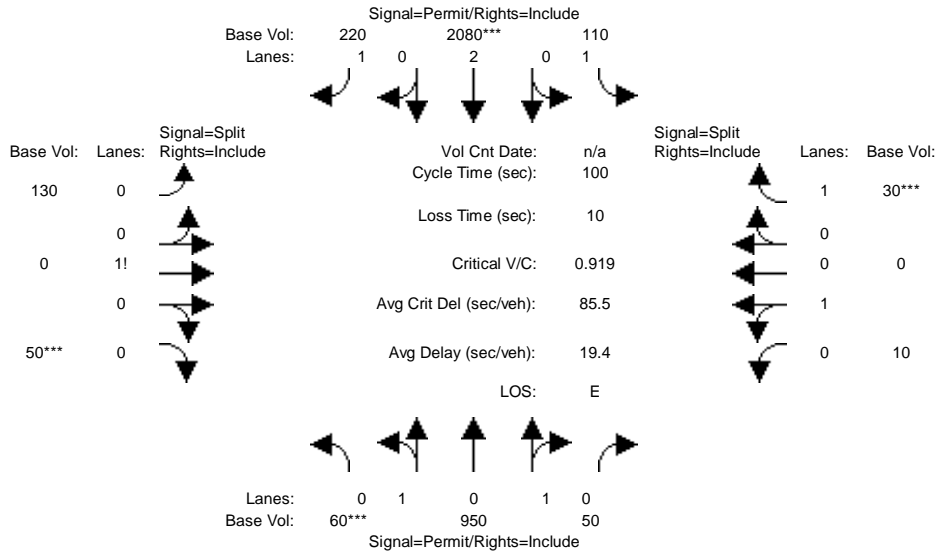


Street Name:	Victoria St.						Birchknoll Dr.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	350	0	110	20	0	50	20	1000	100	130	880	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	350	0	110	20	0	50	20	1000	100	130	880	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	350	0	110	20	0	50	20	1000	100	130	880	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	350	0	110	20	0	50	20	1000	100	130	880	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	350	0	110	20	0	50	20	1000	100	130	880	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	2.00	0.00	1.00	0.29	0.00	0.71	1.00	1.82	0.18	2.00	1.93	0.07
Final Sat.:	3200	0	1600	457	0	1143	1600	2909	291	5760	3095	105
Capacity Analysis Module:												
Vol/Sat:	0.11	0.00	0.07	0.04	0.00	0.04	0.01	0.34	0.34	0.02	0.28	0.28
Crit Moves:	***					***		***		***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM Mitigated

Intersection #5: Central Ave. & Charles Willard St.

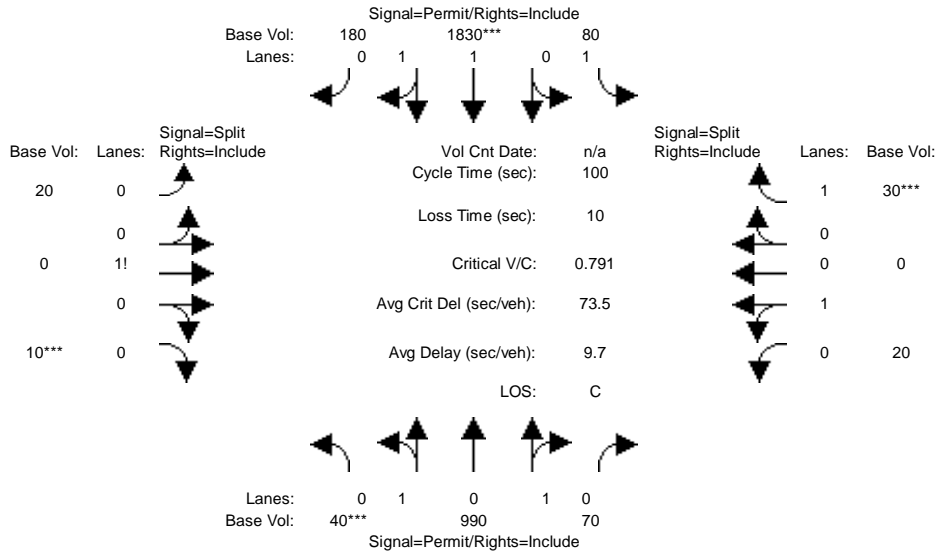


Street Name:	Central Ave.						Charles Willard St.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	60	950	50	110	2080	220	130	0	50	10	0	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	950	50	110	2080	220	130	0	50	10	0	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	950	50	110	2080	220	130	0	50	10	0	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	950	50	110	2080	220	130	0	50	10	0	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	60	950	50	110	2080	220	130	0	50	10	0	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.11	1.80	0.09	1.00	2.00	1.00	0.72	0.00	0.28	1.00	0.00	1.00
Final Sat.:	181	2868	151	1600	3200	1600	1156	0	444	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.33	0.33	0.07	0.65	0.14	0.11	0.00	0.11	0.01	0.00	0.02
Crit Moves:	***				***				***			***

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM Mitigated

Intersection #6: Central Ave. & Project Driveway/Beachey Pl.

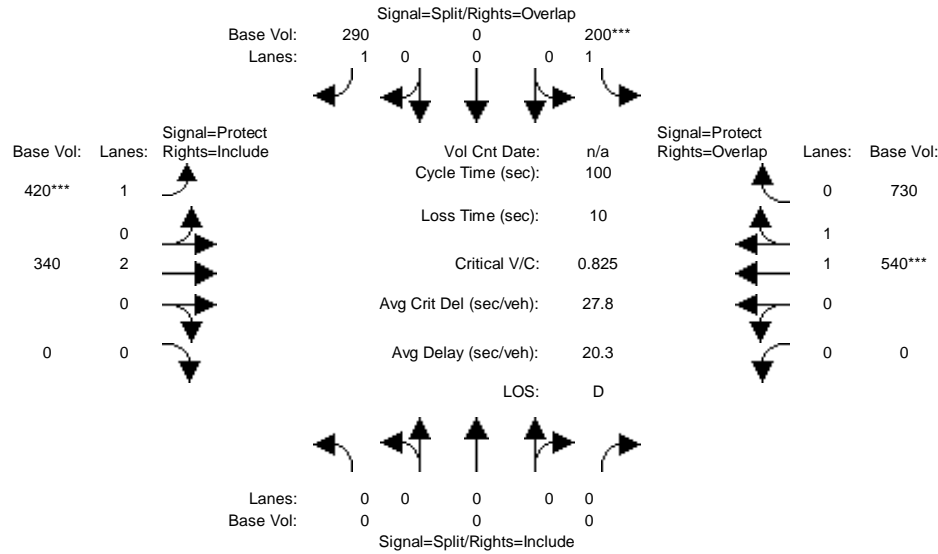


Street Name:	Central Ave.						Beachey Pl.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	40	990	70	80	1830	180	20	0	10	20	0	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	990	70	80	1830	180	20	0	10	20	0	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	990	70	80	1830	180	20	0	10	20	0	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	990	70	80	1830	180	20	0	10	20	0	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	40	990	70	80	1830	180	20	0	10	20	0	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.07	1.80	0.13	1.00	1.82	0.18	0.67	0.00	0.33	1.00	0.00	1.00
Final Sat.:	116	2880	204	1600	2913	287	1067	0	533	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.34	0.34	0.05	0.63	0.63	0.02	0.00	0.02	0.01	0.00	0.02
Crit Moves:	***			***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM Mitigated

Intersection #9: University Dr. & Toro Center Dr.

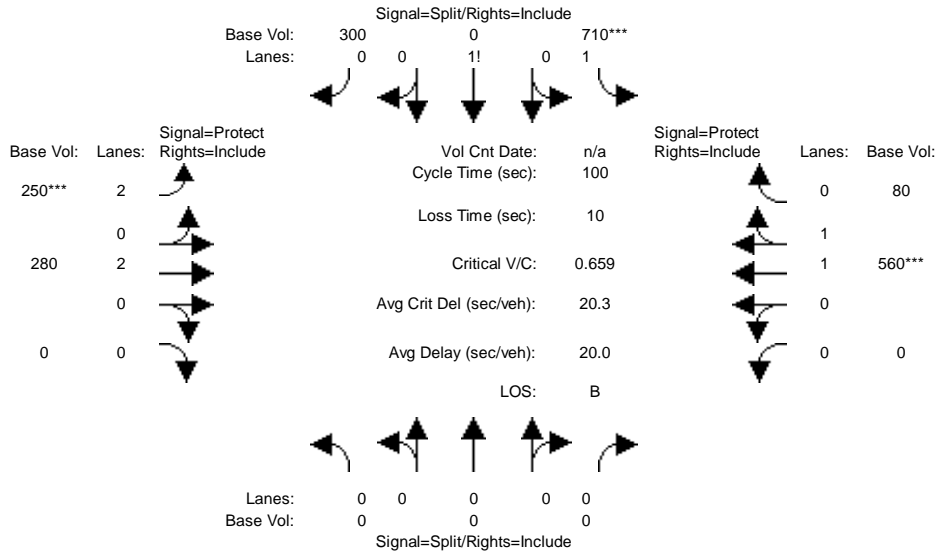


Street Name:	University Dr.						Toro Center Dr.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	200	0	290	420	340	0	0	540	730
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	200	0	290	420	340	0	0	540	730
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	200	0	290	420	340	0	0	540	730
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	200	0	290	420	340	0	0	540	730
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	200	0	290	420	340	0	0	540	730
OvlAdjVol:							0 530					
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.00	1.00
Final Sat.:	0	0	0	1600	0	1600	1600	3200	0	0	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.00	0.18	0.26	0.11	0.00	0.00	0.34	0.46
OvlAdjV/S:							0.00 0.33					
Crit Moves:				****				****				****

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM Mitigated

Intersection #10: Albertoni St. & SR 91 EB Ramps

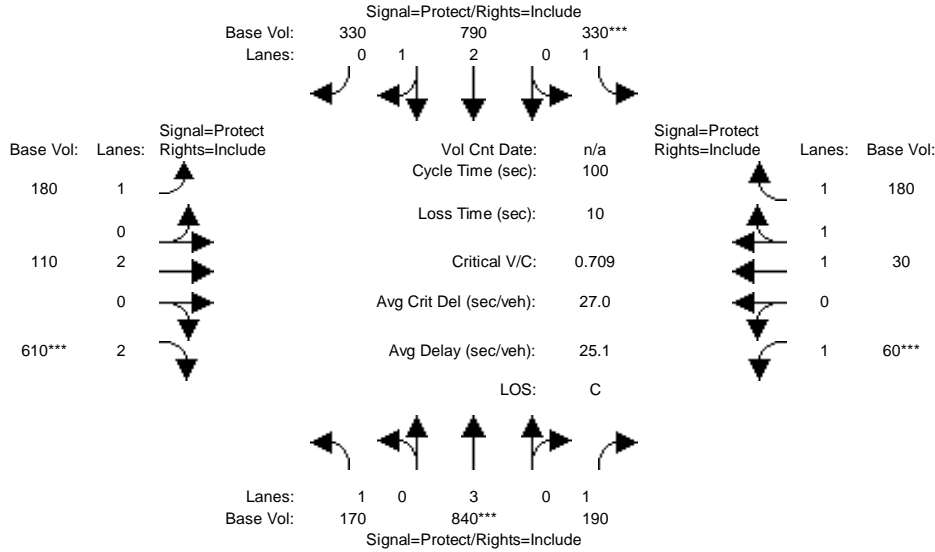


Street Name:	Albertoni St.						SR 91 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	710	0	300	250	280	0	0	560	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	710	0	300	250	280	0	0	560	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	710	0	300	250	280	0	0	560	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	710	0	300	250	280	0	0	560	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	710	0	300	250	280	0	0	560	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.41	0.00	0.59	2.00	2.00	0.00	0.00	1.75	0.25
Final Sat.:	0	0	0	2250	0	950	5760	3200	0	0	2800	400
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.32	0.00	0.32	0.04	0.09	0.00	0.00	0.20	0.20
Crit Moves:				****			****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM Mitigated

Intersection #12: Avalon Blvd. & Albertoni St.

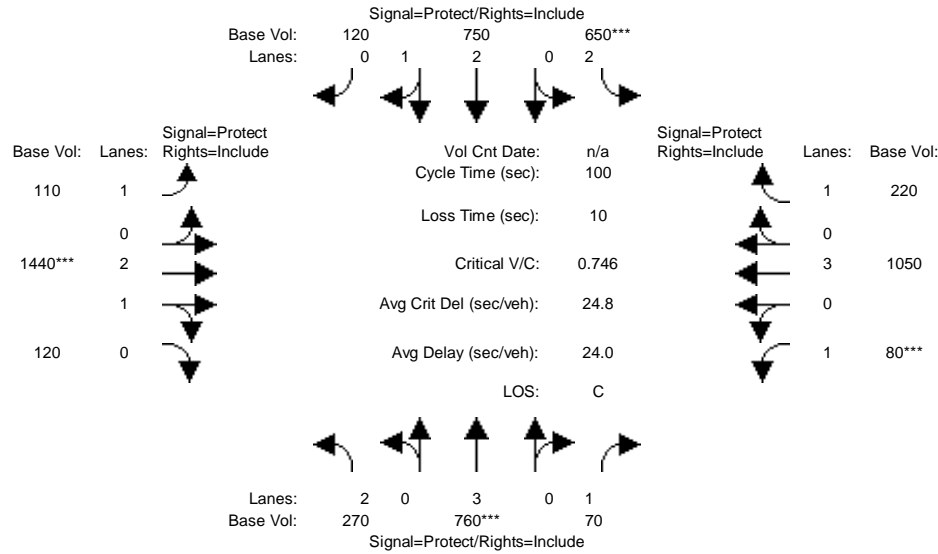


Street Name:	Avalon Blvd.						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	170	840	190	330	790	330	180	110	610	60	30	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	170	840	190	330	790	330	180	110	610	60	30	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	170	840	190	330	790	330	180	110	610	60	30	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	170	840	190	330	790	330	180	110	610	60	30	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	170	840	190	330	790	330	180	110	610	60	30	180
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.12	0.88	1.00	2.00	2.00	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3386	1414	1600	3200	3200	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.11	0.17	0.12	0.21	0.23	0.23	0.11	0.03	0.19	0.04	0.02	0.06
Crit Moves:	****			****					****	****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM Mitigated

Intersection #13: Avalon Blvd. & Victoria St.

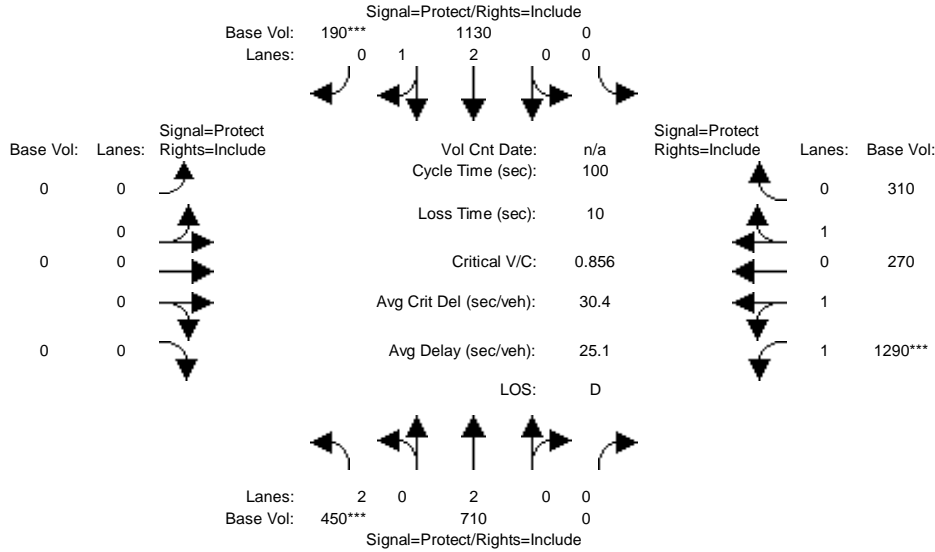


Street Name:	Avalon Blvd.						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	270	760	70	650	750	120	110	1440	120	80	1050	220
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	270	760	70	650	750	120	110	1440	120	80	1050	220
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	270	760	70	650	750	120	110	1440	120	80	1050	220
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	270	760	70	650	750	120	110	1440	120	80	1050	220
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	270	760	70	650	750	120	110	1440	120	80	1050	220
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	2.59	0.41	1.00	2.77	0.23	1.00	3.00	1.00
Final Sat.:	5760	4800	1600	5760	4138	662	1600	4431	369	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.16	0.04	0.11	0.18	0.18	0.07	0.33	0.32	0.05	0.22	0.14
Crit Moves:	****			****				****		****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM Mitigated

Intersection #14: Central Ave. & Artesia Blvd.

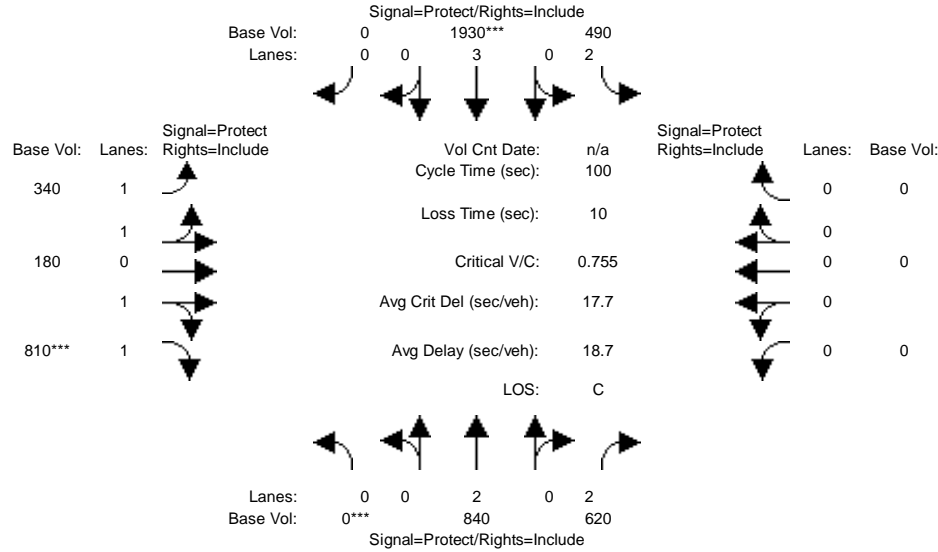


Street Name:	Central Ave.						Artesia Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	450	710	0	0	1130	190	0	0	0	1290	270	310
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	450	710	0	0	1130	190	0	0	0	1290	270	310
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	450	710	0	0	1130	190	0	0	0	1290	270	310
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	450	710	0	0	1130	190	0	0	0	1290	270	310
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	450	710	0	0	1130	190	0	0	0	1290	270	310
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	2.57	0.43	0.00	0.00	0.00	2.00	0.47	0.53
Final Sat.:	5760	3200	0	0	4109	691	0	0	0	3200	745	855
Capacity Analysis Module:												
Vol/Sat:	0.08	0.22	0.00	0.00	0.27	0.28	0.00	0.00	0.00	0.40	0.36	0.36
Crit Moves:	***					***				***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM Mitigated

Intersection #15: Central Ave. & Albertoni St./Artesia Blvd. EB

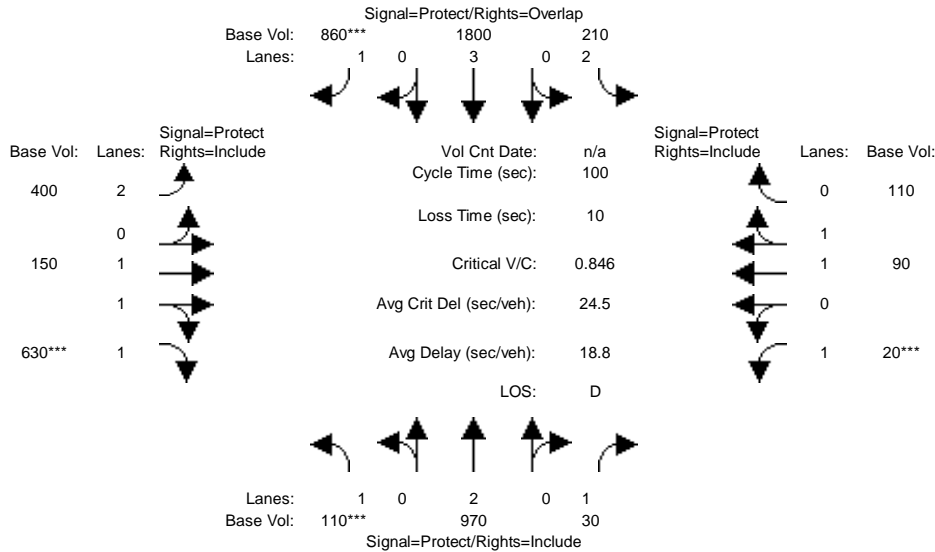


Street Name:	Central Ave.						Albertoni St./Artesia Blvd. EB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	840	620	490	1930	0	340	180	810	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	840	620	490	1930	0	340	180	810	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	840	620	490	1930	0	340	180	810	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	840	620	490	1930	0	340	180	810	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	840	620	490	1930	0	340	180	810	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	3.00	0.00	1.31	0.69	2.00	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	4800	0	2092	1108	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.19	0.09	0.40	0.00	0.16	0.16	0.25	0.00	0.00	0.00
Crit Moves:	***				***				***			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM Mitigated

Intersection #16: Central Ave. & Victoria St.

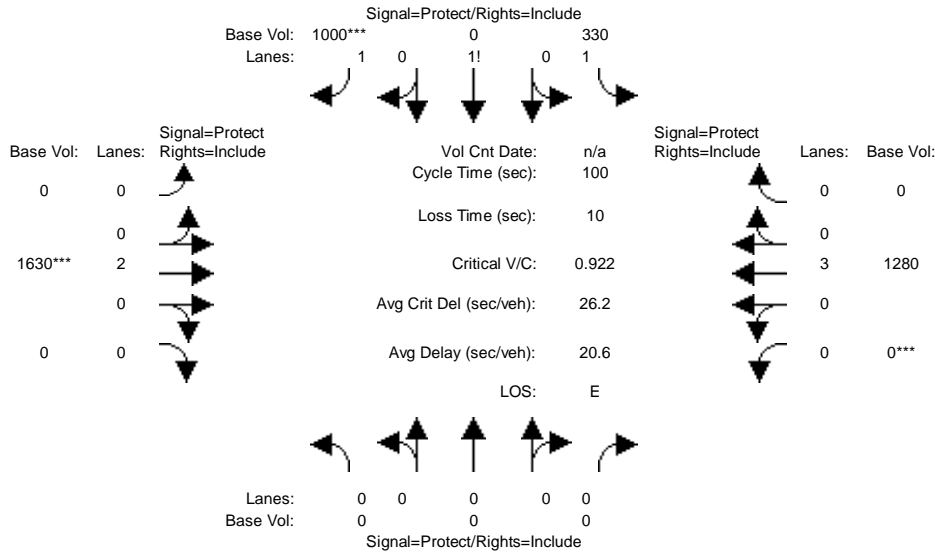


Street Name:	Central Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	110	970	30	210	1800	860	400	150	630	20	90	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	970	30	210	1800	860	400	150	630	20	90	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	110	970	30	210	1800	860	400	150	630	20	90	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	110	970	30	210	1800	860	400	150	630	20	90	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	110	970	30	210	1800	860	400	150	630	20	90	110
OvlAdjVol:	749											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	3.00	1.00	2.00	1.00	2.00	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	5760	4800	1600	5760	1600	3200	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.30	0.02	0.04	0.38	0.54	0.07	0.09	0.20	0.01	0.06	0.07
OvlAdjV/S:	0.47											
Crit Moves:	***			***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM Mitigated

Intersection #20: I-110 SB Off-Ramp & 190th St.

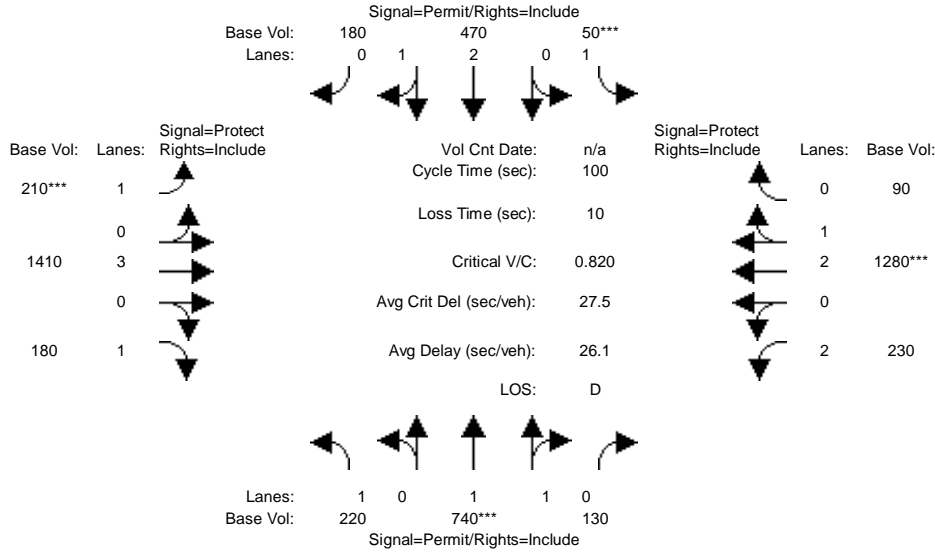


Street Name:	I-110 SB Off-Ramp						190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	330	0	1000	0	1630	0	0	1280	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	330	0	1000	0	1630	0	0	1280	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	330	0	1000	0	1630	0	0	1280	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	330	0	1000	0	1630	0	0	1280	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	330	0	1000	0	1630	0	0	1280	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	2.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	3200	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.21	0.00	0.31	0.00	0.51	0.00	0.00	0.27	0.00
Crit Moves:				***		***		***		***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM Mitigated

Intersection #22: Figueroa St. & 190th St./Victoria St.

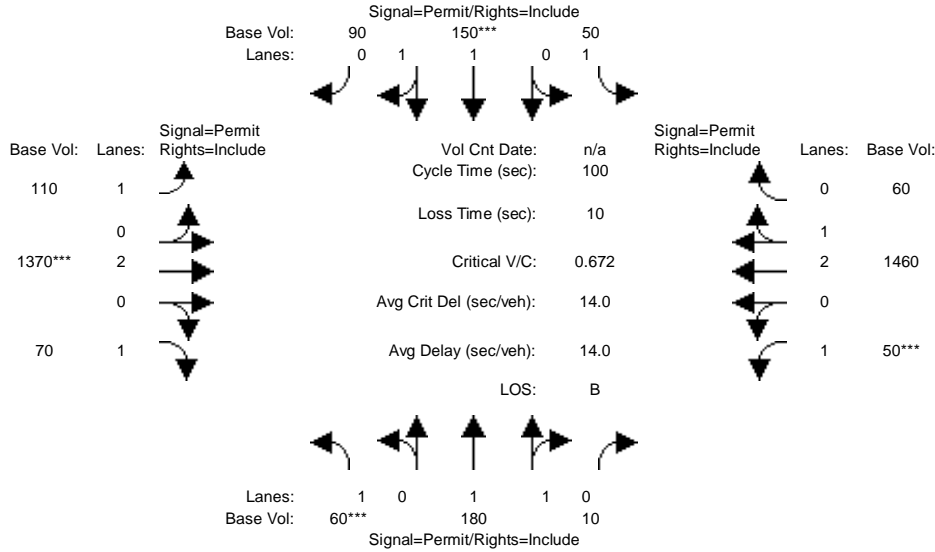


Street Name:	Figueroa St.						190th St./Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	220	740	130	50	470	180	210	1410	180	230	1280	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	220	740	130	50	470	180	210	1410	180	230	1280	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	220	740	130	50	470	180	210	1410	180	230	1280	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	220	740	130	50	470	180	210	1410	180	230	1280	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	220	740	130	50	470	180	210	1410	180	230	1280	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	1.00	1.70	0.30	1.00	2.17	0.83	1.00	3.00	1.00	2.00	2.80	0.20
Final Sat.:	1600	2722	478	1600	3471	1329	1600	4800	1600	5760	4485	315
Capacity Analysis Module:												
Vol/Sat:	0.14	0.27	0.27	0.03	0.14	0.14	0.13	0.29	0.11	0.04	0.29	0.29
Crit Moves:		****		****			****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM Mitigated

Intersection #23: Broadway & Victoria St.

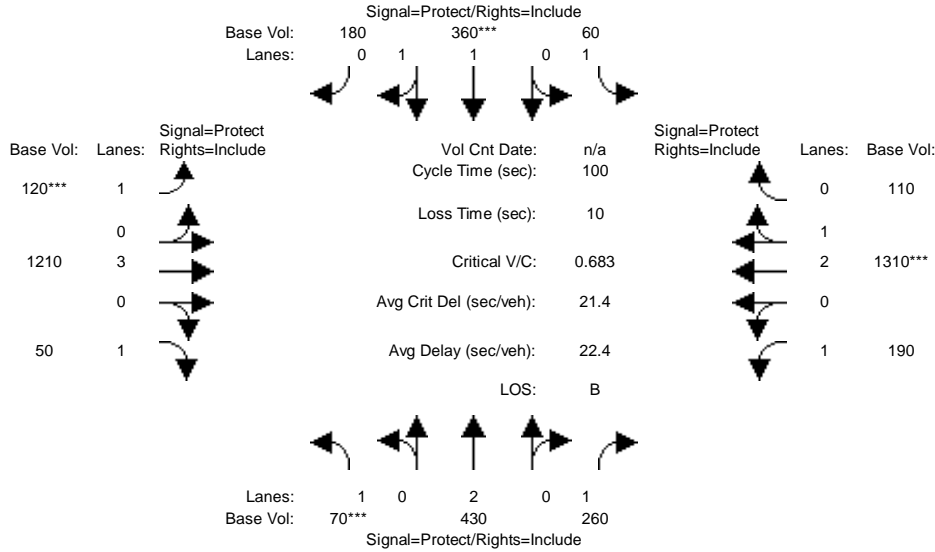


Street Name:	Broadway						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	60	180	10	50	150	90	110	1370	70	50	1460	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	180	10	50	150	90	110	1370	70	50	1460	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	180	10	50	150	90	110	1370	70	50	1460	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	180	10	50	150	90	110	1370	70	50	1460	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	60	180	10	50	150	90	110	1370	70	50	1460	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.89	0.11	1.00	1.25	0.75	1.00	2.00	1.00	1.00	2.88	0.12
Final Sat.:	1600	3032	168	1600	2000	1200	1600	3200	1600	1600	4611	189
Capacity Analysis Module:												
Vol/Sat:	0.04	0.06	0.06	0.03	0.08	0.08	0.07	0.43	0.04	0.03	0.32	0.32
Crit Moves:	***				***			***			***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM Mitigated

Intersection #24: Main St. & Victoria St.

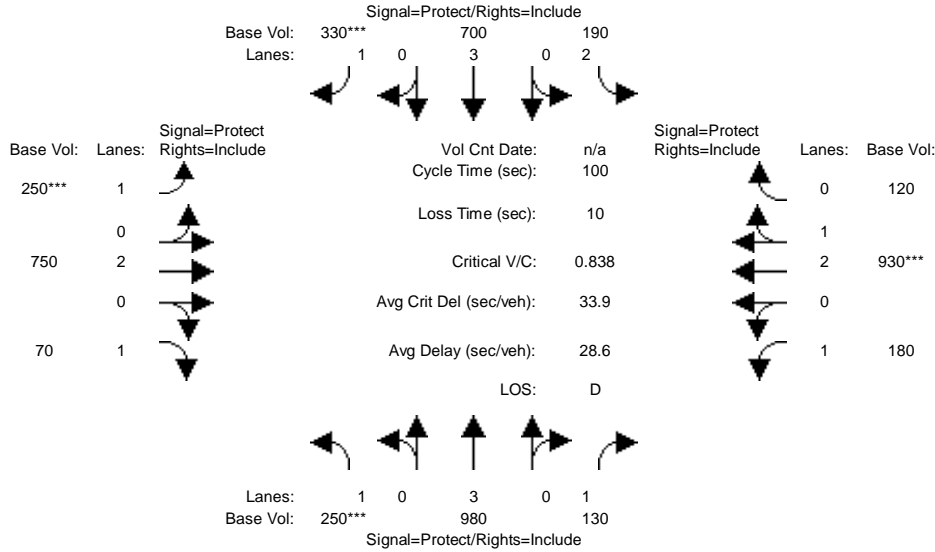


Street Name:	Main St.						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	70	430	260	60	360	180	120	1210	50	190	1310	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	430	260	60	360	180	120	1210	50	190	1310	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	430	260	60	360	180	120	1210	50	190	1310	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	430	260	60	360	180	120	1210	50	190	1310	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	70	430	260	60	360	180	120	1210	50	190	1310	110
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.33	0.67	1.00	3.00	1.00	1.00	2.77	0.23
Final Sat.:	1600	3200	1600	1600	2133	1067	1600	4800	1600	1600	4428	372
Capacity Analysis Module:												
Vol/Sat:	0.04	0.13	0.16	0.04	0.17	0.17	0.08	0.25	0.03	0.12	0.30	0.30
Crit Moves:	***				***		***				***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM Mitigated

Intersection #26: Avalon Blvd. & Del Amo Blvd.

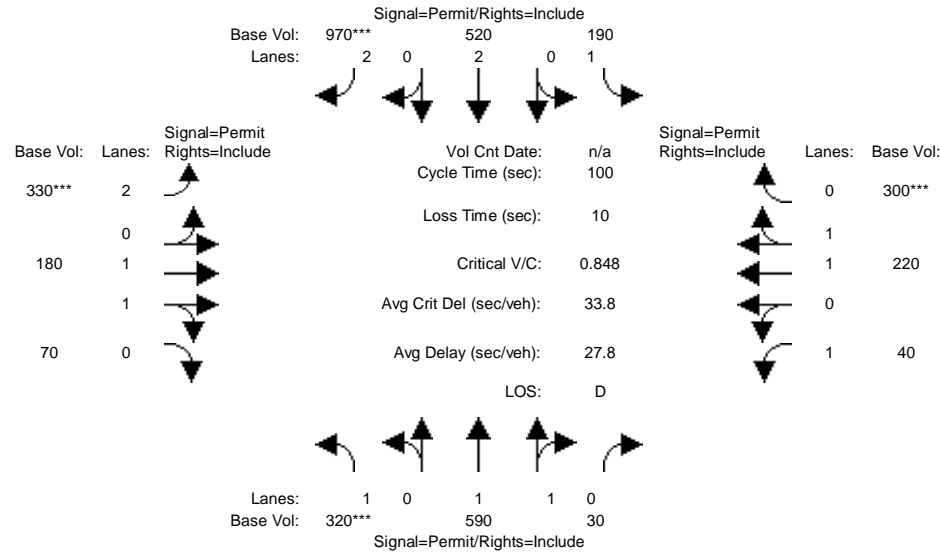


Street Name:	Avalon Blvd.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	250	980	130	190	700	330	250	750	70	180	930	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	250	980	130	190	700	330	250	750	70	180	930	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	250	980	130	190	700	330	250	750	70	180	930	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	250	980	130	190	700	330	250	750	70	180	930	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	250	980	130	190	700	330	250	750	70	180	930	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	1.00	2.00	1.00	1.00	2.66	0.34
Final Sat.:	1600	4800	1600	5760	4800	1600	1600	3200	1600	1600	4251	549
Capacity Analysis Module:												
Vol/Sat:	0.16	0.20	0.08	0.03	0.15	0.21	0.16	0.23	0.04	0.11	0.22	0.22
Crit Moves:	***					***	***				***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday AM Mitigated

Intersection #29: Central Ave. & University Dr.

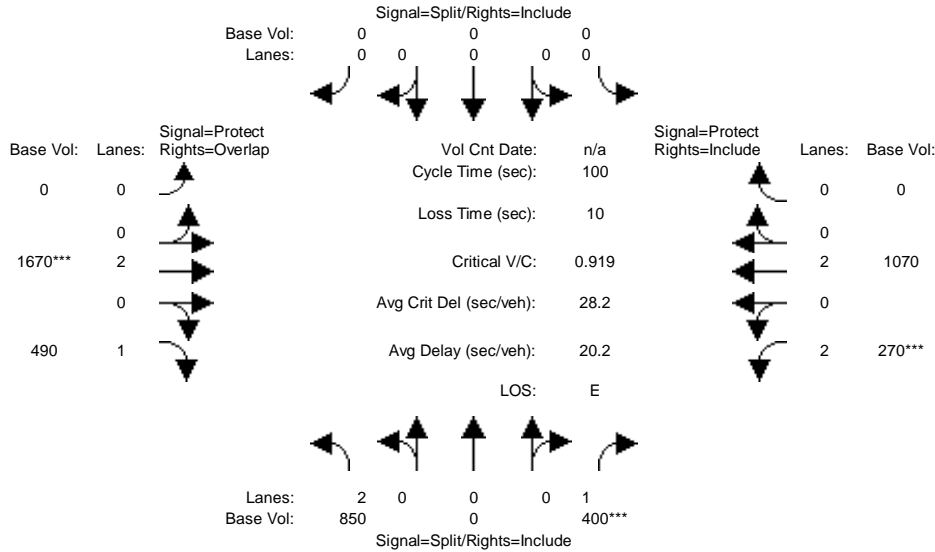


Street Name:	Central Ave.						University Dr.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	320	590	30	190	520	970	330	180	70	40	220	300
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	320	590	30	190	520	970	330	180	70	40	220	300
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	320	590	30	190	520	970	330	180	70	40	220	300
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	320	590	30	190	520	970	330	180	70	40	220	300
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	320	590	30	190	520	970	330	180	70	40	220	300
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.90	0.10	1.00	2.00	2.00	2.00	1.44	0.56	1.00	1.00	1.00
Final Sat.:	1600	3045	155	1600	3200	3200	5760	2304	896	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.20	0.19	0.19	0.12	0.16	0.30	0.06	0.08	0.08	0.03	0.14	0.19
Crit Moves:	***					***	***					***

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM Mitigated

Intersection #1: Victoria St. & Drive D

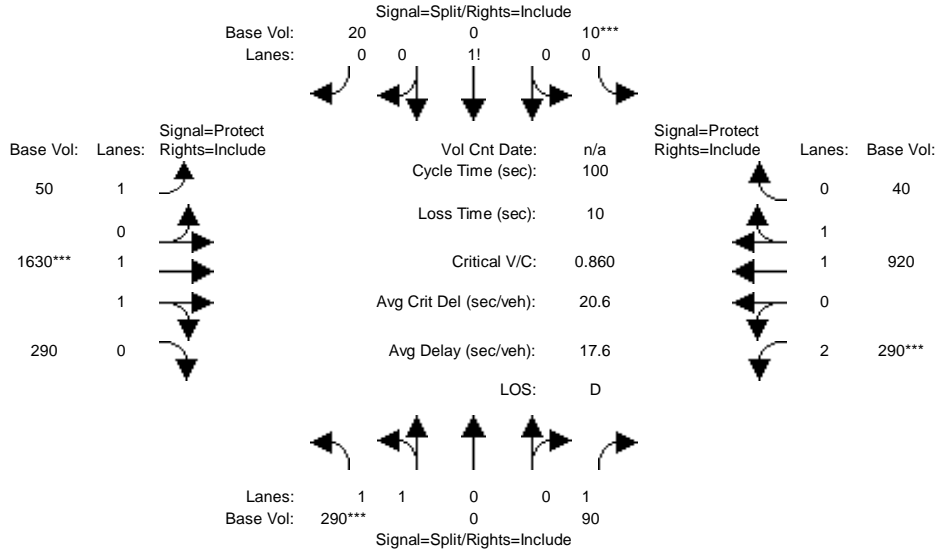


Street Name:	Drive D						Victoria St..					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	850	0	400	0	0	0	0	1670	490	270	1070	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	850	0	400	0	0	0	0	1670	490	270	1070	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	850	0	400	0	0	0	0	1670	490	270	1070	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	850	0	400	0	0	0	0	1670	490	270	1070	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	850	0	400	0	0	0	0	1670	490	270	1070	0
OvlAdjVol:												90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	1.00	2.00	2.00	0.00
Final Sat.:	5760	0	1600	0	0	0	0	3200	1600	5760	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.15	0.00	0.25	0.00	0.00	0.00	0.00	0.52	0.31	0.05	0.33	0.00
OvlAdjV/S:												0.06
Crit Moves:	****						****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM Mitigated

Intersection #3: Victoria St. & Birchknoll Dr.

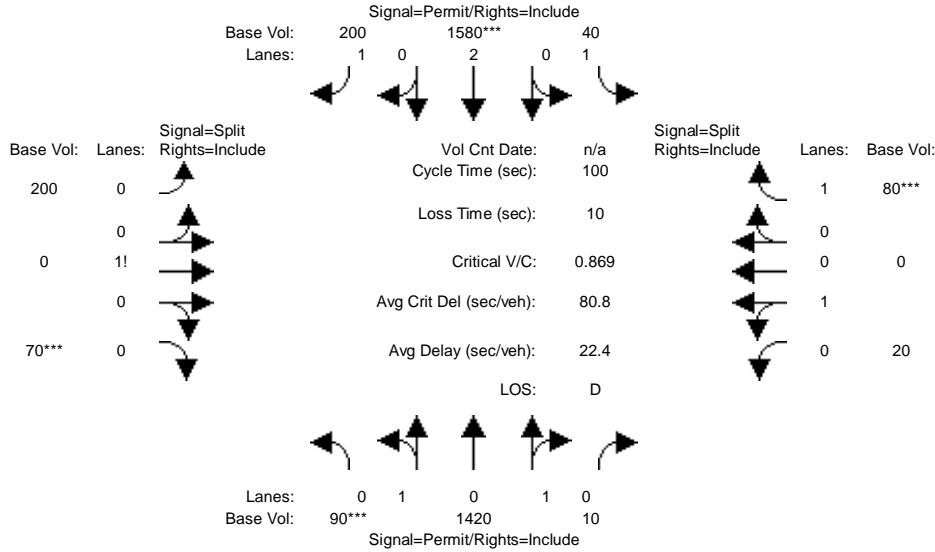


Street Name:	Victoria St.						Birchknoll Dr.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	290	0	90	10	0	20	50	1630	290	290	920	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	290	0	90	10	0	20	50	1630	290	290	920	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	290	0	90	10	0	20	50	1630	290	290	920	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	290	0	90	10	0	20	50	1630	290	290	920	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	290	0	90	10	0	20	50	1630	290	290	920	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	2.00	0.00	1.00	0.33	0.00	0.67	1.00	1.70	0.30	2.00	1.92	0.08
Final Sat.:	3200	0	1600	533	0	1067	1600	2717	483	5760	3067	133
Capacity Analysis Module:												
Vol/Sat:	0.09	0.00	0.06	0.02	0.00	0.02	0.03	0.60	0.60	0.05	0.30	0.30
Crit Moves:	***			***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM Mitigated

Intersection #5: Central Ave. & Charles Willard St.

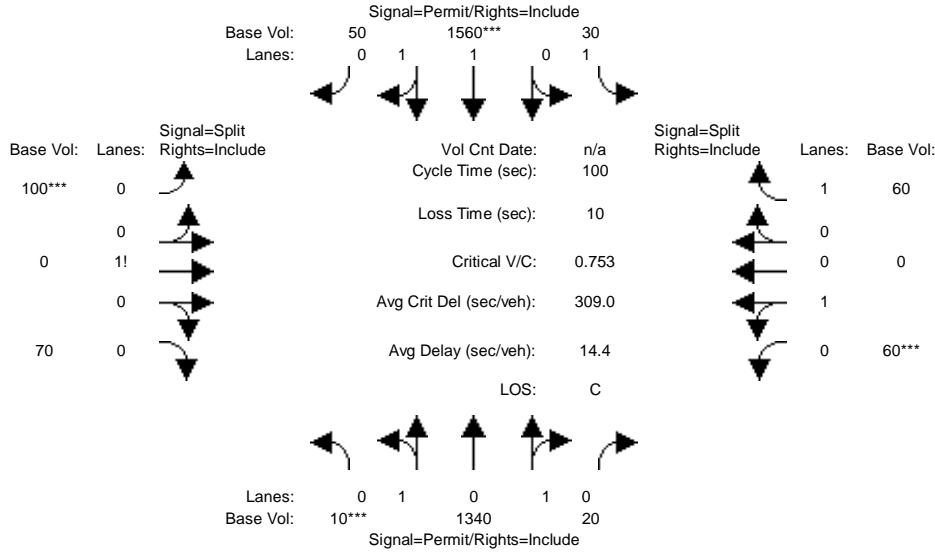


Street Name:	Central Ave.						Charles Willard St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	90	1420	10	40	1580	200	200	0	70	20	0	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	1420	10	40	1580	200	200	0	70	20	0	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	1420	10	40	1580	200	200	0	70	20	0	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	1420	10	40	1580	200	200	0	70	20	0	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	90	1420	10	40	1580	200	200	0	70	20	0	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.12	1.87	0.01	1.00	2.00	1.00	0.74	0.00	0.26	1.00	0.00	1.00
Final Sat.:	189	2989	21	1600	3200	1600	1185	0	415	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.48	0.48	0.03	0.49	0.13	0.17	0.00	0.17	0.01	0.00	0.05
Crit Moves:	***			***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM Mitigated

Intersection #6: Centrral Ave. & Project Driveway/Beachey Pl.

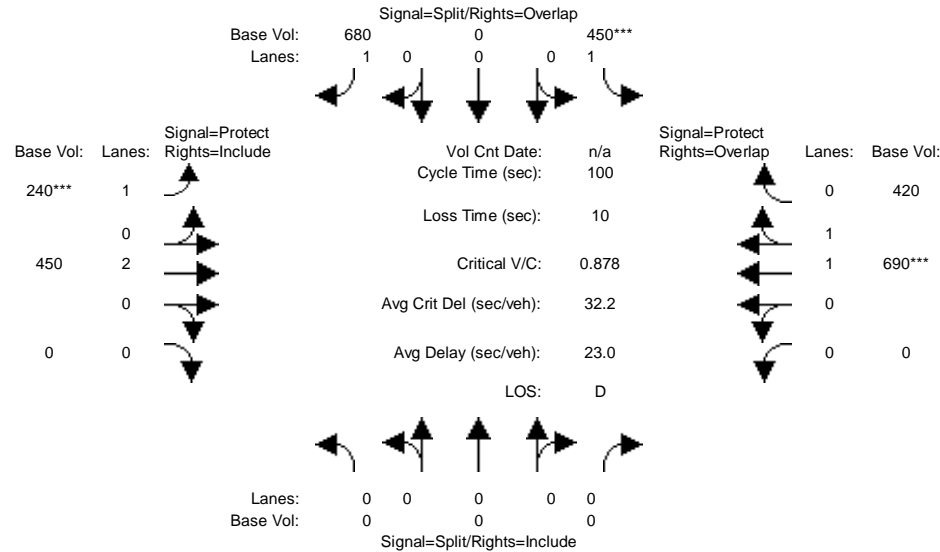


Street Name:	Central Ave.						Beachey Pl.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	10	1340	20	30	1560	50	100	0	70	60	0	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	1340	20	30	1560	50	100	0	70	60	0	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	10	1340	20	30	1560	50	100	0	70	60	0	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	1340	20	30	1560	50	100	0	70	60	0	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	10	1340	20	30	1560	50	100	0	70	60	0	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	1.96	0.03	1.00	1.94	0.06	0.59	0.00	0.41	1.00	0.00	1.00
Final Sat.:	23	3130	47	1600	3101	99	941	0	659	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.43	0.43	0.02	0.50	0.50	0.11	0.00	0.11	0.04	0.00	0.04
Crit Moves:	***				***		***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM Mitigated

Intersection #9: University Dr. & Toro Center Dr.

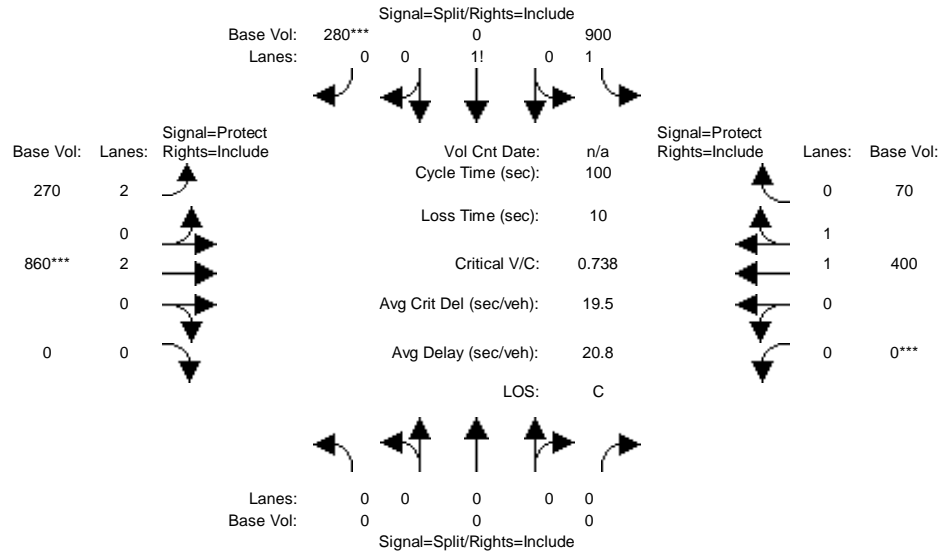


Street Name:	University Dr.						Toro Center Dr.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	450	0	680	240	450	0	0	690	420
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	450	0	680	240	450	0	0	690	420
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	450	0	680	240	450	0	0	690	420
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	450	0	680	240	450	0	0	690	420
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	450	0	680	240	450	0	0	690	420
OvlAdjVol:							440			79		
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.24	0.76
Final Sat.:	0	0	0	1600	0	1600	1600	3200	0	0	1989	1211
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.28	0.00	0.43	0.15	0.14	0.00	0.00	0.35	0.35
OvlAdjV/S:							0.28					
Crit Moves:				****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM Mitigated

Intersection #10: Albertoni St. & SR 91 EB Ramps

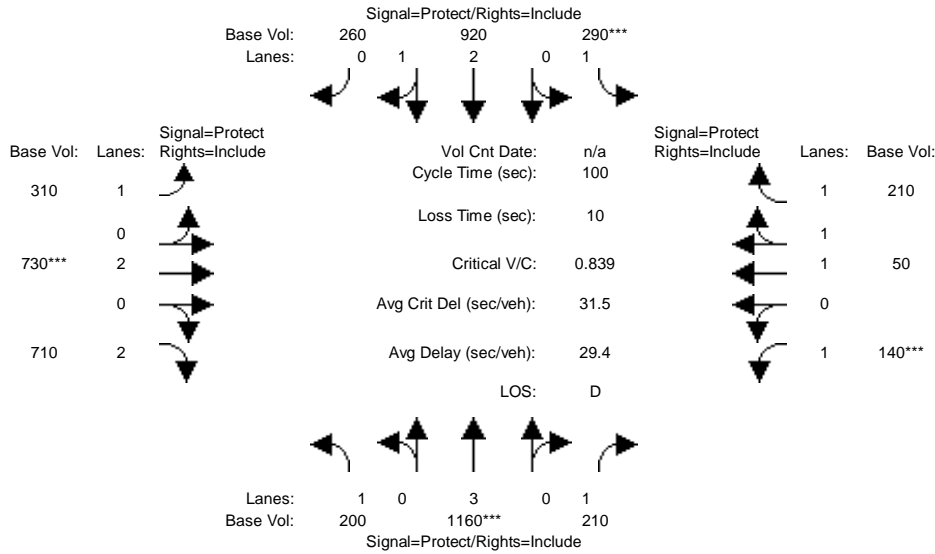


Street Name:	Albertoni St.						SR 91 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	900	0	280	270	860	0	0	400	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	900	0	280	270	860	0	0	400	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	900	0	280	270	860	0	0	400	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	900	0	280	270	860	0	0	400	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	900	0	280	270	860	0	0	400	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.53	0.00	0.47	2.00	2.00	0.00	0.00	1.70	0.30
Final Sat.:	0	0	0	2441	0	759	5760	3200	0	0	2723	477
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.37	0.00	0.37	0.05	0.27	0.00	0.00	0.15	0.15
Crit Moves:						****		****		****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM Mitigated

Intersection #12: Avalon Blvd. & Albertoni St.

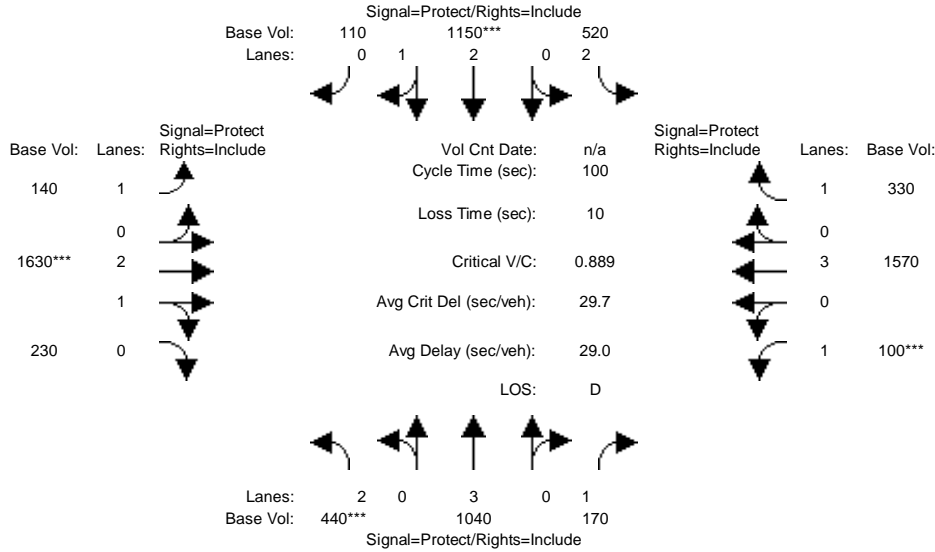


Street Name:	Avalon Blvd.						Albertoni St.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	200	1160	210	290	920	260	310	730	710	140	50	210
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	200	1160	210	290	920	260	310	730	710	140	50	210
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	200	1160	210	290	920	260	310	730	710	140	50	210
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	200	1160	210	290	920	260	310	730	710	140	50	210
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	200	1160	210	290	920	260	310	730	710	140	50	210
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.34	0.66	1.00	2.00	2.00	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3742	1058	1600	3200	3200	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.13	0.24	0.13	0.18	0.25	0.25	0.19	0.23	0.22	0.09	0.03	0.07
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM Mitigated

Intersection #13: Avalon Blvd. & Victoria St.

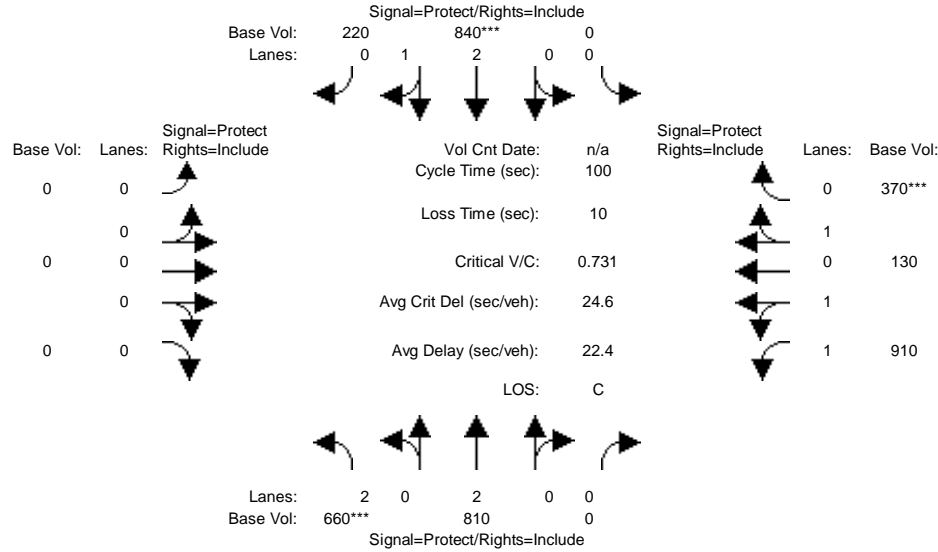


Street Name:	Avalon Blvd.						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	440	1040	170	520	1150	110	140	1630	230	100	1570	330
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	440	1040	170	520	1150	110	140	1630	230	100	1570	330
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	440	1040	170	520	1150	110	140	1630	230	100	1570	330
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	440	1040	170	520	1150	110	140	1630	230	100	1570	330
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	440	1040	170	520	1150	110	140	1630	230	100	1570	330
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	2.74	0.26	1.00	2.63	0.37	1.00	3.00	1.00
Final Sat.:	5760	4800	1600	5760	4381	419	1600	4206	594	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.22	0.11	0.09	0.26	0.26	0.09	0.39	0.39	0.06	0.33	0.21
Crit Moves:	***				***			***			***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM Mitigated

Intersection #14: Central Ave. & Artesia Blvd.

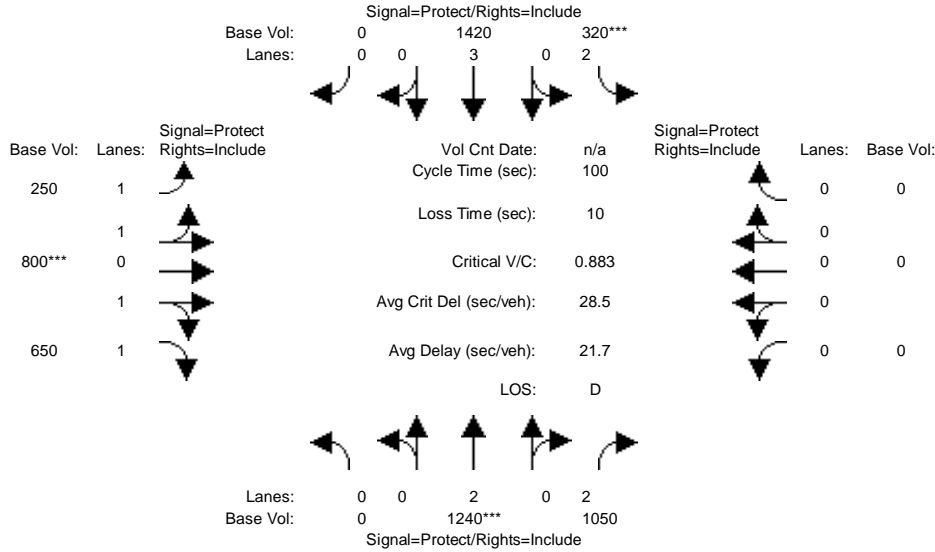


Street Name:	Central Ave.						Artesia Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	660	810	0	0	840	220	0	0	0	910	130	370
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	660	810	0	0	840	220	0	0	0	910	130	370
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	660	810	0	0	840	220	0	0	0	910	130	370
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	660	810	0	0	840	220	0	0	0	910	130	370
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	660	810	0	0	840	220	0	0	0	910	130	370
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	2.38	0.62	0.00	0.00	0.00	1.94	0.28	0.78
Final Sat.:	5760	3200	0	0	3804	996	0	0	0	3107	441	1252
Capacity Analysis Module:												
Vol/Sat:	0.11	0.25	0.00	0.00	0.22	0.22	0.00	0.00	0.00	0.29	0.29	0.30
Crit Moves:	***				***	***						***

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM Mitigated

Intersection #15: Central Ave. & Albertoni St./Artesia Blvd. EB

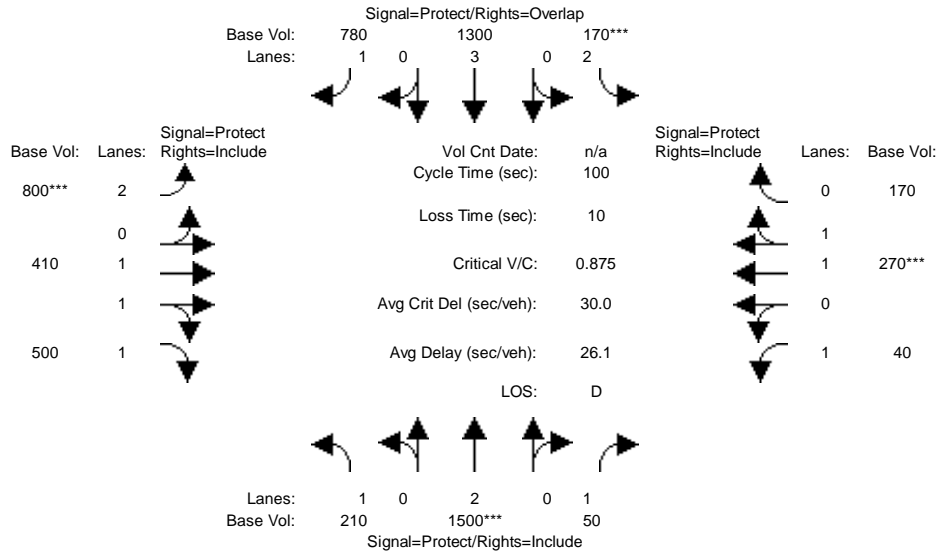


Street Name:	Central Ave.						Albertoni St./Artesia Blvd. EB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1240	1050	320	1420	0	250	800	650	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1240	1050	320	1420	0	250	800	650	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1240	1050	320	1420	0	250	800	650	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1240	1050	320	1420	0	250	800	650	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	1240	1050	320	1420	0	250	800	650	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	3.00	0.00	1.00	1.47	1.53	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	4800	0	1600	2353	2447	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.39	0.33	0.06	0.30	0.00	0.16	0.34	0.27	0.00	0.00	0.00
Crit Moves:		****		****				****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM Mitigated

Intersection #16: Central Ave. & Victoria St.

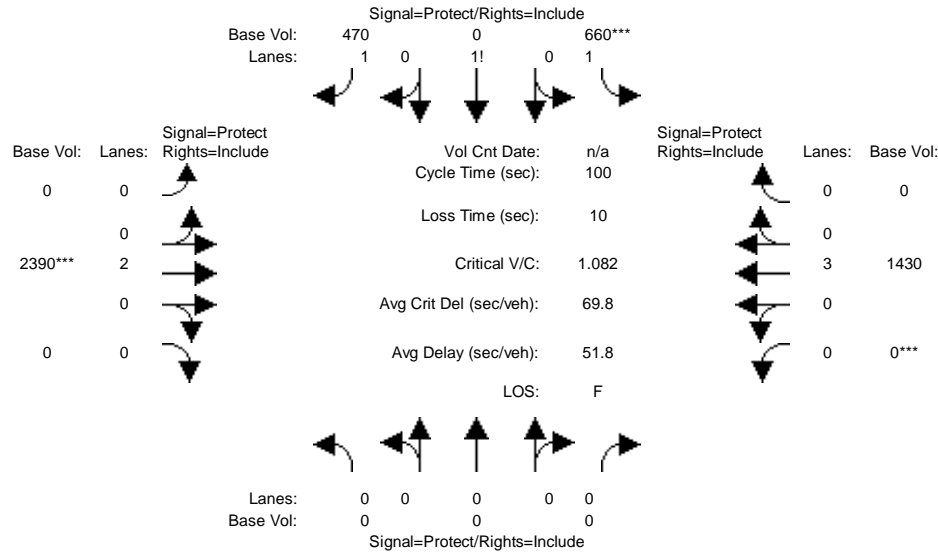


Street Name:	Central Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	210	1500	50	170	1300	780	800	410	500	40	270	170
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	210	1500	50	170	1300	780	800	410	500	40	270	170
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	210	1500	50	170	1300	780	800	410	500	40	270	170
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	210	1500	50	170	1300	780	800	410	500	40	270	170
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	210	1500	50	170	1300	780	800	410	500	40	270	170
OvlAdjVol:	558											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	3.00	1.00	2.00	1.35	1.65	1.00	1.23	0.77
Final Sat.:	1600	3200	1600	5760	4800	1600	5760	2163	2637	1600	1964	1236
Capacity Analysis Module:												
Vol/Sat:	0.13	0.47	0.03	0.03	0.27	0.49	0.14	0.19	0.19	0.03	0.14	0.14
OvlAdjV/S:	0.35											
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM Mitigated

Intersection #20: I-110 SB Off-Ramp & 190th St.

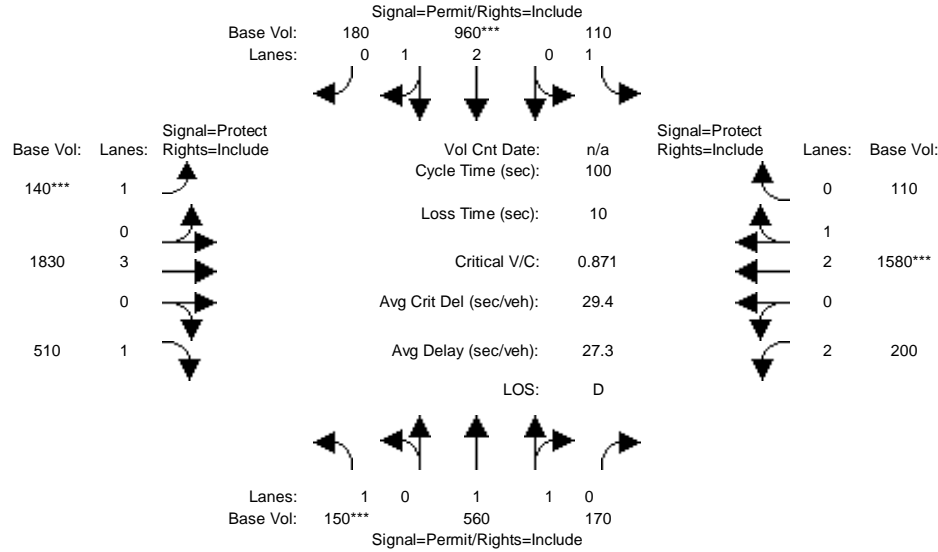


Street Name:	I-110 SB Off-Ramp						190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	660	0	470	0	2390	0	0	1430	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	660	0	470	0	2390	0	0	1430	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	660	0	470	0	2390	0	0	1430	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	660	0	470	0	2390	0	0	1430	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	660	0	470	0	2390	0	0	1430	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.75	0.01	1.24	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	2804	0	1996	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.24	0.00	0.24	0.00	0.75	0.00	0.00	0.30	0.00
Crit Moves:				***				***			***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM Mitigated

Intersection #22: Figueroa St. & 190th St./Victoria St.

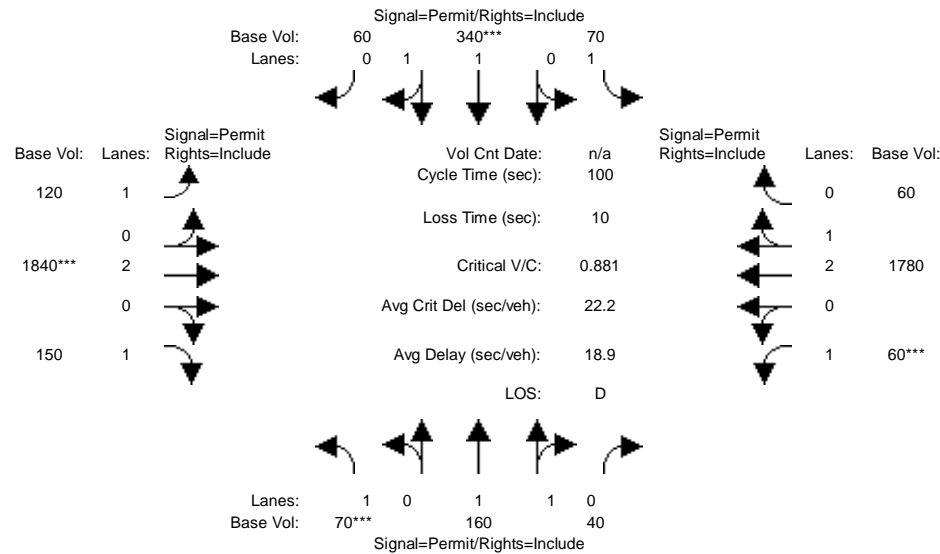


Street Name:	Figueroa St.						190th St./Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	150	560	170	110	960	180	140	1830	510	200	1580	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	560	170	110	960	180	140	1830	510	200	1580	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	560	170	110	960	180	140	1830	510	200	1580	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	560	170	110	960	180	140	1830	510	200	1580	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	150	560	170	110	960	180	140	1830	510	200	1580	110
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	1.00	1.53	0.47	1.00	2.53	0.47	1.00	3.00	1.00	2.00	2.80	0.20
Final Sat.:	1600	2455	745	1600	4042	758	1600	4800	1600	5760	4488	312
Capacity Analysis Module:												
Vol/Sat:	0.09	0.23	0.23	0.07	0.24	0.24	0.09	0.38	0.32	0.03	0.35	0.35
Crit Moves:	***				***		***				***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM Mitigated

Intersection #23: Broadway & Victoria St.

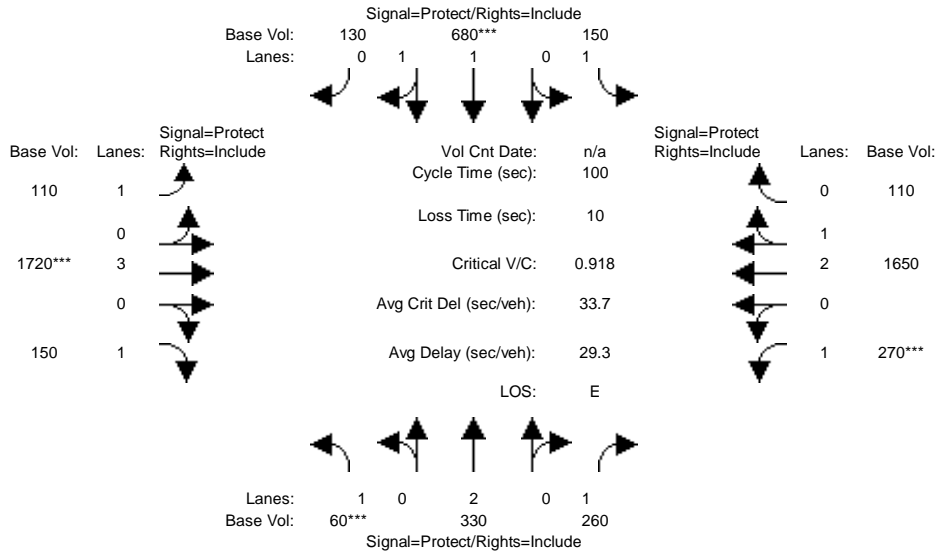


Street Name:	Broadway						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	70	160	40	70	340	60	120	1840	150	60	1780	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	160	40	70	340	60	120	1840	150	60	1780	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	160	40	70	340	60	120	1840	150	60	1780	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	160	40	70	340	60	120	1840	150	60	1780	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	70	160	40	70	340	60	120	1840	150	60	1780	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.60	0.40	1.00	1.70	0.30	1.00	2.00	1.00	1.00	2.90	0.10
Final Sat.:	1600	2560	640	1600	2720	480	1600	3200	1600	1600	4643	157
Capacity Analysis Module:												
Vol/Sat:	0.04	0.06	0.06	0.04	0.13	0.13	0.08	0.57	0.09	0.04	0.38	0.38
Crit Moves:	***			***			***			***		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM Mitigated

Intersection #24: Main St. & Victoria St.

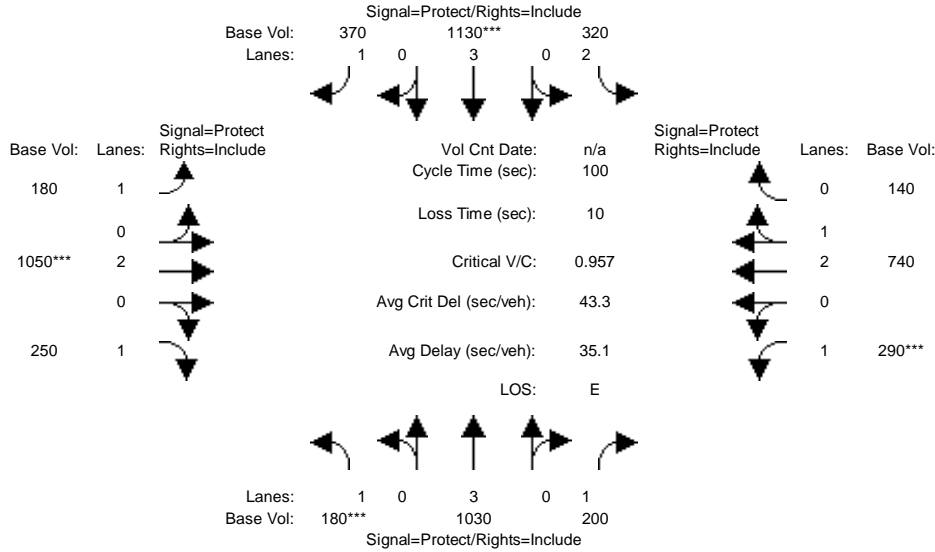


Street Name:	Main St.						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Movement:												
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	60	330	260	150	680	130	110	1720	150	270	1650	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	330	260	150	680	130	110	1720	150	270	1650	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	330	260	150	680	130	110	1720	150	270	1650	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	330	260	150	680	130	110	1720	150	270	1650	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	60	330	260	150	680	130	110	1720	150	270	1650	110
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.68	0.32	1.00	3.00	1.00	1.00	2.81	0.19
Final Sat.:	1600	3200	1600	1600	2686	514	1600	4800	1600	1600	4500	300
Capacity Analysis Module:												
Vol/Sat:	0.04	0.10	0.16	0.09	0.25	0.25	0.07	0.36	0.09	0.17	0.37	0.37
Crit Moves:	***				***			***			***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM Mitigated

Intersection #26: Avalon Blvd. & Del Amo Blvd.

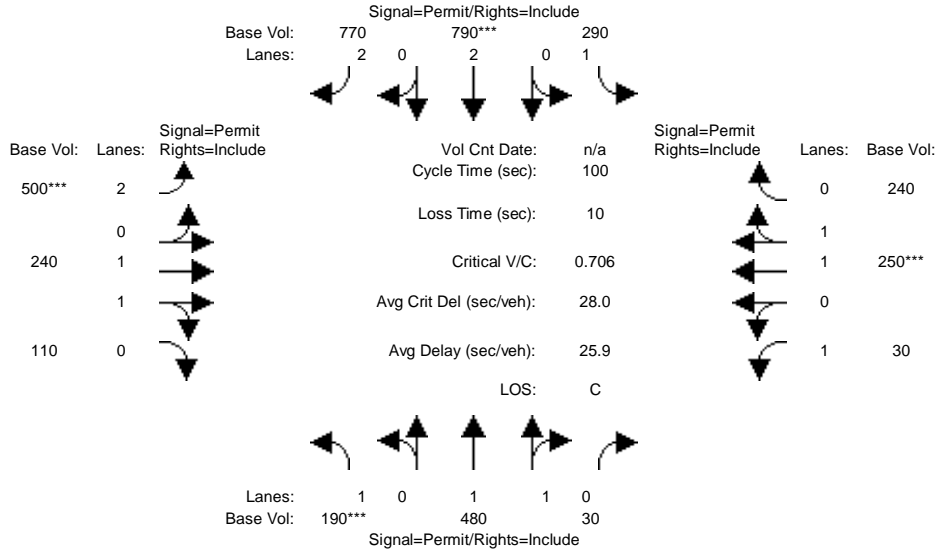


Street Name:	Avalon Blvd.						Del Amo Blvd.					
	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	180	1030	200	320	1130	370	180	1050	250	290	740	140
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	180	1030	200	320	1130	370	180	1050	250	290	740	140
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	180	1030	200	320	1130	370	180	1050	250	290	740	140
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	180	1030	200	320	1130	370	180	1050	250	290	740	140
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	180	1030	200	320	1130	370	180	1050	250	290	740	140
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	1.00	2.00	1.00	1.00	2.52	0.48
Final Sat.:	1600	4800	1600	5760	4800	1600	1600	3200	1600	1600	4036	764
Capacity Analysis Module:												
Vol/Sat:	0.11	0.21	0.13	0.06	0.24	0.23	0.11	0.33	0.16	0.18	0.18	0.18
Crit Moves:	***				***			***			***	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 Plus Project Weekday PM Mitigated

Intersection #29: Central Ave. & University Dr.



Street Name:	Central Ave.						University Dr.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	190	480	30	290	790	770	500	240	110	30	250	240
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	190	480	30	290	790	770	500	240	110	30	250	240
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	190	480	30	290	790	770	500	240	110	30	250	240
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	190	480	30	290	790	770	500	240	110	30	250	240
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	190	480	30	290	790	770	500	240	110	30	250	240
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.88	0.12	1.00	2.00	2.00	2.00	1.37	0.63	1.00	1.02	0.98
Final Sat.:	1600	3012	188	1600	3200	3200	5760	2194	1006	1600	1633	1567
Capacity Analysis Module:												
Vol/Sat:	0.12	0.16	0.16	0.18	0.25	0.24	0.09	0.11	0.11	0.02	0.15	0.15
Crit Moves:	***				***		***				***	

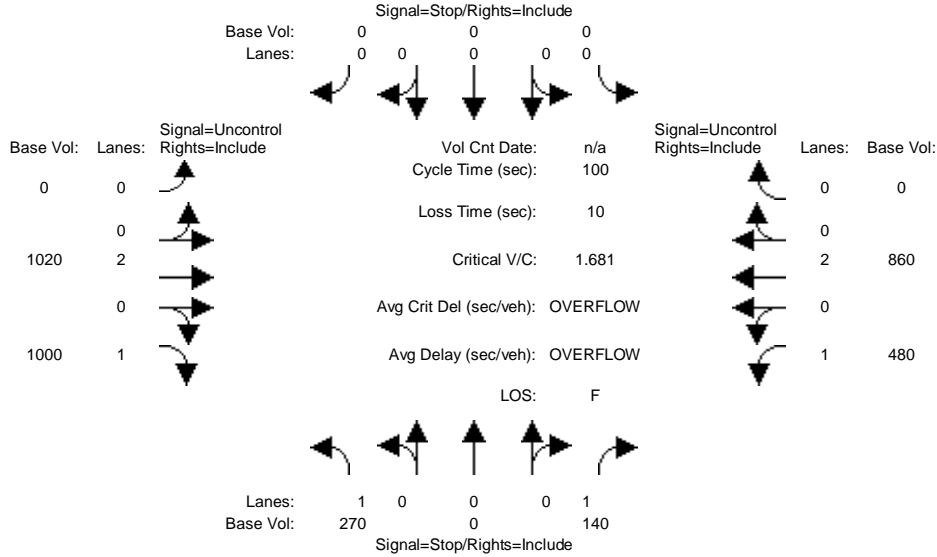
Appendix R

Intersection LOS Worksheets for 2035 Weekday Plus Project Alternative 2 Conditions

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2035 With Project Alt2 Weekday AM

Intersection #1: Victoria St. & Drive D



Street Name:	Drive D						Victoria St..					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	270	0	140	0	0	0	0	1020	1000	480	860	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	270	0	140	0	0	0	0	1020	1000	480	860	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	270	0	140	0	0	0	0	1020	1000	480	860	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	270	0	140	0	0	0	0	1020	1000	480	860	0
Critical Gap Module:												
Critical Gp:	6.8	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	2410	xxxx	510	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	2020	xxxx	xxxxx
Potent Cap.:	28	xxxx	514	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	285	xxxx	xxxxx
Move Cap.:	0	xxxx	514	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	285	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.27	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	1.68	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	1.1	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	30.3	xxxx	xxxxx
Control Del:	xxxxx	xxxx	14.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	352.7	xxxx	xxxxx
LOS by Move:	*	*	B	*	*	*	*	*	*	F	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	+Inf			xxxxxxx			xxxxxxx			xxxxxxx		

ApproachLOS: F * * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #1 Victoria St. & Drive D

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 2 0 1	1 0 2 0 0
Initial Vol:	270 0 140	0 0 0	0 1020 1000	480 860 0
ApproachDel:	+Inf	xxxxxx	xxxxxx	xxxxxx

Approach[northbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=OVERFLOW]
SUCCEED - Vehicle-hours >= 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=410]
SUCCEED - Approach volume >= 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=3770]
SUCCEED - Total volume greater than or equal to 650 for intersection
with less than four approaches.

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #1 Victoria St. & Drive D

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 2 0 1	1 0 2 0 0
Initial Vol:	270 0 140	0 0 0	0 1020 1000	480 860 0

Major Street Volume: 3360
Minor Approach Volume: 410
Minor Approach Volume Threshold: -147 [less than minimum of 150]

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

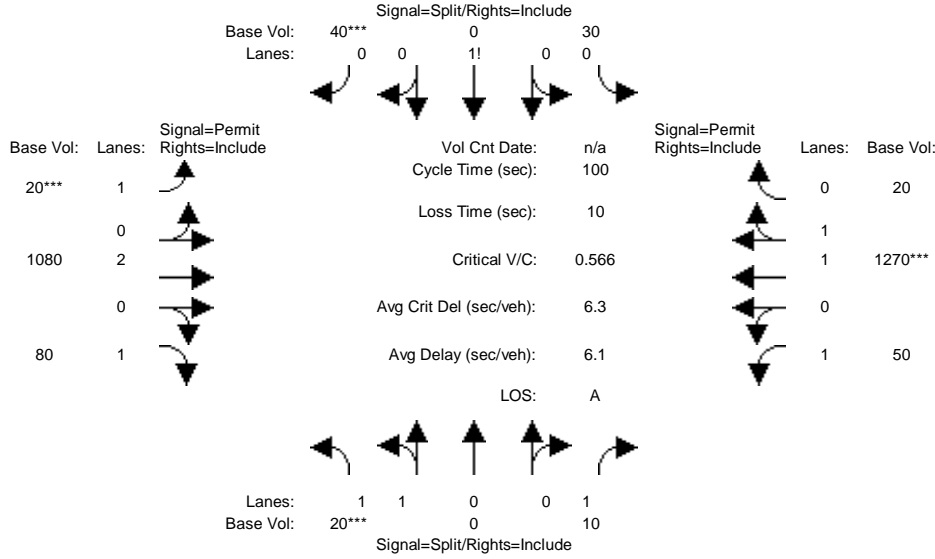
The peak hour warrant analysis in this report is not intended to replace

a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday AM

Intersection #2: Victoria St. & Tamcliff Ave.

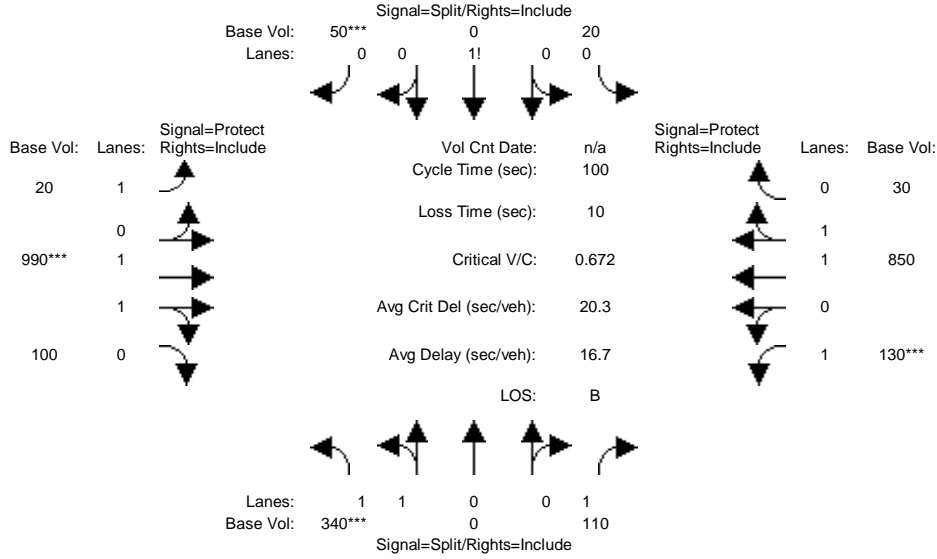


Street Name:	Victoria St.						Tamcliff Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	20	0	10	30	0	40	20	1080	80	50	1270	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	0	10	30	0	40	20	1080	80	50	1270	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	0	10	30	0	40	20	1080	80	50	1270	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	0	10	30	0	40	20	1080	80	50	1270	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	0	10	30	0	40	20	1080	80	50	1270	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.43	0.00	0.57	1.00	2.00	1.00	1.00	1.97	0.03
Final Sat.:	3200	0	1600	686	0	914	1600	3200	1600	1600	3150	50
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.01	0.04	0.00	0.04	0.01	0.34	0.05	0.03	0.40	0.40
Crit Moves:	****					****	****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday AM

Intersection #3: Victoria St. & Birchknoll Dr.

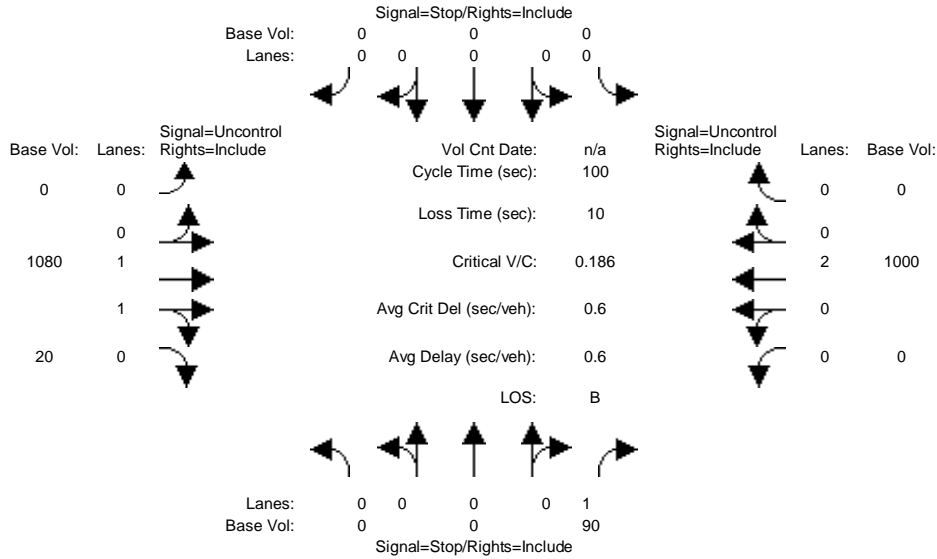


Street Name:	Victoria St.						Birchknoll Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	340	0	110	20	0	50	20	990	100	130	850	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	340	0	110	20	0	50	20	990	100	130	850	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	340	0	110	20	0	50	20	990	100	130	850	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	340	0	110	20	0	50	20	990	100	130	850	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	340	0	110	20	0	50	20	990	100	130	850	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.29	0.00	0.71	1.00	1.82	0.18	1.00	1.93	0.07
Final Sat.:	3200	0	1600	457	0	1143	1600	2906	294	1600	3091	109
Capacity Analysis Module:												
Vol/Sat:	0.11	0.00	0.07	0.04	0.00	0.04	0.01	0.34	0.34	0.08	0.28	0.27
Crit Moves:	****					****	****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2035 With Project Alt2 Weekday AM

Intersection #4: Victoria St. & Project Service Rd.



Street Name:	Project Service Rd.						Victoria St.															
Approach:	North Bound			South Bound			East Bound			West Bound												
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R		
Volume Module:																						
Base Vol:	0	0	90	0	0	0	0	1080	20	0	1000	0	0	0	0	0	0	1080	20	0	1000	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	90	0	0	0	0	1080	20	0	1000	0	0	0	0	0	0	1080	20	0	1000	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	90	0	0	0	0	1080	20	0	1000	0	0	0	0	0	0	1080	20	0	1000	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	90	0	0	0	0	1080	20	0	1000	0	0	0	0	0	0	1080	20	0	1000	0
Critical Gap Module:																						
Critical Gp:	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx
Capacity Module:																						
Cnflct Vol:	xxxx	xxxx	550	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx
Potent Cap.:	xxxx	xxxx	484	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx
Move Cap.:	xxxx	xxxx	484	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.19	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:																						
2Way95thQ:	xxxx	xxxx	0.7	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx
Control Del:	xxxxx	xxxx	14.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx
LOS by Move:	*	*	B	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	14.1			xxxxxx			xxxxxx			xxxxxx			xxxxxx			xxxxxx			xxxxxx			xxxxxx

ApproachLOS: B * * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #4 Victoria St. & Project Service Rd.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 1	0 0 0 0 0	0 0 1 1 0	0 0 2 0 0
Initial Vol:	0 0 90	0 0 0	0 1080 20	0 1000 0
ApproachDel:	14.1	xxxxxx	xxxxxx	xxxxxx

Approach[northbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.4]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=90]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=2190]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #4 Victoria St. & Project Service Rd.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 1	0 0 0 0 0	0 0 1 1 0	0 0 2 0 0
Initial Vol:	0 0 90	0 0 0	0 1080 20	0 1000 0

Major Street Volume: 2100

Minor Approach Volume: 90

Minor Approach Volume Threshold: 29 [less than minimum of 100]

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

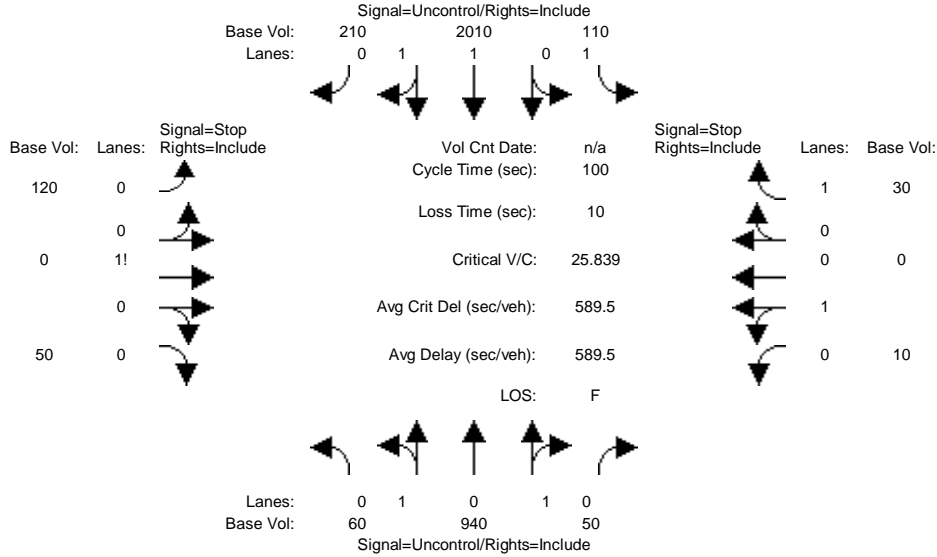
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2035 With Project Alt2 Weekday AM

Intersection #5: Central Ave. & Charles Willard St.



Street Name:	Central Ave.				Charles Willard St.							
Approach:	North Bound		South Bound		East Bound		West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	60	940	50	110	2010	210	120	0	50	10	0	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	940	50	110	2010	210	120	0	50	10	0	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	940	50	110	2010	210	120	0	50	10	0	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	60	940	50	110	2010	210	120	0	50	10	0	30
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	4.1	xxxx	xxxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxxx	2.2	xxxx	xxxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflct Vol:	2220	xxxx	xxxxxx	990	xxxx	xxxxxx	2925	3445	1110	2310	3525	495
Potent Cap.:	239	xxxx	xxxxxx	706	xxxx	xxxxxx	7	7	207	21	6	525
Move Cap.:	239	xxxx	xxxxxx	706	xxxx	xxxxxx	5	4	207	11	4	525
Volume/Cap:	0.25	xxxx	xxxx	0.16	xxxx	xxxx	25.84	0.00	0.24	0.89	0.00	0.06
Level Of Service Module:												
2Way95thQ:	1.0	xxxx	xxxxxx	0.5	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	0.2
Control Del:	25.1	xxxx	xxxxxx	11.0	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	12.3
LOS by Move:	D	*	*	B	*	*	*	*	*	*	*	B
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	7	xxxxxx	11	xxxx	xxxxxx
SharedQueue:	1.0	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	23.2	xxxxxx	1.9	xxxx	xxxxxx
Shrd ConDel:	25.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	663.1	xxxx	xxxxxx
Shared LOS:	D	*	*	*	*	*	*	F	*	F	*	*
ApproachDel:	xxxxxxx			xxxxxxx			xxxxxxx			175.0		

ApproachLOS: * * F F

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #5 Central Ave. & Charles Willard St.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	0	1	0	1	0	1	0	0	1	0	1	0
Initial Vol:	60	940	50	110	2010	210	120	0	50	10	0	30
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			175.0		

Approach[eastbound][lanes=1][control=Stop Sign]
 Signal Warrant Rule #1: [vehicle-hours=585.1]
 SUCCEED - Vehicle-hours greater than or equal to 4 for one lane approach.
 Signal Warrant Rule #2: [approach volume=170]
 SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
 Signal Warrant Rule #3: [approach count=4][total volume=3590]
 SUCCEED - Total volume greater than or equal to 800 for intersection
 with four or more approaches.

Approach[westbound][lanes=2][control=Stop Sign]
 Signal Warrant Rule #1: [vehicle-hours=1.9]
 FAIL - Vehicle-hours less than 5 for two or more lane approach.
 Signal Warrant Rule #2: [approach volume=40]
 FAIL - Approach volume less than 150 for two or more lane approach.
 Signal Warrant Rule #3: [approach count=4][total volume=3590]
 SUCCEED - Total volume greater than or equal to 800 for intersection
 with four or more approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #5 Central Ave. & Charles Willard St.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	0	1	0	1	0	1	0	0	1	0	1	0
Initial Vol:	60	940	50	110	2010	210	120	0	50	10	0	30

Major Street Volume: 3380
 Minor Approach Volume: 170
 Minor Approach Volume Threshold: -135 [less than minimum of 100]

SIGNAL WARRANT DISCLAIMER

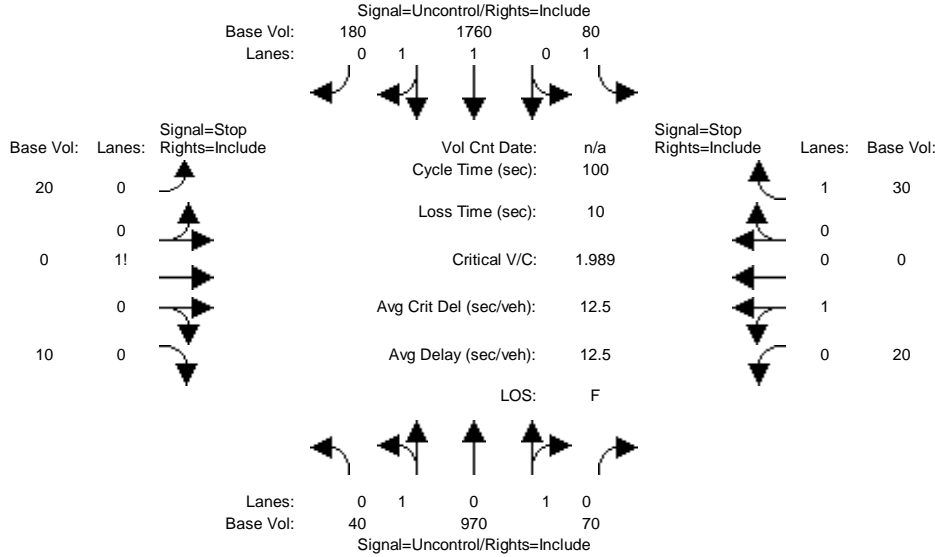
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2035 With Project Alt2 Weekday AM

Intersection #6: Central Ave. & Project Driveway/Beachey Pl.



Street Name:	Central Ave.					Beachey Pl.									
Approach:	North Bound			South Bound		East Bound			West Bound						
Movement:	L	T	R	L	T	R	L	T	R	L	T	R			
Volume Module:															
Base Vol:	40	970	70	80	1760	180	20	0	10	20	0	30			
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Initial Bse:	40	970	70	80	1760	180	20	0	10	20	0	30			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Volume:	40	970	70	80	1760	180	20	0	10	20	0	30			
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0			
FinalVolume:	40	970	70	80	1760	180	20	0	10	20	0	30			
Critical Gap Module:															
Critical Gp:	4.1	xxxx	xxxxxx	4.1	xxxx	xxxxxx	7.5	6.5	6.9	7.5	6.5	6.9			
FollowUpTim:	2.2	xxxx	xxxxxx	2.2	xxxx	xxxxxx	3.5	4.0	3.3	3.5	4.0	3.3			
Capacity Module:															
Cnflct Vol:	1940	xxxx	xxxxxx	1040	xxxx	xxxxxx	2575	3130	970	2125	3185	520			
Potent Cap.:	307	xxxx	xxxxxx	676	xxxx	xxxxxx	13	11	257	29	10	506			
Move Cap.:	307	xxxx	xxxxxx	676	xxxx	xxxxxx	10	9	257	23	8	506			
Volume/Cap:	0.13	xxxx	xxxx	0.12	xxxx	xxxx	1.99	0.00	0.04	0.88	0.00	0.06			
Level Of Service Module:															
2Way95thQ:	0.4	xxxx	xxxxxx	0.4	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	0.2			
Control Del:	18.5	xxxx	xxxxxx	11.0	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	12.6			
LOS by Move:	C	*	*	B	*	*	*	*	*	*	*	B			
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	15	xxxxxx	23	xxxx	xxxxxx			
SharedQueue:	0.4	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	4.4	xxxxxx	2.6	xxxx	xxxxxx			
Shrd ConDel:	18.5	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	1005	xxxxxx	387.6	xxxx	xxxxxx			
Shared LOS:	C	*	*	*	*	*	*	F	*	F	*	*			
ApproachDel:	xxxxxx			xxxxxx			1004.9			162.6					

ApproachLOS: * * F F

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #6 Central Ave. & Project Driveway/Beachey Pl.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	0	1	0	1	0	1	0	0	1	0	1	0
Initial Vol:	40	970	70	80	1760	180	20	0	10	20	0	30
ApproachDel:	xxxxxxx			xxxxxxx			1004.9			162.6		

Approach[eastbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=8.4]

SUCCEED - Vehicle-hours greater than or equal to 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=30]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=3180]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Approach[westbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=2.3]

FAIL - Vehicle-hours less than 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=50]

FAIL - Approach volume less than 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=3180]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #6 Central Ave. & Project Driveway/Beachey Pl.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	0	1	0	1	0	1	0	0	1	0	1	0
Initial Vol:	40	970	70	80	1760	180	20	0	10	20	0	30

Major Street Volume: 3100

Minor Approach Volume: 50

Minor Approach Volume Threshold: -112 [less than minimum of 150]

SIGNAL WARRANT DISCLAIMER

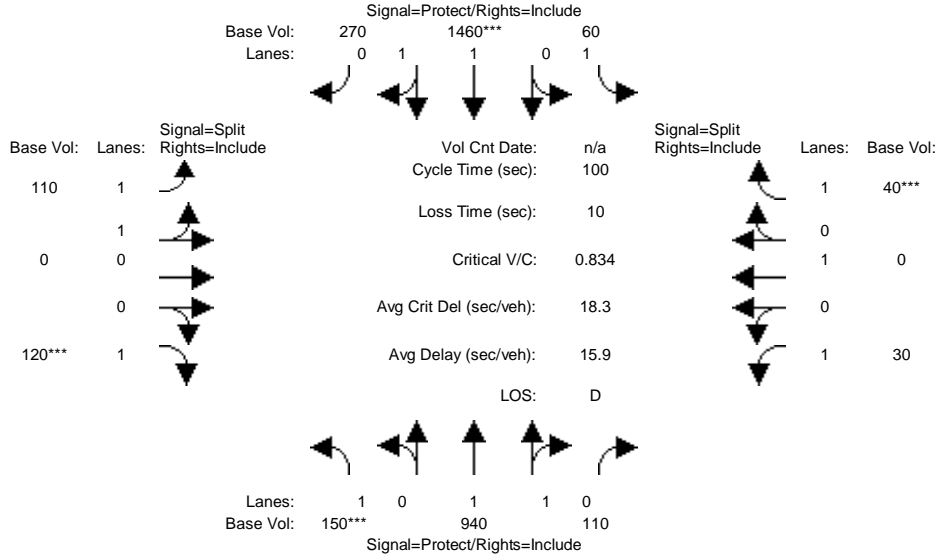
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday AM

Intersection #7: Central Ave. & Glenn Curtiss St.

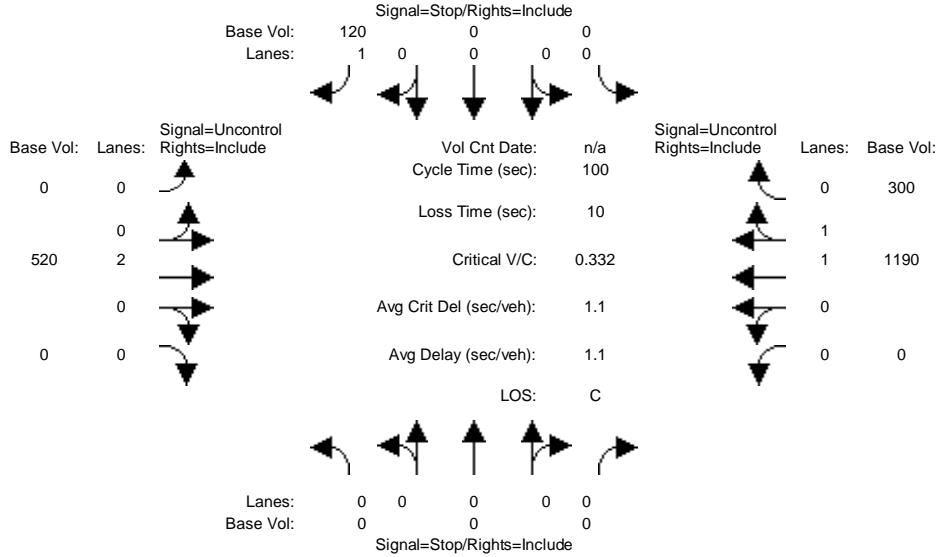


Street Name:	Central Ave.						Glenn Curtiss St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	150	940	110	60	1460	270	110	0	120	30	0	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	940	110	60	1460	270	110	0	120	30	0	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	940	110	60	1460	270	110	0	120	30	0	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	940	110	60	1460	270	110	0	120	30	0	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	940	110	60	1460	270	110	0	120	30	0	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.79	0.21	1.00	1.69	0.31	2.00	0.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	2865	335	1600	2701	499	3200	0	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.09	0.33	0.33	0.04	0.54	0.54	0.03	0.00	0.08	0.02	0.00	0.03
Crit Moves:	****				****				****			****

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
2035 With Project Alt2 Weekday AM

Intersection #8: University Dr./Birchknoll Dr. Ext.



Street Name:	Birchknoll Dr. Ext.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	0	0	120	0	520	0	0	1190	300
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	120	0	520	0	0	1190	300
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	120	0	520	0	0	1190	300
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	120	0	520	0	0	1190	300
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	745	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	361	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	361	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	0.33	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	1.4	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	19.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	C	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxxx			19.9			xxxxxxx			xxxxxxx		

ApproachLOS: * C * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #8 University Dr./Birchknoll Dr. Ext.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 0	0 0 0 0 1	0 0 2 0 0	0 0 1 1 0
Initial Vol:	0 0 0	0 0 120	0 520 0	0 1190 300
ApproachDel:	xxxxxx	19.9	xxxxxx	xxxxxx

Approach[southbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.7]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=120]

SUCCEED - Approach volume greater than or equal to 100 for one lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=2130]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #8 University Dr./Birchknoll Dr. Ext.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 0	0 0 0 0 1	0 0 2 0 0	0 0 1 1 0
Initial Vol:	0 0 0	0 0 120	0 520 0	0 1190 300

Major Street Volume: 2010

Minor Approach Volume: 120

Minor Approach Volume Threshold: 44 [less than minimum of 100]

SIGNAL WARRANT DISCLAIMER

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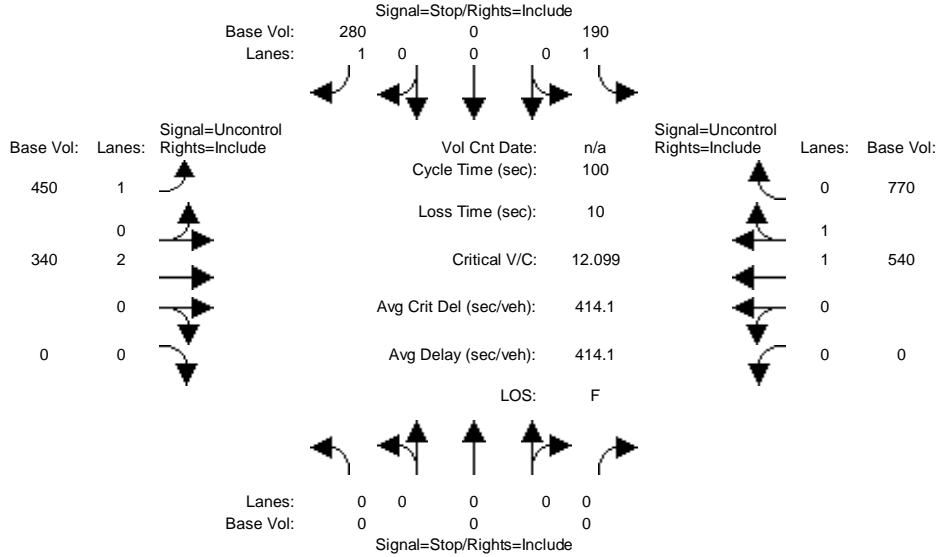
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
2035 With Project Alt2 Weekday AM

Intersection #9: University Dr. & Toro Center Dr.



Street Name:	University Dr.						Toro Center Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	190	0	280	450	340	0	0	540	770
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	190	0	280	450	340	0	0	540	770
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	190	0	280	450	340	0	0	540	770
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	190	0	280	450	340	0	0	540	770
Critical Gap Module:												
Critical Gp:	xxxx	xxxx	xxxx	6.8	xxxx	6.9	4.1	xxxx	xxxx	xxxx	xxxx	xxxx
FollowUpTim:	xxxx	xxxx	xxxx	3.5	xxxx	3.3	2.2	xxxx	xxxx	xxxx	xxxx	xxxx
Capacity Module:												
Cnflct Vol:	xxxx	xxxx	xxxx	1995	xxxx	655	1310	xxxx	xxxx	xxxx	xxxx	xxxx
Potent Cap.:	xxxx	xxxx	xxxx	54	xxxx	413	535	xxxx	xxxx	xxxx	xxxx	xxxx
Move Cap.:	xxxx	xxxx	xxxx	16	xxxx	413	535	xxxx	xxxx	xxxx	xxxx	xxxx
Volume/Cap:	xxxx	xxxx	xxxx	12.10	xxxx	0.68	0.84	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxx	24.7	xxxx	4.9	8.7	xxxx	xxxx	xxxx	xxxx	xxxx
Control Del:	xxxx	xxxx	xxxx	5467	xxxx	30.1	37.9	xxxx	xxxx	xxxx	xxxx	xxxx
LOS by Move:	*	*	*	F	*	D	E	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
SharedQueue:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Shrd ConDel:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			2228.2			xxxxxx			xxxxxx		

ApproachLOS: * F * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #9 University Dr. & Toro Center Dr.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0	0	0	0	0	0	1	0	2	0	0	1
Initial Vol:	0	0	0	190	0	280	450	340	0	0	540	770
ApproachDel:	xxxxxx			2228.2			xxxxxx			xxxxxx		

Approach[southbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=290.9]

SUCCEED - Vehicle-hours >= 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=470]

SUCCEED - Approach volume >= 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=2570]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #9 University Dr. & Toro Center Dr.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0	0	0	0	0	0	1	0	2	0	0	1
Initial Vol:	0	0	0	190	0	280	450	340	0	0	540	770

Major Street Volume: 2100

Minor Approach Volume: 470

Minor Approach Volume Threshold: 55 [less than minimum of 150]

SIGNAL WARRANT DISCLAIMER

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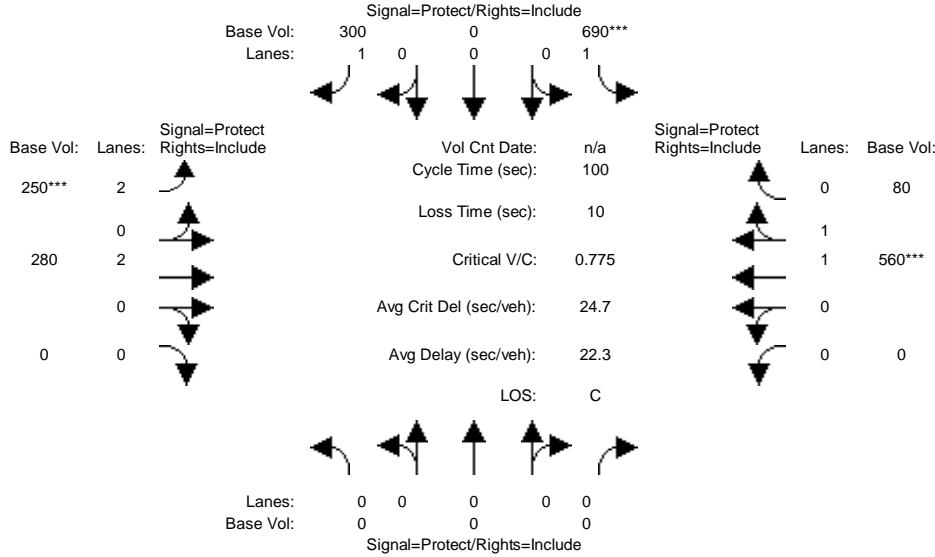
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday AM

Intersection #10: Albertoni St. & SR 91 EB Ramps

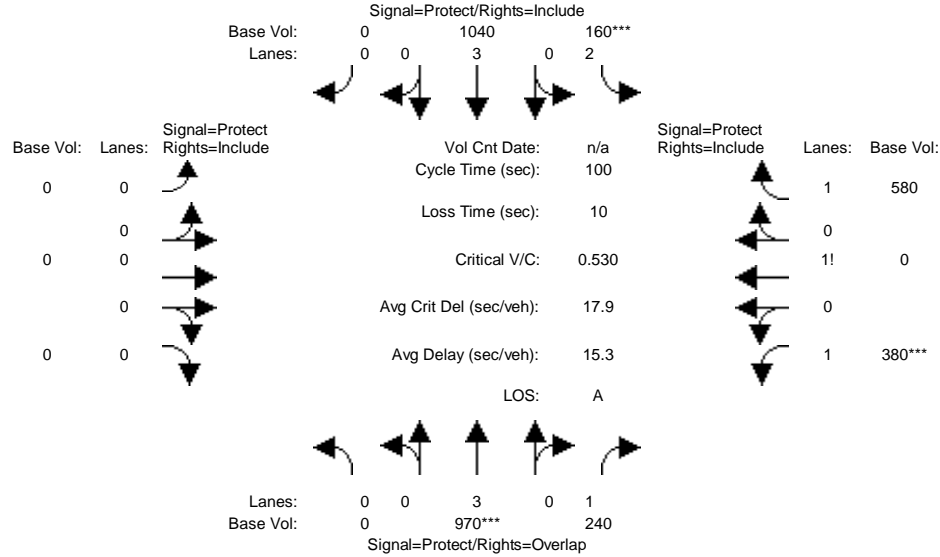


Street Name:	Albertoni St.						SR 91 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	690	0	300	250	280	0	0	560	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	690	0	300	250	280	0	0	560	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	690	0	300	250	280	0	0	560	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	690	0	300	250	280	0	0	560	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	690	0	300	250	280	0	0	560	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.75	0.25
Final Sat.:	0	0	0	1600	0	1600	5760	3200	0	0	2800	400
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.43	0.00	0.19	0.04	0.09	0.00	0.00	0.20	0.20
Crit Moves:				****			****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday AM

Intersection #11: Avalon Blvd. & SR 91 WB On-Ramp

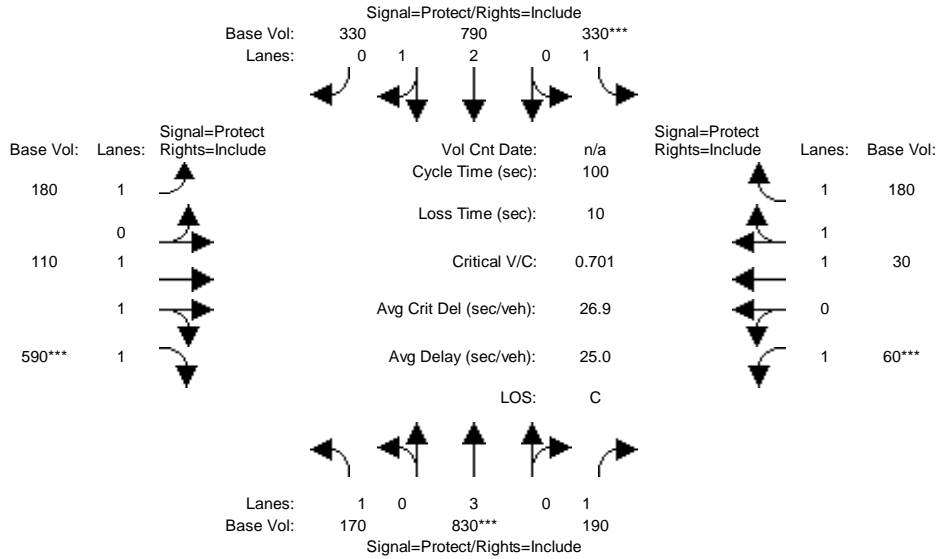


Street Name:	Avalon Blvd.						SR 91 WB On-Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	970	240	160	1040	0	0	0	0	380	0	580
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	970	240	160	1040	0	0	0	0	380	0	580
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	970	240	160	1040	0	0	0	0	380	0	580
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	970	240	160	1040	0	0	0	0	380	0	580
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	970	240	160	1040	0	0	0	0	380	0	580
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.19	0.00	1.81
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	1900	0	2900
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.15	0.03	0.22	0.00	0.00	0.00	0.00	0.20	0.00	0.20
OvlAdjV/S:	0.00											
Crit Moves:	****			****						****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday AM

Intersection #12: Avalon Blvd. & Albertoni St.

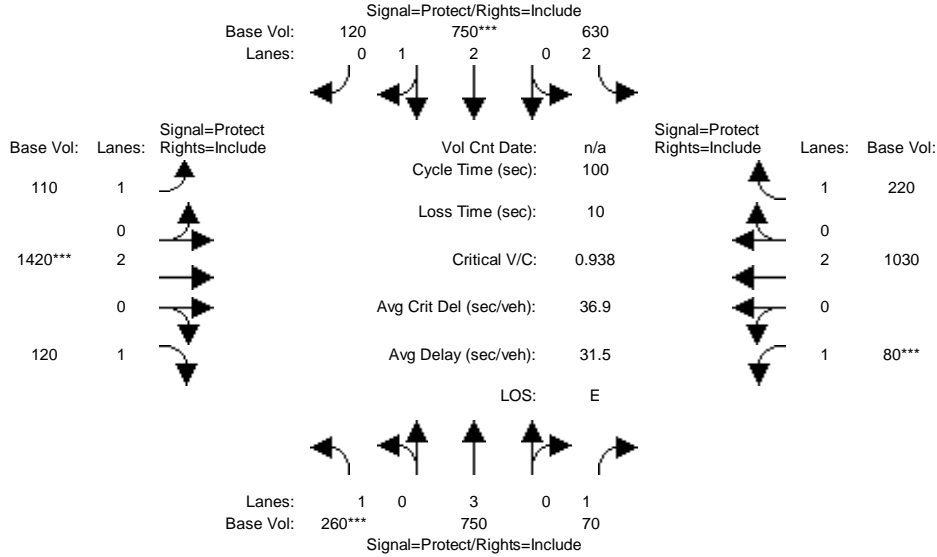


Street Name:	Avalon Blvd.						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	170	830	190	330	790	330	180	110	590	60	30	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	170	830	190	330	790	330	180	110	590	60	30	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	170	830	190	330	790	330	180	110	590	60	30	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	170	830	190	330	790	330	180	110	590	60	30	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	170	830	190	330	790	330	180	110	590	60	30	180
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.12	0.88	1.00	1.00	2.00	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3386	1414	1600	1600	3200	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.11	0.17	0.12	0.21	0.23	0.23	0.11	0.07	0.18	0.04	0.02	0.06
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday AM

Intersection #13: Avalon Blvd. & Victoria St.

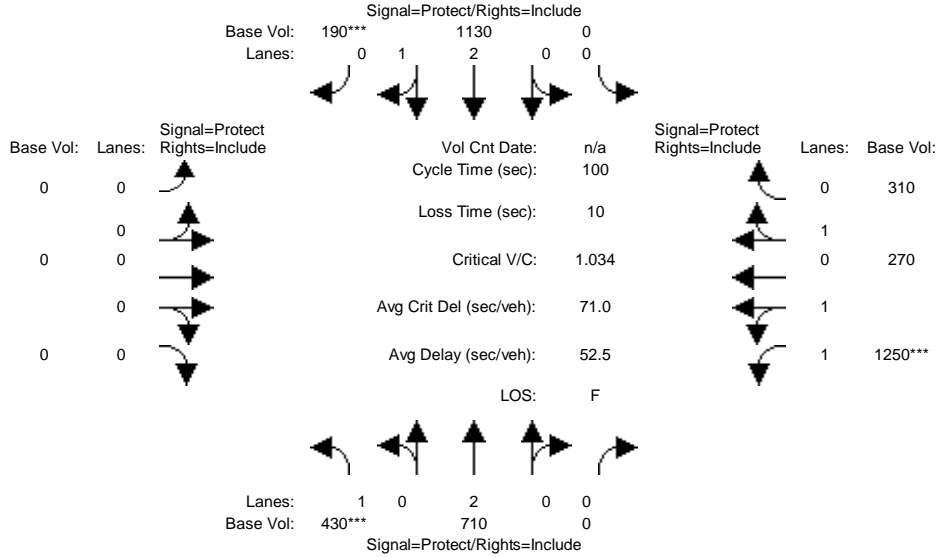


Street Name:	Avalon Blvd.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	260	750	70	630	750	120	110	1420	120	80	1030	220
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	260	750	70	630	750	120	110	1420	120	80	1030	220
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	260	750	70	630	750	120	110	1420	120	80	1030	220
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	260	750	70	630	750	120	110	1420	120	80	1030	220
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	260	750	70	630	750	120	110	1420	120	80	1030	220
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.59	0.41	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4138	662	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.16	0.16	0.04	0.11	0.18	0.18	0.07	0.44	0.08	0.05	0.32	0.14
Crit Moves:	****				****			****			****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday AM

Intersection #14: Central Ave. & Artesia Blvd.

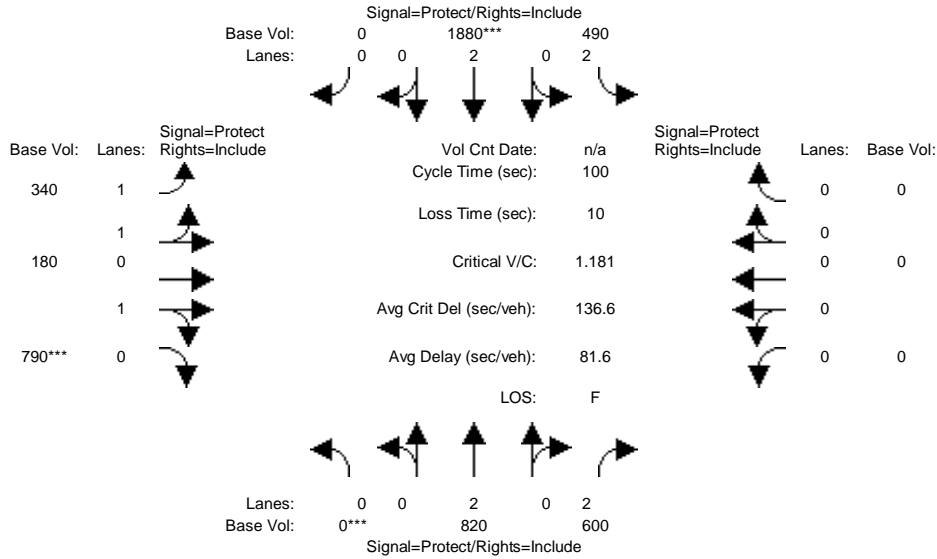


Street Name:	Central Ave.						Artesia Blvd.														
Approach:	North Bound			South Bound			East Bound			West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Volume Module:																					
Base Vol:	430	710	0	0	1130	190	0	0	0	1250	270	310									
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	430	710	0	0	1130	190	0	0	0	1250	270	310									
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Volume:	430	710	0	0	1130	190	0	0	0	1250	270	310									
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	430	710	0	0	1130	190	0	0	0	1250	270	310									
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
FinalVolume:	430	710	0	0	1130	190	0	0	0	1250	270	310									
Saturation Flow Module:																					
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600								
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Lanes:	1.00	2.00	0.00	0.00	2.57	0.43	0.00	0.00	0.00	2.00	0.47	0.53									
Final Sat.:	1600	3200	0	0	4109	691	0	0	0	3200	745	855									
Capacity Analysis Module:																					
Vol/Sat:	0.27	0.22	0.00	0.00	0.27	0.28	0.00	0.00	0.00	0.39	0.36	0.36									
Crit Moves:	****					****				****											

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday AM

Intersection #15: Central Ave. & Albertoni St./Artesia Blvd. EB

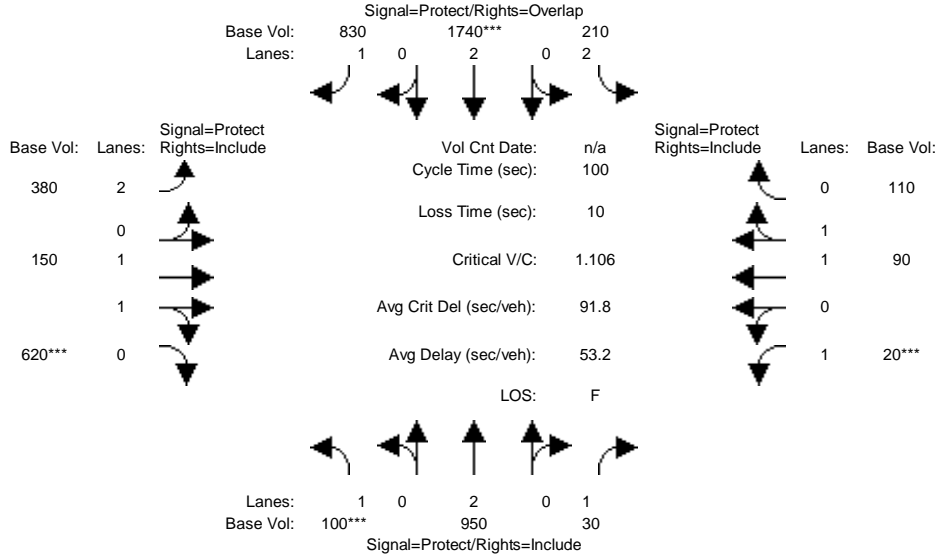


Street Name:	Central Ave.						Albertoni St./Artesia Blvd. EB														
Approach:	North Bound			South Bound			East Bound			West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																					
Base Vol:	0	820	600	490	1880	0	340	180	790	0	0	0	0	0	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	820	600	490	1880	0	340	180	790	0	0	0	0	0	0	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	820	600	490	1880	0	340	180	790	0	0	0	0	0	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	820	600	490	1880	0	340	180	790	0	0	0	0	0	0	0	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	820	600	490	1880	0	340	180	790	0	0	0	0	0	0	0	0	0	0	0	0
Saturation Flow Module:																					
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.31	0.69	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	2092	1108	1600	0	0	0	0	0	0	0	0	0	0	0	0
Capacity Analysis Module:																					
Vol/Sat:	0.00	0.26	0.19	0.09	0.59	0.00	0.16	0.16	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****				****				****												

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday AM

Intersection #16: Central Ave. & Victoria St.

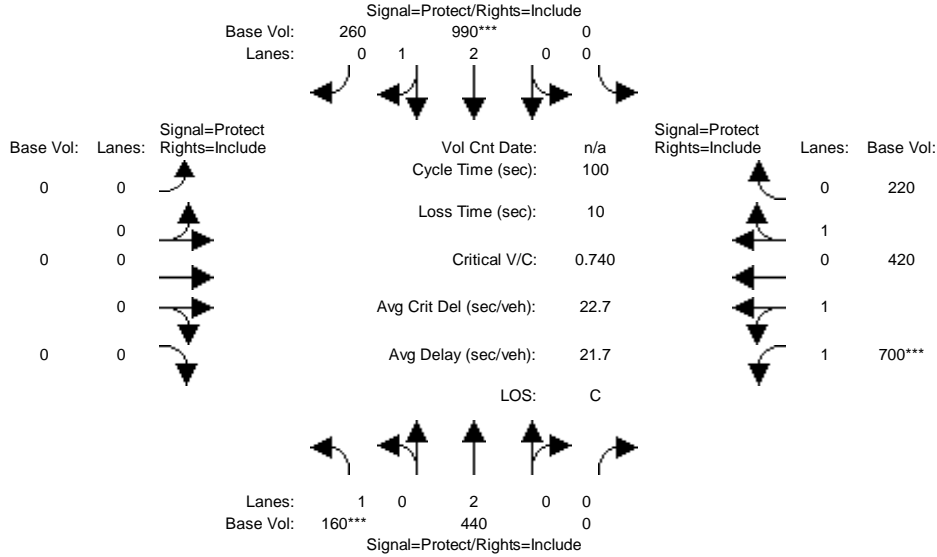


Street Name:	Central Ave.						Victoria St.													
Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																				
Base Vol:	100	950	30	210	1740	830	380	150	620	20	90	110								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	100	950	30	210	1740	830	380	150	620	20	90	110								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	100	950	30	210	1740	830	380	150	620	20	90	110								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	100	950	30	210	1740	830	380	150	620	20	90	110								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	100	950	30	210	1740	830	380	150	620	20	90	110								
OvlAdjVol:													724							
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	5760	3200	1600	5760	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Capacity Analysis Module:																				
Vol/Sat:	0.06	0.30	0.02	0.04	0.54	0.52	0.07	0.09	0.39	0.01	0.06	0.07								
OvlAdjV/S:													0.45							
Crit Moves:	***					****					****	****								

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday AM

Intersection #17: Wilmington Ave. & Artesia Blvd. WB

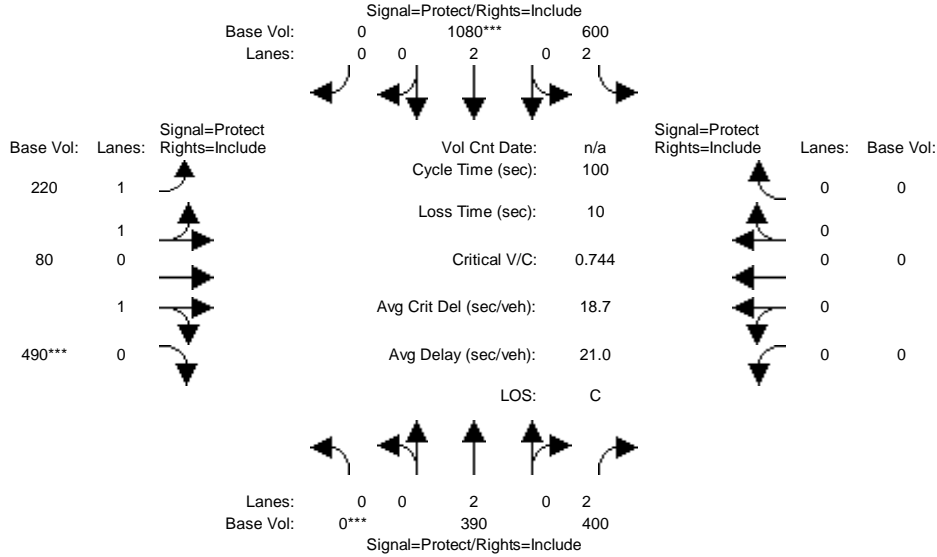


Street Name:	Wilmington Ave.						Artesia Blvd. WB								
Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:															
Base Vol:	160	440	0	0	990	260	0	0	0	700	420	220			
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Initial Bse:	160	440	0	0	990	260	0	0	0	700	420	220			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Volume:	160	440	0	0	990	260	0	0	0	700	420	220			
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0			
Reduced Vol:	160	440	0	0	990	260	0	0	0	700	420	220			
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
FinalVolume:	160	440	0	0	990	260	0	0	0	700	420	220			
Saturation Flow Module:															
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600			
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Lanes:	1.00	2.00	0.00	0.00	2.38	0.62	0.00	0.00	0.00	1.57	0.94	0.49			
Final Sat.:	1600	3200	0	0	3802	998	0	0	0	2508	1504	788			
Capacity Analysis Module:															
Vol/Sat:	0.10	0.14	0.00	0.00	0.26	0.26	0.00	0.00	0.00	0.28	0.28	0.28			
Crit Moves:	****				****					****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday AM

Intersection #18: Wilmington Ave. & Artesia Blvd. EB

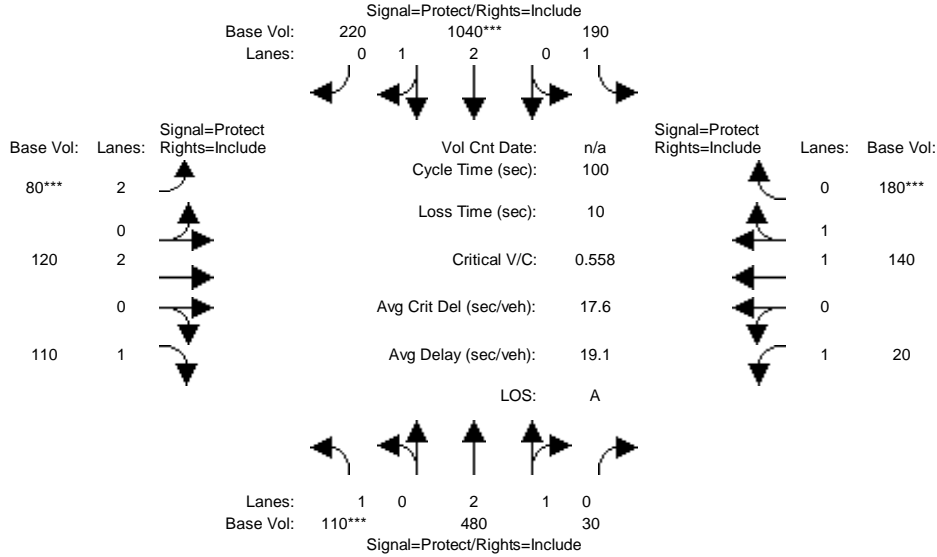


Street Name:	Wilmington Ave.						Artesia Blvd. EB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	390	400	600	1080	0	220	80	490	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	390	400	600	1080	0	220	80	490	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	390	400	600	1080	0	220	80	490	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	390	400	600	1080	0	220	80	490	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	390	400	600	1080	0	220	80	490	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.47	0.53	1.00	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	2347	853	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.12	0.13	0.10	0.34	0.00	0.09	0.09	0.31	0.00	0.00	0.00
Crit Moves:	****				****				****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday AM

Intersection #19: Wilmington Ave. & Victoria St.

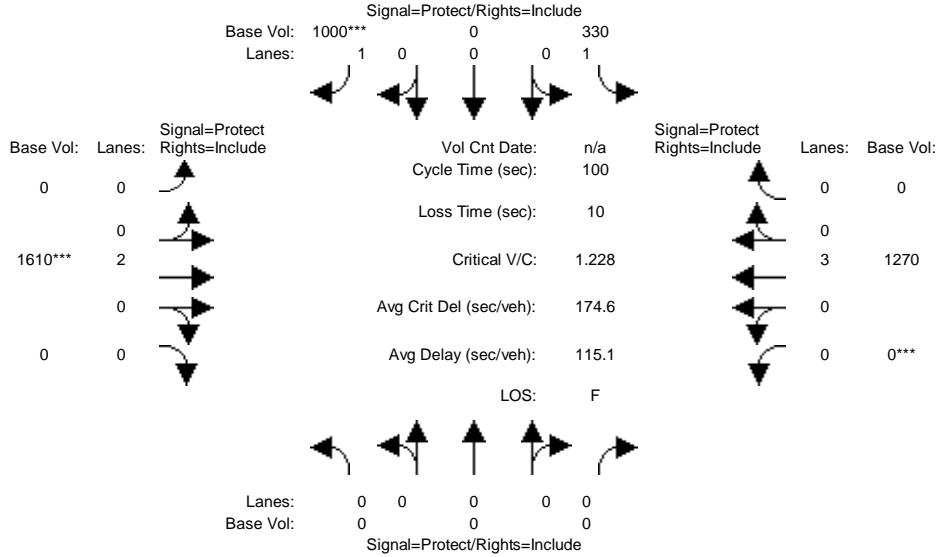


Street Name:	Wilmington Ave.						Victoria St.														
Approach:	North Bound			South Bound			East Bound			West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																					
Base Vol:	110	480	30	190	1040	220	80	120	110	20	140	180									
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
Initial Bse:	110	480	30	190	1040	220	80	120	110	20	140	180									
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
PHF Volume:	110	480	30	190	1040	220	80	120	110	20	140	180									
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0									
Reduced Vol:	110	480	30	190	1040	220	80	120	110	20	140	180									
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
FinalVolume:	110	480	30	190	1040	220	80	120	110	20	140	180									
Saturation Flow Module:																					
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600									
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00									
Lanes:	1.00	2.82	0.18	1.00	2.48	0.52	2.00	2.00	1.00	1.00	1.00	1.00									
Final Sat.:	1600	4518	282	1600	3962	838	5760	3200	1600	1600	1600	1600									
Capacity Analysis Module:																					
Vol/Sat:	0.07	0.11	0.11	0.12	0.26	0.26	0.01	0.04	0.07	0.01	0.09	0.11									
Crit Moves:	****				****		****					****									

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday AM

Intersection #20: I-110 SB Off-Ramp & 190th St.

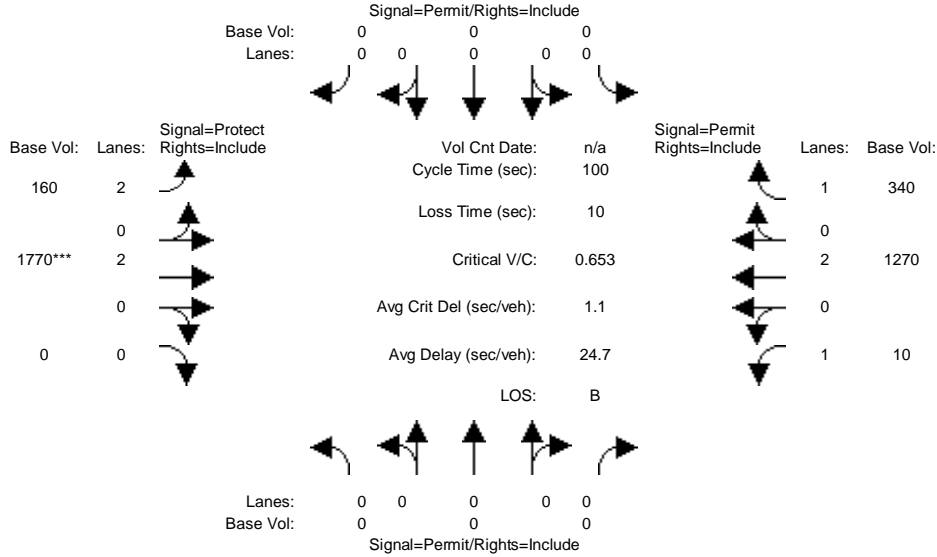


Street Name:	I-110 SB Off-Ramp						190th St.								
Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:															
Base Vol:	0	0	0	330	0	1000	0	1610	0	0	1270	0			
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	330	0	1000	0	1610	0	0	1270	0			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	330	0	1000	0	1610	0	0	1270	0			
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0			
Reduced Vol:	0	0	0	330	0	1000	0	1610	0	0	1270	0			
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	330	0	1000	0	1610	0	0	1270	0			
Saturation Flow Module:															
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00			
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0			
Capacity Analysis Module:															
Vol/Sat:	0.00	0.00	0.00	0.21	0.00	0.63	0.00	0.50	0.00	0.00	0.26	0.00			
Crit Moves:						****		****			****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday AM

Intersection #21: I-110 NB On-Ramp & 190th St.

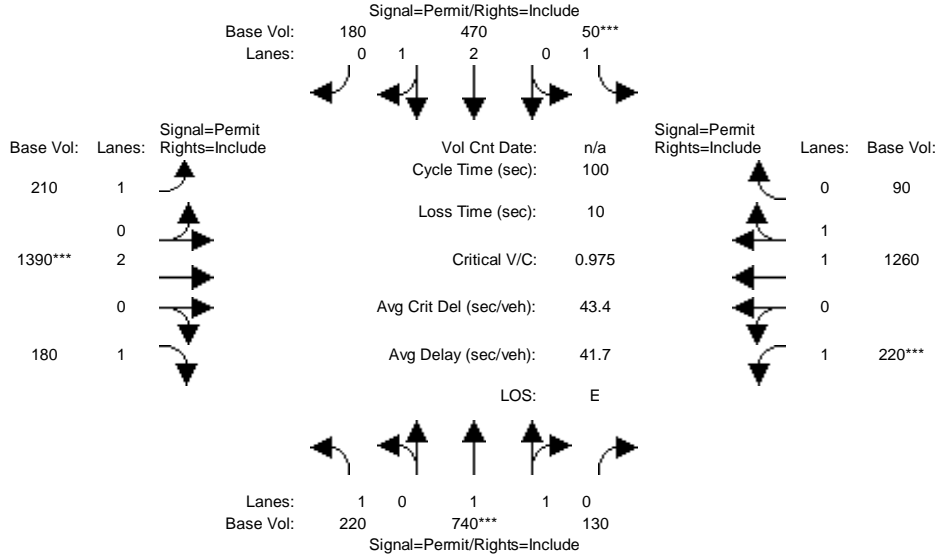


Street Name:	I-110 NB On-Ramp						190th St.														
Approach:	North Bound			South Bound			East Bound			West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																					
Base Vol:	0	0	0	0	0	0	160	1770	0	10	1270	340									
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00						
Initial Bse:	0	0	0	0	0	0	160	1770	0	10	1270	340									
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00						
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00						
PHF Volume:	0	0	0	0	0	0	160	1770	0	10	1270	340									
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0									
Reduced Vol:	0	0	0	0	0	0	160	1770	0	10	1270	340									
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00						
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00						
FinalVolume:	0	0	0	0	0	0	160	1770	0	10	1270	340									
Saturation Flow Module:																					
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600						
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00						
Lanes:	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00									
Final Sat.:	0	0	0	0	0	0	5760	3200	0	1600	3200	1600									
Capacity Analysis Module:																					
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.55	0.00	0.01	0.40	0.21									
Crit Moves:									****												

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday AM

Intersection #22: Figueroa St. & 190th St./Victoria St.

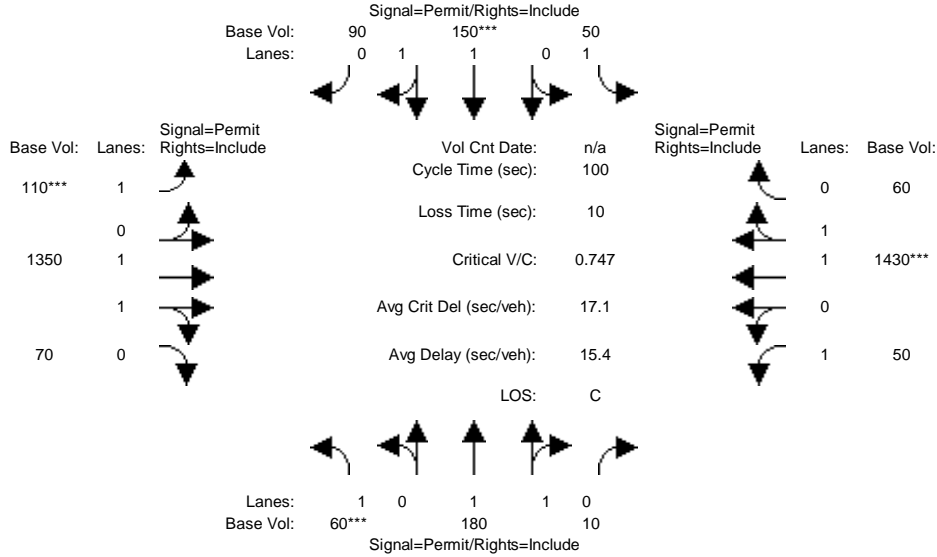


Street Name:	Figueroa St.						190th St./Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	220	740	130	50	470	180	210	1390	180	220	1260	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	220	740	130	50	470	180	210	1390	180	220	1260	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	220	740	130	50	470	180	210	1390	180	220	1260	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	220	740	130	50	470	180	210	1390	180	220	1260	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	220	740	130	50	470	180	210	1390	180	220	1260	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.70	0.30	1.00	2.17	0.83	1.00	2.00	1.00	1.00	1.87	0.13
Final Sat.:	1600	2722	478	1600	3471	1329	1600	3200	1600	1600	2987	213
Capacity Analysis Module:												
Vol/Sat:	0.14	0.27	0.27	0.03	0.14	0.14	0.13	0.43	0.11	0.14	0.42	0.42
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday AM

Intersection #23: Broadway & Victoria St.

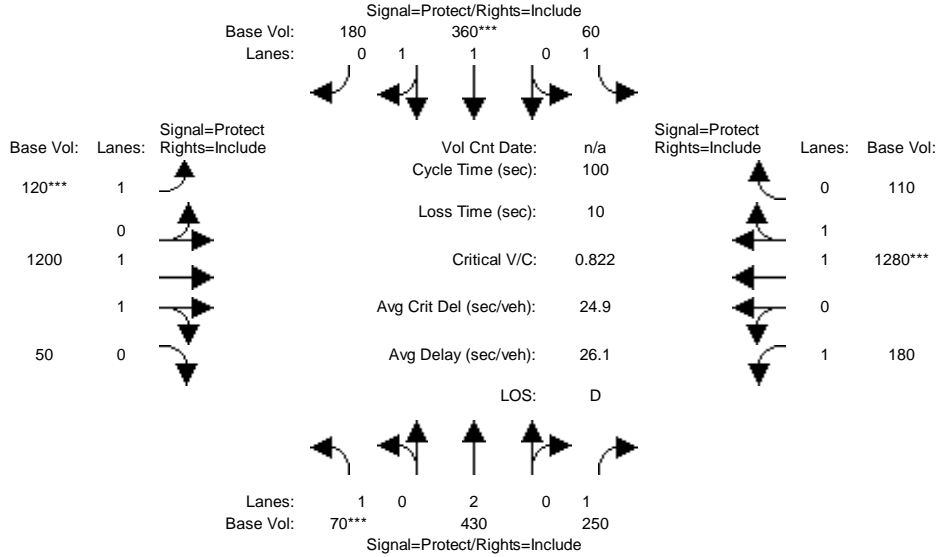


Street Name:	Broadway						Victoria St.														
Approach:	North Bound			South Bound			East Bound			West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																					
Base Vol:	60	180	10	50	150	90	110	1350	70	50	1430	60									
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00						
Initial Bse:	60	180	10	50	150	90	110	1350	70	50	1430	60									
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00						
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00						
PHF Volume:	60	180	10	50	150	90	110	1350	70	50	1430	60									
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0									
Reduced Vol:	60	180	10	50	150	90	110	1350	70	50	1430	60									
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00						
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00						
FinalVolume:	60	180	10	50	150	90	110	1350	70	50	1430	60									
Saturation Flow Module:																					
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600						
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00						
Lanes:	1.00	1.89	0.11	1.00	1.25	0.75	1.00	1.90	0.10	1.00	1.92	0.08									
Final Sat.:	1600	3032	168	1600	2000	1200	1600	3042	158	1600	3071	129									
Capacity Analysis Module:																					
Vol/Sat:	0.04	0.06	0.06	0.03	0.08	0.08	0.07	0.44	0.44	0.03	0.47	0.47									
Crit Moves:	****				****		****				****										

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday AM

Intersection #24: Main St. & Victoria St.

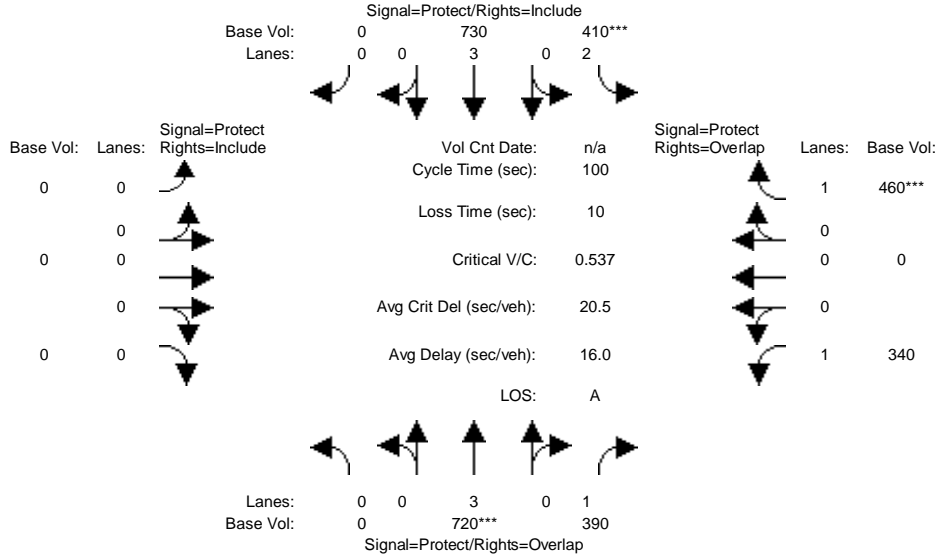


Street Name:	Main St.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	70	430	250	60	360	180	120	1200	50	180	1280	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	430	250	60	360	180	120	1200	50	180	1280	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	430	250	60	360	180	120	1200	50	180	1280	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	430	250	60	360	180	120	1200	50	180	1280	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	70	430	250	60	360	180	120	1200	50	180	1280	110
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.33	0.67	1.00	1.92	0.08	1.00	1.84	0.16
Final Sat.:	1600	3200	1600	1600	2133	1067	1600	3072	128	1600	2947	253
Capacity Analysis Module:												
Vol/Sat:	0.04	0.13	0.16	0.04	0.17	0.17	0.08	0.39	0.39	0.11	0.43	0.43
Crit Moves:	****				****		****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday AM

Intersection #25: Avalon Blvd. & University Dr.

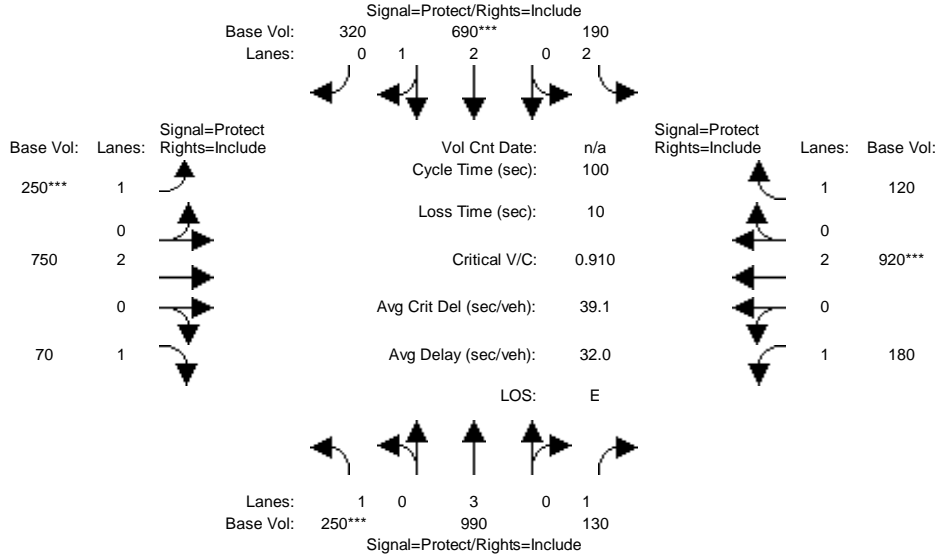


Street Name:	Avalon Blvd.						University Dr.						
Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Volume Module:													
Base Vol:	0	720	390	410	730	0	0	0	0	340	0	460	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	0	720	390	410	730	0	0	0	0	340	0	460	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:	0	720	390	410	730	0	0	0	0	340	0	460	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	0	720	390	410	730	0	0	0	0	340	0	460	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Final Volume:	0	720	390	410	730	0	0	0	0	340	0	460	
OvlAdjVol:												50	346
Saturation Flow Module:													
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00	
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	1600	0	1600	
Capacity Analysis Module:													
Vol/Sat:	0.00	0.15	0.24	0.07	0.15	0.00	0.00	0.00	0.00	0.21	0.00	0.29	
OvlAdjV/S:												0.22	
Crit Moves:	****			****									****

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday AM

Intersection #26: Avalon Blvd. & Del Amo Blvd.

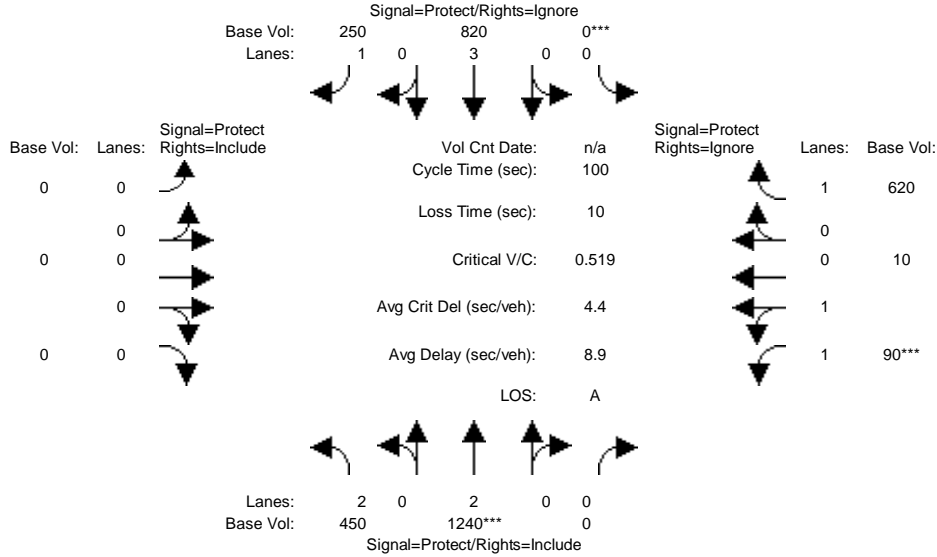


Street Name:	Avalon Blvd.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	250	990	130	190	690	320	250	750	70	180	920	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	250	990	130	190	690	320	250	750	70	180	920	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	250	990	130	190	690	320	250	750	70	180	920	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	250	990	130	190	690	320	250	750	70	180	920	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	250	990	130	190	690	320	250	750	70	180	920	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.05	0.95	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	3279	1521	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.16	0.21	0.08	0.03	0.21	0.21	0.16	0.23	0.04	0.11	0.29	0.08
Crit Moves:	****				****		****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday AM

Intersection #27: Avalon Blvd. & I-405 NB Ramps

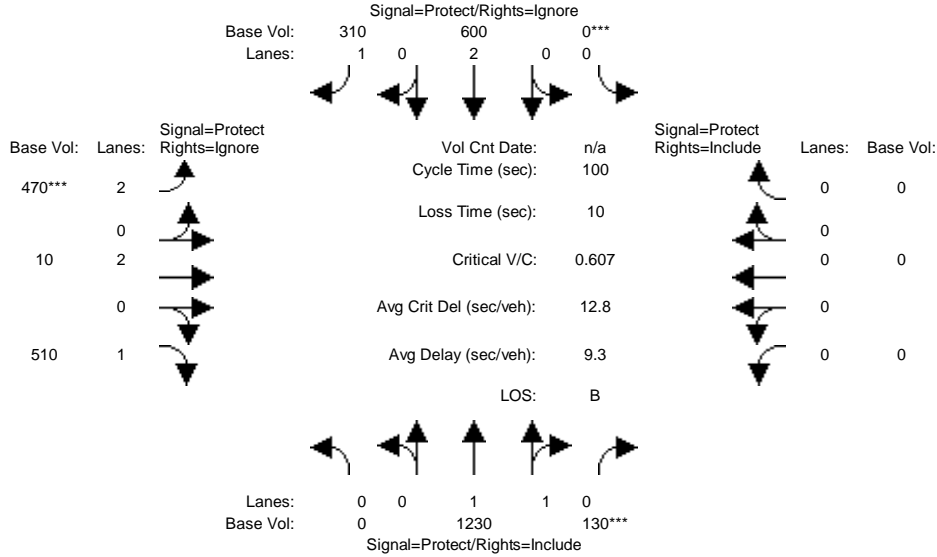


Street Name:	Avalon Blvd.						I-405 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	450	1240	0	0	820	250	0	0	0	90	10	620
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	450	1240	0	0	820	250	0	0	0	90	10	620
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	450	1240	0	0	820	0	0	0	0	90	10	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	450	1240	0	0	820	0	0	0	0	90	10	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Volume:	450	1240	0	0	820	0	0	0	0	90	10	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.80	0.20	1.00
Final Sat.:	5760	3200	0	0	4800	1600	0	0	0	2880	320	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.39	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.03	0.03	0.00
Crit Moves:	****			****						****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday AM

Intersection #28: Avalon Blvd. & I-405 SB Ramps

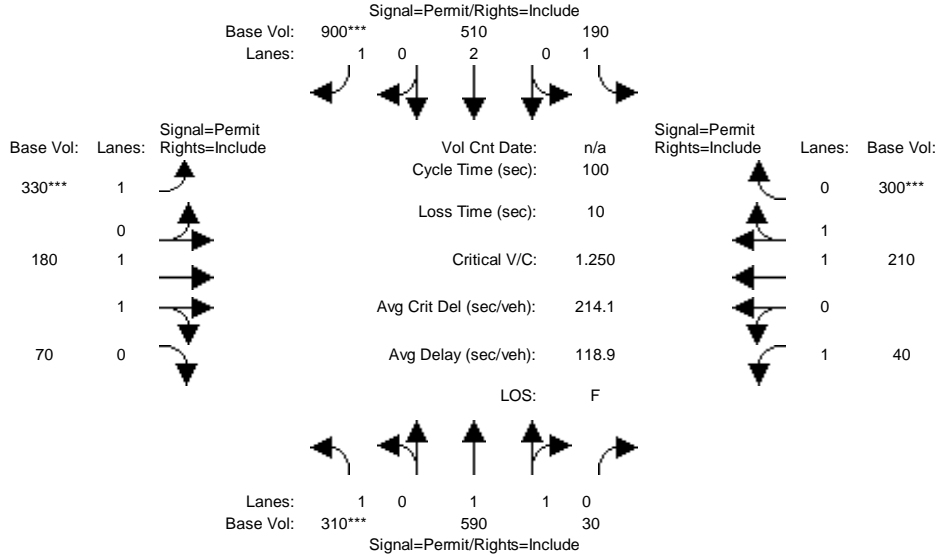


Street Name:	Avalon Blvd.						I-405 SB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1230	130	0	600	310	470	10	510	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1230	130	0	600	310	470	10	510	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	1230	130	0	600	0	470	10	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1230	130	0	600	0	470	10	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Volume:	0	1230	130	0	600	0	470	10	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.81	0.19	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	0	2894	306	0	3200	1600	5760	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.42	0.43	0.00	0.19	0.00	0.08	0.00	0.00	0.00	0.00	0.00
Crit Moves:			****	****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday AM

Intersection #29: Central Ave. & University Dr.

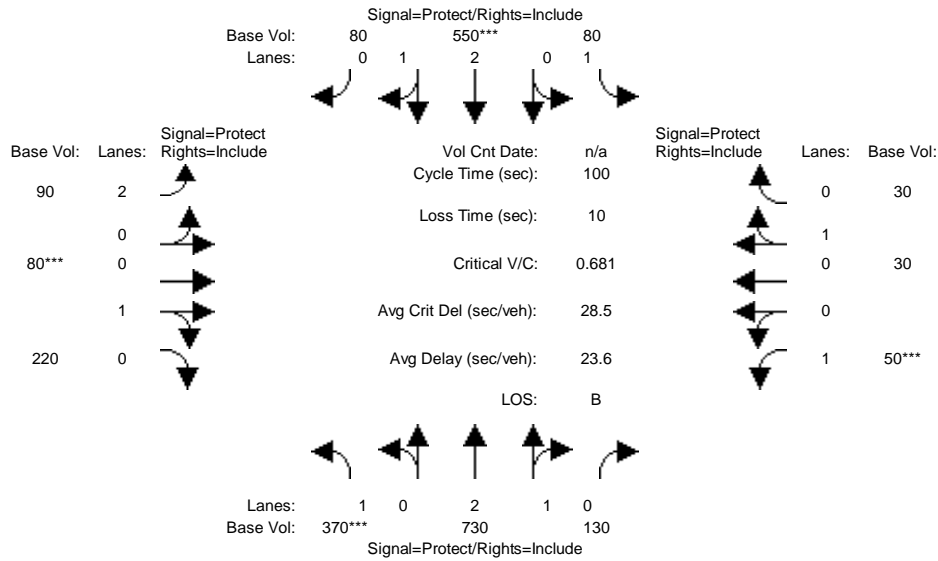


Street Name:	Central Ave.						University Dr.													
Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																				
Base Vol:	310	590	30	190	510	900	330	180	70	40	210	300								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	310	590	30	190	510	900	330	180	70	40	210	300								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Volume:	310	590	30	190	510	900	330	180	70	40	210	300								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	310	590	30	190	510	900	330	180	70	40	210	300								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
FinalVolume:	310	590	30	190	510	900	330	180	70	40	210	300								
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600								
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Lanes:	1.00	1.90	0.10	1.00	2.00	1.00	1.00	1.44	0.56	1.00	1.00	1.00								
Final Sat.:	1600	3045	155	1600	3200	1600	1600	2304	896	1600	1600	1600								
Capacity Analysis Module:																				
Vol/Sat:	0.19	0.19	0.19	0.12	0.16	0.56	0.21	0.08	0.08	0.03	0.13	0.19								
Crit Moves:	****					****	****					****								

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday AM

Intersection #30: Wilmington Ave. & University Dr.

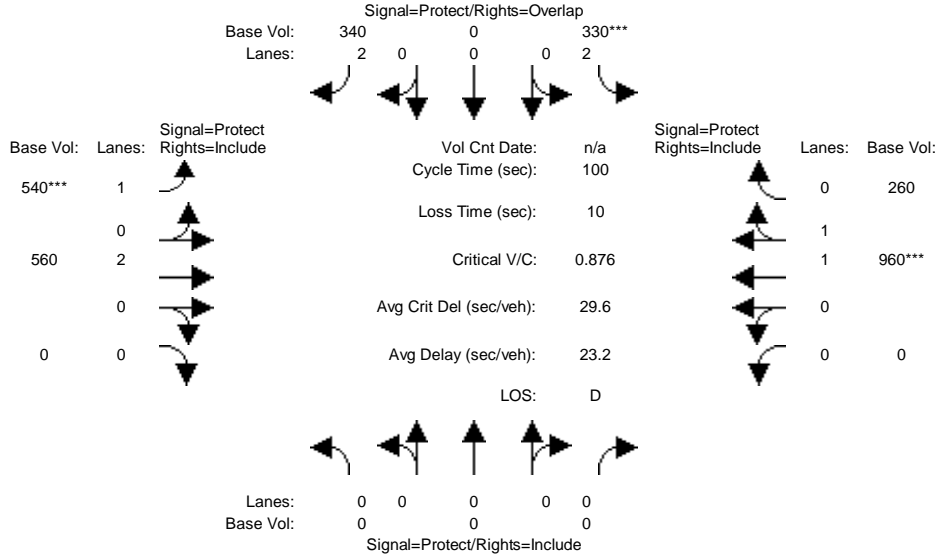


Street Name:	Wilmington Ave.						University Dr.														
Approach:	North Bound			South Bound			East Bound			West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Volume Module:																					
Base Vol:	370	730	130	80	550	80	90	80	220	50	30	30									
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	370	730	130	80	550	80	90	80	220	50	30	30									
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:	370	730	130	80	550	80	90	80	220	50	30	30									
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0									
Reduced Vol:	370	730	130	80	550	80	90	80	220	50	30	30									
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
FinalVolume:	370	730	130	80	550	80	90	80	220	50	30	30									
Saturation Flow Module:																					
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Lanes:	1.00	2.55	0.45	1.00	2.62	0.38	2.00	0.27	0.73	1.00	0.50	0.50									
Final Sat.:	1600	4074	726	1600	4190	610	5760	427	1173	1600	800	800									
Capacity Analysis Module:																					
Vol/Sat:	0.23	0.18	0.18	0.05	0.13	0.13	0.02	0.19	0.19	0.03	0.04	0.04									
Crit Moves:	****				****		****			****											

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday AM

Intersection #31: Central Ave. & Del Amo Blvd.

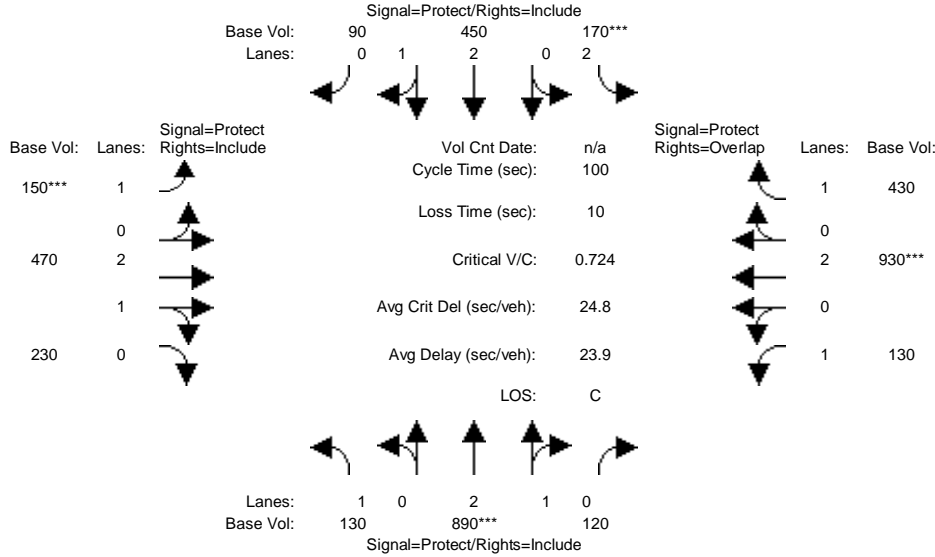


Street Name:	Central Ave.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	330	0	340	540	560	0	0	960	260
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	330	0	340	540	560	0	0	960	260
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	330	0	340	540	560	0	0	960	260
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	330	0	340	540	560	0	0	960	260
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	330	0	340	540	560	0	0	960	260
OvlAdjVol:						0						
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	2.00	1.00	2.00	0.00	0.00	1.57	0.43
Final Sat.:	0	0	0	5760	0	3200	1600	3200	0	0	2518	682
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.06	0.00	0.11	0.34	0.17	0.00	0.00	0.38	0.38
OvlAdjV/S:						0.00						
Crit Moves:				****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday AM

Intersection #32: Wilmington Ave. & Del Amo Blvd.

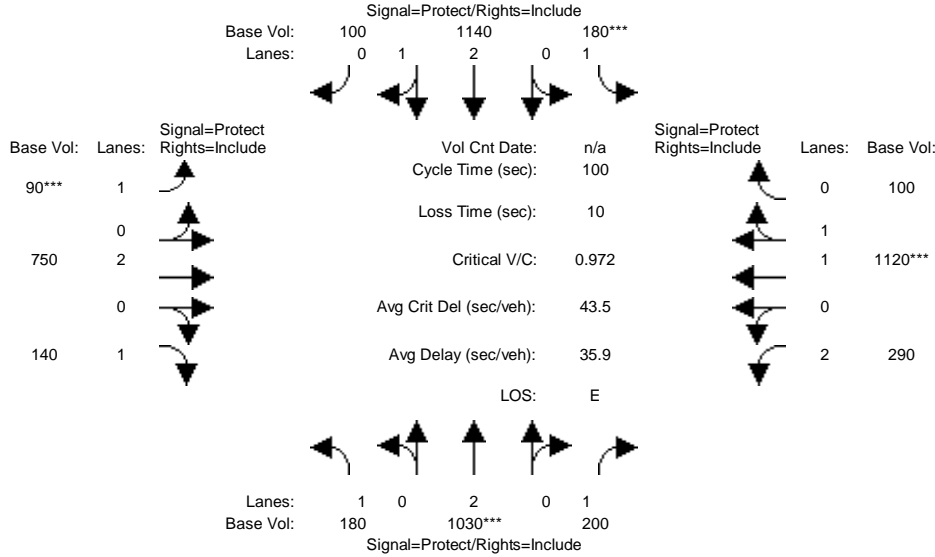


Street Name:	Wilmington Ave.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	130	890	120	170	450	90	150	470	230	130	930	430
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	890	120	170	450	90	150	470	230	130	930	430
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	890	120	170	450	90	150	470	230	130	930	430
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	890	120	170	450	90	150	470	230	130	930	430
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	130	890	120	170	450	90	150	470	230	130	930	430
OvlAdjVol:												383
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.64	0.36	2.00	2.50	0.50	1.00	2.01	0.99	1.00	2.00	1.00
Final Sat.:	1600	4230	570	5760	4000	800	1600	3223	1577	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.21	0.21	0.03	0.11	0.11	0.09	0.15	0.15	0.08	0.29	0.27
OvlAdjV/S:												0.24
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday AM

Intersection #33: W. Artesia Blvd. & Crenshaw Blvd.

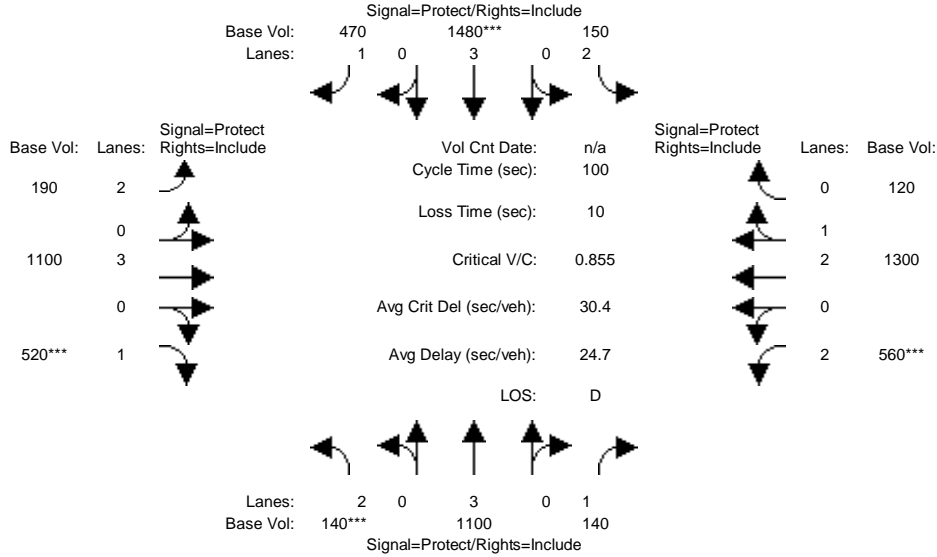


Street Name:	Crenshaw Blvd.						W. Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	180	1030	200	180	1140	100	90	750	140	290	1120	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	180	1030	200	180	1140	100	90	750	140	290	1120	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	180	1030	200	180	1140	100	90	750	140	290	1120	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	180	1030	200	180	1140	100	90	750	140	290	1120	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	180	1030	200	180	1140	100	90	750	140	290	1120	100
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.76	0.24	1.00	2.00	1.00	2.00	1.84	0.16
Final Sat.:	1600	3200	1600	1600	4413	387	1600	3200	1600	5760	2938	262
Capacity Analysis Module:												
Vol/Sat:	0.11	0.32	0.13	0.11	0.26	0.26	0.06	0.23	0.09	0.05	0.38	0.38
Crit Moves:		****		****			****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday AM

Intersection #34: W 190th St. & South Western Ave.

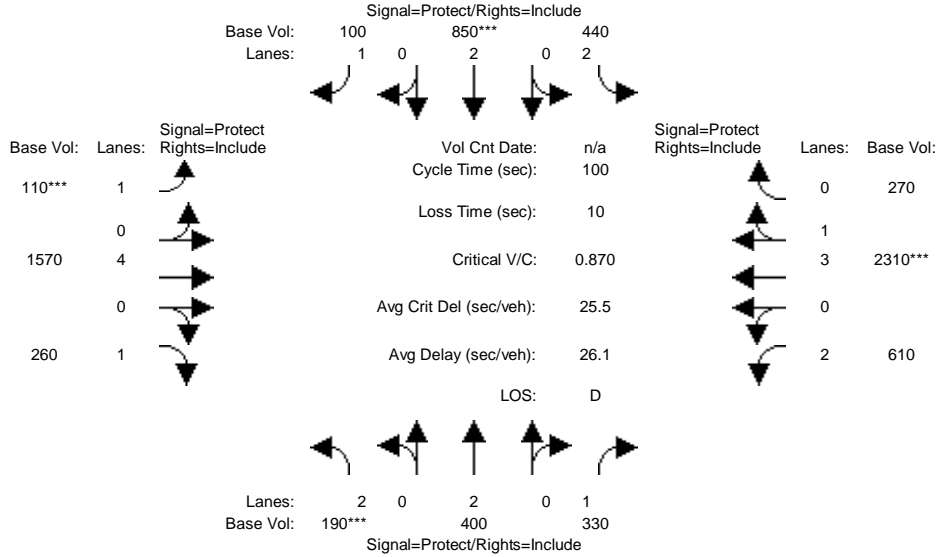


Street Name:	S. Western Ave.						W. 190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	140	1100	140	150	1480	470	190	1100	520	560	1300	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	140	1100	140	150	1480	470	190	1100	520	560	1300	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	140	1100	140	150	1480	470	190	1100	520	560	1300	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	1100	140	150	1480	470	190	1100	520	560	1300	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	140	1100	140	150	1480	470	190	1100	520	560	1300	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.75	0.25
Final Sat.:	5760	4800	1600	5760	4800	1600	5760	4800	1600	5760	4394	406
Capacity Analysis Module:												
Vol/Sat:	0.02	0.23	0.09	0.03	0.31	0.29	0.03	0.23	0.33	0.10	0.30	0.30
Crit Moves:	****				****			****		****	****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday AM

Intersection #35: W. Artesia Blvd. & Vermont Av.e

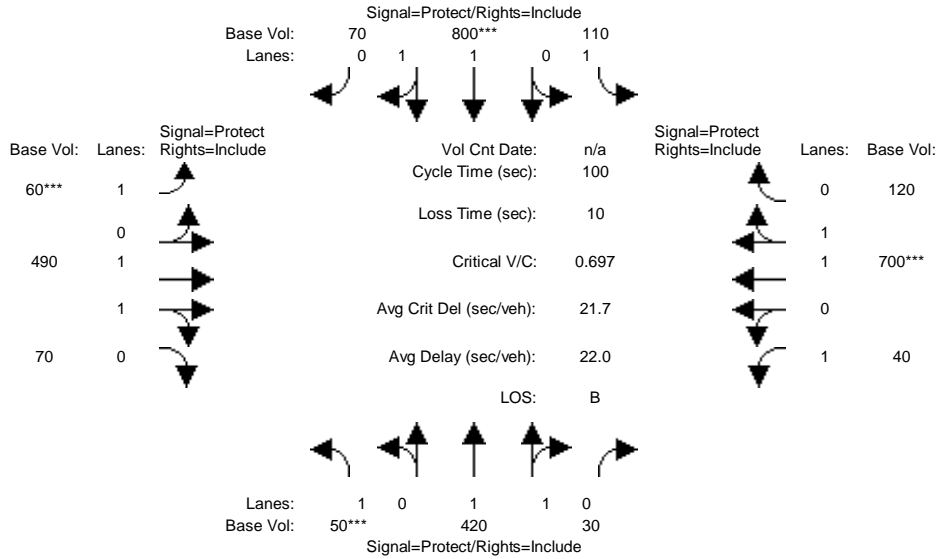


Street Name:	Vermont Ave.						W. Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	190	400	330	440	850	100	110	1570	260	610	2310	270
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	190	400	330	440	850	100	110	1570	260	610	2310	270
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	190	400	330	440	850	100	110	1570	260	610	2310	270
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	190	400	330	440	850	100	110	1570	260	610	2310	270
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	190	400	330	440	850	100	110	1570	260	610	2310	270
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	1.00	4.00	1.00	2.00	3.58	0.42
Final Sat.:	5760	3200	1600	5760	3200	1600	1600	6400	1600	5760	5730	670
Capacity Analysis Module:												
Vol/Sat:	0.03	0.13	0.21	0.08	0.27	0.06	0.07	0.25	0.16	0.11	0.40	0.40
Crit Moves:	****				****		****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday AM

Intersection #36: Alameda St. & Compton Blvd.

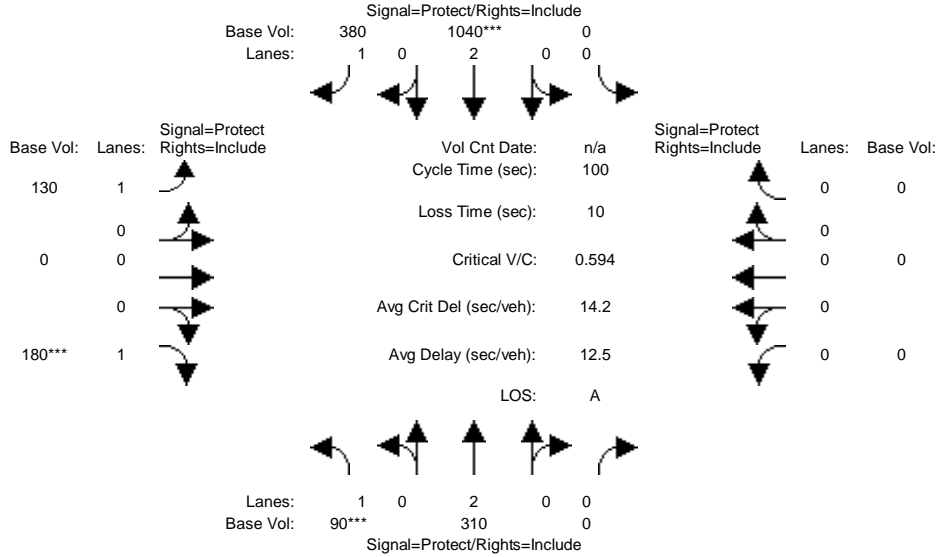


Street Name:	Alameda St.						Compton Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	50	420	30	110	800	70	60	490	70	40	700	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	420	30	110	800	70	60	490	70	40	700	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	420	30	110	800	70	60	490	70	40	700	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	420	30	110	800	70	60	490	70	40	700	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	50	420	30	110	800	70	60	490	70	40	700	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.87	0.13	1.00	1.84	0.16	1.00	1.75	0.25	1.00	1.71	0.29
Final Sat.:	1600	2987	213	1600	2943	257	1600	2800	400	1600	2732	468
Capacity Analysis Module:												
Vol/Sat:	0.03	0.14	0.14	0.07	0.27	0.27	0.04	0.17	0.17	0.03	0.26	0.26
Crit Moves:	****				****		****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday AM

Intersection #37: Alameda St. & SR 91 EB Ramps

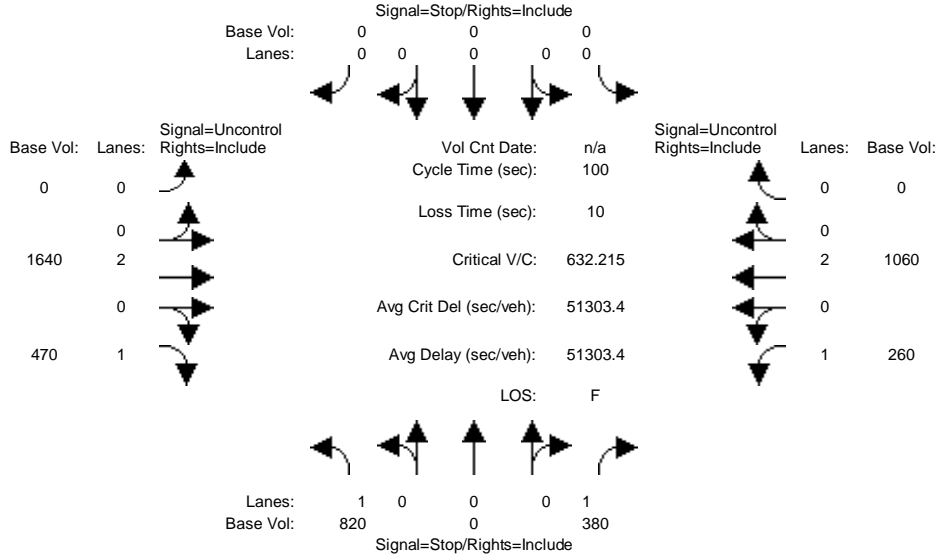


Street Name:	Alameda St.						SR 91 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	90	310	0	0	1040	380	130	0	180	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	310	0	0	1040	380	130	0	180	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	310	0	0	1040	380	130	0	180	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	310	0	0	1040	380	130	0	180	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	90	310	0	0	1040	380	130	0	180	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	3200	0	0	3200	1600	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.06	0.10	0.00	0.00	0.33	0.24	0.08	0.00	0.11	0.00	0.00	0.00
Crit Moves:	****				****				****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2035 With Project Alt2 Weekday PM

Intersection #1: Victoria St. & Drive D



Street Name:	Drive D				Victoria St..							
Approach:	North Bound		South Bound		East Bound		West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	820	0	380	0	0	0	0	1640	470	260	1060	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	820	0	380	0	0	0	0	1640	470	260	1060	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	820	0	380	0	0	0	0	1640	470	260	1060	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	820	0	380	0	0	0	0	1640	470	260	1060	0
Critical Gap Module:												
Critical Gp:	6.8	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	2690	xxxx	820	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	2110	xxxx	xxxxx
Potent Cap.:	18	xxxx	322	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	263	xxxx	xxxxx
Move Cap.:	1	xxxx	322	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	263	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	1.18	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.99	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	105	xxxx	16.1	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	9.7	xxxx	xxxxx
Control Del:	xxxxx	xxxx	143.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	93.8	xxxx	xxxxx
LOS by Move:	F	*	F	*	*	*	*	*	*	F	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxxx		xxxxxxx			xxxxxxx	xxxxxxx		xxxxxxx	xxxxxxx		xxxxxxx

ApproachLOS: F * * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #1 Victoria St. & Drive D

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 2 0 1	1 0 2 0 0
Initial Vol:	820 0 380	0 0 0	0 1640 470	260 1060 0
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	xxxxxx

Approach[northbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=65975.1]

SUCCEED - Vehicle-hours >= 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=1200]

SUCCEED - Approach volume >= 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=4630]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #1 Victoria St. & Drive D

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	1 0 0 0 1	0 0 0 0 0	0 0 2 0 1	1 0 2 0 0
Initial Vol:	820 0 380	0 0 0	0 1640 470	260 1060 0

Major Street Volume: 3430

Minor Approach Volume: 1200

Minor Approach Volume Threshold: -156 [less than minimum of 150]

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

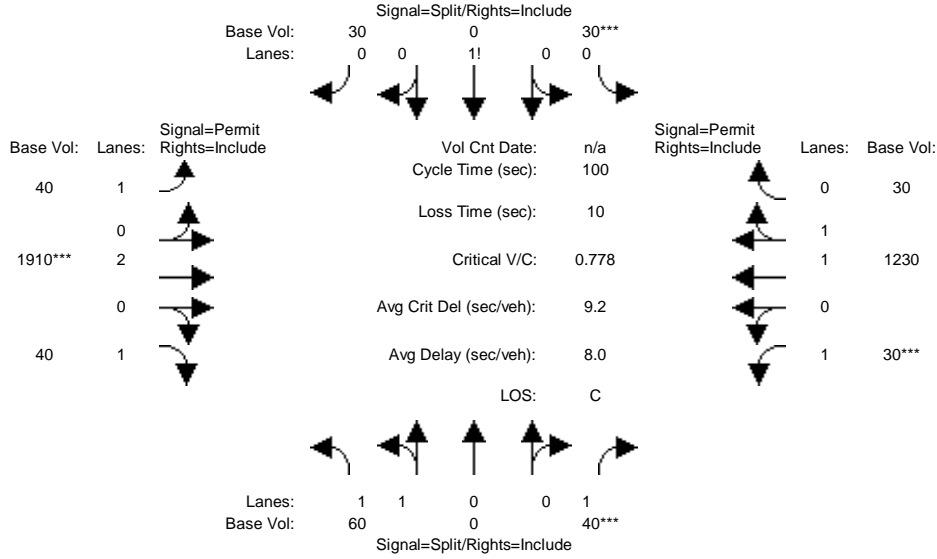
The peak hour warrant analysis in this report is not intended to replace

a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday PM

Intersection #2: Victoria St. & Tamcliff Ave.

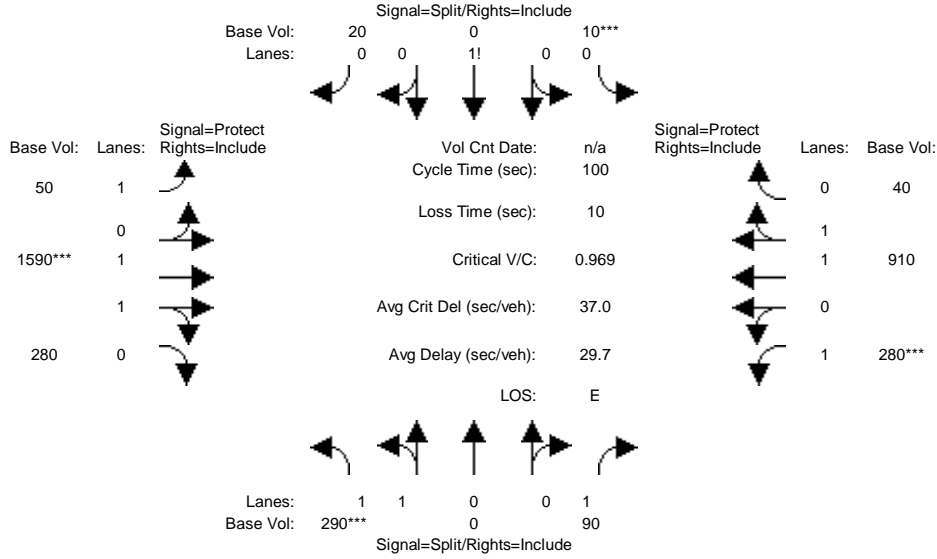


Street Name:	Victoria St.						Tamcliff Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	60	0	40	30	0	30	40	1910	40	30	1230	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	0	40	30	0	30	40	1910	40	30	1230	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	0	40	30	0	30	40	1910	40	30	1230	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	0	40	30	0	30	40	1910	40	30	1230	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	0	40	30	0	30	40	1910	40	30	1230	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.50	0.00	0.50	1.00	2.00	1.00	1.00	1.95	0.05
Final Sat.:	3200	0	1600	800	0	800	1600	3200	1600	1600	3124	76
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.03	0.04	0.00	0.04	0.03	0.60	0.03	0.02	0.39	0.39
Crit Moves:			****	****				****		****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday PM

Intersection #3: Victoria St. & Birchknoll Dr.

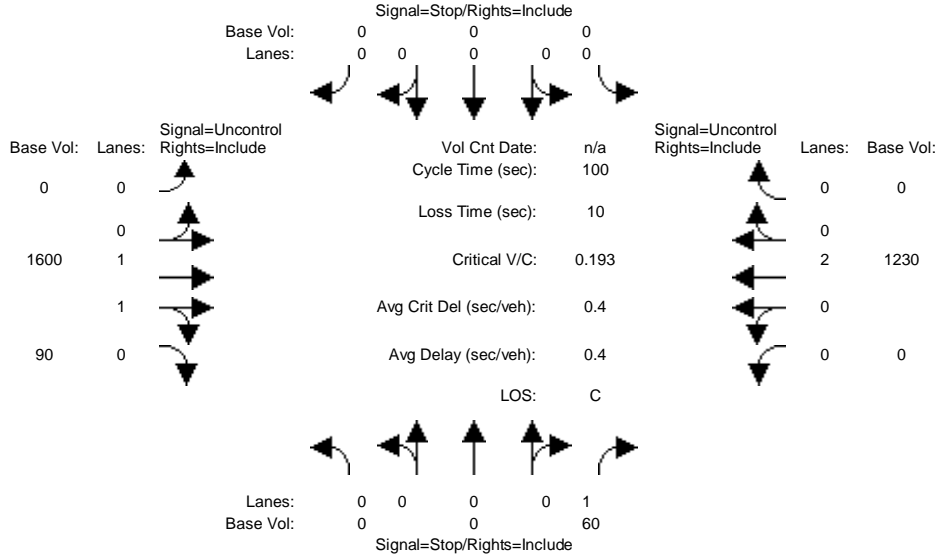


Street Name:	Victoria St.						Birchknoll Dr.													
Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																				
Base Vol:	290	0	90	10	0	20	50	1590	280	280	910	40								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	290	0	90	10	0	20	50	1590	280	280	910	40								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Volume:	290	0	90	10	0	20	50	1590	280	280	910	40								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	290	0	90	10	0	20	50	1590	280	280	910	40								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
FinalVolume:	290	0	90	10	0	20	50	1590	280	280	910	40								
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600								
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Lanes:	2.00	0.00	1.00	0.33	0.00	0.67	1.00	1.70	0.30	1.00	1.92	0.08								
Final Sat.:	3200	0	1600	533	0	1067	1600	2721	479	1600	3065	135								
Capacity Analysis Module:																				
Vol/Sat:	0.09	0.00	0.06	0.02	0.00	0.02	0.03	0.58	0.58	0.17	0.30	0.30								
Crit Moves:	****			****				****		****										

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
2035 With Project Alt2 Weekday PM

Intersection #4: Victoria St. & Project Service Rd.



Street Name:	Project Service Rd.						Victoria St.														
Approach:	North Bound			South Bound			East Bound			West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Volume Module:																					
Base Vol:	0	0	60	0	0	0	0	1600	90	0	1230	0	0	0	0	0	1600	90	0	1230	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	60	0	0	0	0	1600	90	0	1230	0	0	0	0	0	1600	90	0	1230	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	60	0	0	0	0	1600	90	0	1230	0	0	0	0	0	1600	90	0	1230	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	60	0	0	0	0	1600	90	0	1230	0	0	0	0	0	1600	90	0	1230	0
Critical Gap Module:																					
Critical Gp:	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:																					
Cnflct Vol:	xxxx	xxxx	845	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	310	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	310	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.19	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:																					
2Way95thQ:	xxxx	xxxx	0.7	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	19.4	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	C	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	19.4			xxxxxx			xxxxxx			xxxxxx			xxxxxx			xxxxxx			xxxxxx		

ApproachLOS: C * * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #4 Victoria St. & Project Service Rd.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 1	0 0 0 0 0	0 0 1 1 0	0 0 2 0 0
Initial Vol:	0 0 60	0 0 0	0 1600 90	0 1230 0
ApproachDel:	19.4	xxxxxx	xxxxxx	xxxxxx

Approach[northbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.3]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=60]

FAIL - Approach volume less than 100 for one lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=2980]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

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The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #4 Victoria St. & Project Service Rd.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 1	0 0 0 0 0	0 0 1 1 0	0 0 2 0 0
Initial Vol:	0 0 60	0 0 0	0 1600 90	0 1230 0

Major Street Volume: 2920

Minor Approach Volume: 60

Minor Approach Volume Threshold: -84 [less than minimum of 100]

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

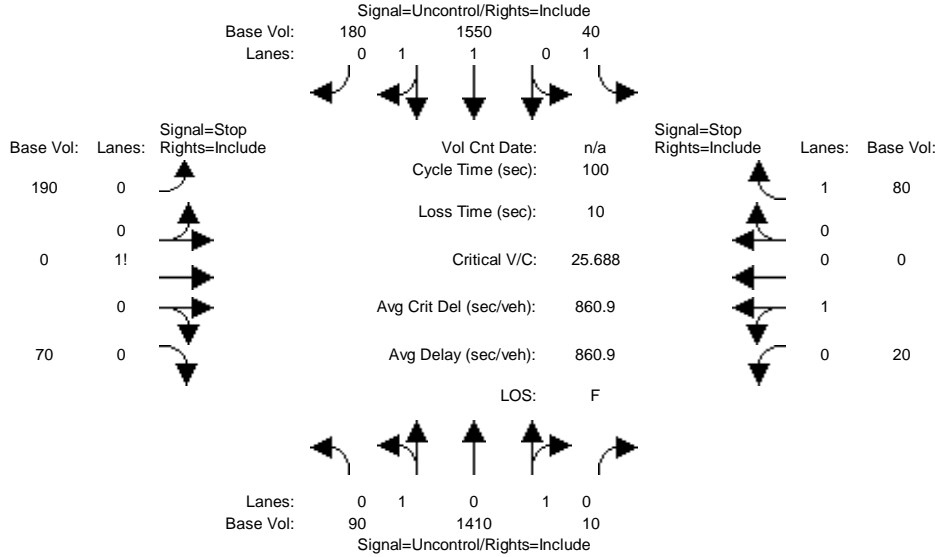
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2035 With Project Alt2 Weekday PM

Intersection #5: Central Ave. & Charles Willard St.



Street Name:	Central Ave.					Charles Willard St.						
Approach:	North Bound			South Bound		East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	90	1410	10	40	1550	180	190	0	70	20	0	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	1410	10	40	1550	180	190	0	70	20	0	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	1410	10	40	1550	180	190	0	70	20	0	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	90	1410	10	40	1550	180	190	0	70	20	0	80
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxxx	4.1	xxxx	xxxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxxx	2.2	xxxx	xxxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflct Vol:	1730	xxxx	xxxxxx	1420	xxxx	xxxxxx	2605	3320	865	2450	3405	710
Potent Cap.:	370	xxxx	xxxxxx	486	xxxx	xxxxxx	12	8	301	16	7	381
Move Cap.:	370	xxxx	xxxxxx	486	xxxx	xxxxxx	7	6	301	9	5	381
Volume/Cap:	0.24	xxxx	xxxx	0.08	xxxx	xxxx	25.69	0.00	0.23	2.11	0.00	0.21
Level Of Service Module:												
2Way95thQ:	0.9	xxxx	xxxxxx	0.3	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	0.8
Control Del:	17.8	xxxx	xxxxxx	13.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	17.0
LOS by Move:	C	*	*	B	*	*	*	*	*	*	*	C
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	10	xxxxxx	9	xxxx	xxxxxx
SharedQueue:	0.9	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	34.1	xxxxxx	3.5	xxxx	xxxxxx
Shrd ConDel:	17.8	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	1287	xxxx	xxxxxx
Shared LOS:	C	*	*	*	*	*	*	F	*	F	*	*
ApproachDel:	xxxxxxx			xxxxxxx			xxxxxxx			270.9		

ApproachLOS: * * F F

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #5 Central Ave. & Charles Willard St.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 1 0 1 0	1 0 1 1 0	0 0 1! 0 0	0 1 0 0 1
Initial Vol:	90 1410 10	40 1550 180	190 0 70	20 0 80
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	270.9

Approach[eastbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=862.3]

SUCCEED - Vehicle-hours greater than or equal to 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=260]

SUCCEED - Approach volume greater than or equal to 100 for one lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=3640]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Approach[westbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=7.5]

SUCCEED - Vehicle-hours >= 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=100]

FAIL - Approach volume less than 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=4][total volume=3640]

SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #5 Central Ave. & Charles Willard St.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 1 0 1 0	1 0 1 1 0	0 0 1! 0 0	0 1 0 0 1
Initial Vol:	90 1410 10	40 1550 180	190 0 70	20 0 80

Major Street Volume: 3280

Minor Approach Volume: 260

Minor Approach Volume Threshold: -124 [less than minimum of 100]

SIGNAL WARRANT DISCLAIMER

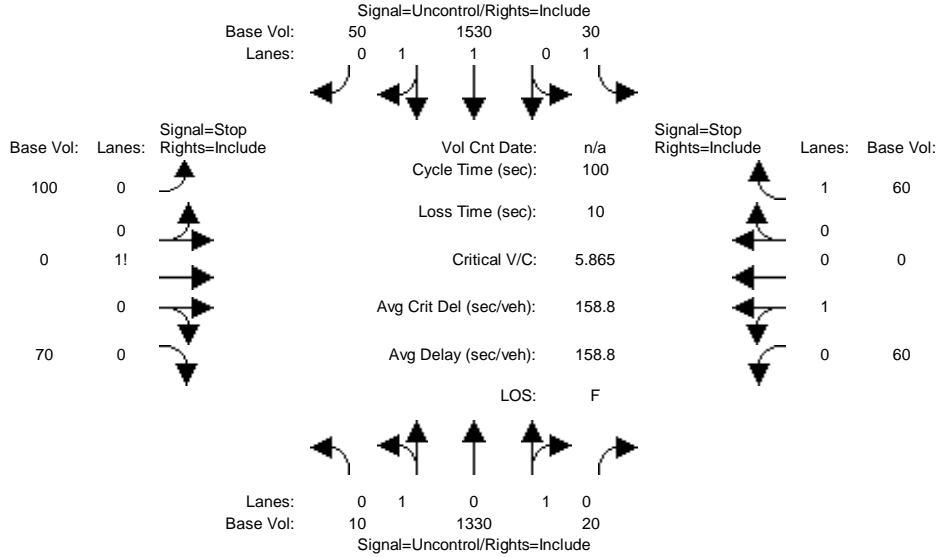
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2035 With Project Alt2 Weekday PM

Intersection #6: Central Ave. & Project Driveway/Beachey Pl.



Street Name:	Central Ave.						Beachey Pl.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	10	1330	20	30	1530	50	100	0	70	60	0	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	1330	20	30	1530	50	100	0	70	60	0	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	10	1330	20	30	1530	50	100	0	70	60	0	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Volume:	10	1330	20	30	1530	50	100	0	70	60	0	60
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	7.5	6.5	6.9	7.5	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	3.5	4.0	3.3	3.5	4.0	3.3
Capacity Module:												
Cnflct Vol:	1580	xxxx	xxxxx	1350	xxxx	xxxxx	2300	2985	790	2185	3000	675
Potent Cap.:	422	xxxx	xxxxx	516	xxxx	xxxxx	21	14	337	26	14	401
Move Cap.:	422	xxxx	xxxxx	516	xxxx	xxxxx	17	13	337	19	13	401
Volume/Cap:	0.02	xxxx	xxxx	0.06	xxxx	xxxx	5.86	0.00	0.21	3.08	0.00	0.15
Level Of Service Module:												
2Way95thQ:	0.1	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0.5
Control Del:	13.7	xxxx	xxxxx	12.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	15.5
LOS by Move:	B	*	*	B	*	*	*	*	*	*	*	C
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	28	xxxxx	19	xxxx	xxxxx
SharedQueue:	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	20.8	xxxxx	7.9	xxxx	xxxxx
Shrd ConDel:	13.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	2561	xxxxx	1349	xxxx	xxxxx
Shared LOS:	B	*	*	*	*	*	*	F	*	F	*	*
ApproachDel:	xxxxxxx	xxxxxxx	xxxxxxx	xxxxxxx	xxxxxxx	xxxxxxx	2560.8	xxxxxxx	xxxxxxx	682.4	xxxxxxx	xxxxxxx

ApproachLOS: * * F F

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #6 Central Ave. & Project Driveway/Beachey Pl.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	0	1	0	1	0	1	0	0	1	0	1	0
Initial Vol:	10	1330	20	30	1530	50	100	0	70	60	0	60
ApproachDel:	xxxxxx			xxxxxx			2560.8			682.4		

Approach[eastbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=120.9]
SUCCEED - Vehicle-hours greater than or equal to 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=170]
SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=3260]
SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Approach[westbound][lanes=2][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=22.7]
SUCCEED - Vehicle-hours >= 5 for two or more lane approach.
Signal Warrant Rule #2: [approach volume=120]
FAIL - Approach volume less than 150 for two or more lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=3260]
SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

SIGNAL WARRANT DISCLAIMER
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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #6 Central Ave. & Project Driveway/Beachey Pl.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	0	1	0	1	0	1	0	0	1	0	1	0
Initial Vol:	10	1330	20	30	1530	50	100	0	70	60	0	60

Major Street Volume: 2970
Minor Approach Volume: 170
Minor Approach Volume Threshold: -90 [less than minimum of 100]

SIGNAL WARRANT DISCLAIMER

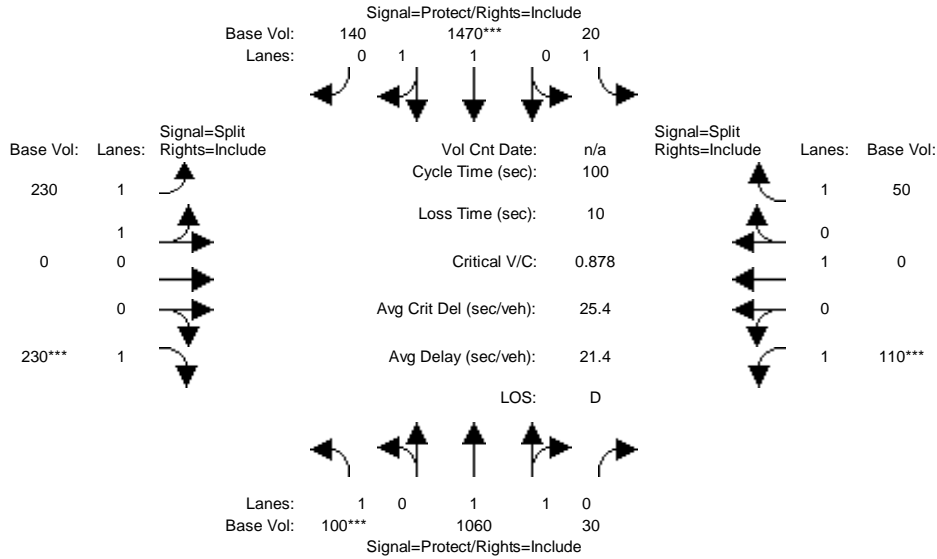
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday PM

Intersection #7: Central Ave. & Glenn Curtiss St.

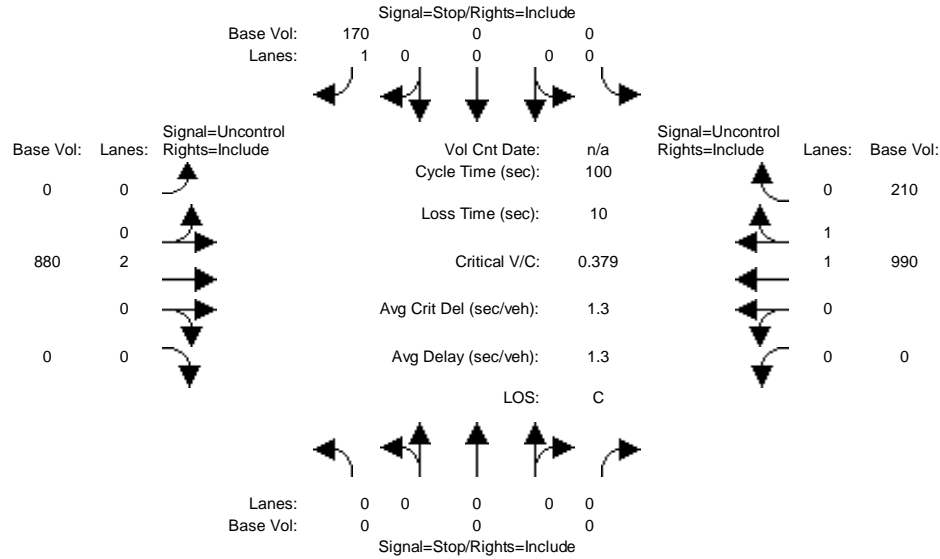


Street Name:	Central Ave.						Glenn Curtiss St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	100	1060	30	20	1470	140	230	0	230	110	0	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	100	1060	30	20	1470	140	230	0	230	110	0	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	100	1060	30	20	1470	140	230	0	230	110	0	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	100	1060	30	20	1470	140	230	0	230	110	0	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	100	1060	30	20	1470	140	230	0	230	110	0	50
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.94	0.06	1.00	1.83	0.17	2.00	0.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	3112	88	1600	2922	278	3200	0	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.34	0.34	0.01	0.50	0.50	0.07	0.00	0.14	0.07	0.00	0.03
Crit Moves:	****				****				****	****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
2035 With Project Alt2 Weekday PM

Intersection #8: University Dr./Birchknoll Dr. Ext.



Vol Cnt Date: n/a
 Cycle Time (sec): 100
 Loss Time (sec): 10
 Critical V/C: 0.379
 Avg Crit Del (sec/veh): 1.3
 Avg Delay (sec/veh): 1.3
 LOS: C

Street Name:	Birchknoll Dr. Ext.					University Dr.						
Approach:	North Bound			South Bound		East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:							0	880	0	0	990	210
Base Vol:	0	0	0	0	0	170	0	880	0	0	990	210
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	170	0	880	0	0	990	210
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	170	0	880	0	0	990	210
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	170	0	880	0	0	990	210
Critical Gap Module:							6.9					
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:							600					
Cnflct Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	600	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	449	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	449	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	0.38	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:							1.7					
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	1.7	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	17.8	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	C	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxxx			17.8			xxxxxxx			xxxxxxx		

ApproachLOS: * C * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #8 University Dr./Birchknoll Dr. Ext.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 0	0 0 0 0 1	0 0 2 0 0	0 0 1 1 0
Initial Vol:	0 0 0	0 0 170	0 880 0	0 990 210
ApproachDel:	xxxxxx	17.8	xxxxxx	xxxxxx

Approach[southbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.8]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=170]

SUCCEED - Approach volume greater than or equal to 100 for one lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=2250]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #8 University Dr./Birchknoll Dr. Ext.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 0	0 0 0 0 1	0 0 2 0 0	0 0 1 1 0
Initial Vol:	0 0 0	0 0 170	0 880 0	0 990 210

Major Street Volume: 2080

Minor Approach Volume: 170

Minor Approach Volume Threshold: 33 [less than minimum of 100]

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

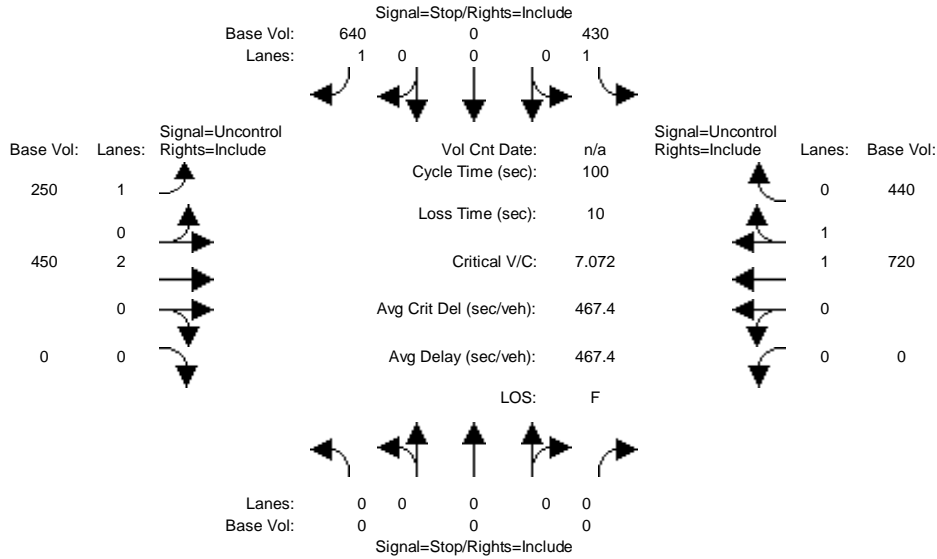
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Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 2000 HCM Unsignalized (Base Volume Alternative)
 2035 With Project Alt2 Weekday PM

Intersection #9: University Dr. & Toro Center Dr.



Street Name:	University Dr.						Toro Center Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	430	0	640	250	450	0	0	720	440
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	430	0	640	250	450	0	0	720	440
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	430	0	640	250	450	0	0	720	440
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	430	0	640	250	450	0	0	720	440
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxxx	6.8	xxxx	6.9	4.1	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
FollowUpTim:	xxxxxx	xxxx	xxxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Capacity Module:												
Cnflct Vol:	xxxx	xxxx	xxxxxx	1665	xxxx	580	1160	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Potent Cap.:	xxxx	xxxx	xxxxxx	89	xxxx	463	610	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Move Cap.:	xxxx	xxxx	xxxxxx	61	xxxx	463	610	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Volume/Cap:	xxxx	xxxx	xxxx	7.07	xxxx	1.38	0.41	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxxx	49.4	xxxx	30.1	2.0	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
Control Del:	xxxxxx	xxxx	xxxxxx	2864	xxxx	209.7	15.0	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
LOS by Move:	*	*	*	F	*	F	B	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx	xxxx	xxxx	xxxxxx
SharedQueue:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shrd ConDel:	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxxx			1276.4			xxxxxxx			xxxxxxx		

ApproachLOS: * F * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #9 University Dr. & Toro Center Dr.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0	0	0	0	0	0	1	0	2	0	0	1
Initial Vol:	0	0	0	430	0	640	250	450	0	0	720	440
ApproachDel:	xxxxxx			1276.4			xxxxxx			xxxxxx		

Approach[southbound][lanes=2][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=379.4]

SUCCEED - Vehicle-hours >= 5 for two or more lane approach.

Signal Warrant Rule #2: [approach volume=1070]

SUCCEED - Approach volume >= 150 for two or more lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=2930]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

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Peak Hour Volume Signal Warrant Report [Urban]

Intersection #9 University Dr. & Toro Center Dr.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0	0	0	0	0	0	1	0	2	0	0	1
Initial Vol:	0	0	0	430	0	640	250	450	0	0	720	440

Major Street Volume: 1860

Minor Approach Volume: 1070

Minor Approach Volume Threshold: 107 [less than minimum of 150]

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

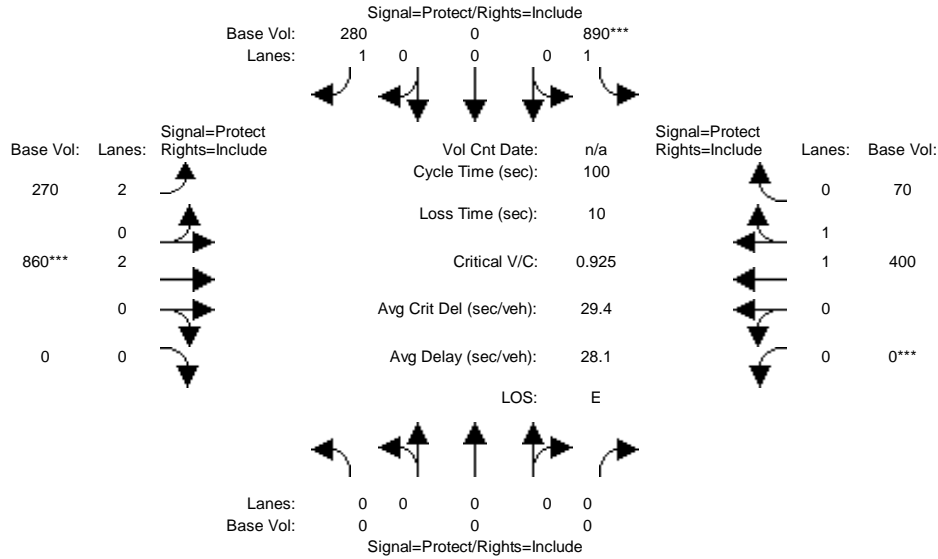
The peak hour warrant analysis in this report is not intended to replace

a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday PM

Intersection #10: Albertoni St. & SR 91 EB Ramps

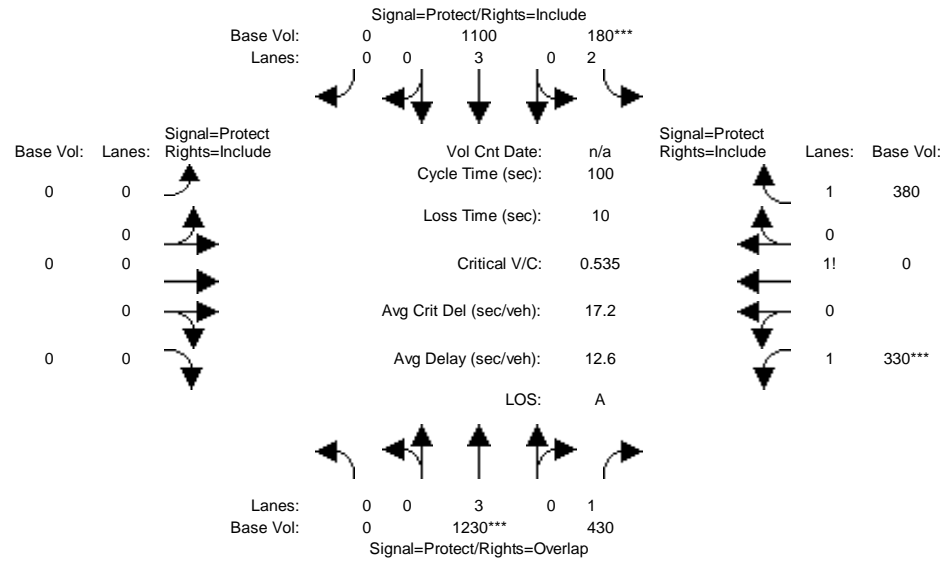


Street Name:	Albertoni St.						SR 91 EB Ramps								
Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:															
Base Vol:	0	0	0	890	0	280	270	860	0	0	400	70			
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Initial Bse:	0	0	0	890	0	280	270	860	0	0	400	70			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Volume:	0	0	0	890	0	280	270	860	0	0	400	70			
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0			
Reduced Vol:	0	0	0	890	0	280	270	860	0	0	400	70			
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Final Volume:	0	0	0	890	0	280	270	860	0	0	400	70			
Saturation Flow Module:															
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600			
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00			
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.70	0.30			
Final Sat.:	0	0	0	1600	0	1600	5760	3200	0	0	2723	477			
Capacity Analysis Module:															
Vol/Sat:	0.00	0.00	0.00	0.56	0.00	0.17	0.05	0.27	0.00	0.00	0.15	0.15			
Crit Moves:				****							****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday PM

Intersection #11: Avalon Blvd. & SR 91 WB On-Ramp

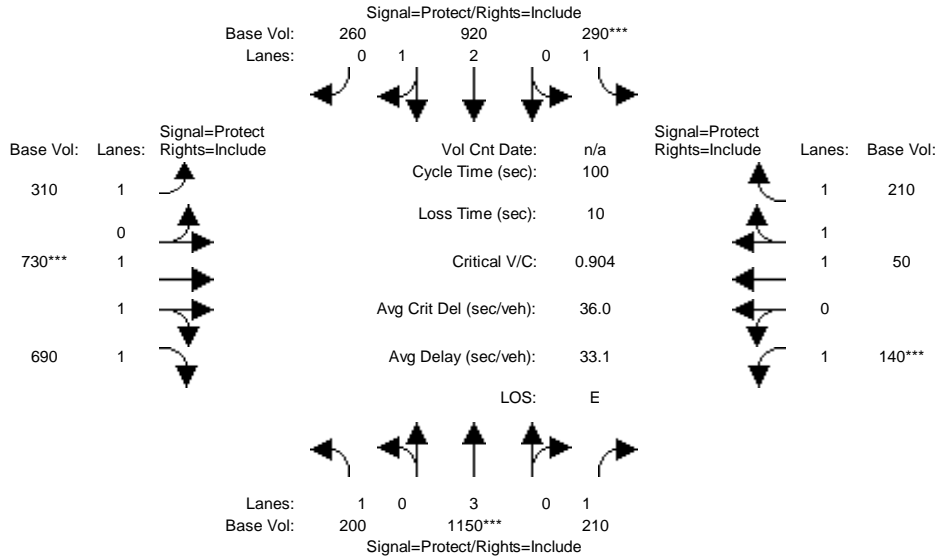


Street Name:	Avalon Blvd.						SR 91 WB On-Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1230	430	180	1100	0	0	0	0	330	0	380
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1230	430	180	1100	0	0	0	0	330	0	380
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1230	430	180	1100	0	0	0	0	330	0	380
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1230	430	180	1100	0	0	0	0	330	0	380
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	1230	430	180	1100	0	0	0	0	330	0	380
OvlAdjVol:	193											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.39	0.00	1.61
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	2231	0	2569
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.27	0.03	0.23	0.00	0.00	0.00	0.00	0.15	0.00	0.15
OvlAdjV/S:	0.12											
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday PM

Intersection #12: Avalon Blvd. & Albertoni St.

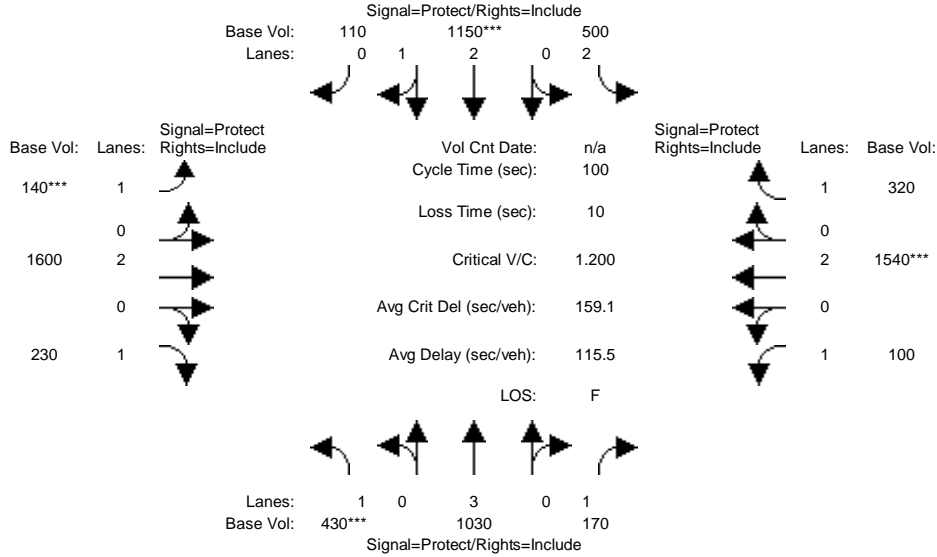


Street Name:	Avalon Blvd.						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	200	1150	210	290	920	260	310	730	690	140	50	210
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	200	1150	210	290	920	260	310	730	690	140	50	210
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	200	1150	210	290	920	260	310	730	690	140	50	210
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	200	1150	210	290	920	260	310	730	690	140	50	210
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	200	1150	210	290	920	260	310	730	690	140	50	210
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.34	0.66	1.00	1.54	1.46	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3742	1058	1600	2468	2332	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.13	0.24	0.13	0.18	0.25	0.25	0.19	0.30	0.30	0.09	0.03	0.07
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday PM

Intersection #13: Avalon Blvd. & Victoria St.

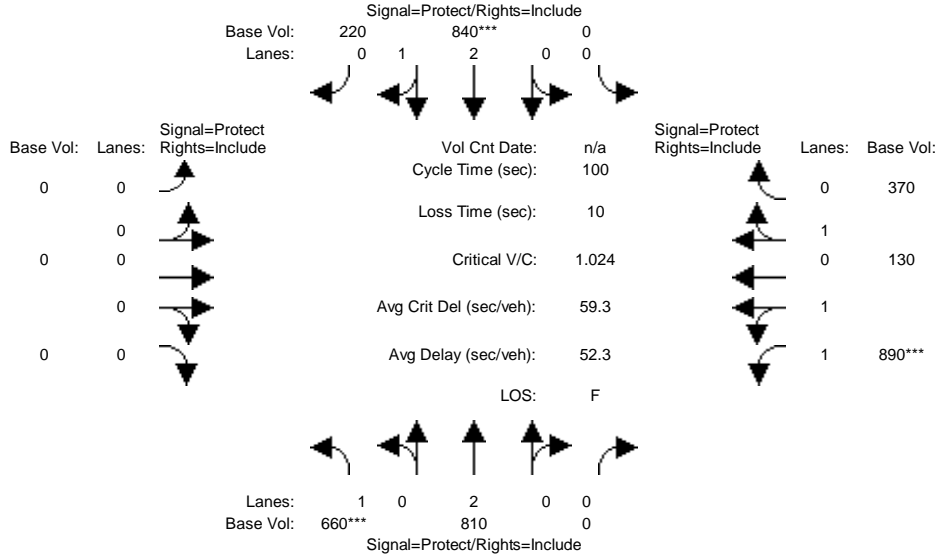


Street Name:	Avalon Blvd.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	430	1030	170	500	1150	110	140	1600	230	100	1540	320
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	430	1030	170	500	1150	110	140	1600	230	100	1540	320
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	430	1030	170	500	1150	110	140	1600	230	100	1540	320
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	430	1030	170	500	1150	110	140	1600	230	100	1540	320
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	430	1030	170	500	1150	110	140	1600	230	100	1540	320
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.74	0.26	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4381	419	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.27	0.21	0.11	0.09	0.26	0.26	0.09	0.50	0.14	0.06	0.48	0.20
Crit Moves:	****				****		****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday PM

Intersection #14: Central Ave. & Artesia Blvd.

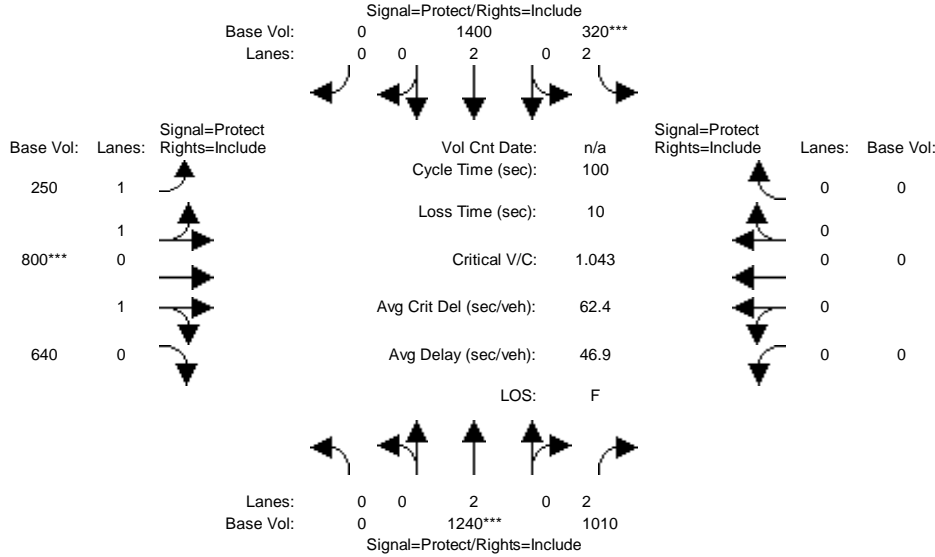


Street Name:	Central Ave.						Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	660	810	0	0	840	220	0	0	0	890	130	370
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	660	810	0	0	840	220	0	0	0	890	130	370
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	660	810	0	0	840	220	0	0	0	890	130	370
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	660	810	0	0	840	220	0	0	0	890	130	370
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	660	810	0	0	840	220	0	0	0	890	130	370
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.38	0.62	0.00	0.00	0.00	1.92	0.28	0.80
Final Sat.:	1600	3200	0	0	3804	996	0	0	0	3066	450	1284
Capacity Analysis Module:												
Vol/Sat:	0.41	0.25	0.00	0.00	0.22	0.22	0.00	0.00	0.00	0.29	0.29	0.29
Crit Moves:	****				****					****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday PM

Intersection #15: Central Ave. & Albertoni St./Artesia Blvd. EB



Street Name:	Central Ave.						Albertoni St./Artesia Blvd. EB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0

Volume Module:

Base Vol:	0	1240	1010	320	1400	0	250	800	640	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1240	1010	320	1400	0	250	800	640	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1240	1010	320	1400	0	250	800	640	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1240	1010	320	1400	0	250	800	640	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1240	1010	320	1400	0	250	800	640	0	0	0

Saturation Flow Module:

Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.00	1.00	1.00	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	1600	1600	1600	0	0	0

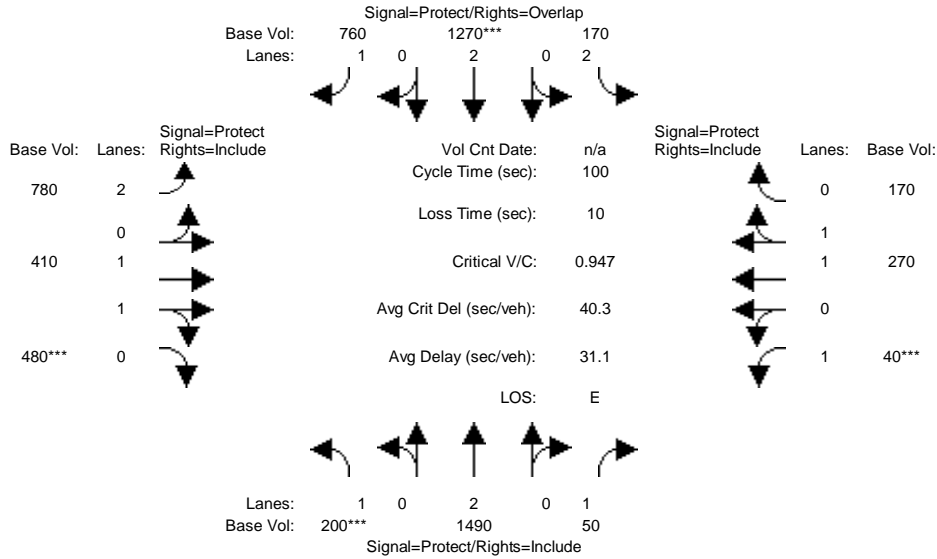
Capacity Analysis Module:

Vol/Sat:	0.00	0.39	0.32	0.06	0.44	0.00	0.16	0.50	0.40	0.00	0.00	0.00
Crit Moves:		****		****				****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday PM

Intersection #16: Central Ave. & Victoria St.

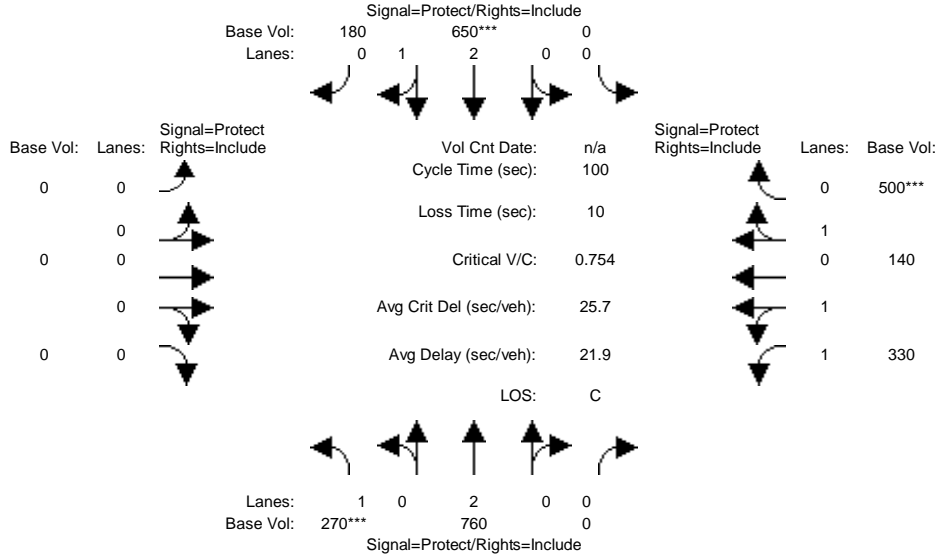


Street Name:	Central Ave.						Victoria St.													
Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																				
Base Vol:	200	1490	50	170	1270	760	780	410	480	40	270	170								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	200	1490	50	170	1270	760	780	410	480	40	270	170								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	200	1490	50	170	1270	760	780	410	480	40	270	170								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	200	1490	50	170	1270	760	780	410	480	40	270	170								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	200	1490	50	170	1270	760	780	410	480	40	270	170								
OvlAdjVol:													543							
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.00	1.00	1.00	1.00	1.23	0.77							
Final Sat.:	1600	3200	1600	5760	3200	1600	5760	1600	1600	1600	1964	1236								
Capacity Analysis Module:																				
Vol/Sat:	0.13	0.47	0.03	0.03	0.40	0.48	0.14	0.26	0.30	0.03	0.14	0.14								
OvlAdjV/S:													0.34							
Crit Moves:	***							***							***	***				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday PM

Intersection #17: Wilmington Ave. & Artesia Blvd. WB

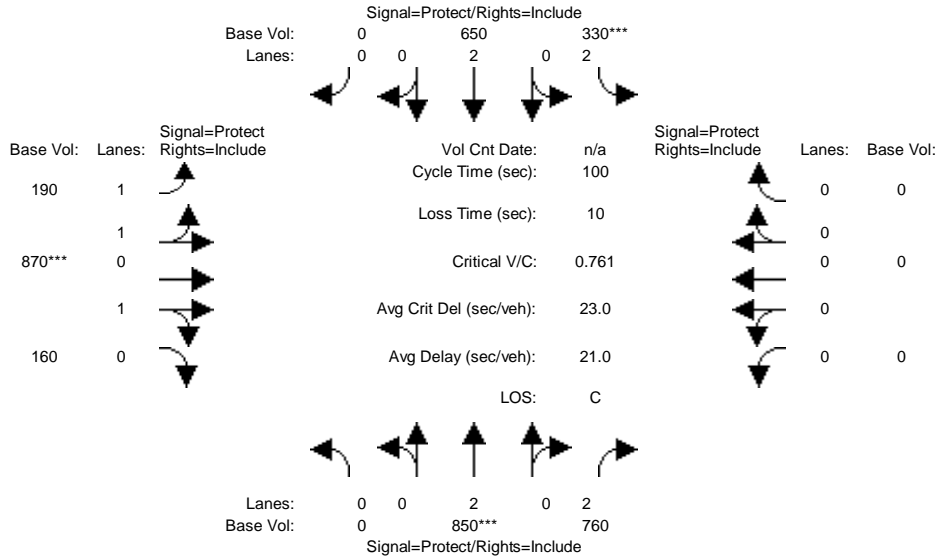


Street Name:	Wilmington Ave.						Artesia Blvd. WB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	270	760	0	0	650	180	0	0	0	330	140	500
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	270	760	0	0	650	180	0	0	0	330	140	500
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	270	760	0	0	650	180	0	0	0	330	140	500
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	270	760	0	0	650	180	0	0	0	330	140	500
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	270	760	0	0	650	180	0	0	0	330	140	500
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.35	0.65	0.00	0.00	0.00	1.40	0.60	1.00
Final Sat.:	1600	3200	0	0	3759	1041	0	0	0	2247	953	1600
Capacity Analysis Module:												
Vol/Sat:	0.17	0.24	0.00	0.00	0.17	0.17	0.00	0.00	0.00	0.15	0.15	0.31
Crit Moves:	****				****							****

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday PM

Intersection #18: Wilmington Ave. & Artesia Blvd. EB

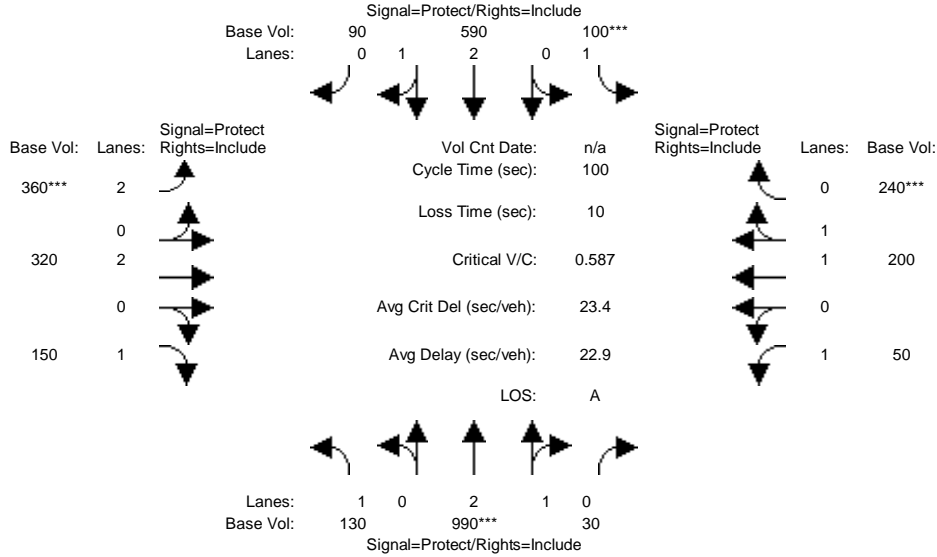


Street Name:	Wilmington Ave.						Artesia Blvd. EB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	850	760	330	650	0	190	870	160	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	850	760	330	650	0	190	870	160	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	850	760	330	650	0	190	870	160	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	850	760	330	650	0	190	870	160	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	850	760	330	650	0	190	870	160	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.00	1.61	0.39	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	1600	2574	626	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.27	0.24	0.06	0.20	0.00	0.12	0.34	0.26	0.00	0.00	0.00
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday PM

Intersection #19: Wilmington Ave. & Victoria St.

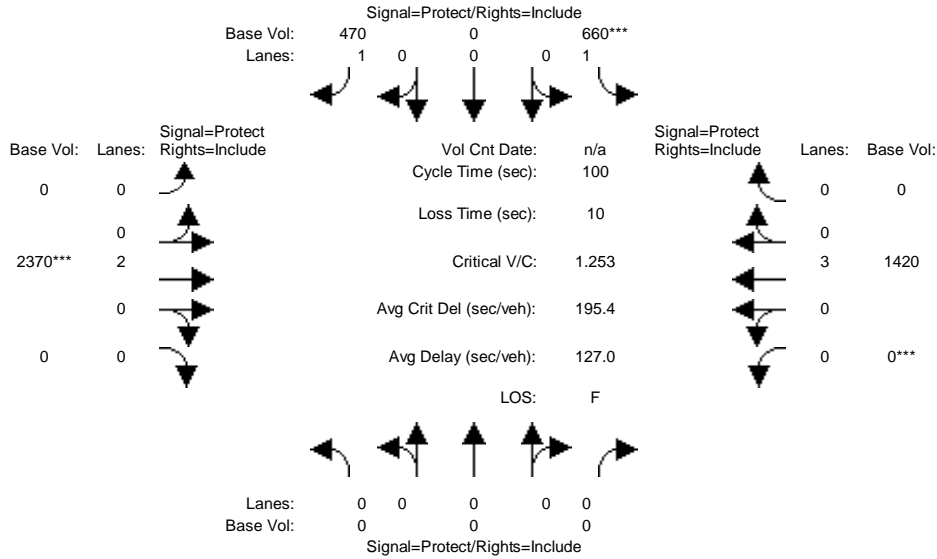


Street Name:	Wilmington Ave.						Victoria St.														
Approach:	North Bound			South Bound			East Bound			West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																					
Base Vol:	130	990	30	100	590	90	360	320	150	50	200	240									
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
Initial Bse:	130	990	30	100	590	90	360	320	150	50	200	240									
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
PHF Volume:	130	990	30	100	590	90	360	320	150	50	200	240									
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0									
Reduced Vol:	130	990	30	100	590	90	360	320	150	50	200	240									
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
FinalVolume:	130	990	30	100	590	90	360	320	150	50	200	240									
Saturation Flow Module:																					
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600									
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00									
Lanes:	1.00	2.91	0.09	1.00	2.60	0.40	2.00	2.00	1.00	1.00	1.00	1.00									
Final Sat.:	1600	4659	141	1600	4165	635	5760	3200	1600	1600	1600	1600									
Capacity Analysis Module:																					
Vol/Sat:	0.08	0.21	0.21	0.06	0.14	0.14	0.06	0.10	0.09	0.03	0.13	0.15									
Crit Moves:	****			****			****			****											

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday PM

Intersection #20: I-110 SB Off-Ramp & 190th St.

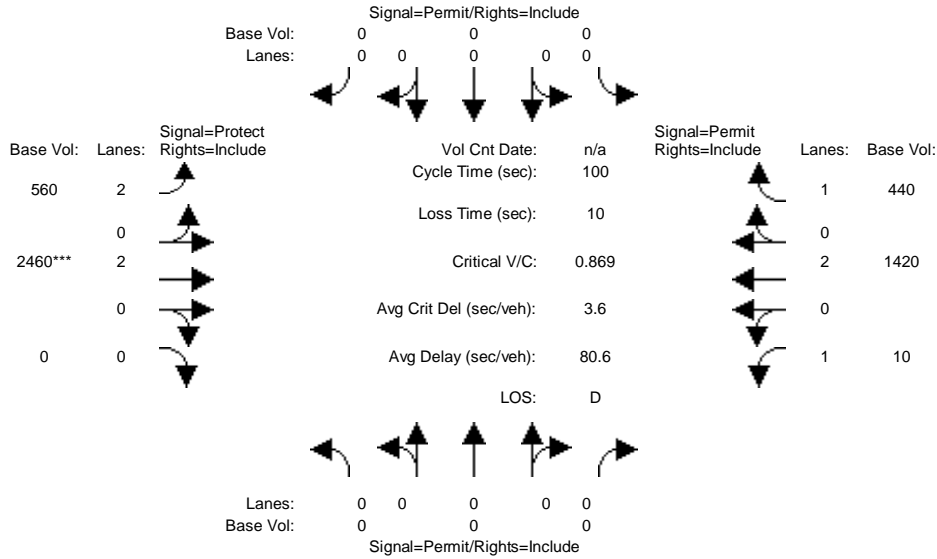


Street Name:	I-110 SB Off-Ramp						190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	660	0	470	0	2370	0	0	1420	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	660	0	470	0	2370	0	0	1420	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	660	0	470	0	2370	0	0	1420	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	660	0	470	0	2370	0	0	1420	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	660	0	470	0	2370	0	0	1420	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	0.00	2.00	0.00	0.00	3.00	0.00
Final Sat.:	0	0	0	1600	0	1600	0	3200	0	0	4800	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.41	0.00	0.29	0.00	0.74	0.00	0.00	0.30	0.00
Crit Moves:				****				****		****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday PM

Intersection #21: I-110 NB On-Ramp & 190th St.

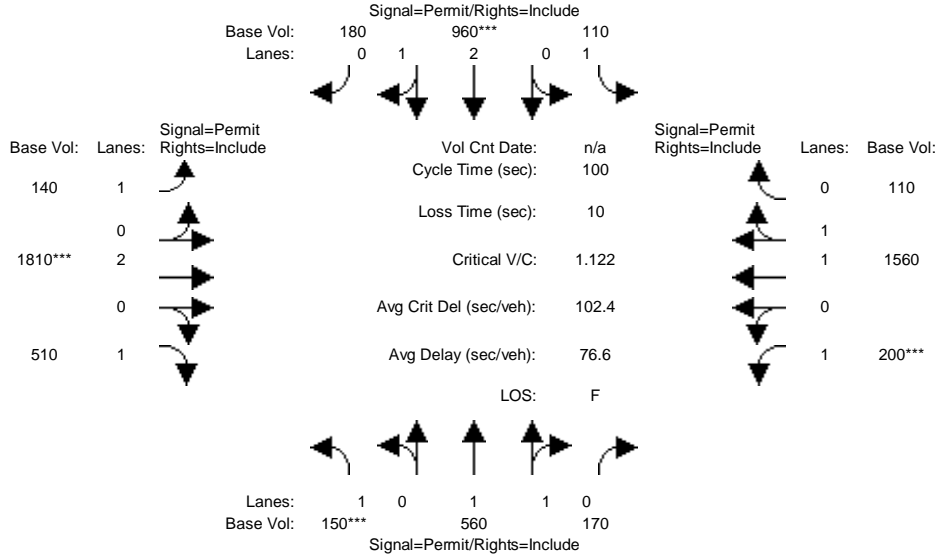


Street Name:	I-110 NB On-Ramp						190th St.														
Approach:	North Bound			South Bound			East Bound			West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																					
Base Vol:	0	0	0	0	0	0	560	2460	0	10	1420	440									
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00						
Initial Bse:	0	0	0	0	0	0	560	2460	0	10	1420	440									
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00						
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00						
PHF Volume:	0	0	0	0	0	0	560	2460	0	10	1420	440									
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0									
Reduced Vol:	0	0	0	0	0	0	560	2460	0	10	1420	440									
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00						
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00						
FinalVolume:	0	0	0	0	0	0	560	2460	0	10	1420	440									
Saturation Flow Module:																					
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600						
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00						
Lanes:	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	1.00	2.00	1.00									
Final Sat.:	0	0	0	0	0	0	5760	3200	0	1600	3200	1600									
Capacity Analysis Module:																					
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.77	0.00	0.01	0.44	0.28									
Crit Moves:													****								

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday PM

Intersection #22: Figueroa St. & 190th St./Victoria St.

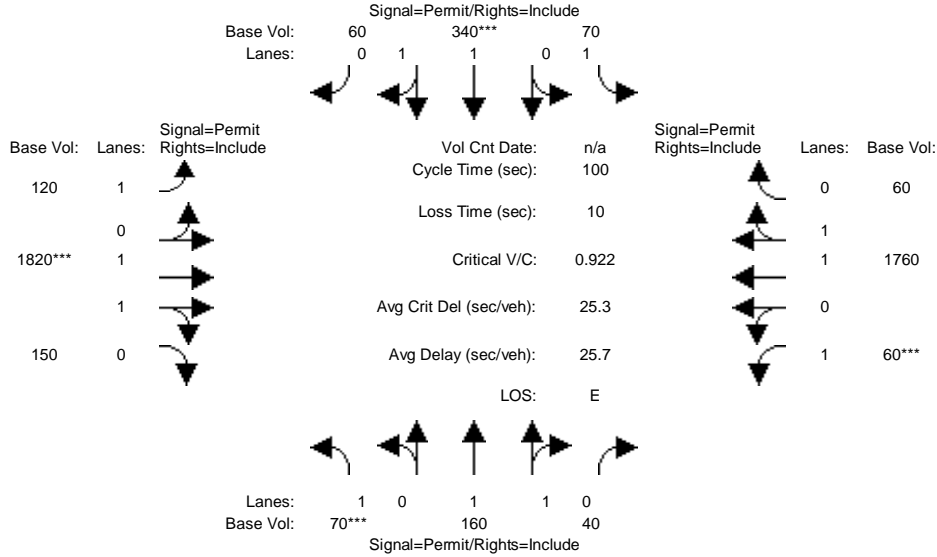


Street Name:	Figueroa St.						190th St./Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	150	560	170	110	960	180	140	1810	510	200	1560	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	560	170	110	960	180	140	1810	510	200	1560	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	560	170	110	960	180	140	1810	510	200	1560	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	560	170	110	960	180	140	1810	510	200	1560	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	560	170	110	960	180	140	1810	510	200	1560	110
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.53	0.47	1.00	2.53	0.47	1.00	2.00	1.00	1.00	1.87	0.13
Final Sat.:	1600	2455	745	1600	4042	758	1600	3200	1600	1600	2989	211
Capacity Analysis Module:												
Vol/Sat:	0.09	0.23	0.23	0.07	0.24	0.24	0.09	0.57	0.32	0.13	0.52	0.52
Crit Moves:	****				****			****			****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday PM

Intersection #23: Broadway & Victoria St.

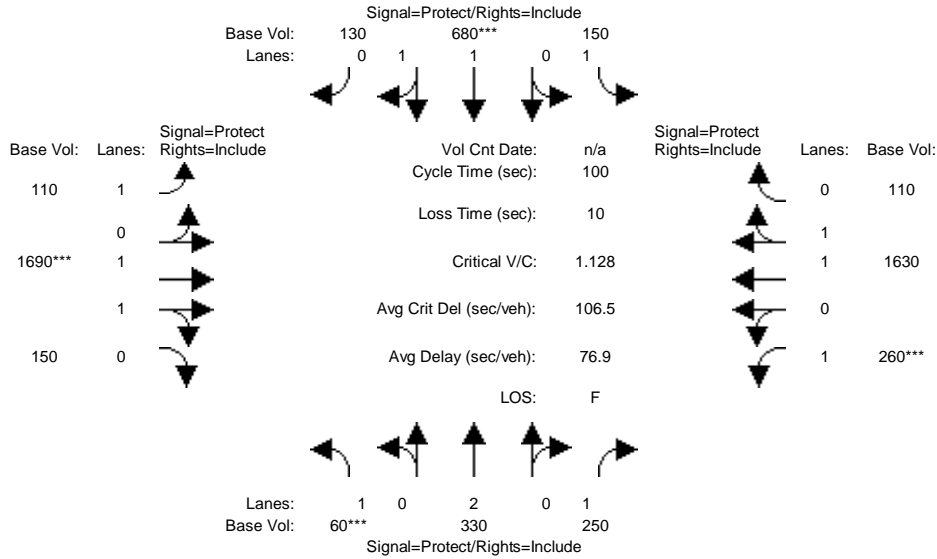


Street Name:	Broadway						Victoria St.														
Approach:	North Bound			South Bound			East Bound			West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																					
Base Vol:	70	160	40	70	340	60	120	1820	150	60	1760	60	70	160	40	70	340	60	120	1820	150
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	160	40	70	340	60	120	1820	150	60	1760	60	70	160	40	70	340	60	120	1820	150
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	160	40	70	340	60	120	1820	150	60	1760	60	70	160	40	70	340	60	120	1820	150
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	160	40	70	340	60	120	1820	150	60	1760	60	70	160	40	70	340	60	120	1820	150
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	70	160	40	70	340	60	120	1820	150	60	1760	60	70	160	40	70	340	60	120	1820	150
Saturation Flow Module:																					
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.60	0.40	1.00	1.70	0.30	1.00	1.85	0.15	1.00	1.93	0.07	1.00	1.60	0.40	1.00	1.70	0.30	1.00	1.85	0.15
Final Sat.:	1600	2560	640	1600	2720	480	1600	2956	244	1600	3095	105	1600	1600	640	1600	2720	480	1600	2956	244
Capacity Analysis Module:																					
Vol/Sat:	0.04	0.06	0.06	0.04	0.13	0.13	0.08	0.62	0.62	0.04	0.57	0.57	0.04	0.06	0.06	0.04	0.13	0.13	0.08	0.62	0.62
Crit Moves:	****				****			****			****						****			****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday PM

Intersection #24: Main St. & Victoria St.

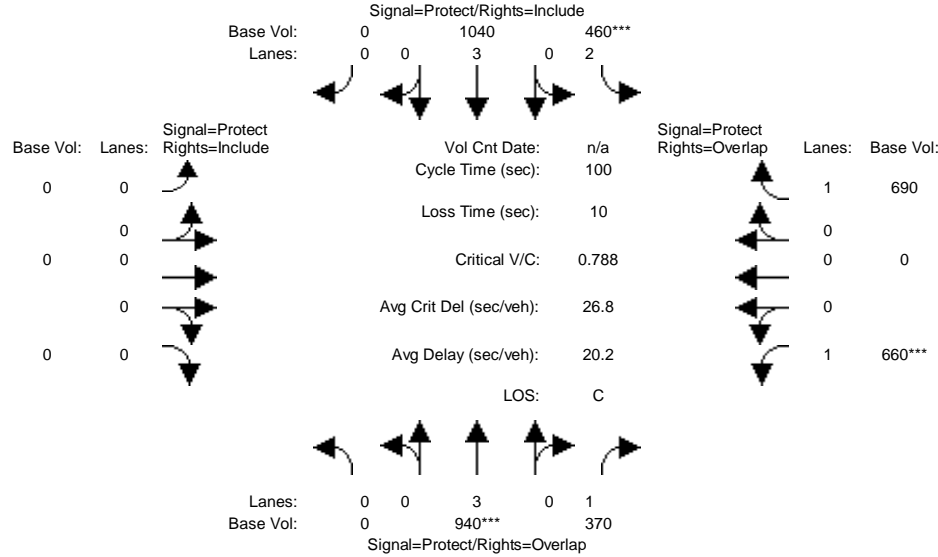


Street Name:	Main St.						Victoria St.																		
Approach:	North Bound			South Bound			East Bound			West Bound															
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R					
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0					
Volume Module:																									
Base Vol:	60	330	250	150	680	130	110	1690	150	260	1630	110	60	330	250	150	680	130	110	1690	150	260	1630	110	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	60	330	250	150	680	130	110	1690	150	260	1630	110	60	330	250	150	680	130	110	1690	150	260	1630	110	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:	60	330	250	150	680	130	110	1690	150	260	1630	110	60	330	250	150	680	130	110	1690	150	260	1630	110	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	60	330	250	150	680	130	110	1690	150	260	1630	110	60	330	250	150	680	130	110	1690	150	260	1630	110	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
FinalVolume:	60	330	250	150	680	130	110	1690	150	260	1630	110	60	330	250	150	680	130	110	1690	150	260	1630	110	
Saturation Flow Module:																									
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Lanes:	1.00	2.00	1.00	1.00	1.68	0.32	1.00	1.84	0.16	1.00	1.87	0.13	1.00	2.00	1.00	1.00	1.68	0.32	1.00	1.84	0.16	1.00	1.87	0.13	
Final Sat.:	1600	3200	1600	1600	2686	514	1600	2939	261	1600	2998	202	1600	3200	1600	1600	2686	514	1600	2939	261	1600	2998	202	
Capacity Analysis Module:																									
Vol/Sat:	0.04	0.10	0.16	0.09	0.25	0.25	0.07	0.58	0.57	0.16	0.54	0.54	0.04	0.10	0.16	0.09	0.25	0.25	0.07	0.58	0.57	0.16	0.54	0.54	
Crit Moves:	****				****		****			****			****				****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday PM

Intersection #25: Avalon Blvd. & University Dr.

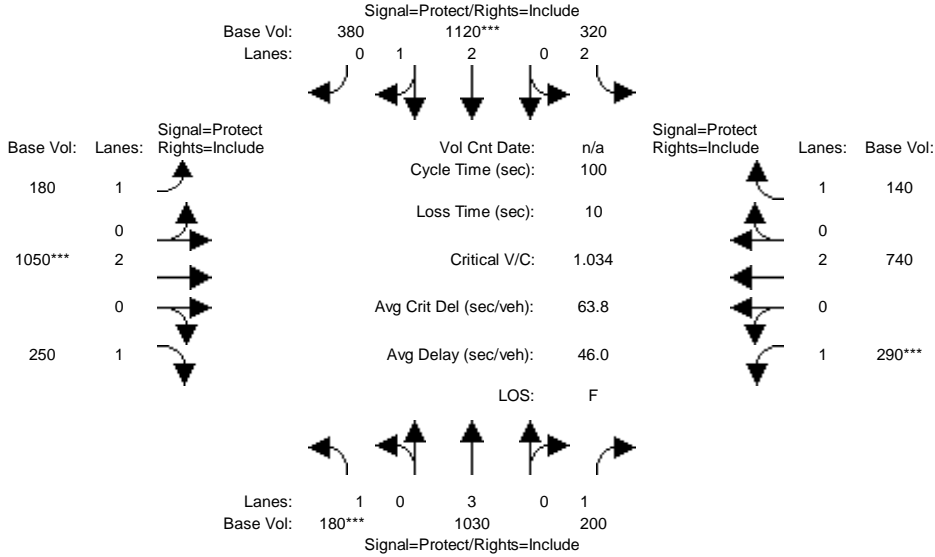


Street Name:	Avalon Blvd.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	940	370	460	1040	0	0	0	0	660	0	690
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	940	370	460	1040	0	0	0	0	660	0	690
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	940	370	460	1040	0	0	0	0	660	0	690
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	940	370	460	1040	0	0	0	0	660	0	690
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	940	370	460	1040	0	0	0	0	660	0	690
OvlAdjVol:	0									562		
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.23	0.08	0.22	0.00	0.00	0.00	0.00	0.41	0.00	0.43
OvlAdjV/S:	0.00									0.35		
Crit Moves:	****			****						****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday PM

Intersection #26: Avalon Blvd. & Del Amo Blvd.

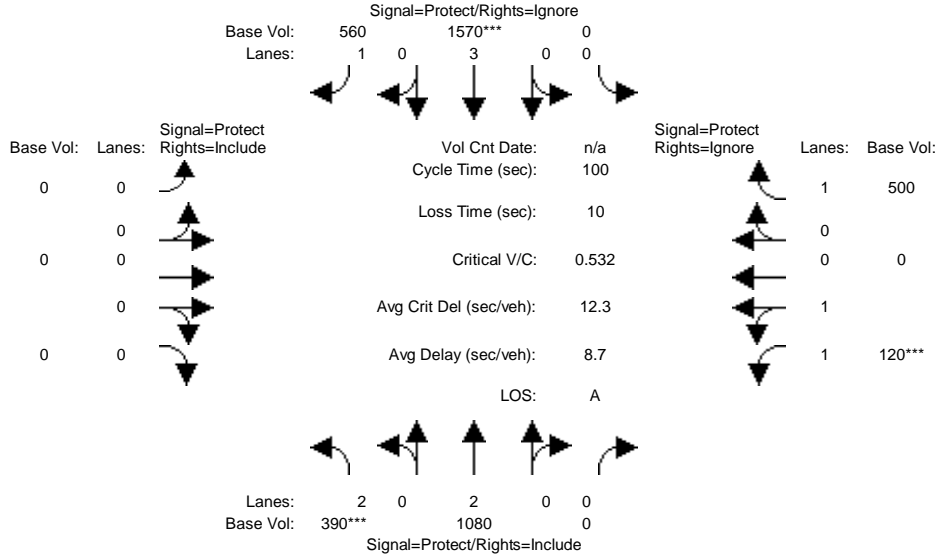


Street Name:	Avalon Blvd.						Del Amo Blvd.								
Approach:	North Bound			South Bound			East Bound			West Bound					
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:															
Base Vol:	180	1030	200	320	1120	380	180	1050	250	290	740	140			
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Initial Bse:	180	1030	200	320	1120	380	180	1050	250	290	740	140			
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
PHF Volume:	180	1030	200	320	1120	380	180	1050	250	290	740	140			
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0			
Reduced Vol:	180	1030	200	320	1120	380	180	1050	250	290	740	140			
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
FinalVolume:	180	1030	200	320	1120	380	180	1050	250	290	740	140			
Saturation Flow Module:															
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600			
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Lanes:	1.00	3.00	1.00	2.00	2.24	0.76	1.00	2.00	1.00	1.00	2.00	1.00			
Final Sat.:	1600	4800	1600	5760	3584	1216	1600	3200	1600	1600	3200	1600			
Capacity Analysis Module:															
Vol/Sat:	0.11	0.21	0.13	0.06	0.31	0.31	0.11	0.33	0.16	0.18	0.23	0.09			
Crit Moves:	****				****		****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday PM

Intersection #27: Avalon Blvd. & I-405 NB Ramps

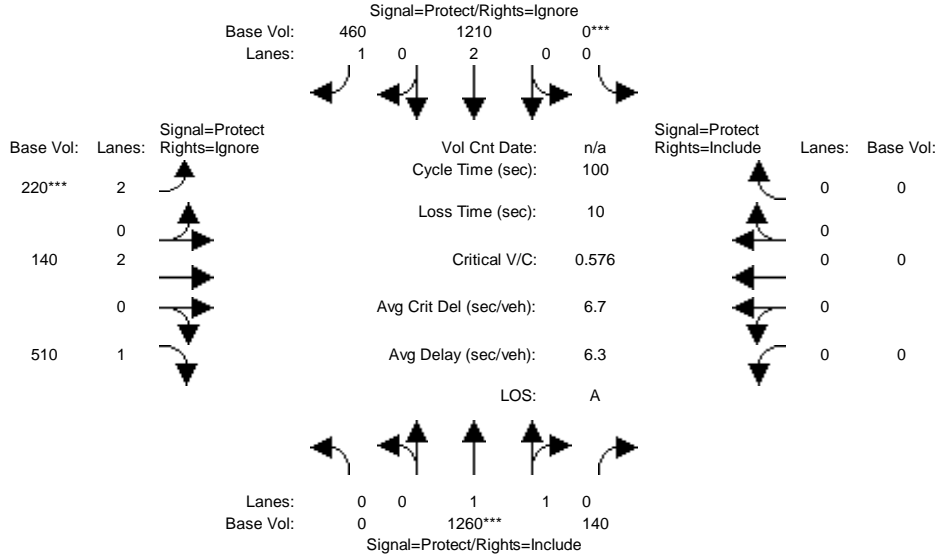


Street Name:	Avalon Blvd.						I-405 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	390	1080	0	0	1570	560	0	0	0	120	0	500
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	390	1080	0	0	1570	560	0	0	0	120	0	500
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	390	1080	0	0	1570	0	0	0	0	120	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	390	1080	0	0	1570	0	0	0	0	120	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	390	1080	0	0	1570	0	0	0	0	120	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	2.00	0.00	1.00
Final Sat.:	5760	3200	0	0	4800	1600	0	0	0	3200	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.07	0.34	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.04	0.00	0.00
Crit Moves:	****				****					****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday PM

Intersection #28: Avalon Blvd. & I-405 SB Ramps

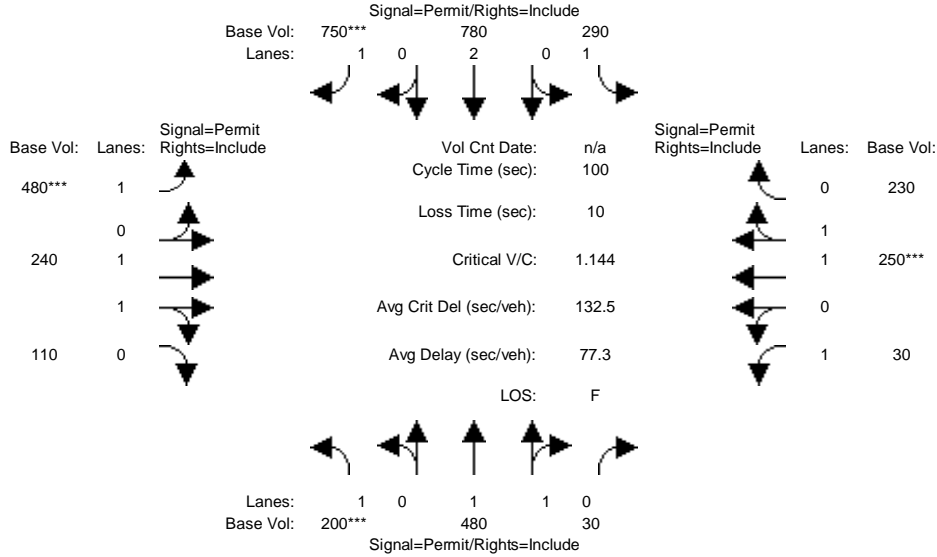


Street Name:	Avalon Blvd.						I-405 SB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1260	140	0	1210	460	220	140	510	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1260	140	0	1210	460	220	140	510	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	1260	140	0	1210	0	220	140	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1260	140	0	1210	0	220	140	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Volume:	0	1260	140	0	1210	0	220	140	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.80	0.20	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	0	2880	320	0	3200	1600	5760	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.44	0.44	0.00	0.38	0.00	0.04	0.04	0.00	0.00	0.00	0.00
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday PM

Intersection #29: Central Ave. & University Dr.

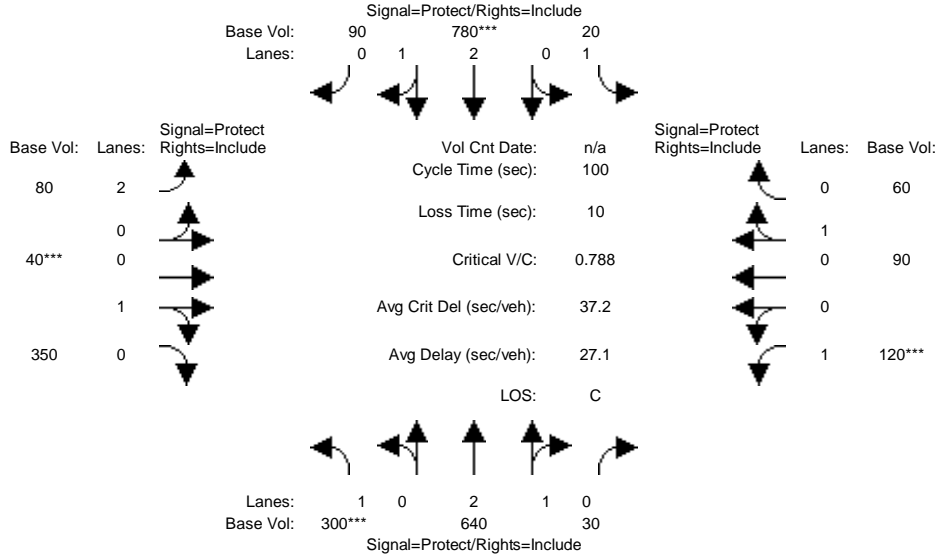


Street Name:	Central Ave.						University Dr.													
Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																				
Base Vol:	200	480	30	290	780	750	480	240	110	30	250	230								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							
Initial Bse:	200	480	30	290	780	750	480	240	110	30	250	230								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							
PHF Volume:	200	480	30	290	780	750	480	240	110	30	250	230								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	200	480	30	290	780	750	480	240	110	30	250	230								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							
FinalVolume:	200	480	30	290	780	750	480	240	110	30	250	230								
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600							
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							
Lanes:	1.00	1.88	0.12	1.00	2.00	1.00	1.00	1.37	0.63	1.00	1.04	0.96								
Final Sat.:	1600	3012	188	1600	3200	1600	1600	2194	1006	1600	1667	1533								
Capacity Analysis Module:																				
Vol/Sat:	0.13	0.16	0.16	0.18	0.24	0.47	0.30	0.11	0.11	0.02	0.15	0.15								
Crit Moves:	****						****	****						****						

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday PM

Intersection #30: Wilmington Ave. & University Dr.

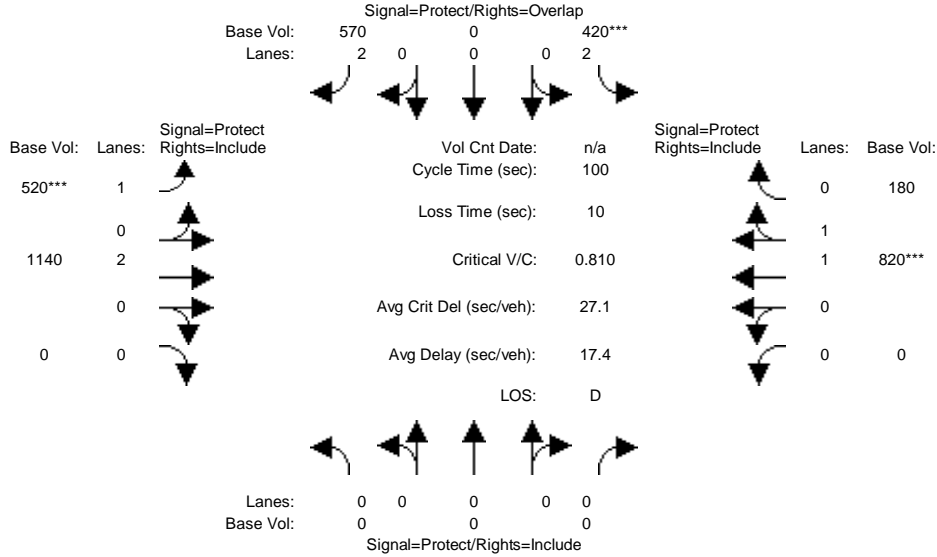


Street Name:	Wilmington Ave.						University Dr.														
Approach:	North Bound			South Bound			East Bound			West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Volume Module:																					
Base Vol:	300	640	30	20	780	90	80	40	350	120	90	60									
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	300	640	30	20	780	90	80	40	350	120	90	60									
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Volume:	300	640	30	20	780	90	80	40	350	120	90	60									
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0									
Reduced Vol:	300	640	30	20	780	90	80	40	350	120	90	60									
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
FinalVolume:	300	640	30	20	780	90	80	40	350	120	90	60									
Saturation Flow Module:																					
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600								
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00								
Lanes:	1.00	2.87	0.13	1.00	2.69	0.31	2.00	0.10	0.90	1.00	0.60	0.40									
Final Sat.:	1600	4585	215	1600	4303	497	5760	164	1436	1600	960	640									
Capacity Analysis Module:																					
Vol/Sat:	0.19	0.14	0.14	0.01	0.18	0.18	0.01	0.24	0.24	0.08	0.09	0.09									
Crit Moves:	****				****		****			****											

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday PM

Intersection #31: Central Ave. & Del Amo Blvd.

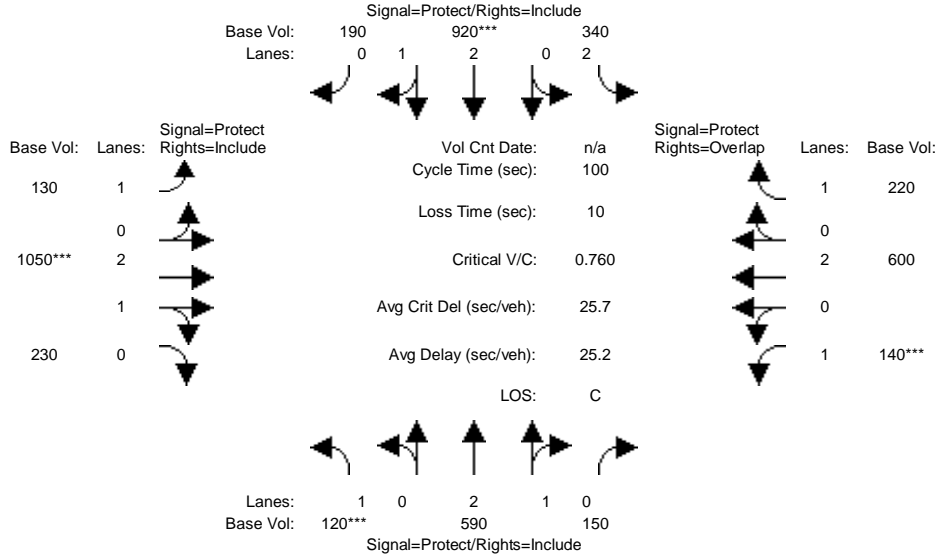


Street Name:	Central Ave.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	420	0	570	520	1140	0	0	820	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	420	0	570	520	1140	0	0	820	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	420	0	570	520	1140	0	0	820	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	420	0	570	520	1140	0	0	820	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	420	0	570	520	1140	0	0	820	180
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	2.00	1.00	2.00	0.00	0.00	1.64	0.36
Final Sat.:	0	0	0	5760	0	3200	1600	3200	0	0	2624	576
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.07	0.00	0.18	0.33	0.36	0.00	0.00	0.31	0.31
OvlAdjV/S:							0.00					
Crit Moves:				****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday PM

Intersection #32: Wilmington Ave. & Del Amo Blvd.

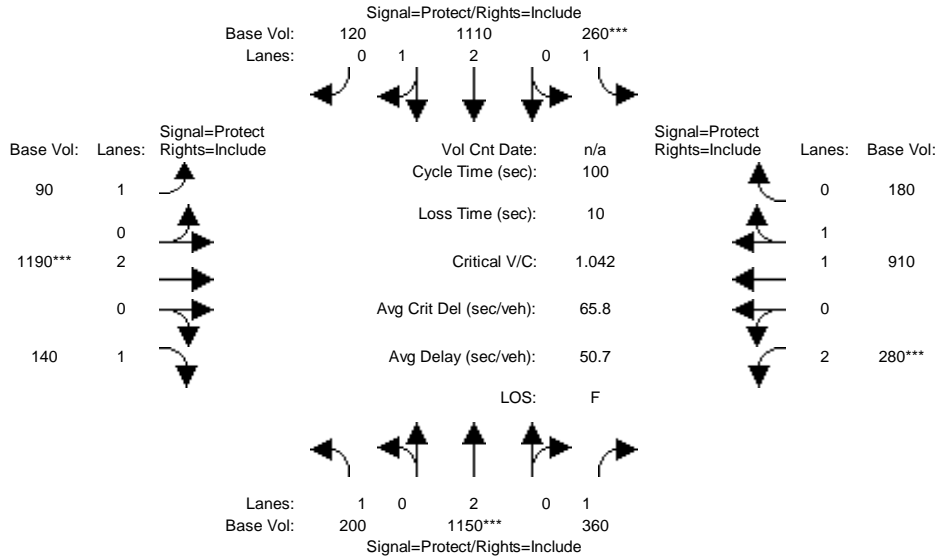


Street Name:	Wilmington Ave.						Del Amo Blvd.													
Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																				
Base Vol:	120	590	150	340	920	190	130	1050	230	140	600	220								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							
Initial Bse:	120	590	150	340	920	190	130	1050	230	140	600	220								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							
PHF Volume:	120	590	150	340	920	190	130	1050	230	140	600	220								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	120	590	150	340	920	190	130	1050	230	140	600	220								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							
Final Volume:	120	590	150	340	920	190	130	1050	230	140	600	220								
OvlAdjVol:													126							
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600							
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							
Lanes:	1.00	2.39	0.61	2.00	2.49	0.51	1.00	2.46	0.54	1.00	2.00	1.00								
Final Sat.:	1600	3827	973	5760	3978	822	1600	3938	863	1600	3200	1600								
Capacity Analysis Module:																				
Vol/Sat:	0.08	0.15	0.15	0.06	0.23	0.23	0.08	0.27	0.27	0.09	0.19	0.14								
OvlAdjV/S:													0.08							
Crit Moves:	***				***				***				***							

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday PM

Intersection #33: W. Artesia Blvd. & Crenshaw Blvd.

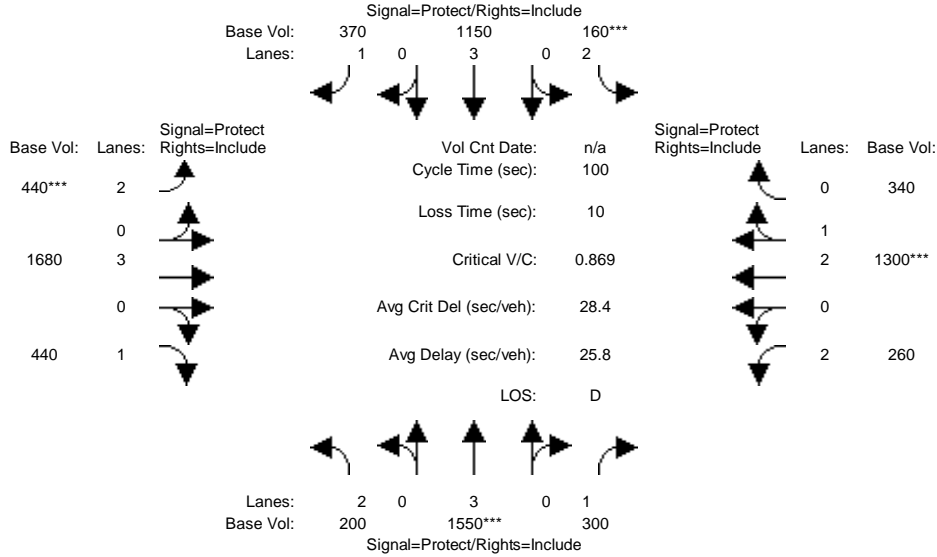


Street Name:	Crenshaw Blvd.						W. Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	200	1150	360	260	1110	120	90	1190	140	280	910	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	200	1150	360	260	1110	120	90	1190	140	280	910	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	200	1150	360	260	1110	120	90	1190	140	280	910	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	200	1150	360	260	1110	120	90	1190	140	280	910	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	200	1150	360	260	1110	120	90	1190	140	280	910	180
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	2.71	0.29	1.00	2.00	1.00	2.00	1.67	0.33
Final Sat.:	1600	3200	1600	1600	4332	468	1600	3200	1600	5760	2672	528
Capacity Analysis Module:												
Vol/Sat:	0.13	0.36	0.23	0.16	0.26	0.26	0.06	0.37	0.09	0.05	0.34	0.34
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday PM

Intersection #34: W 190th St. & South Western Ave.

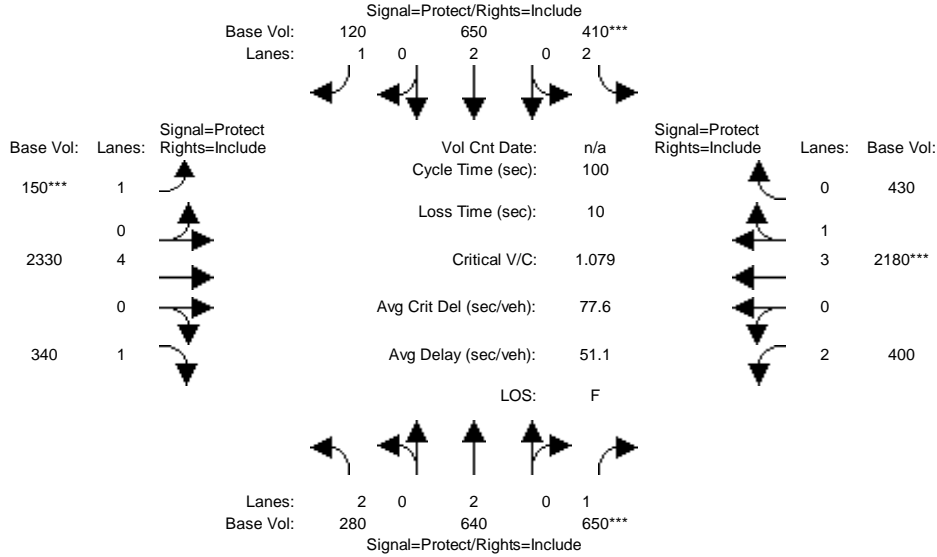


Street Name:	S. Western Ave.						W. 190th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	200	1550	300	160	1150	370	440	1680	440	260	1300	340
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	200	1550	300	160	1150	370	440	1680	440	260	1300	340
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	200	1550	300	160	1150	370	440	1680	440	260	1300	340
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	200	1550	300	160	1150	370	440	1680	440	260	1300	340
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	200	1550	300	160	1150	370	440	1680	440	260	1300	340
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.38	0.62
Final Sat.:	5760	4800	1600	5760	4800	1600	5760	4800	1600	5760	3805	995
Capacity Analysis Module:												
Vol/Sat:	0.03	0.32	0.19	0.03	0.24	0.23	0.08	0.35	0.28	0.05	0.34	0.34
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday PM

Intersection #35: W. Artesia Blvd. & Vermont Av.e

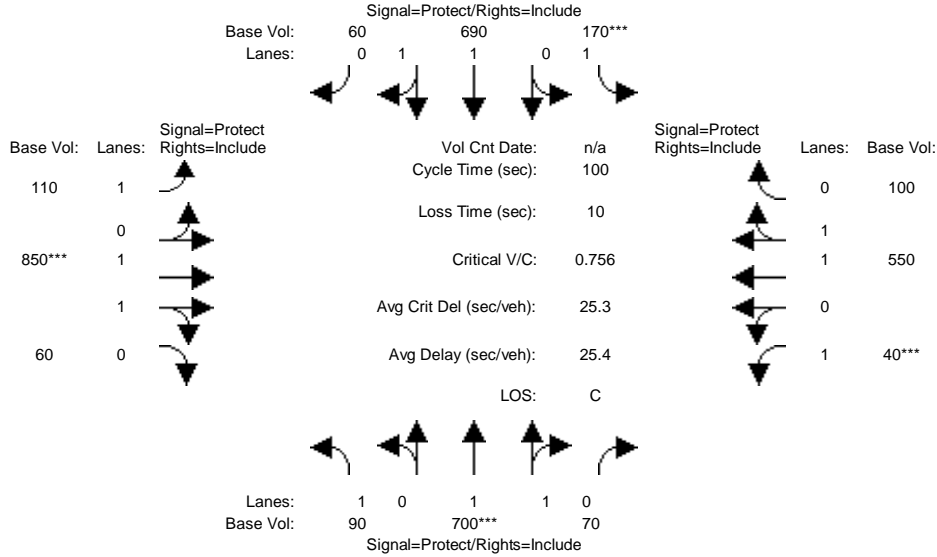


Street Name:	Vermont Ave.						W. Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	280	640	650	410	650	120	150	2330	340	400	2180	430
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	280	640	650	410	650	120	150	2330	340	400	2180	430
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	280	640	650	410	650	120	150	2330	340	400	2180	430
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	280	640	650	410	650	120	150	2330	340	400	2180	430
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	280	640	650	410	650	120	150	2330	340	400	2180	430
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	2.00	2.00	1.00	2.00	2.00	1.00	1.00	4.00	1.00	2.00	3.34	0.66
Final Sat.:	5760	3200	1600	5760	3200	1600	1600	6400	1600	5760	5346	1054
Capacity Analysis Module:												
Vol/Sat:	0.05	0.20	0.41	0.07	0.20	0.08	0.09	0.36	0.21	0.07	0.41	0.41
Crit Moves:			****	****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday PM

Intersection #36: Alameda St. & Compton Blvd.

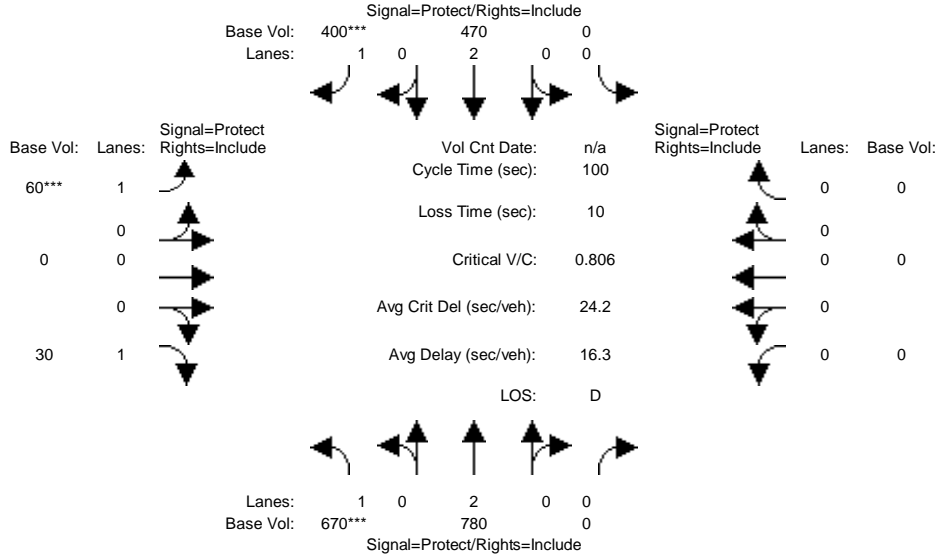


Street Name:	Alameda St.						Compton Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	90	700	70	170	690	60	110	850	60	40	550	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	700	70	170	690	60	110	850	60	40	550	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	700	70	170	690	60	110	850	60	40	550	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	700	70	170	690	60	110	850	60	40	550	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	700	70	170	690	60	110	850	60	40	550	100
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.82	0.18	1.00	1.84	0.16	1.00	1.87	0.13	1.00	1.69	0.31
Final Sat.:	1600	2909	291	1600	2944	256	1600	2989	211	1600	2708	492
Capacity Analysis Module:												
Vol/Sat:	0.06	0.24	0.24	0.11	0.23	0.23	0.07	0.28	0.28	0.03	0.20	0.20
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Alt2 Weekday PM

Intersection #37: Alameda St. & SR 91 EB Ramps

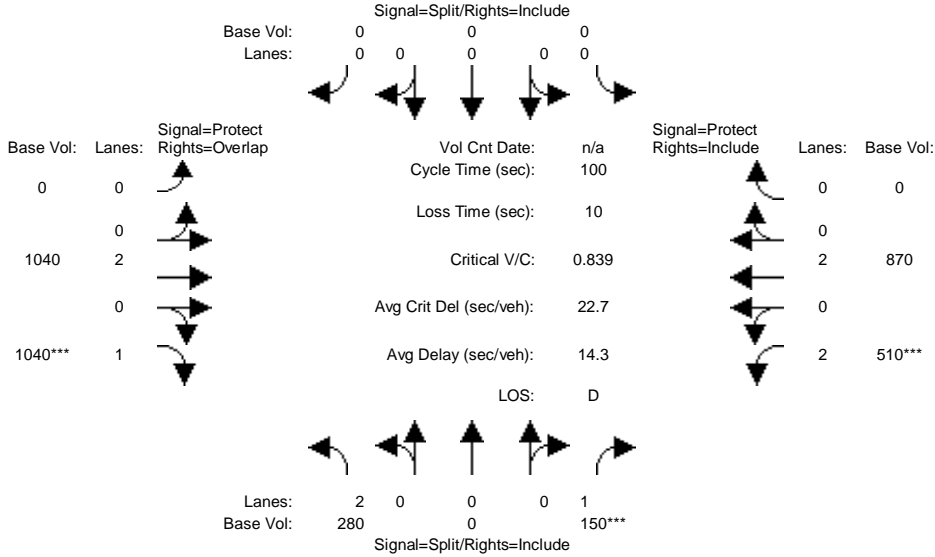


Street Name:	Alameda St.						SR 91 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	670	780	0	0	470	400	60	0	30	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	670	780	0	0	470	400	60	0	30	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	670	780	0	0	470	400	60	0	30	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	670	780	0	0	470	400	60	0	30	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	670	780	0	0	470	400	60	0	30	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1600	3200	0	0	3200	1600	1600	0	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.42	0.24	0.00	0.00	0.15	0.25	0.04	0.00	0.02	0.00	0.00	0.00
Crit Moves:	****					****	****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Weekday AM Mitigated

Intersection #1: Victoria St. & Drive D

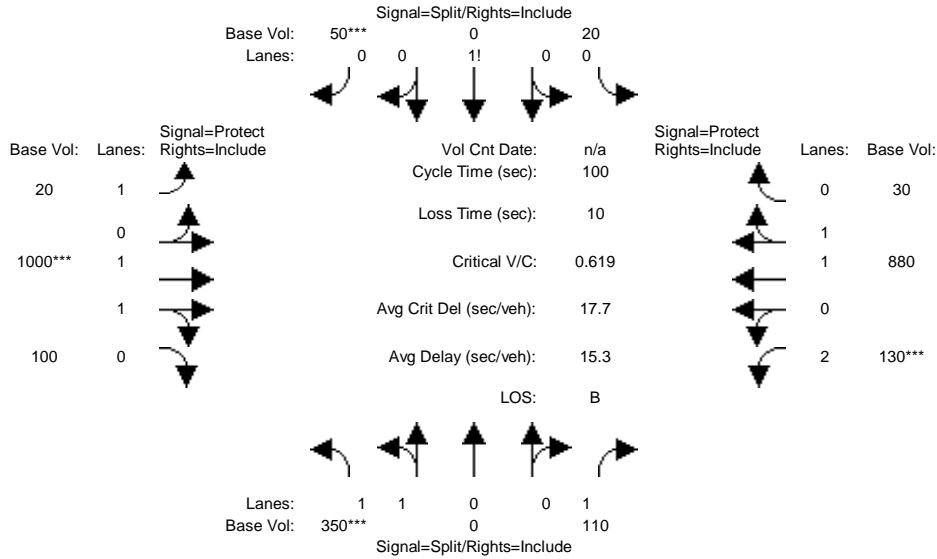


Street Name:	Drive D						Victoria St..					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	280	0	150	0	0	0	0	1040	1040	510	870	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	280	0	150	0	0	0	0	1040	1040	510	870	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	280	0	150	0	0	0	0	1040	1040	510	870	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	280	0	150	0	0	0	0	1040	1040	510	870	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	280	0	150	0	0	0	0	1040	1040	510	870	0
OvlAdjVol:												890
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	1.00	2.00	2.00	0.00
Final Sat.:	5760	0	1600	0	0	0	0	3200	1600	5760	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.09	0.00	0.00	0.00	0.00	0.33	0.65	0.09	0.27	0.00
OvlAdjV/S:										0.56		
Crit Moves:	****						****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Weekday AM Mitigated

Intersection #3: Victoria St. & Birchknoll Dr.

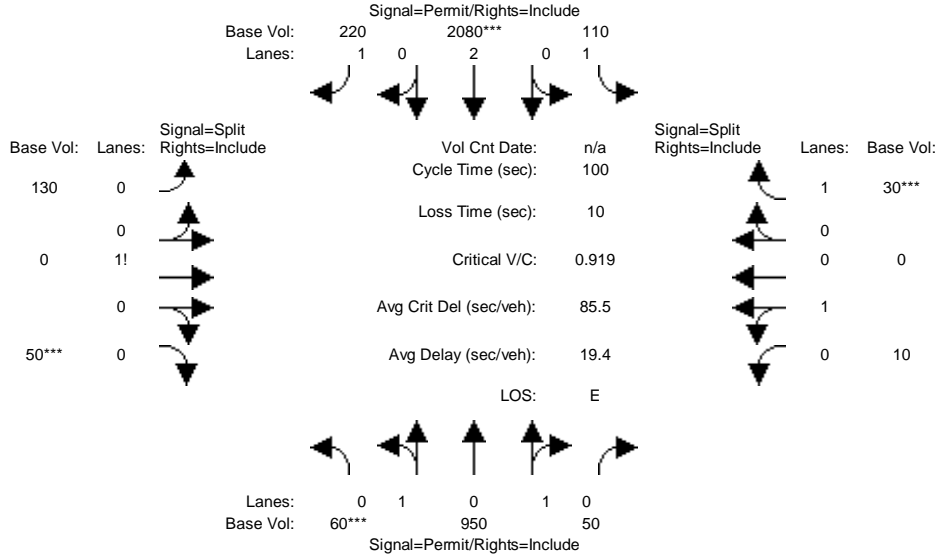


Street Name:	Victoria St.						Birchknoll Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	350	0	110	20	0	50	20	1000	100	130	880	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	350	0	110	20	0	50	20	1000	100	130	880	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	350	0	110	20	0	50	20	1000	100	130	880	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	350	0	110	20	0	50	20	1000	100	130	880	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	350	0	110	20	0	50	20	1000	100	130	880	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	2.00	0.00	1.00	0.29	0.00	0.71	1.00	1.82	0.18	2.00	1.93	0.07
Final Sat.:	3200	0	1600	457	0	1143	1600	2909	291	5760	3095	105
Capacity Analysis Module:												
Vol/Sat:	0.11	0.00	0.07	0.04	0.00	0.04	0.01	0.34	0.34	0.02	0.28	0.28
Crit Moves:	****					****	****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Weekday AM Mitigated

Intersection #5: Central Ave. & Charles Willard St.

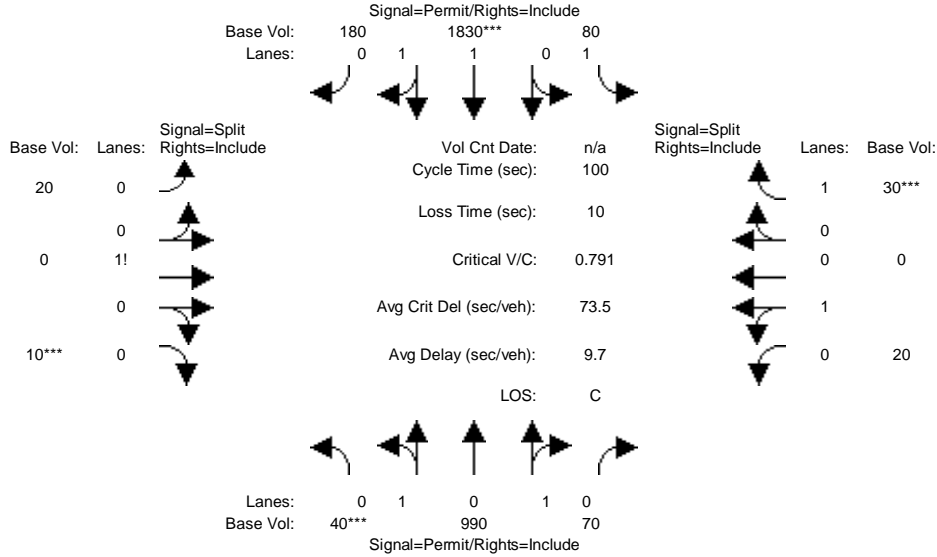


Street Name:	Central Ave.						Charles Willard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	60	950	50	110	2080	220	130	0	50	10	0	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	950	50	110	2080	220	130	0	50	10	0	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	950	50	110	2080	220	130	0	50	10	0	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	950	50	110	2080	220	130	0	50	10	0	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	950	50	110	2080	220	130	0	50	10	0	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.11	1.80	0.09	1.00	2.00	1.00	0.72	0.00	0.28	1.00	0.00	1.00
Final Sat.:	181	2868	151	1600	3200	1600	1156	0	444	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.33	0.33	0.07	0.65	0.14	0.11	0.00	0.11	0.01	0.00	0.02
Crit Moves:	****				****				****			****

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Weekday AM Mitigated

Intersection #6: Central Ave. & Project Driveway/Beachey Pl.

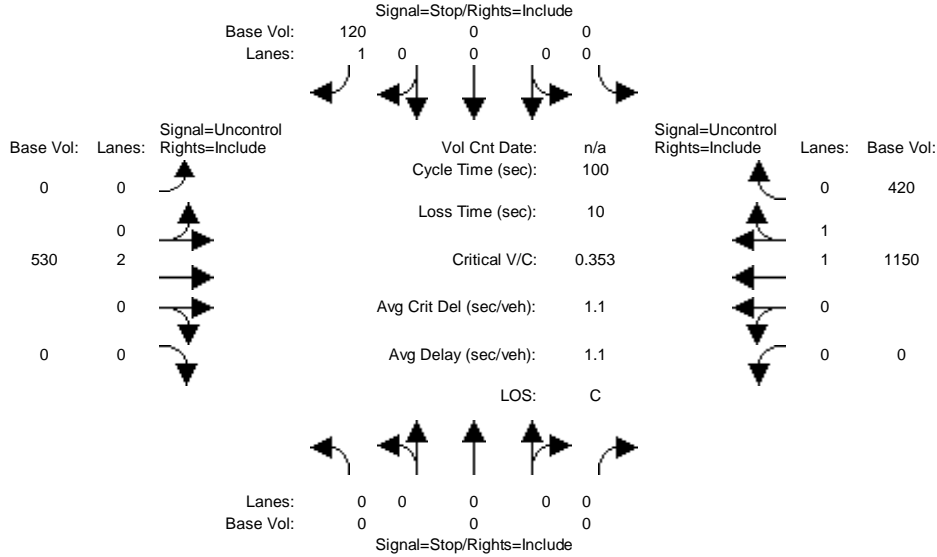


Street Name:	Central Ave.						Beachey Pl.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	40	990	70	80	1830	180	20	0	10	20	0	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	990	70	80	1830	180	20	0	10	20	0	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	990	70	80	1830	180	20	0	10	20	0	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	990	70	80	1830	180	20	0	10	20	0	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	990	70	80	1830	180	20	0	10	20	0	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.07	1.80	0.13	1.00	1.82	0.18	0.67	0.00	0.33	1.00	0.00	1.00
Final Sat.:	116	2880	204	1600	2913	287	1067	0	533	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.34	0.34	0.05	0.63	0.63	0.02	0.00	0.02	0.01	0.00	0.02
Crit Moves:	****				****				****			****

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
2035 With Project Weekday AM Mitigated

Intersection #8: University Dr./Birchknoll Dr. Ext.



Vol Cnt Date: n/a
 Cycle Time (sec): 100
 Loss Time (sec): 10
 Critical V/C: 0.353
 Avg Crit Del (sec/veh): 1.1
 Avg Delay (sec/veh): 1.1
 LOS: C

Street Name:	Birchknoll Dr. Ext.					University Dr.						
Approach:	North Bound			South Bound		East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:							0	530	0	0	1150	420
Base Vol:	0	0	0	0	0	120	0	530	0	0	1150	420
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	120	0	530	0	0	1150	420
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	120	0	530	0	0	1150	420
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	120	0	530	0	0	1150	420
Critical Gap Module:							6.9					
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:							785					
Cnflct Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	785	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	340	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	340	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	0.35	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:							1.6					
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	1.6	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	21.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	C	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxxx					21.3	xxxxxxx			xxxxxxx		

ApproachLOS: * C * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #8 University Dr./Birchknoll Dr. Ext.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 0	0 0 0 0 1	0 0 2 0 0	0 0 1 1 0
Initial Vol:	0 0 0	0 0 120	0 530 0	0 1150 420
ApproachDel:	xxxxxx	21.3	xxxxxx	xxxxxx

Approach[southbound][lanes=1][control=Stop Sign]

Signal Warrant Rule #1: [vehicle-hours=0.7]

FAIL - Vehicle-hours less than 4 for one lane approach.

Signal Warrant Rule #2: [approach volume=120]

SUCCEED - Approach volume greater than or equal to 100 for one lane approach.

Signal Warrant Rule #3: [approach count=3][total volume=2220]

SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #8 University Dr./Birchknoll Dr. Ext.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 0	0 0 0 0 1	0 0 2 0 0	0 0 1 1 0
Initial Vol:	0 0 0	0 0 120	0 530 0	0 1150 420

Major Street Volume: 2100

Minor Approach Volume: 120

Minor Approach Volume Threshold: 29 [less than minimum of 100]

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

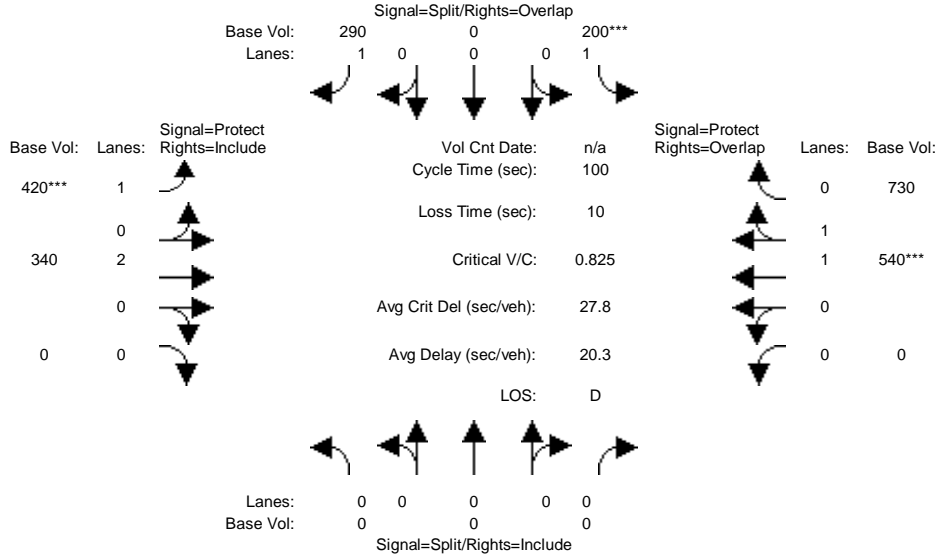
The peak hour warrant analysis in this report is not intended to replace

a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Weekday AM Mitigated

Intersection #9: University Dr. & Toro Center Dr.

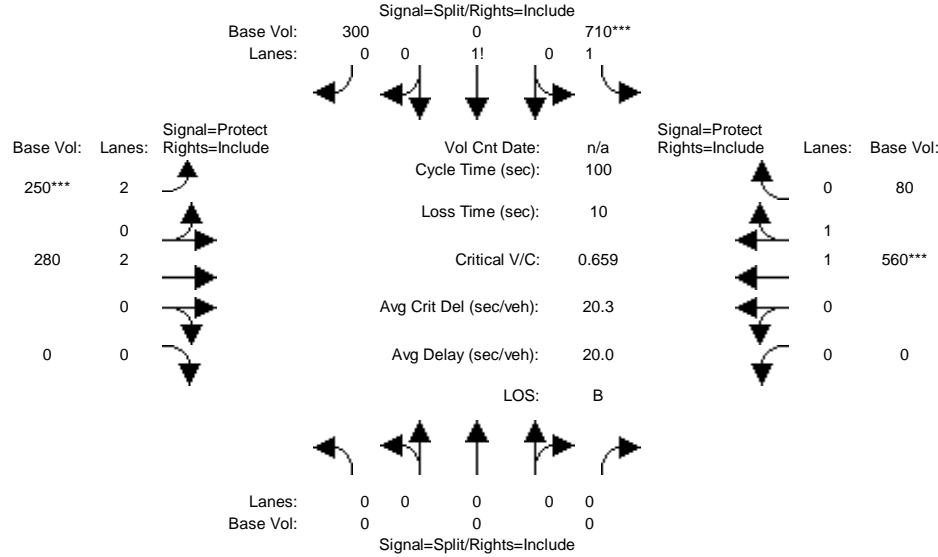


Street Name:	University Dr.						Toro Center Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	200	0	290	420	340	0	0	540	730
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	200	0	290	420	340	0	0	540	730
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	200	0	290	420	340	0	0	540	730
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	200	0	290	420	340	0	0	540	730
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	200	0	290	420	340	0	0	540	730
OvlAdjVol:						0						530
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.00	1.00
Final Sat.:	0	0	0	1600	0	1600	1600	3200	0	0	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.00	0.18	0.26	0.11	0.00	0.00	0.34	0.46
OvlAdjV/S:						0.00						0.33
Crit Moves:				****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Weekday AM Mitigated

Intersection #10: Albertoni St. & SR 91 EB Ramps

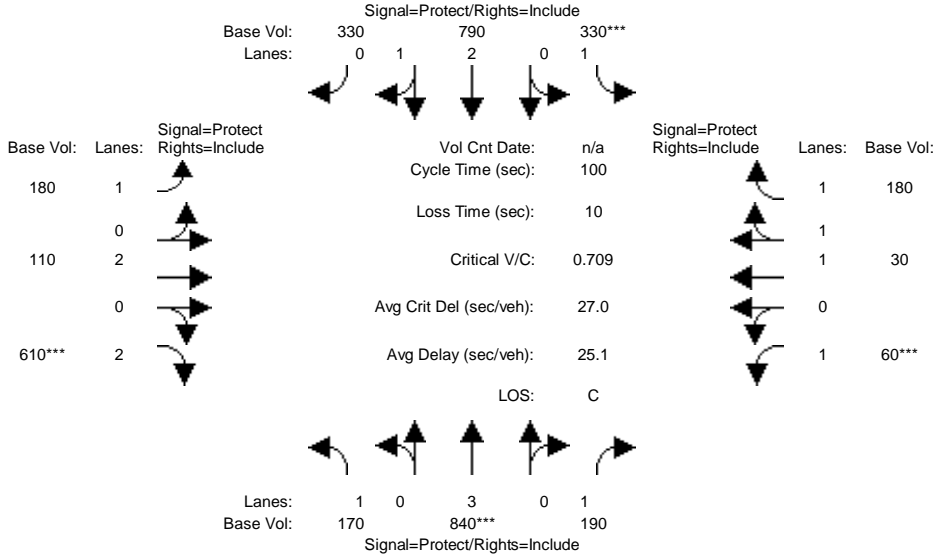


Street Name:	Albertoni St.						SR 91 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	710	0	300	250	280	0	0	560	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	710	0	300	250	280	0	0	560	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	710	0	300	250	280	0	0	560	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	710	0	300	250	280	0	0	560	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	710	0	300	250	280	0	0	560	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.41	0.00	0.59	2.00	2.00	0.00	0.00	1.75	0.25
Final Sat.:	0	0	0	2250	0	950	5760	3200	0	0	2800	400
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.32	0.00	0.32	0.04	0.09	0.00	0.00	0.20	0.20
Crit Moves:				****			****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Weekday AM Mitigated

Intersection #12: Avalon Blvd. & Albertoni St.

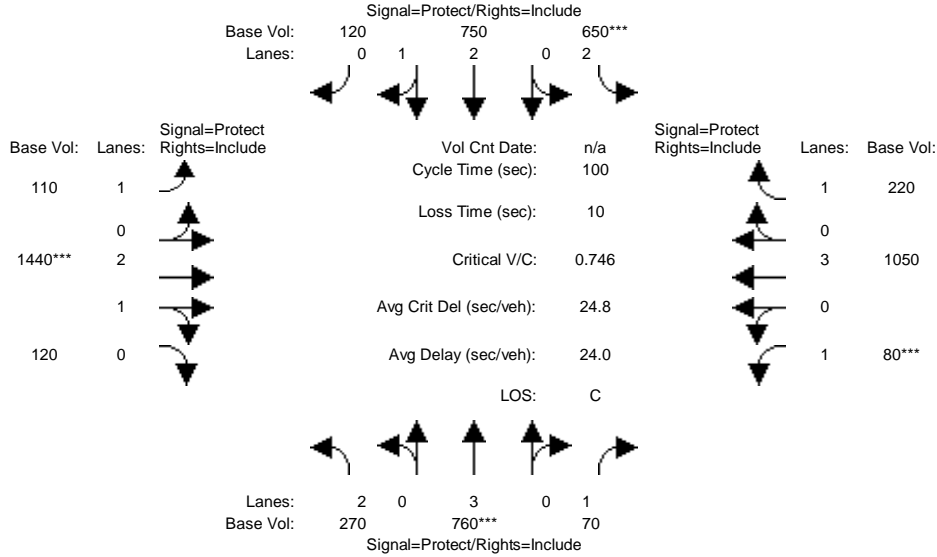


Street Name:	Avalon Blvd.						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	170	840	190	330	790	330	180	110	610	60	30	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	170	840	190	330	790	330	180	110	610	60	30	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	170	840	190	330	790	330	180	110	610	60	30	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	170	840	190	330	790	330	180	110	610	60	30	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	170	840	190	330	790	330	180	110	610	60	30	180
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.12	0.88	1.00	2.00	2.00	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3386	1414	1600	3200	3200	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.11	0.17	0.12	0.21	0.23	0.23	0.11	0.03	0.19	0.04	0.02	0.06
Crit Moves:		****		****					****	****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Weekday AM Mitigated

Intersection #13: Avalon Blvd. & Victoria St.

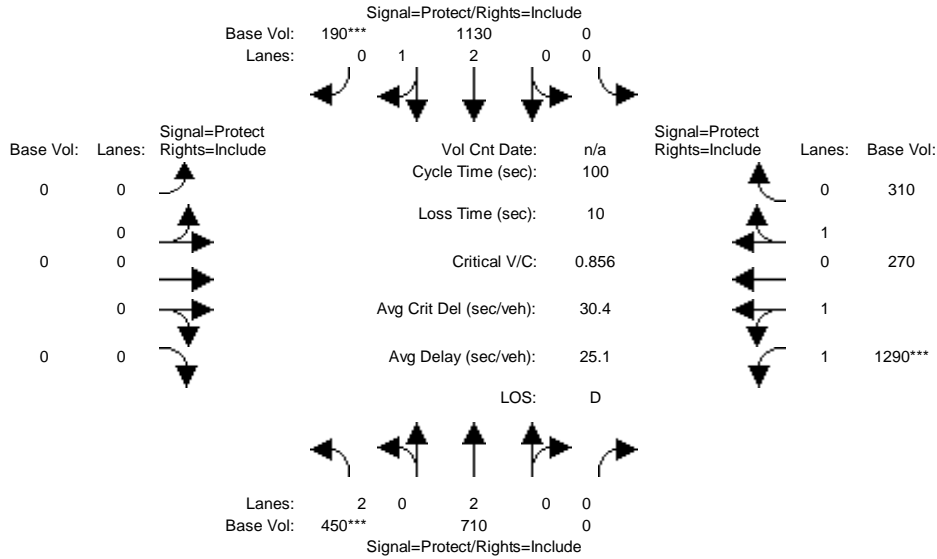


Street Name:	Avalon Blvd.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	270	760	70	650	750	120	110	1440	120	80	1050	220
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	270	760	70	650	750	120	110	1440	120	80	1050	220
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	270	760	70	650	750	120	110	1440	120	80	1050	220
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	270	760	70	650	750	120	110	1440	120	80	1050	220
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	270	760	70	650	750	120	110	1440	120	80	1050	220
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	2.59	0.41	1.00	2.77	0.23	1.00	3.00	1.00
Final Sat.:	5760	4800	1600	5760	4138	662	1600	4431	369	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.16	0.04	0.11	0.18	0.18	0.07	0.33	0.32	0.05	0.22	0.14
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Weekday AM Mitigated

Intersection #14: Central Ave. & Artesia Blvd.

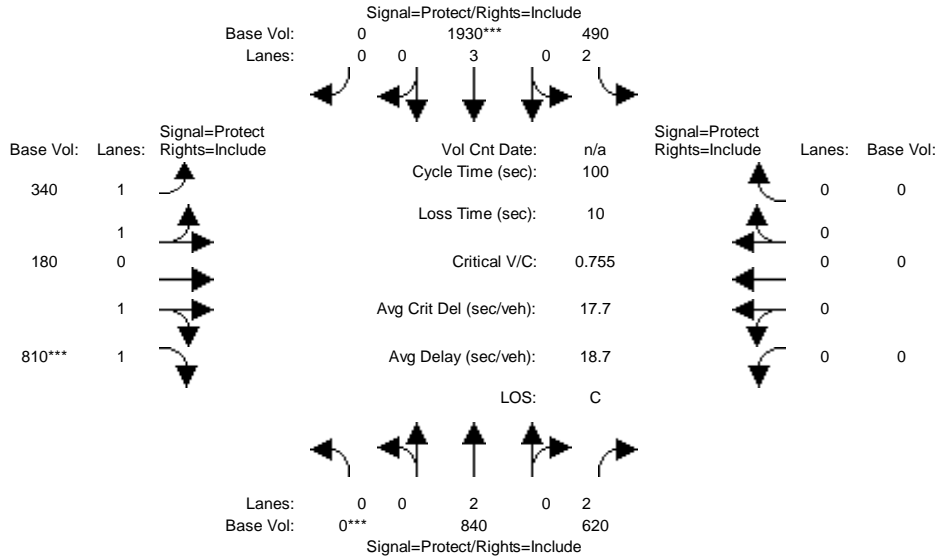


Street Name:	Central Ave.						Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	450	710	0	0	1130	190	0	0	0	1290	270	310
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	450	710	0	0	1130	190	0	0	0	1290	270	310
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	450	710	0	0	1130	190	0	0	0	1290	270	310
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	450	710	0	0	1130	190	0	0	0	1290	270	310
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	450	710	0	0	1130	190	0	0	0	1290	270	310
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	2.57	0.43	0.00	0.00	0.00	2.00	0.47	0.53
Final Sat.:	5760	3200	0	0	4109	691	0	0	0	3200	745	855
Capacity Analysis Module:												
Vol/Sat:	0.08	0.22	0.00	0.00	0.27	0.28	0.00	0.00	0.00	0.40	0.36	0.36
Crit Moves:	****					****				****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Weekday AM Mitigated

Intersection #15: Central Ave. & Albertoni St./Artesia Blvd. EB

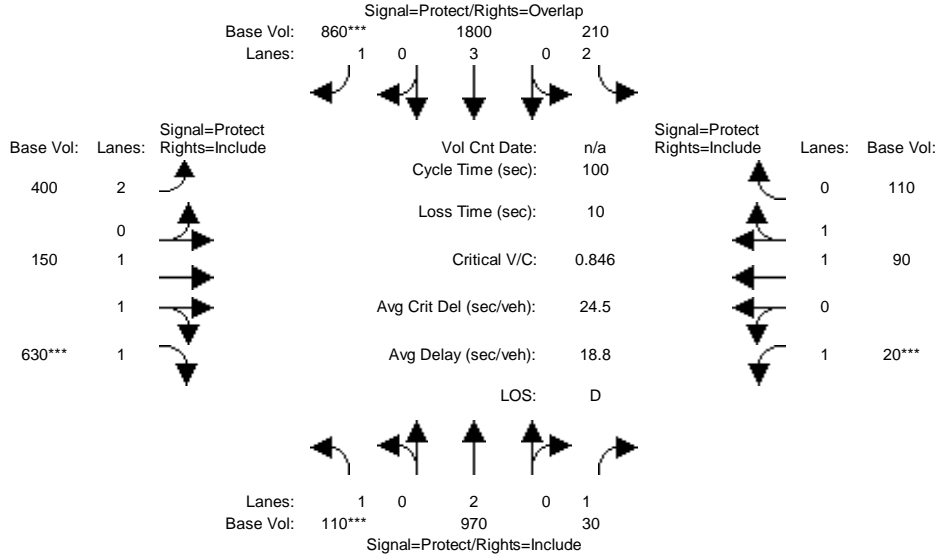


Street Name:	Central Ave.						Albertoni St./Artesia Blvd. EB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	840	620	490	1930	0	340	180	810	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	840	620	490	1930	0	340	180	810	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	840	620	490	1930	0	340	180	810	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	840	620	490	1930	0	340	180	810	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	840	620	490	1930	0	340	180	810	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	3.00	0.00	1.31	0.69	2.00	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	4800	0	2092	1108	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.19	0.09	0.40	0.00	0.16	0.16	0.25	0.00	0.00	0.00
Crit Moves:	****				****				****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Weekday AM Mitigated

Intersection #16: Central Ave. & Victoria St.

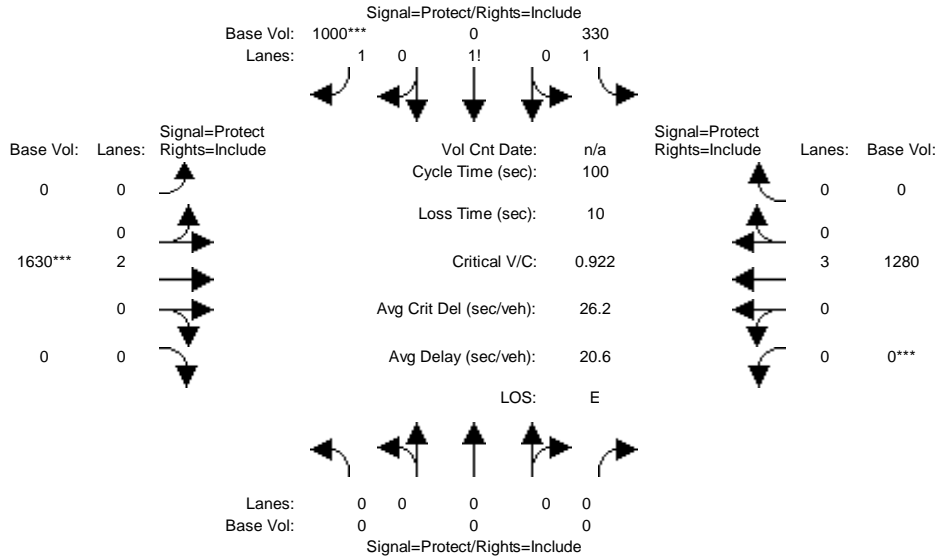


Street Name:	Central Ave.						Victoria St.														
Approach:	North Bound			South Bound			East Bound			West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																					
Base Vol:	110	970	30	210	1800	860	400	150	630	20	90	110									
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
Initial Bse:	110	970	30	210	1800	860	400	150	630	20	90	110									
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
PHF Volume:	110	970	30	210	1800	860	400	150	630	20	90	110									
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0									
Reduced Vol:	110	970	30	210	1800	860	400	150	630	20	90	110									
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
Final Volume:	110	970	30	210	1800	860	400	150	630	20	90	110									
OvlAdjVol:													749								
Saturation Flow Module:																					
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600									
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00									
Lanes:	1.00	2.00	1.00	2.00	3.00	1.00	2.00	1.00	2.00	1.00	1.00	1.00									
Final Sat.:	1600	3200	1600	5760	4800	1600	5760	1600	3200	1600	1600	1600									
Capacity Analysis Module:																					
Vol/Sat:	0.07	0.30	0.02	0.04	0.38	0.54	0.07	0.09	0.20	0.01	0.06	0.07									
OvlAdjV/S:													0.47								
Crit Moves:	***						***						***								

Transportation Study for CSUDH Campus Master Plan 2018

Level of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Weekday AM Mitigated

Intersection #20: I-110 SB Off-Ramp & 190th St.

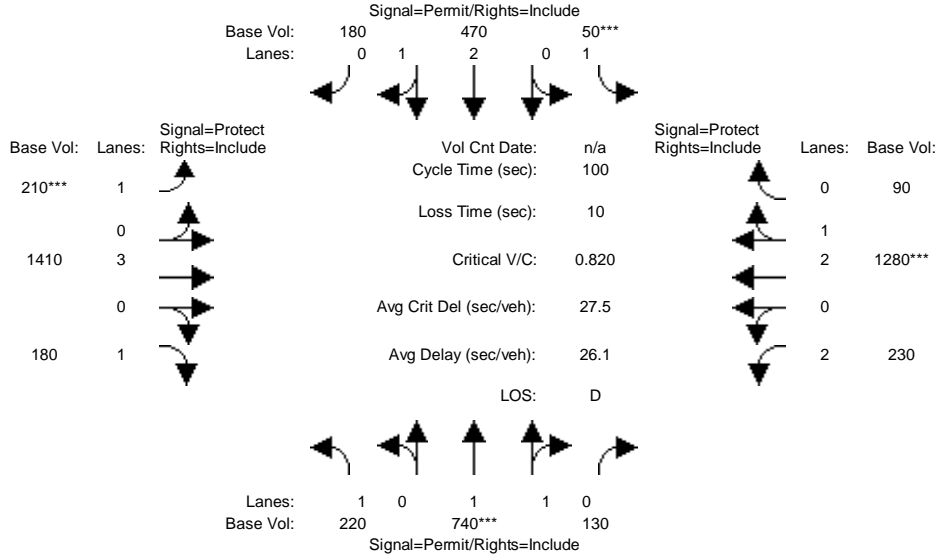


Street Name:	I-110 SB Off-Ramp						190th St.													
Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																				
Base Vol:	0	0	0	330	0	1000	0	1630	0	0	1280	0								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	330	0	1000	0	1630	0	0	1280	0								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	330	0	1000	0	1630	0	0	1280	0								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	0	0	0	330	0	1000	0	1630	0	0	1280	0								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	330	0	1000	0	1630	0	0	1280	0								
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	2.00	0.00	2.00	0.00	0.00	3.00	0.00								
Final Sat.:	0	0	0	1600	0	3200	0	3200	0	0	4800	0								
Capacity Analysis Module:																				
Vol/Sat:	0.00	0.00	0.00	0.21	0.00	0.31	0.00	0.51	0.00	0.00	0.27	0.00								
Crit Moves:						****		****			****									

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Weekday AM Mitigated

Intersection #22: Figueroa St. & 190th St./Victoria St.

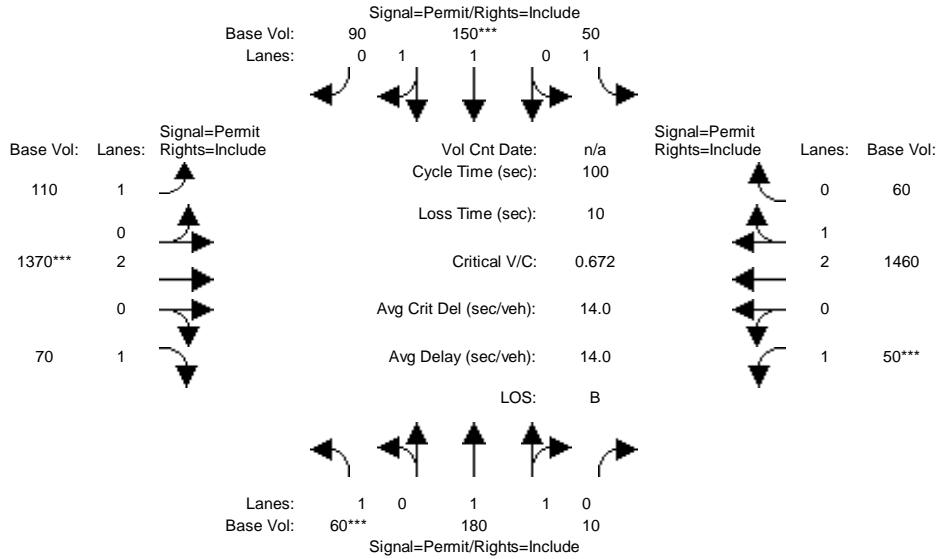


Street Name:	Figueroa St.						190th St./Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	220	740	130	50	470	180	210	1410	180	230	1280	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	220	740	130	50	470	180	210	1410	180	230	1280	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	220	740	130	50	470	180	210	1410	180	230	1280	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	220	740	130	50	470	180	210	1410	180	230	1280	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	220	740	130	50	470	180	210	1410	180	230	1280	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	1.00	1.70	0.30	1.00	2.17	0.83	1.00	3.00	1.00	2.00	2.80	0.20
Final Sat.:	1600	2722	478	1600	3471	1329	1600	4800	1600	5760	4485	315
Capacity Analysis Module:												
Vol/Sat:	0.14	0.27	0.27	0.03	0.14	0.14	0.13	0.29	0.11	0.04	0.29	0.29
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Weekday AM Mitigated

Intersection #23: Broadway & Victoria St.

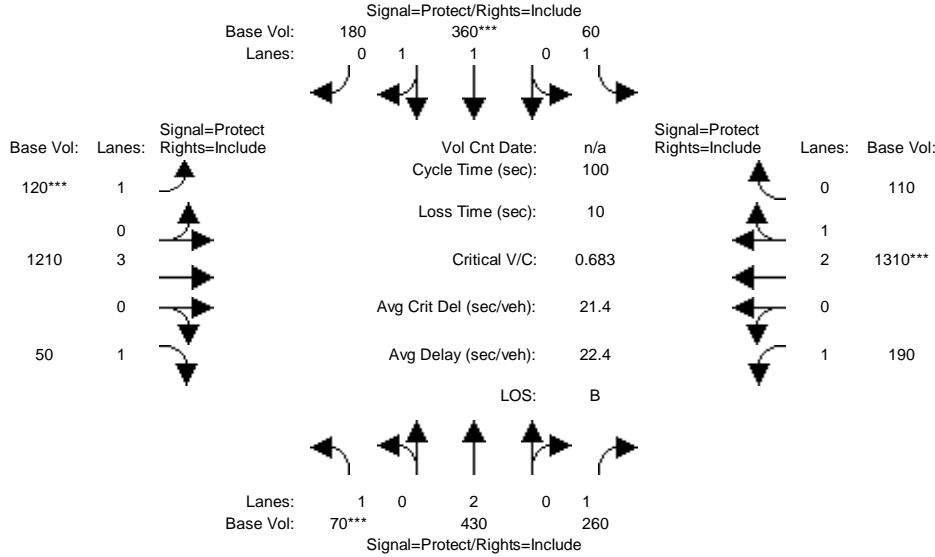


Street Name:	Broadway						Victoria St.													
Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Volume Module:																				
Base Vol:	60	180	10	50	150	90	110	1370	70	50	1460	60								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	60	180	10	50	150	90	110	1370	70	50	1460	60								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Volume:	60	180	10	50	150	90	110	1370	70	50	1460	60								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	60	180	10	50	150	90	110	1370	70	50	1460	60								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
FinalVolume:	60	180	10	50	150	90	110	1370	70	50	1460	60								
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600								
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Lanes:	1.00	1.89	0.11	1.00	1.25	0.75	1.00	2.00	1.00	1.00	2.88	0.12								
Final Sat.:	1600	3032	168	1600	2000	1200	1600	3200	1600	1600	4611	189								
Capacity Analysis Module:																				
Vol/Sat:	0.04	0.06	0.06	0.03	0.08	0.08	0.07	0.43	0.04	0.03	0.32	0.32								
Crit Moves:	****				****		****			****										

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Weekday AM Mitigated

Intersection #24: Main St. & Victoria St.

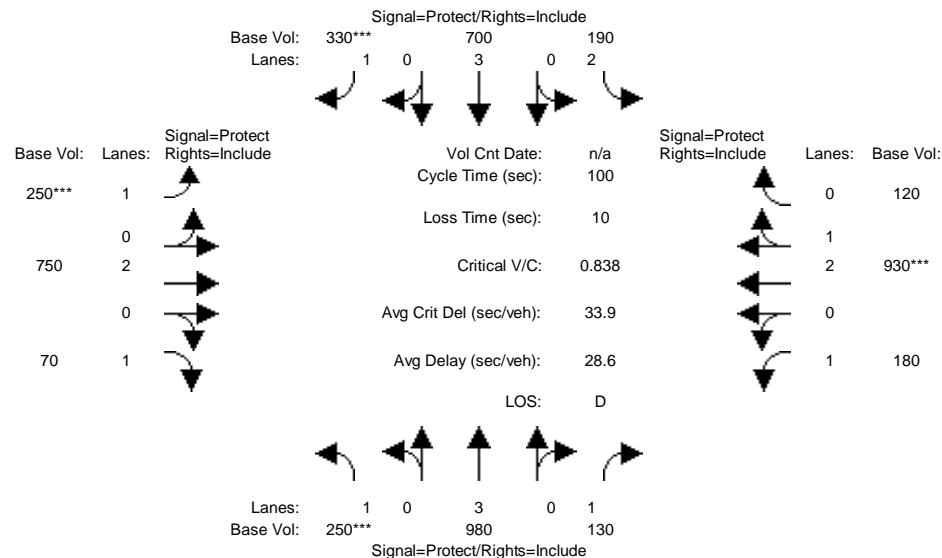


Street Name:	Main St.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	70	430	260	60	360	180	120	1210	50	190	1310	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	430	260	60	360	180	120	1210	50	190	1310	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	430	260	60	360	180	120	1210	50	190	1310	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	430	260	60	360	180	120	1210	50	190	1310	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	70	430	260	60	360	180	120	1210	50	190	1310	110
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.33	0.67	1.00	3.00	1.00	1.00	2.77	0.23
Final Sat.:	1600	3200	1600	1600	2133	1067	1600	4800	1600	1600	4428	372
Capacity Analysis Module:												
Vol/Sat:	0.04	0.13	0.16	0.04	0.17	0.17	0.08	0.25	0.03	0.12	0.30	0.30
Crit Moves:	****				****		****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Weekday AM Mitigated

Intersection #26: Avalon Blvd. & Del Amo Blvd.

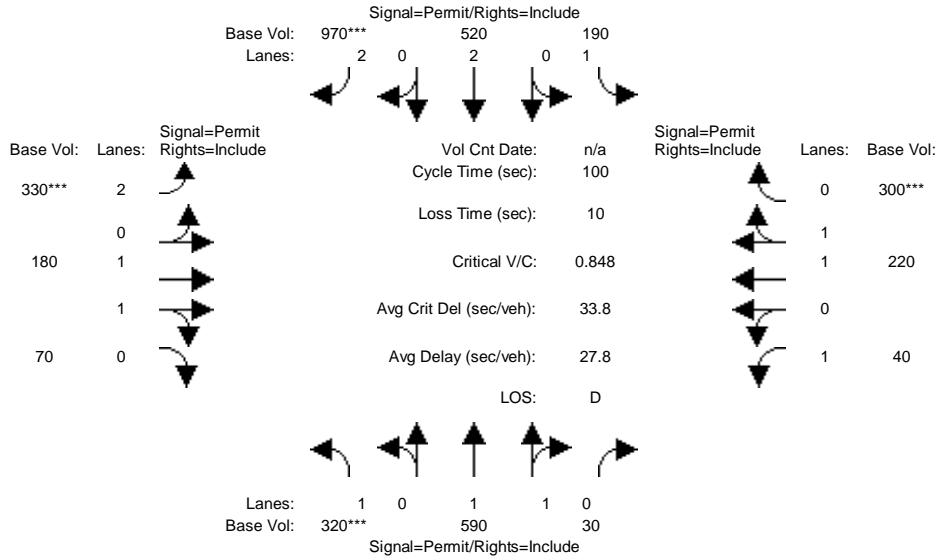


Street Name:	Avalon Blvd.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	250	980	130	190	700	330	250	750	70	180	930	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	250	980	130	190	700	330	250	750	70	180	930	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	250	980	130	190	700	330	250	750	70	180	930	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	250	980	130	190	700	330	250	750	70	180	930	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	250	980	130	190	700	330	250	750	70	180	930	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	1.00	2.00	1.00	1.00	2.66	0.34
Final Sat.:	1600	4800	1600	5760	4800	1600	1600	3200	1600	1600	4251	549
Capacity Analysis Module:												
Vol/Sat:	0.16	0.20	0.08	0.03	0.15	0.21	0.16	0.23	0.04	0.11	0.22	0.22
Crit Moves:	****					****	****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Weekday AM Mitigated

Intersection #29: Central Ave. & University Dr.

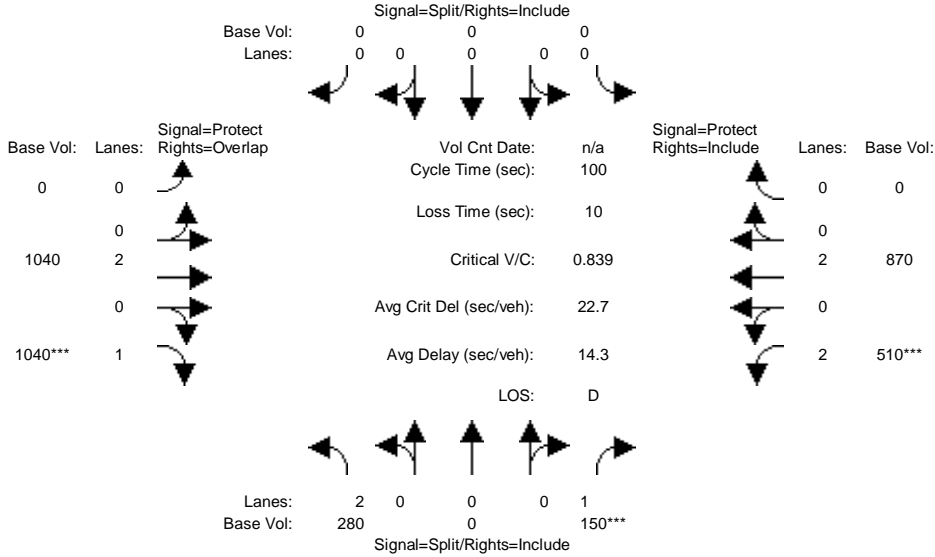


Street Name:	Central Ave.						University Dr.														
Approach:	North Bound			South Bound			East Bound			West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Volume Module:																					
Base Vol:	320	590	30	190	520	970	330	180	70	40	220	300									
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	320	590	30	190	520	970	330	180	70	40	220	300									
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Volume:	320	590	30	190	520	970	330	180	70	40	220	300									
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0									
Reduced Vol:	320	590	30	190	520	970	330	180	70	40	220	300									
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
FinalVolume:	320	590	30	190	520	970	330	180	70	40	220	300									
Saturation Flow Module:																					
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600								
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00								
Lanes:	1.00	1.90	0.10	1.00	2.00	2.00	2.00	1.44	0.56	1.00	1.00	1.00									
Final Sat.:	1600	3045	155	1600	3200	3200	5760	2304	896	1600	1600	1600									
Capacity Analysis Module:																					
Vol/Sat:	0.20	0.19	0.19	0.12	0.16	0.30	0.06	0.08	0.08	0.03	0.14	0.19									
Crit Moves:	****						****	****					****								

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Weekday AM Mitigated

Intersection #1: Victoria St. & Drive D

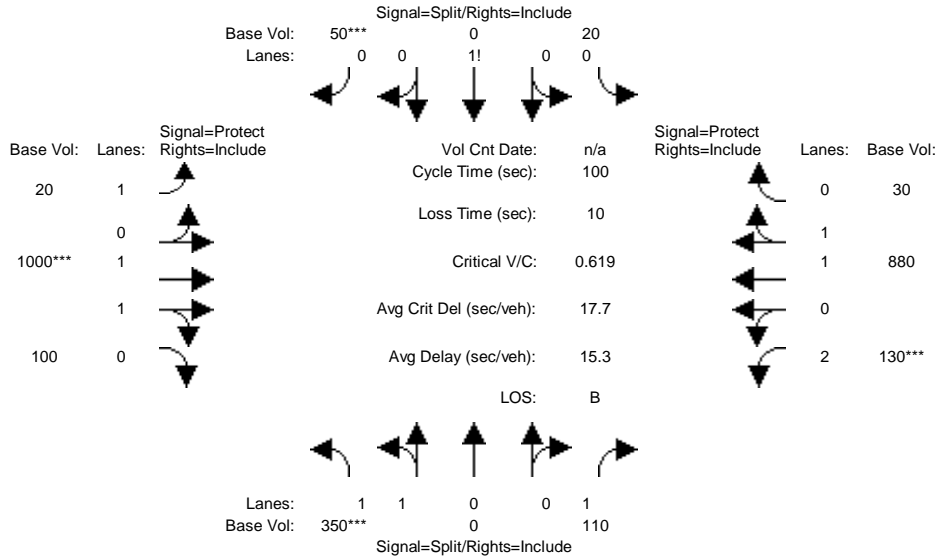


Street Name:	Drive D						Victoria St..					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	280	0	150	0	0	0	0	1040	1040	510	870	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	280	0	150	0	0	0	0	1040	1040	510	870	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	280	0	150	0	0	0	0	1040	1040	510	870	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	280	0	150	0	0	0	0	1040	1040	510	870	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	280	0	150	0	0	0	0	1040	1040	510	870	0
OvlAdjVol:	890											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	1.00	2.00	2.00	0.00
Final Sat.:	5760	0	1600	0	0	0	0	3200	1600	5760	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.05	0.00	0.09	0.00	0.00	0.00	0.00	0.33	0.65	0.09	0.27	0.00
OvlAdjV/S:										0.56		
Crit Moves:	****						**** ****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Weekday AM Mitigated

Intersection #3: Victoria St. & Birchknoll Dr.

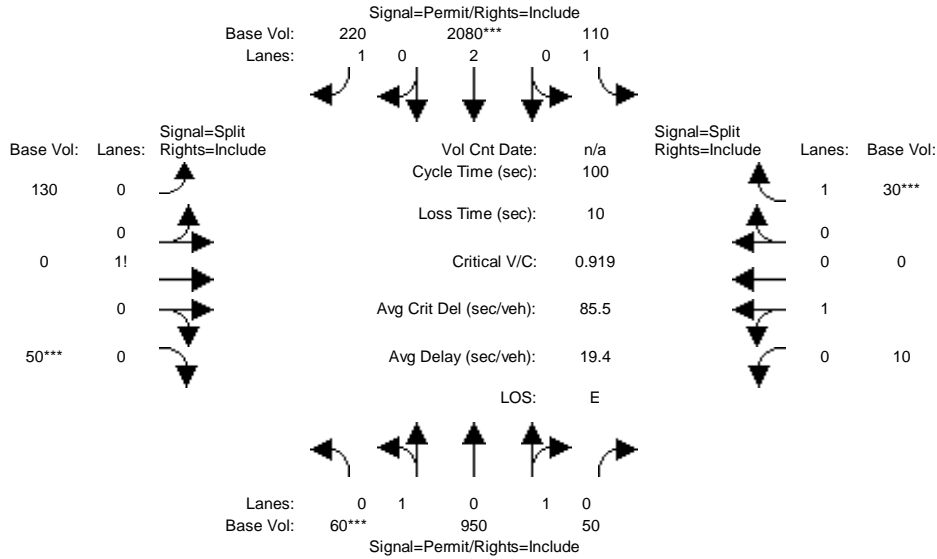


Street Name:	Victoria St.						Birchknoll Dr.													
Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																				
Base Vol:	350	0	110	20	0	50	20	1000	100	130	880	30								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							
Initial Bse:	350	0	110	20	0	50	20	1000	100	130	880	30								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							
PHF Volume:	350	0	110	20	0	50	20	1000	100	130	880	30								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0							
Reduced Vol:	350	0	110	20	0	50	20	1000	100	130	880	30								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00							
FinalVolume:	350	0	110	20	0	50	20	1000	100	130	880	30								
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600							
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00							
Lanes:	2.00	0.00	1.00	0.29	0.00	0.71	1.00	1.82	0.18	2.00	1.93	0.07	0.07							
Final Sat.:	3200	0	1600	457	0	1143	1600	2909	291	5760	3095	105	105							
Capacity Analysis Module:																				
Vol/Sat:	0.11	0.00	0.07	0.04	0.00	0.04	0.01	0.34	0.34	0.02	0.28	0.28	0.28							
Crit Moves:	****					****		****		****										

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Weekday AM Mitigated

Intersection #5: Central Ave. & Charles Willard St.

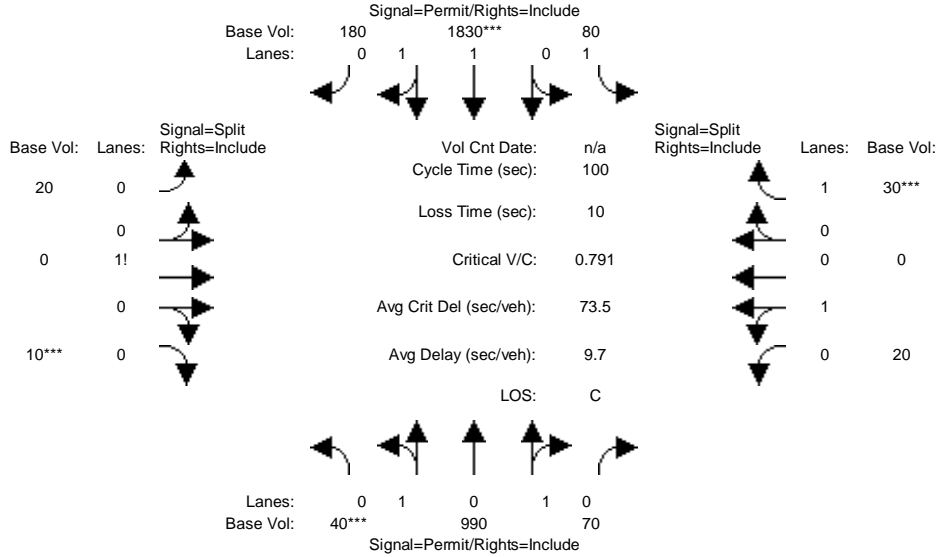


Street Name:	Central Ave.						Charles Willard St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	60	950	50	110	2080	220	130	0	50	10	0	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	950	50	110	2080	220	130	0	50	10	0	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	950	50	110	2080	220	130	0	50	10	0	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	950	50	110	2080	220	130	0	50	10	0	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	950	50	110	2080	220	130	0	50	10	0	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.11	1.80	0.09	1.00	2.00	1.00	0.72	0.00	0.28	1.00	0.00	1.00
Final Sat.:	181	2868	151	1600	3200	1600	1156	0	444	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.33	0.33	0.07	0.65	0.14	0.11	0.00	0.11	0.01	0.00	0.02
Crit Moves:	****				****				****			****

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Weekday AM Mitigated

Intersection #6: Central Ave. & Project Driveway/Beachey Pl.

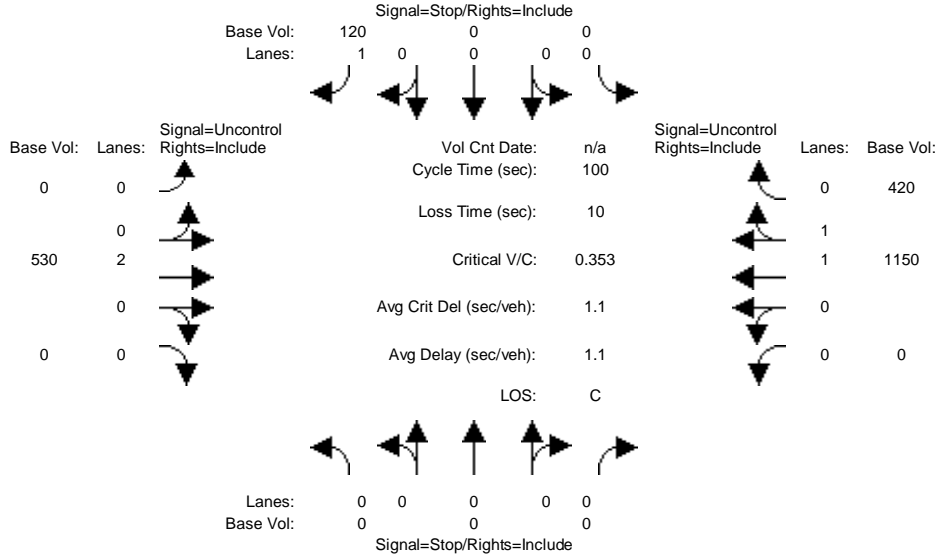


Street Name:	Central Ave.						Beachey Pl.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	40	990	70	80	1830	180	20	0	10	20	0	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	990	70	80	1830	180	20	0	10	20	0	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	990	70	80	1830	180	20	0	10	20	0	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	990	70	80	1830	180	20	0	10	20	0	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	990	70	80	1830	180	20	0	10	20	0	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.07	1.80	0.13	1.00	1.82	0.18	0.67	0.00	0.33	1.00	0.00	1.00
Final Sat.:	116	2880	204	1600	2913	287	1067	0	533	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.34	0.34	0.05	0.63	0.63	0.02	0.00	0.02	0.01	0.00	0.02
Crit Moves:	****				****				****			****

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
2035 With Project Weekday AM Mitigated

Intersection #8: University Dr./Birchknoll Dr. Ext.



Street Name:	Birchknoll Dr. Ext.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	0	0	120	0	530	0	0	1150	420
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	120	0	530	0	0	1150	420
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	120	0	530	0	0	1150	420
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	120	0	530	0	0	1150	420
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflct Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	785	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	340	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	340	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	0.35	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	1.6	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	21.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	C	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxxx			21.3			xxxxxxx			xxxxxxx		

ApproachLOS: * C * *

Note: Queue reported is the number of cars per lane.

Peak Hour Delay Signal Warrant Report

Intersection #8 University Dr./Birchknoll Dr. Ext.

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 0	0 0 0 0 1	0 0 2 0 0	0 0 1 1 0
Initial Vol:	0 0 0	0 0 120	0 530 0	0 1150 420
ApproachDel:	xxxxxx	21.3	xxxxxx	xxxxxx

Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.7]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=120]
SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=2220]
SUCCEED - Total volume greater than or equal to 650 for intersection
with less than four approaches.

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #8 University Dr./Birchknoll Dr. Ext.

Base Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 0	0 0 0 0 1	0 0 2 0 0	0 0 1 1 0
Initial Vol:	0 0 0	0 0 120	0 530 0	0 1150 420

Major Street Volume: 2100
Minor Approach Volume: 120
Minor Approach Volume Threshold: 29 [less than minimum of 100]

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

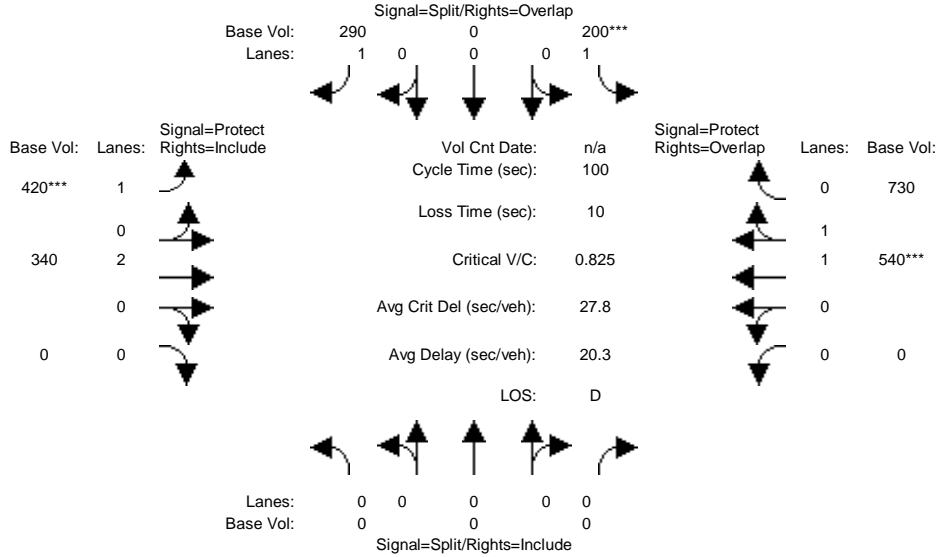
The peak hour warrant analysis in this report is not intended to replace

a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Weekday AM Mitigated

Intersection #9: University Dr. & Toro Center Dr.

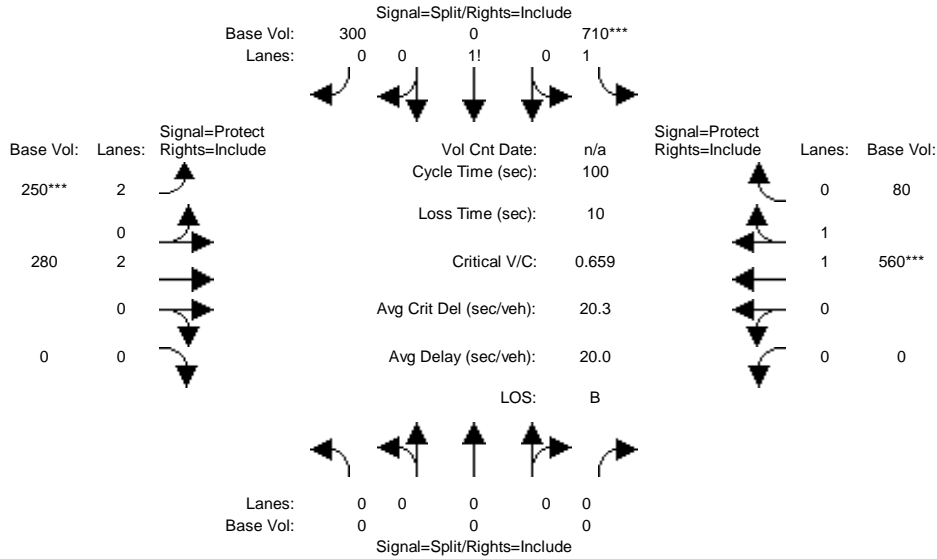


Street Name:	University Dr.						Toro Center Dr.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	200	0	290	420	340	0	0	540	730
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	200	0	290	420	340	0	0	540	730
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	200	0	290	420	340	0	0	540	730
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	200	0	290	420	340	0	0	540	730
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	200	0	290	420	340	0	0	540	730
OvlAdjVol:						0						530
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.00	1.00
Final Sat.:	0	0	0	1600	0	1600	1600	3200	0	0	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.00	0.18	0.26	0.11	0.00	0.00	0.34	0.46
OvlAdjV/S:						0.00						0.33
Crit Moves:				****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Weekday AM Mitigated

Intersection #10: Albertoni St. & SR 91 EB Ramps

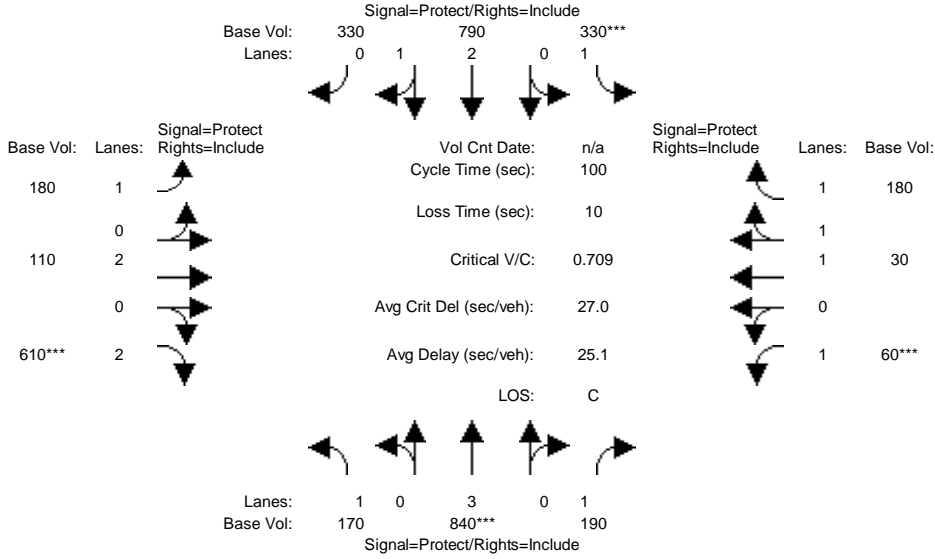


Street Name:	Albertoni St.						SR 91 EB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	710	0	300	250	280	0	0	560	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	710	0	300	250	280	0	0	560	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	710	0	300	250	280	0	0	560	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	710	0	300	250	280	0	0	560	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	710	0	300	250	280	0	0	560	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.41	0.00	0.59	2.00	2.00	0.00	0.00	1.75	0.25
Final Sat.:	0	0	0	2250	0	950	5760	3200	0	0	2800	400
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.32	0.00	0.32	0.04	0.09	0.00	0.00	0.20	0.20
Crit Moves:				****			****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Weekday AM Mitigated

Intersection #12: Avalon Blvd. & Albertoni St.

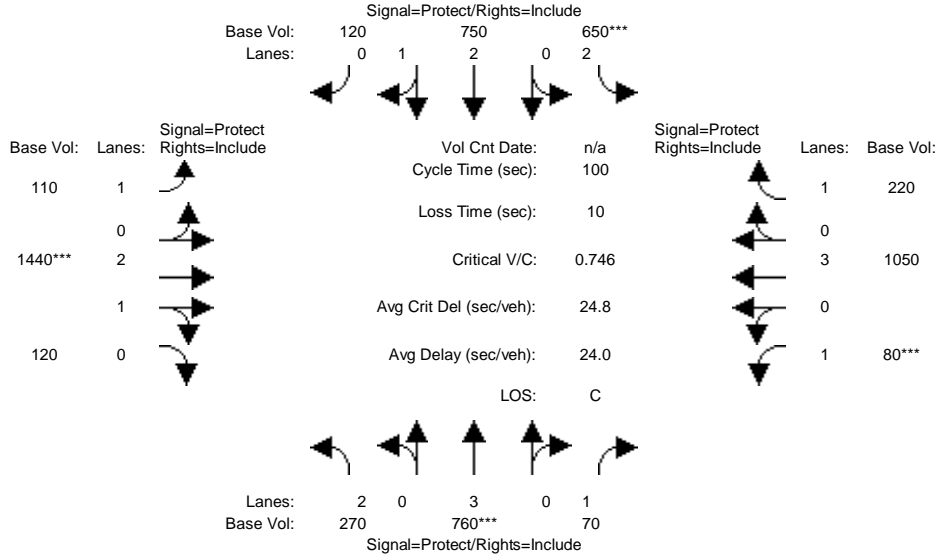


Street Name:	Avalon Blvd.						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	170	840	190	330	790	330	180	110	610	60	30	180
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	170	840	190	330	790	330	180	110	610	60	30	180
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	170	840	190	330	790	330	180	110	610	60	30	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	170	840	190	330	790	330	180	110	610	60	30	180
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	170	840	190	330	790	330	180	110	610	60	30	180
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.12	0.88	1.00	2.00	2.00	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3386	1414	1600	3200	3200	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.11	0.17	0.12	0.21	0.23	0.23	0.11	0.03	0.19	0.04	0.02	0.06
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Weekday AM Mitigated

Intersection #13: Avalon Blvd. & Victoria St.

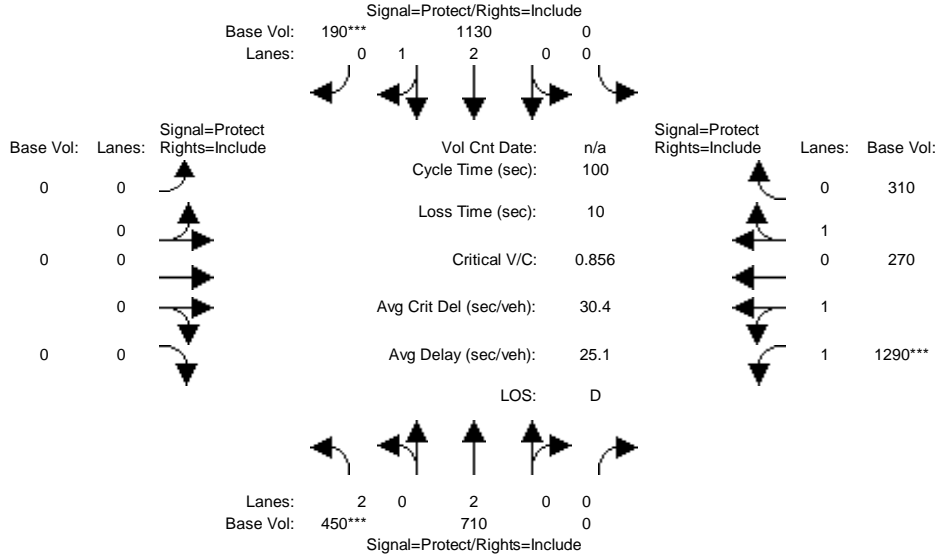


Street Name:	Avalon Blvd.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	270	760	70	650	750	120	110	1440	120	80	1050	220
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	270	760	70	650	750	120	110	1440	120	80	1050	220
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	270	760	70	650	750	120	110	1440	120	80	1050	220
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	270	760	70	650	750	120	110	1440	120	80	1050	220
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	270	760	70	650	750	120	110	1440	120	80	1050	220
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	3.00	1.00	2.00	2.59	0.41	1.00	2.77	0.23	1.00	3.00	1.00
Final Sat.:	5760	4800	1600	5760	4138	662	1600	4431	369	1600	4800	1600
Capacity Analysis Module:												
Vol/Sat:	0.05	0.16	0.04	0.11	0.18	0.18	0.07	0.33	0.32	0.05	0.22	0.14
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Weekday AM Mitigated

Intersection #14: Central Ave. & Artesia Blvd.

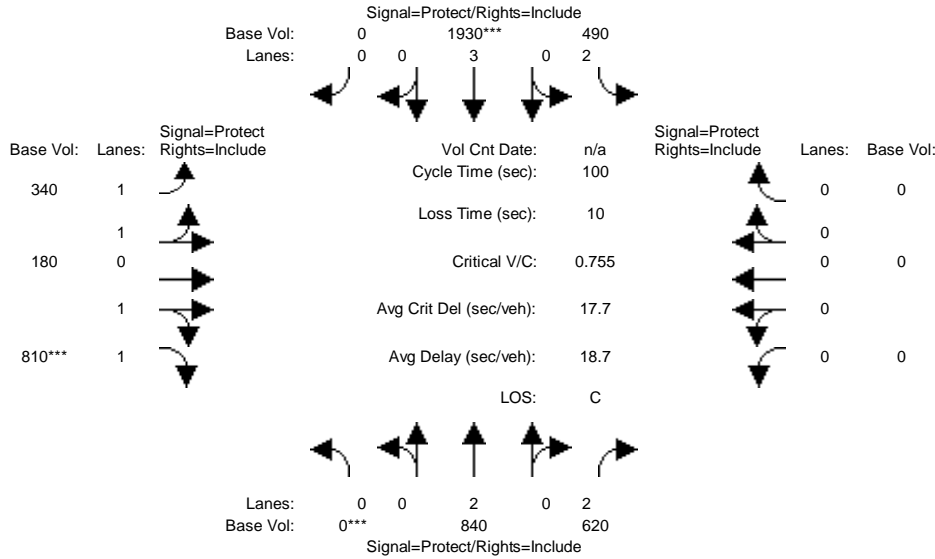


Street Name:	Central Ave.						Artesia Blvd.														
Approach:	North Bound			South Bound			East Bound			West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																					
Base Vol:	450	710	0	0	1130	190	0	0	0	1290	270	310									
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
Initial Bse:	450	710	0	0	1130	190	0	0	0	1290	270	310									
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
PHF Volume:	450	710	0	0	1130	190	0	0	0	1290	270	310									
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0									
Reduced Vol:	450	710	0	0	1130	190	0	0	0	1290	270	310									
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
FinalVolume:	450	710	0	0	1130	190	0	0	0	1290	270	310									
Saturation Flow Module:																					
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600									
Adjustment:	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00									
Lanes:	2.00	2.00	0.00	0.00	2.57	0.43	0.00	0.00	0.00	2.00	0.47	0.53									
Final Sat.:	5760	3200	0	0	4109	691	0	0	0	3200	745	855									
Capacity Analysis Module:																					
Vol/Sat:	0.08	0.22	0.00	0.00	0.27	0.28	0.00	0.00	0.00	0.40	0.36	0.36									
Crit Moves:	****					****				****											

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Weekday AM Mitigated

Intersection #15: Central Ave. & Albertoni St./Artesia Blvd. EB

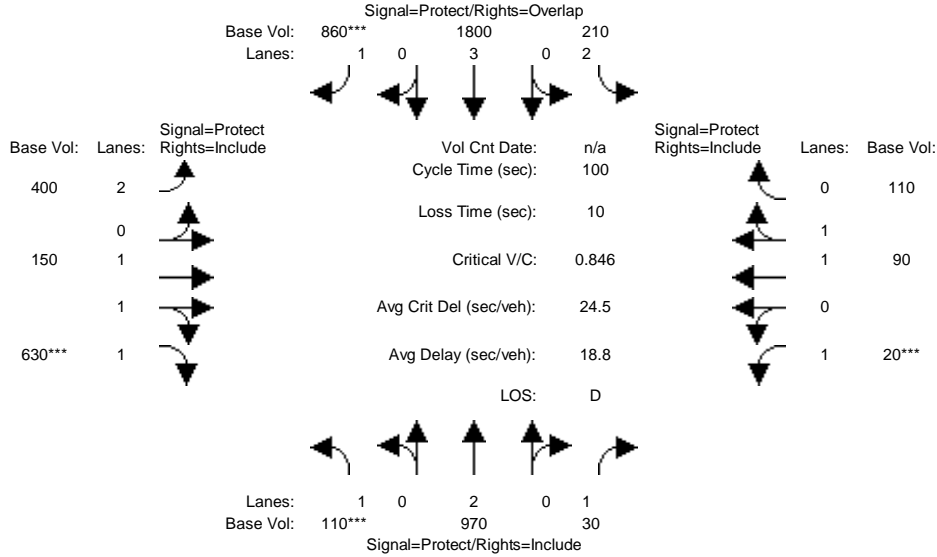


Street Name:	Central Ave.						Albertoni St./Artesia Blvd. EB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	840	620	490	1930	0	340	180	810	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	840	620	490	1930	0	340	180	810	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	840	620	490	1930	0	340	180	810	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	840	620	490	1930	0	340	180	810	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	840	620	490	1930	0	340	180	810	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	3.00	0.00	1.31	0.69	2.00	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	4800	0	2092	1108	3200	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.26	0.19	0.09	0.40	0.00	0.16	0.16	0.25	0.00	0.00	0.00
Crit Moves:	****				****				****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Weekday AM Mitigated

Intersection #16: Central Ave. & Victoria St.

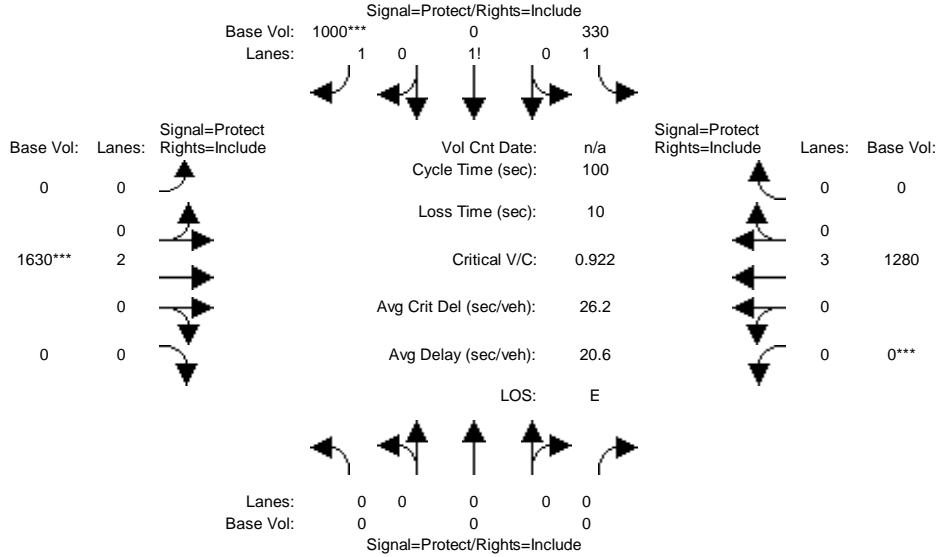


Street Name:	Central Ave.						Victoria St.													
Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																				
Base Vol:	110	970	30	210	1800	860	400	150	630	20	90	110								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	110	970	30	210	1800	860	400	150	630	20	90	110								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	110	970	30	210	1800	860	400	150	630	20	90	110								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	110	970	30	210	1800	860	400	150	630	20	90	110								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	110	970	30	210	1800	860	400	150	630	20	90	110								
OvlAdjVol:													749							
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	3.00	1.00	2.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	3200	1600	5760	4800	1600	5760	1600	3200	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Capacity Analysis Module:																				
Vol/Sat:	0.07	0.30	0.02	0.04	0.38	0.54	0.07	0.09	0.20	0.01	0.06	0.07								
OvlAdjV/S:													0.47							
Crit Moves:	***												***	***	***					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Weekday AM Mitigated

Intersection #20: I-110 SB Off-Ramp & 190th St.

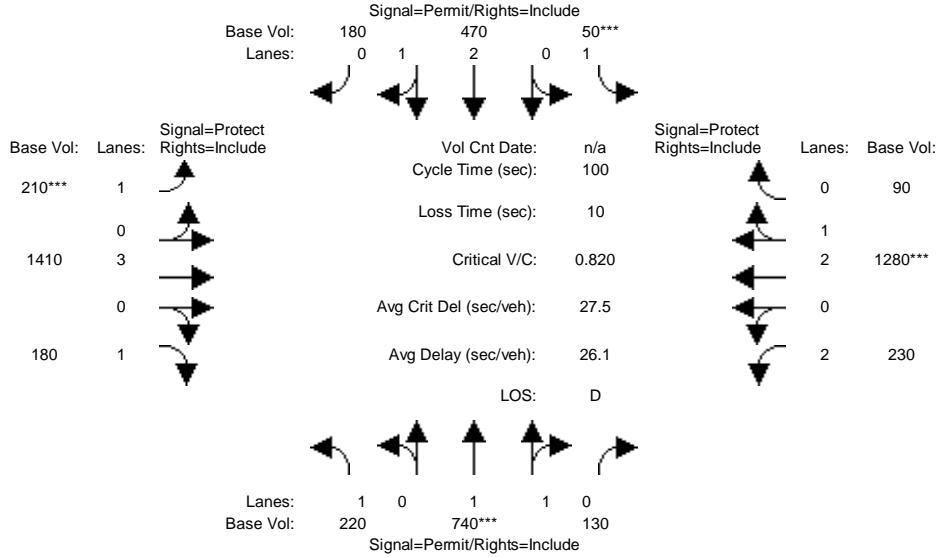


Street Name:	I-110 SB Off-Ramp						190th St.														
Approach:	North Bound			South Bound			East Bound			West Bound											
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																					
Base Vol:	0	0	0	330	0	1000	0	1630	0	0	1280	0	0	0	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	330	0	1000	0	1630	0	0	1280	0	0	0	0	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	330	0	1000	0	1630	0	0	1280	0	0	0	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	330	0	1000	0	1630	0	0	1280	0	0	0	0	0	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	330	0	1000	0	1630	0	0	1280	0	0	0	0	0	0	0	0	0	0
Saturation Flow Module:																					
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	2.00	0.00	2.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Final Sat.:	0	0	0	1600	0	3200	0	3200	0	0	4800	0	0	0	0	0	0	0	0	0	0
Capacity Analysis Module:																					
Vol/Sat:	0.00	0.00	0.00	0.21	0.00	0.31	0.00	0.51	0.00	0.00	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crit Moves:						****		****			****										

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Weekday AM Mitigated

Intersection #22: Figueroa St. & 190th St./Victoria St.

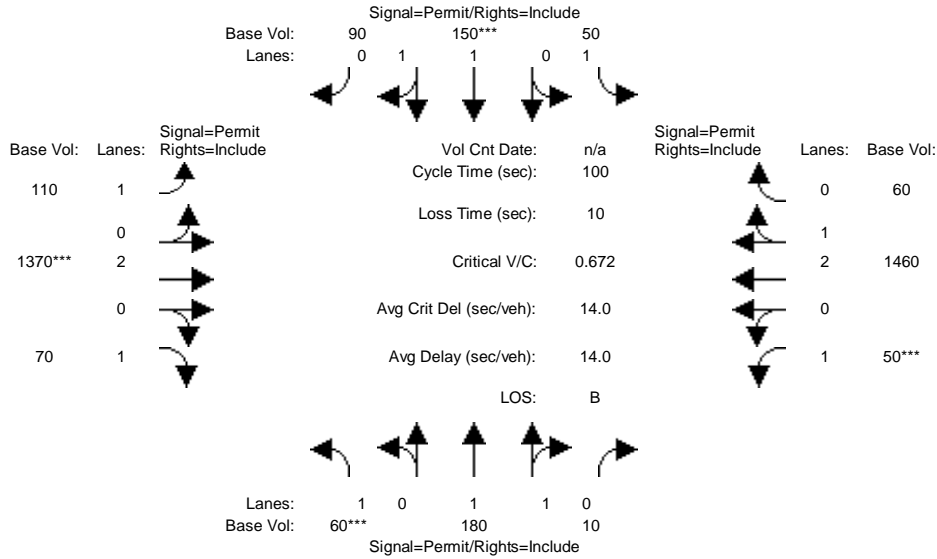


Street Name:	Figueroa St.						190th St./Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	220	740	130	50	470	180	210	1410	180	230	1280	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	220	740	130	50	470	180	210	1410	180	230	1280	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	220	740	130	50	470	180	210	1410	180	230	1280	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	220	740	130	50	470	180	210	1410	180	230	1280	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	220	740	130	50	470	180	210	1410	180	230	1280	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	1.00	1.70	0.30	1.00	2.17	0.83	1.00	3.00	1.00	2.00	2.80	0.20
Final Sat.:	1600	2722	478	1600	3471	1329	1600	4800	1600	5760	4485	315
Capacity Analysis Module:												
Vol/Sat:	0.14	0.27	0.27	0.03	0.14	0.14	0.13	0.29	0.11	0.04	0.29	0.29
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Weekday AM Mitigated

Intersection #23: Broadway & Victoria St.

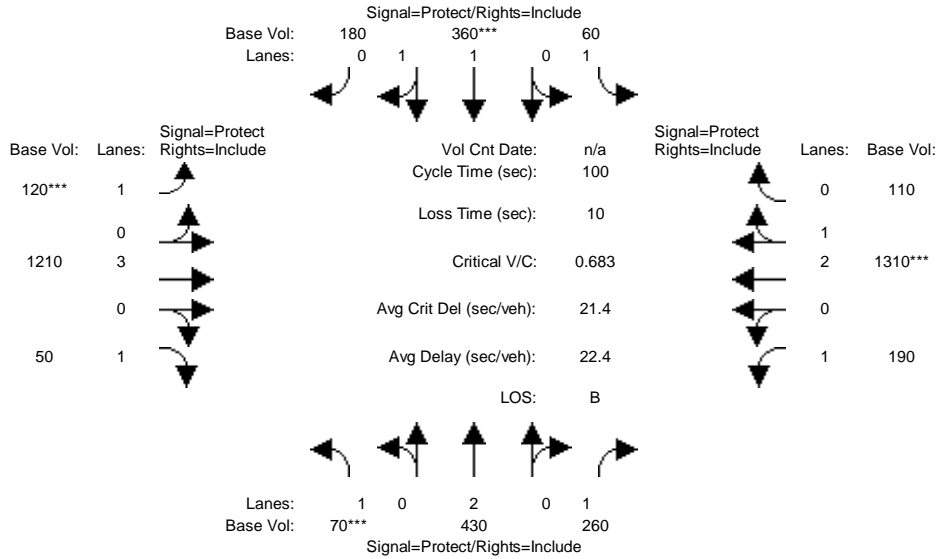


Street Name:	Broadway						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	60	180	10	50	150	90	110	1370	70	50	1460	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	180	10	50	150	90	110	1370	70	50	1460	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	180	10	50	150	90	110	1370	70	50	1460	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	180	10	50	150	90	110	1370	70	50	1460	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	180	10	50	150	90	110	1370	70	50	1460	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.89	0.11	1.00	1.25	0.75	1.00	2.00	1.00	1.00	2.88	0.12
Final Sat.:	1600	3032	168	1600	2000	1200	1600	3200	1600	1600	4611	189
Capacity Analysis Module:												
Vol/Sat:	0.04	0.06	0.06	0.03	0.08	0.08	0.07	0.43	0.04	0.03	0.32	0.32
Crit Moves:	****				****			****			****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Weekday AM Mitigated

Intersection #24: Main St. & Victoria St.

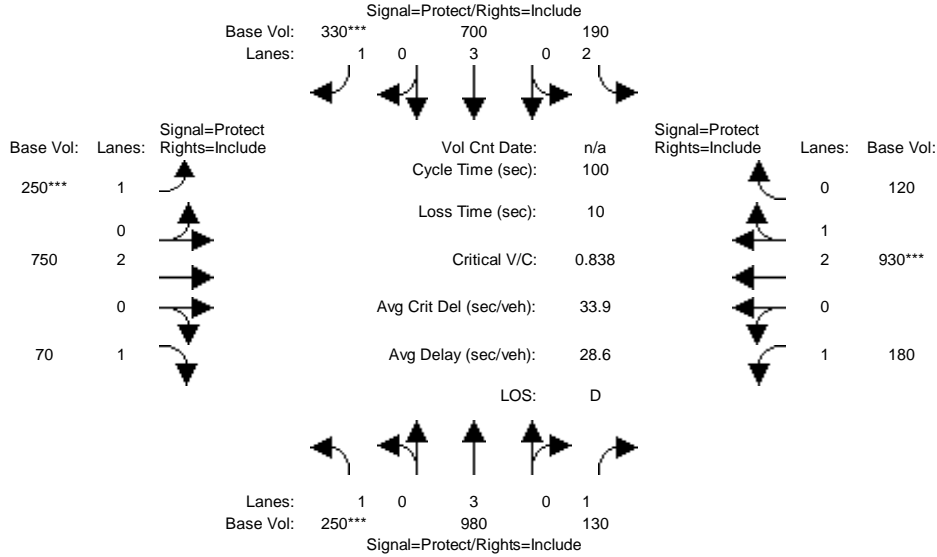


Street Name:	Main St.						Victoria St.													
Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Volume Module:																				
Base Vol:	70	430	260	60	360	180	120	1210	50	190	1310	110								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	70	430	260	60	360	180	120	1210	50	190	1310	110								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Volume:	70	430	260	60	360	180	120	1210	50	190	1310	110								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	70	430	260	60	360	180	120	1210	50	190	1310	110								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
FinalVolume:	70	430	260	60	360	180	120	1210	50	190	1310	110								
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600								
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Lanes:	1.00	2.00	1.00	1.00	1.33	0.67	1.00	3.00	1.00	1.00	2.77	0.23								
Final Sat.:	1600	3200	1600	1600	2133	1067	1600	4800	1600	1600	4428	372								
Capacity Analysis Module:																				
Vol/Sat:	0.04	0.13	0.16	0.04	0.17	0.17	0.08	0.25	0.03	0.12	0.30	0.30								
Crit Moves:	****				****		****				****									

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Weekday AM Mitigated

Intersection #26: Avalon Blvd. & Del Amo Blvd.

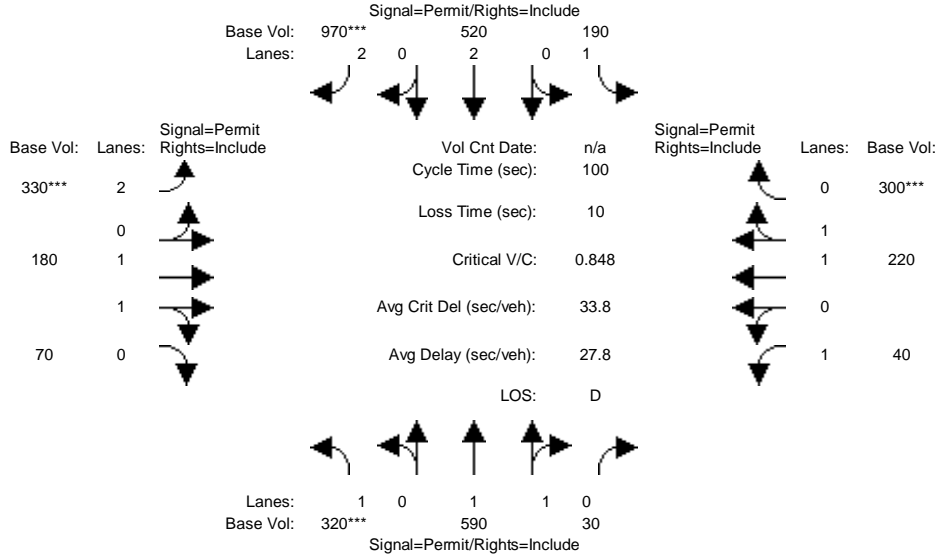


Street Name:	Avalon Blvd.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	250	980	130	190	700	330	250	750	70	180	930	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	250	980	130	190	700	330	250	750	70	180	930	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	250	980	130	190	700	330	250	750	70	180	930	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	250	980	130	190	700	330	250	750	70	180	930	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	250	980	130	190	700	330	250	750	70	180	930	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	3.00	1.00	1.00	2.00	1.00	1.00	2.66	0.34
Final Sat.:	1600	4800	1600	5760	4800	1600	1600	3200	1600	1600	4251	549
Capacity Analysis Module:												
Vol/Sat:	0.16	0.20	0.08	0.03	0.15	0.21	0.16	0.23	0.04	0.11	0.22	0.22
Crit Moves:	****					****	****				****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 With Project Weekday AM Mitigated

Intersection #29: Central Ave. & University Dr.



Street Name:	Central Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	320	590	30	190	520	970	330	180	70	40	220	300
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	320	590	30	190	520	970	330	180	70	40	220	300
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	320	590	30	190	520	970	330	180	70	40	220	300
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	320	590	30	190	520	970	330	180	70	40	220	300
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	320	590	30	190	520	970	330	180	70	40	220	300
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.90	0.10	1.00	2.00	2.00	2.00	1.44	0.56	1.00	1.00	1.00
Final Sat.:	1600	3045	155	1600	3200	3200	5760	2304	896	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.20	0.19	0.19	0.12	0.16	0.30	0.06	0.08	0.08	0.03	0.14	0.19
Crit Moves:	****					****	****					****

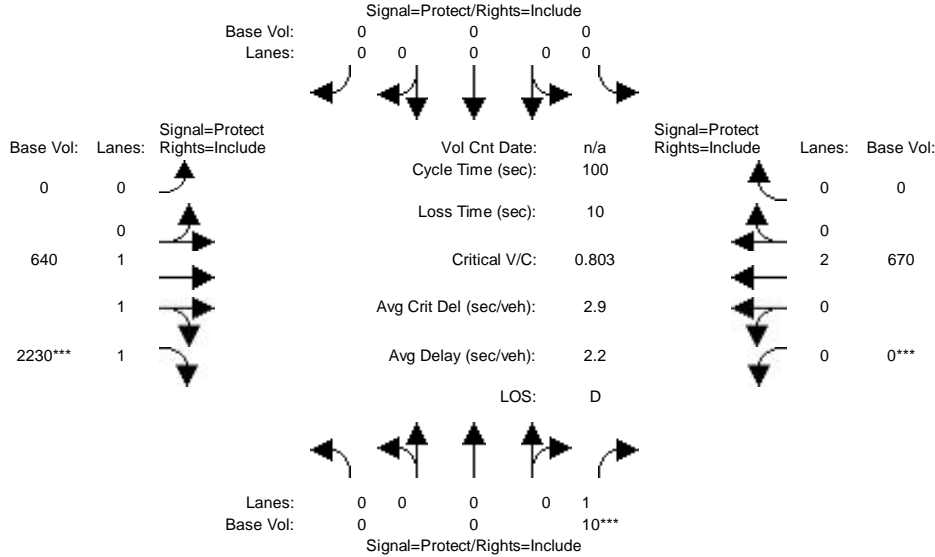
Appendix S

Intersection LOS Worksheets for 2035 Sunday Plus Project with 30,000-Seats
Conditions

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Pre-Game

Intersection #1: Victoria St. & Drive D

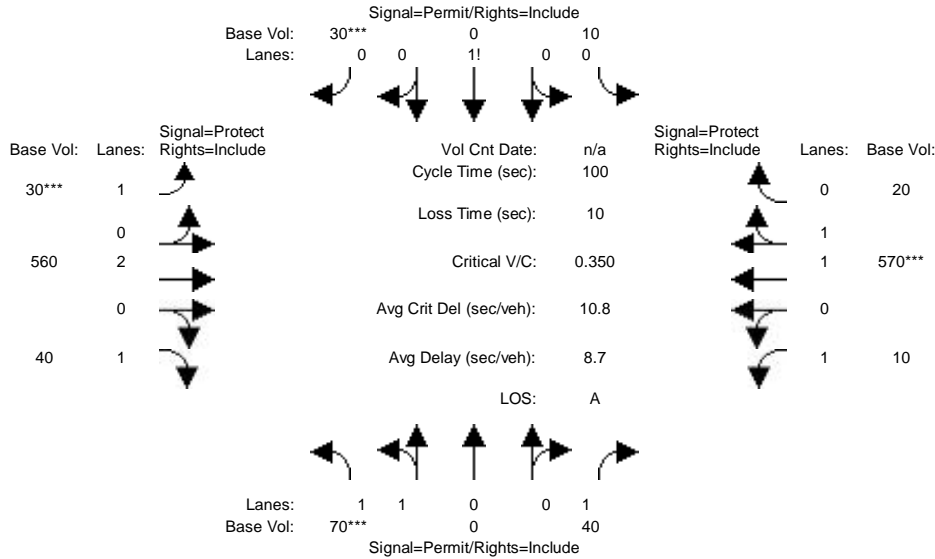


Street Name:	Drive D						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	10	0	0	0	0	640	2230	0	670	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	10	0	0	0	0	640	2230	0	670	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	10	0	0	0	0	640	2230	0	670	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	10	0	0	0	0	640	2230	0	670	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	10	0	0	0	0	640	2230	0	670	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	2.00	0.00	2.00	0.00
Final Sat.:	0	0	1600	0	0	0	0	1600	3200	0	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.40	0.70	0.00	0.21	0.00
Crit Moves:			****					****	****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Pre-Game

Intersection #2: Victoria St & Tamcliff Ave

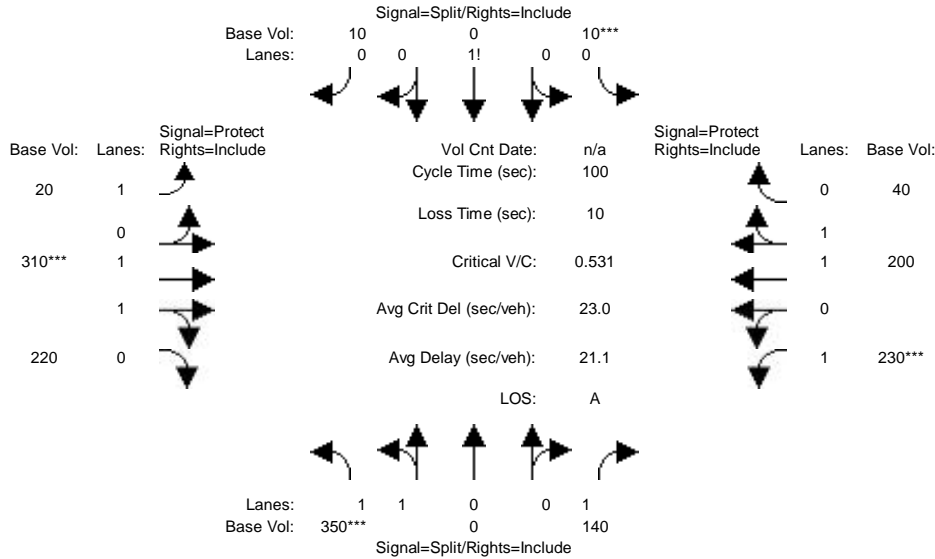


Street Name:	Victoria St						Tamcliff Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	70	0	40	10	0	30	30	560	40	10	570	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	0	40	10	0	30	30	560	40	10	570	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	0	40	10	0	30	30	560	40	10	570	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	0	40	10	0	30	30	560	40	10	570	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	70	0	40	10	0	30	30	560	40	10	570	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.25	0.00	0.75	1.00	2.00	1.00	1.00	1.93	0.07
Final Sat.:	3200	0	1600	400	0	1200	1600	3200	1600	1600	3092	108
Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.03	0.01	0.00	0.03	0.02	0.17	0.03	0.01	0.18	0.18
Crit Moves:	****					****	****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Pre-Game

Intersection #3: Victoria St. & Birchknoll Dr.

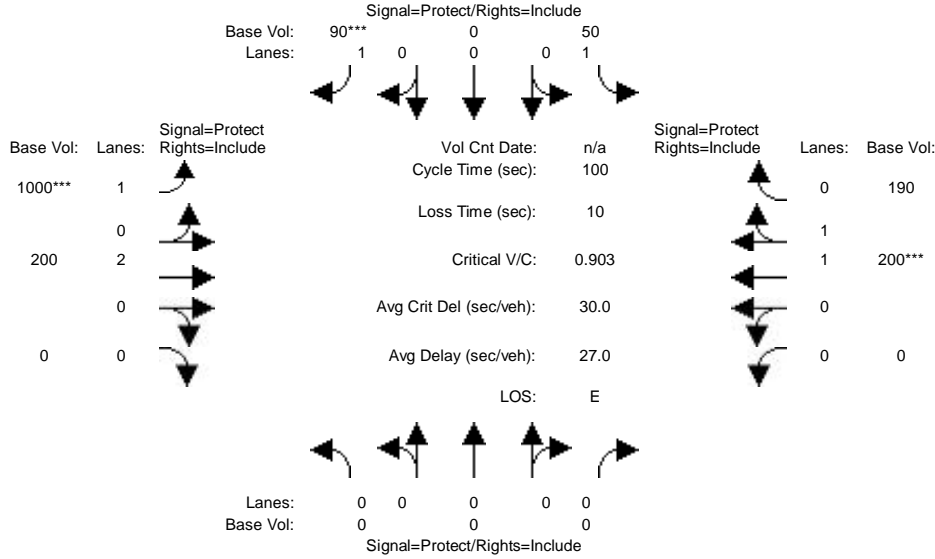


Street Name:	Victoria St.						Birchknoll Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	350	0	140	10	0	10	20	310	220	230	200	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	350	0	140	10	0	10	20	310	220	230	200	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	350	0	140	10	0	10	20	310	220	230	200	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	350	0	140	10	0	10	20	310	220	230	200	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	350	0	140	10	0	10	20	310	220	230	200	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.50	0.00	0.50	1.00	1.17	0.83	1.00	1.67	0.33
Final Sat.:	3200	0	1600	800	0	800	1600	1872	1328	1600	2667	533
Capacity Analysis Module:												
Vol/Sat:	0.11	0.00	0.09	0.01	0.00	0.01	0.01	0.17	0.17	0.14	0.07	0.08
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Pre-Game

Intersection #9: University Dr. & Toro Center Dr.

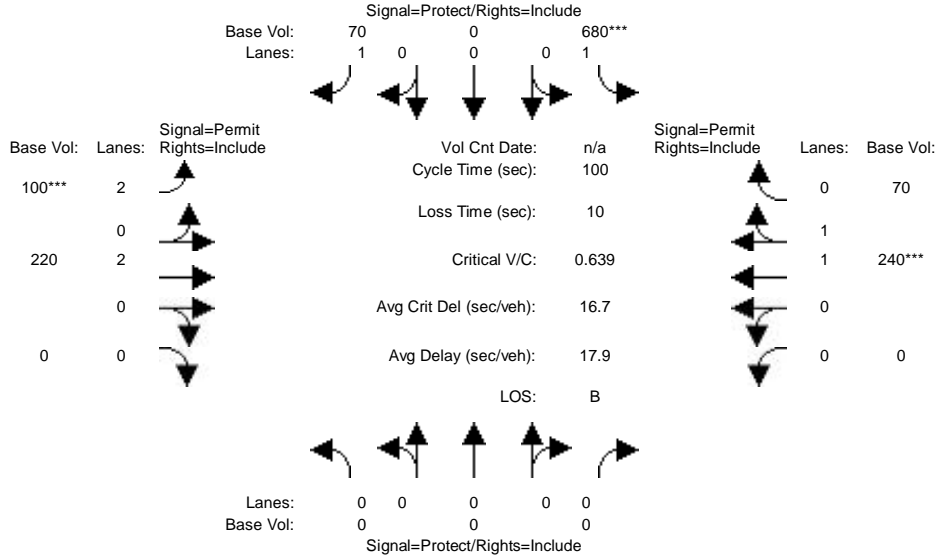


Street Name:	University Dr.						Toro Center Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	50	0	90	1000	200	0	0	200	190
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	50	0	90	1000	200	0	0	200	190
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	50	0	90	1000	200	0	0	200	190
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	50	0	90	1000	200	0	0	200	190
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	50	0	90	1000	200	0	0	200	190
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.03	0.97
Final Sat.:	0	0	0	1600	0	1600	1600	3200	0	0	1641	1559
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.03	0.00	0.06	0.63	0.06	0.00	0.00	0.12	0.12
Crit Moves:				****		****				****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Pre-Game

Intersection #10: Albertoni St. & SR 91 EB Ramps [Moved from Main St & Albertoni St]

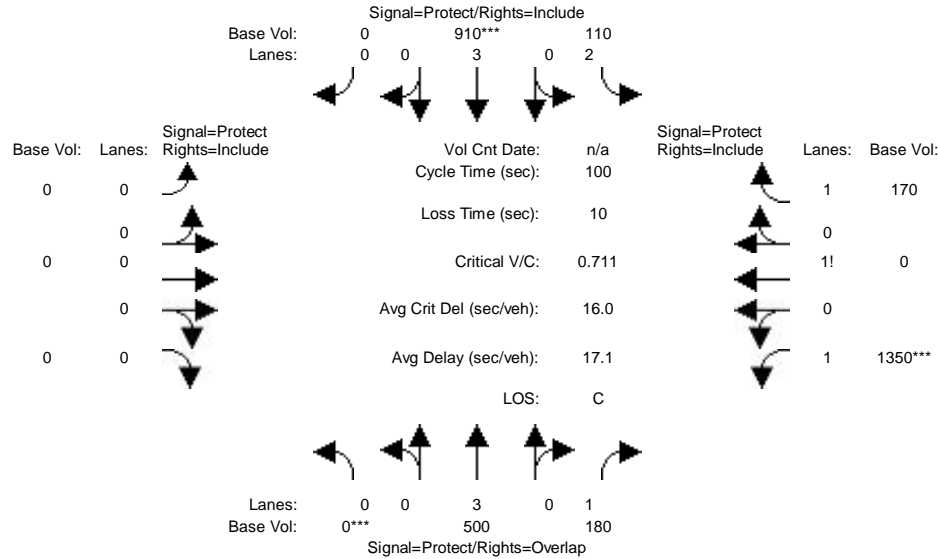


Street Name:	Sr 91 EB Ramps						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	680	0	70	100	220	0	0	240	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	680	0	70	100	220	0	0	240	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	680	0	70	100	220	0	0	240	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	680	0	70	100	220	0	0	240	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	680	0	70	100	220	0	0	240	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.55	0.45
Final Sat.:	0	0	0	1600	0	1600	5760	3200	0	0	2477	723
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.43	0.00	0.04	0.02	0.07	0.00	0.00	0.10	0.10
Crit Moves:				****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Pre-Game

Intersection #11: Avalon Blvd. & SR 91 WB On-Ramp

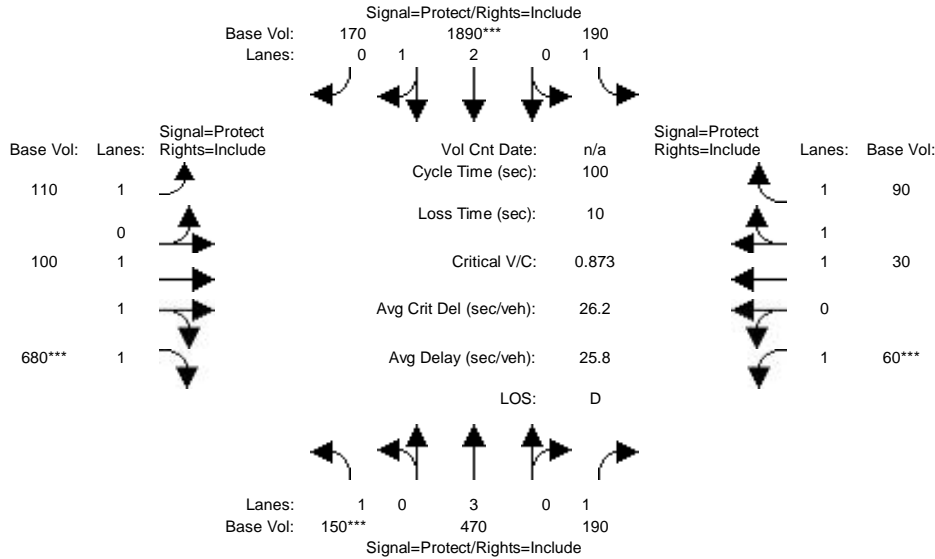


Street Name:	Avalon Blvd.						SR 91 WB On-Ramp						
Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Volume Module:													
Base Vol:	0	500	180	110	910	0	0	0	0	1350	0	170	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	0	500	180	110	910	0	0	0	0	1350	0	170	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:	0	500	180	110	910	0	0	0	0	1350	0	170	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	0	500	180	110	910	0	0	0	0	1350	0	170	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Final Volume:	0	500	180	110	910	0	0	0	0	1350	0	170	
OvlAdjVol:	0												
Saturation Flow Module:													
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	3200	0	1600	
Capacity Analysis Module:													
Vol/Sat:	0.00	0.10	0.11	0.02	0.19	0.00	0.00	0.00	0.00	0.00	0.42	0.00	
OvlAdjV/S:	0.00												
Crit Moves:	****	****						****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Pre-Game

Intersection #12: Avalon Blvd. & Albertoni St.

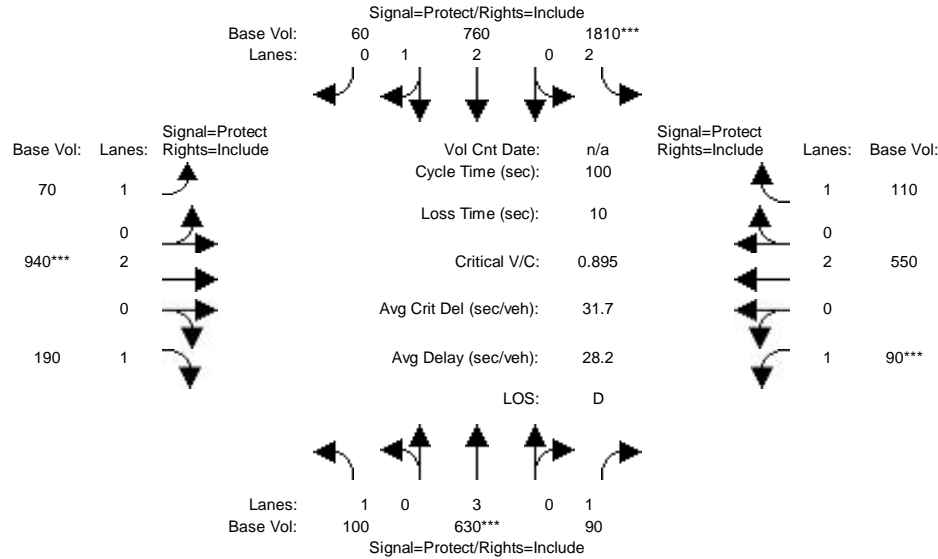


Street Name:	Avalon Blvd.						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	150	470	190	190	1890	170	110	100	680	60	30	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	150	470	190	190	1890	170	110	100	680	60	30	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	150	470	190	190	1890	170	110	100	680	60	30	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	150	470	190	190	1890	170	110	100	680	60	30	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	150	470	190	190	1890	170	110	100	680	60	30	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.75	0.25	1.00	1.00	2.00	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	4404	396	1600	1600	3200	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.09	0.10	0.12	0.12	0.43	0.43	0.07	0.06	0.21	0.04	0.02	0.03
Crit Moves:	****			****			****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Pre-Game

Intersection #13: Avalon Blvd. & Victoria St.

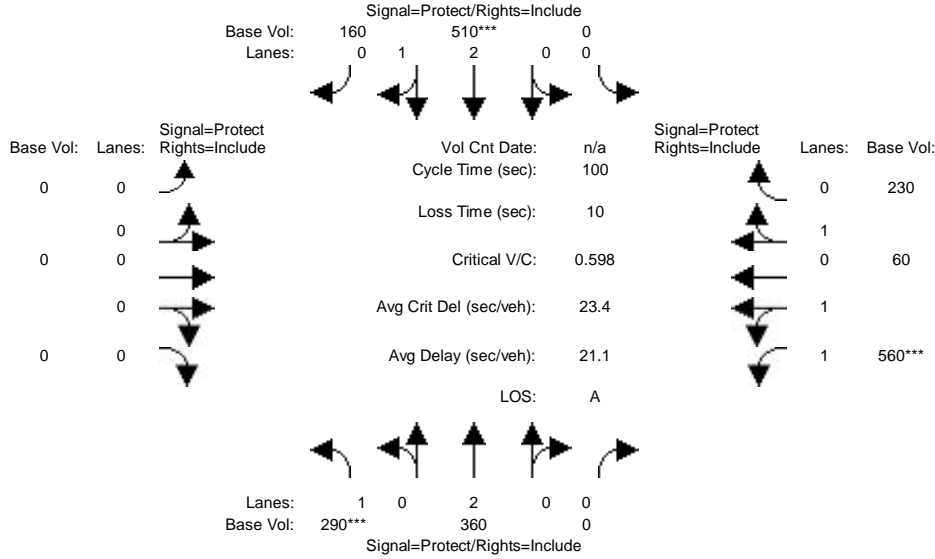


Street Name:	Avalon Blvd.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	100	630	90	1810	760	60	70	940	190	90	550	110
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	100	630	90	1810	760	60	70	940	190	90	550	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	100	630	90	1810	760	60	70	940	190	90	550	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	100	630	90	1810	760	60	70	940	190	90	550	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	100	630	90	1810	760	60	70	940	190	90	550	110
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.78	0.22	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4449	351	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.13	0.06	0.31	0.17	0.17	0.04	0.29	0.12	0.06	0.17	0.07
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Pre-Game

Intersection #14: Central Ave. & Artesia Blvd.

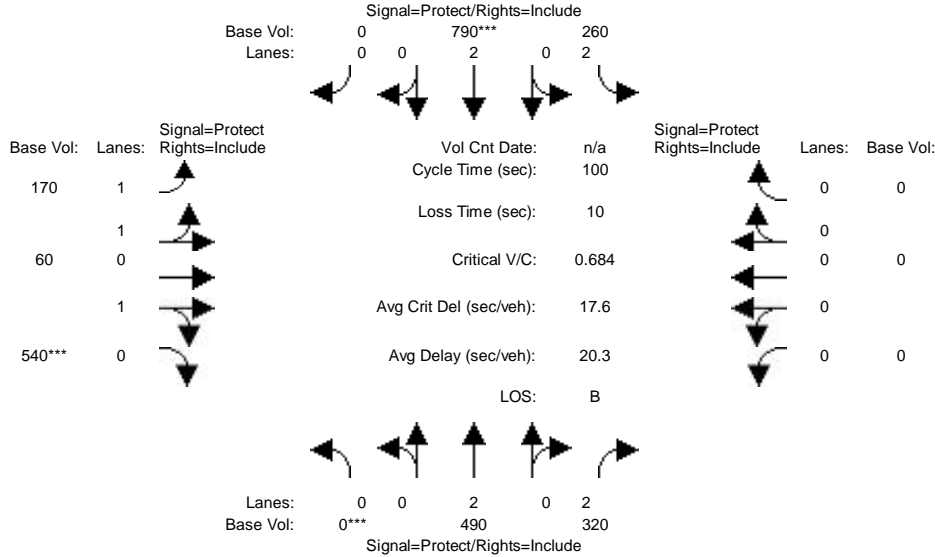


Street Name:	Central Ave.						Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	290	360	0	0	510	160	0	0	0	560	60	230
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	290	360	0	0	510	160	0	0	0	560	60	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	290	360	0	0	510	160	0	0	0	560	60	230
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	290	360	0	0	510	160	0	0	0	560	60	230
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	290	360	0	0	510	160	0	0	0	560	60	230
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.28	0.72	0.00	0.00	0.00	1.98	0.21	0.81
Final Sat.:	1600	3200	0	0	3654	1146	0	0	0	3166	338	1296
Capacity Analysis Module:												
Vol/Sat:	0.18	0.11	0.00	0.00	0.14	0.14	0.00	0.00	0.00	0.18	0.18	0.18
Crit Moves:	****				****					****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Pre-Game

Intersection #15: Central Ave. & Albertoni St.

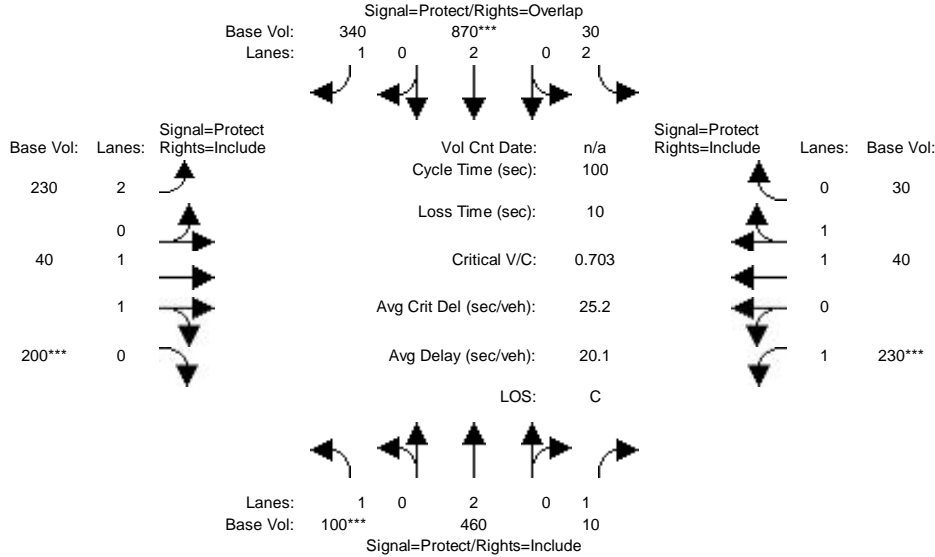


Street Name:	Central Ave.						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	490	320	260	790	0	170	60	540	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	490	320	260	790	0	170	60	540	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	490	320	260	790	0	170	60	540	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	490	320	260	790	0	170	60	540	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	490	320	260	790	0	170	60	540	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.48	0.52	1.00	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	2365	835	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.15	0.10	0.05	0.25	0.00	0.07	0.07	0.34	0.00	0.00	0.00
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Pre-Game

Intersection #16: Central Ave. & Victoria St.

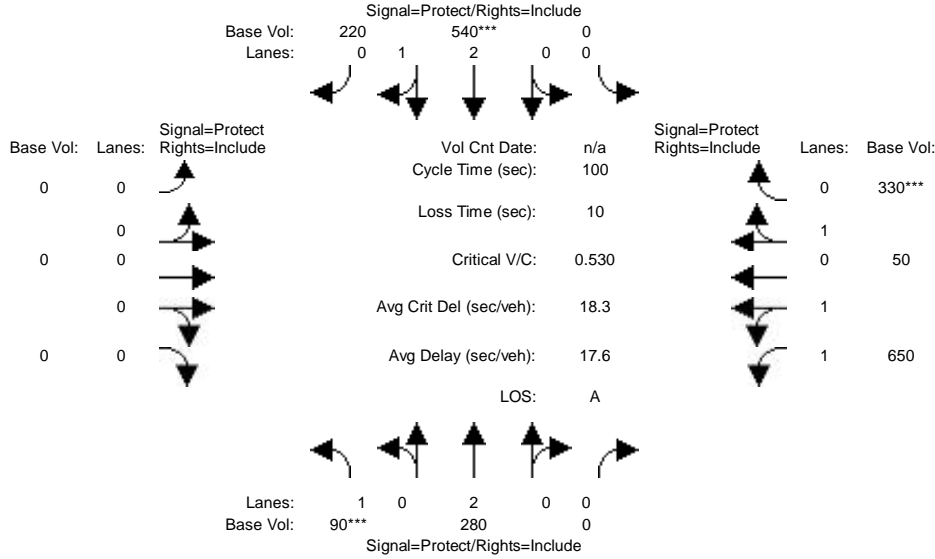


Street Name:	Central Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	100	460	10	30	870	340	230	40	200	230	40	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	100	460	10	30	870	340	230	40	200	230	40	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	100	460	10	30	870	340	230	40	200	230	40	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	100	460	10	30	870	340	230	40	200	230	40	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	100	460	10	30	870	340	230	40	200	230	40	30
OvlAdjVol:	276											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.00	1.00	1.00	1.14	0.86
Final Sat.:	1600	3200	1600	5760	3200	1600	5760	1600	1600	1600	1829	1371
Capacity Analysis Module:												
Vol/Sat:	0.06	0.14	0.01	0.01	0.27	0.21	0.04	0.03	0.13	0.14	0.02	0.02
OvlAdjV/S:	0.17											
Crit Moves:	****			****			****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Pre-Game

Intersection #17: Wilmington Ave. & Artesia Blvd. WB

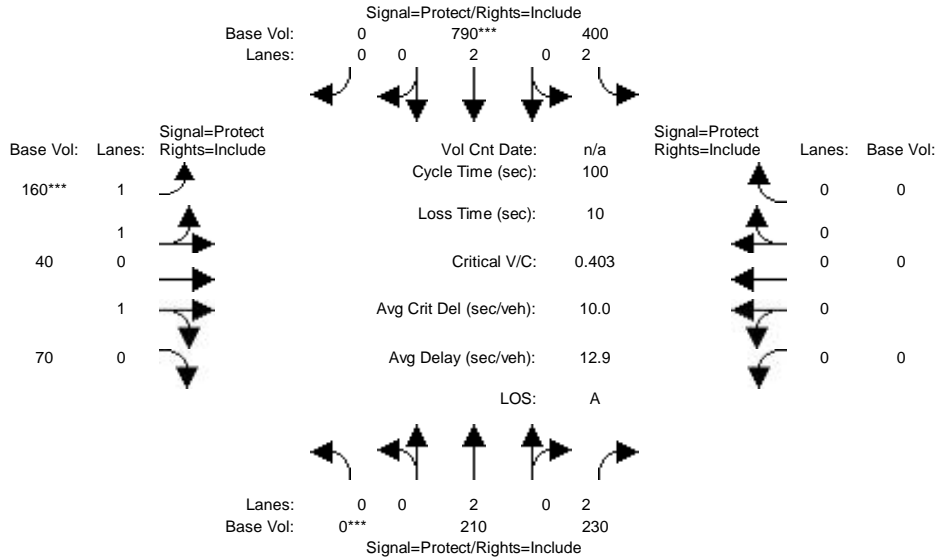


Street Name:	Wilmington Ave.						Artesia Blvd. WB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	90	280	0	0	540	220	0	0	0	650	50	330
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	90	280	0	0	540	220	0	0	0	650	50	330
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	280	0	0	540	220	0	0	0	650	50	330
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	280	0	0	540	220	0	0	0	650	50	330
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	280	0	0	540	220	0	0	0	650	50	330
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.13	0.87	0.00	0.00	0.00	1.90	0.14	0.96
Final Sat.:	1600	3200	0	0	3411	1389	0	0	0	3036	233	1530
Capacity Analysis Module:												
Vol/Sat:	0.06	0.09	0.00	0.00	0.16	0.16	0.00	0.00	0.00	0.21	0.21	0.22
Crit Moves:	****				****					****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Pre-Game

Intersection #18: Wilmington Ave. & Artesia Blvd. EB

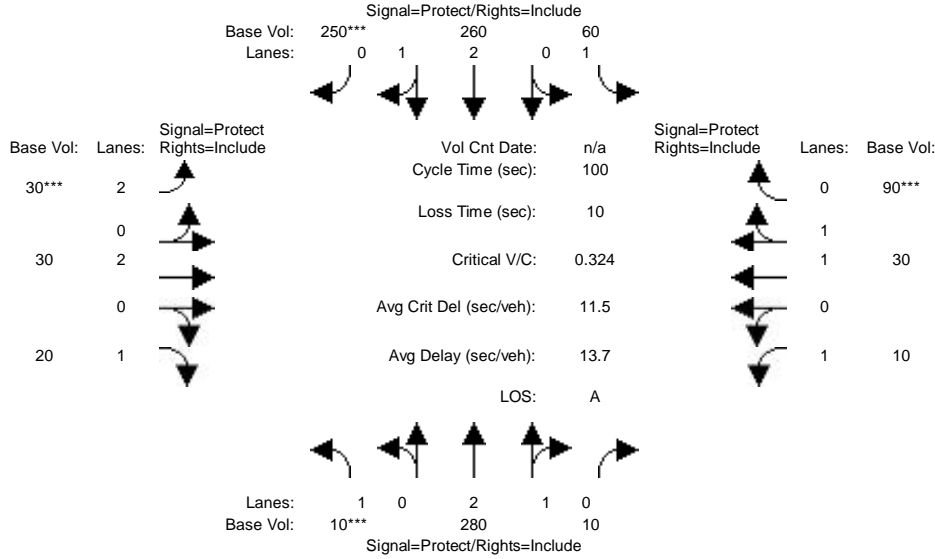


Street Name:	Wilmington Ave.				Artesia Blvd. EB							
Approach:	North Bound		South Bound		East Bound		West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	210	230	400	790	0	160	40	70	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	210	230	400	790	0	160	40	70	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	210	230	400	790	0	160	40	70	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	210	230	400	790	0	160	40	70	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	210	230	400	790	0	160	40	70	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.78	0.44	0.78	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	2844	711	1244	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.07	0.07	0.07	0.25	0.00	0.06	0.06	0.06	0.00	0.00	0.00
Crit Moves:	****			****		****						

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Pre-Game

Intersection #19: Wilmington Ave. & Victoria St.

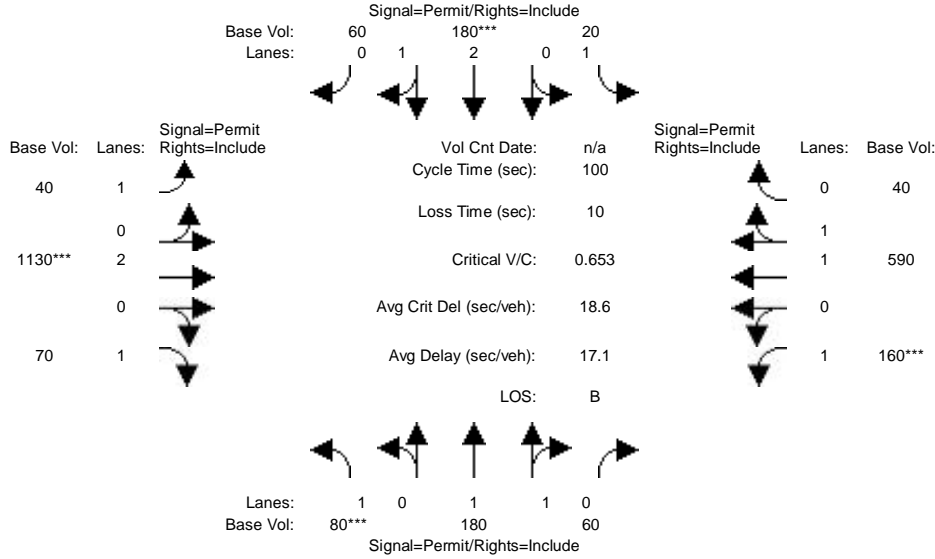


Street Name:	Wilmington Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	10	280	10	60	260	250	30	30	20	10	30	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	10	280	10	60	260	250	30	30	20	10	30	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	10	280	10	60	260	250	30	30	20	10	30	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	10	280	10	60	260	250	30	30	20	10	30	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	10	280	10	60	260	250	30	30	20	10	30	90
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.90	0.10	1.00	2.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	4634	166	1600	3200	1600	5760	3200	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.06	0.06	0.04	0.08	0.16	0.01	0.01	0.01	0.01	0.02	0.06
Crit Moves:	****				****	****					****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Pre-Game

Intersection #22: Figueroa St. & 190th St./Victoria St.

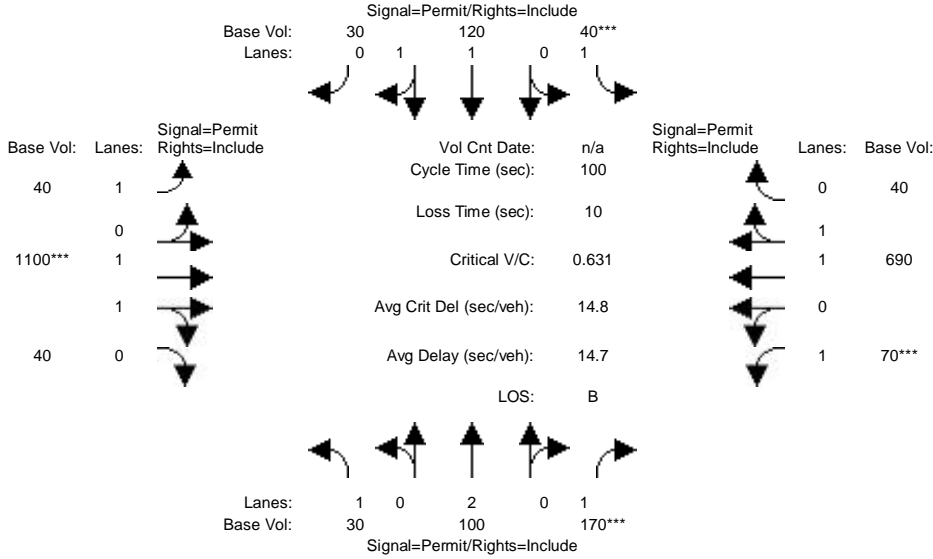


Street Name:	Figueroa St.						190th St./Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	80	180	60	20	180	60	40	1130	70	160	590	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	80	180	60	20	180	60	40	1130	70	160	590	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	80	180	60	20	180	60	40	1130	70	160	590	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	80	180	60	20	180	60	40	1130	70	160	590	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	80	180	60	20	180	60	40	1130	70	160	590	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.50	0.50	1.00	2.25	0.75	1.00	2.00	1.00	1.00	1.87	0.13
Final Sat.:	1600	2400	800	1600	3600	1200	1600	3200	1600	1600	2997	203
Capacity Analysis Module:												
Vol/Sat:	0.05	0.08	0.08	0.01	0.05	0.05	0.03	0.35	0.04	0.10	0.20	0.20
Crit Moves:	****			****			****		****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Pre-Game

Intersection #24: Main St. & Victoria St.

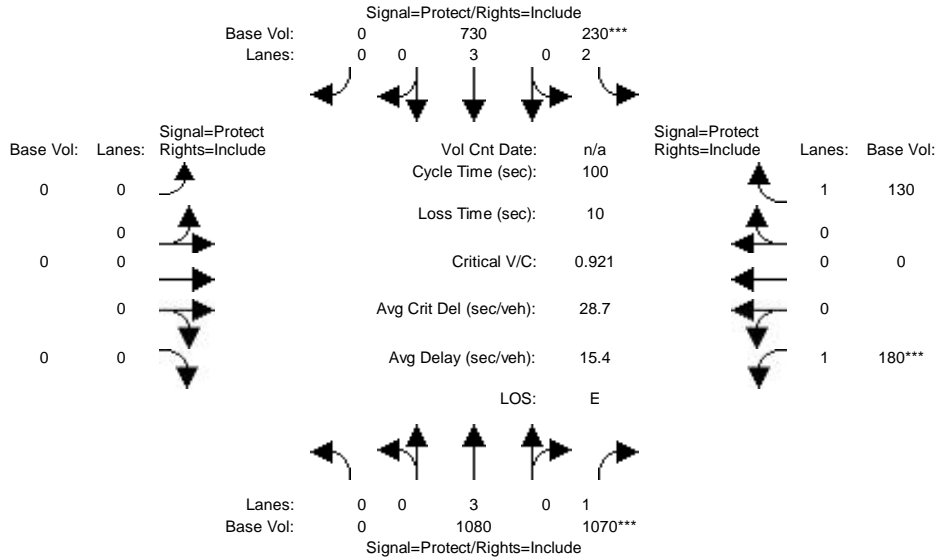


Street Name:	Main St.						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	30	100	170	40	120	30	40	1100	40	70	690	40
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	100	170	40	120	30	40	1100	40	70	690	40
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	100	170	40	120	30	40	1100	40	70	690	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	100	170	40	120	30	40	1100	40	70	690	40
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	100	170	40	120	30	40	1100	40	70	690	40
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.60	0.40	1.00	1.93	0.07	1.00	1.89	0.11
Final Sat.:	1600	3200	1600	1600	2560	640	1600	3088	112	1600	3025	175
Capacity Analysis Module:												
Vol/Sat:	0.02	0.03	0.11	0.03	0.05	0.05	0.03	0.36	0.36	0.04	0.23	0.23
Crit Moves:			****	****			****		****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Pre-Game

Intersection #25: Avalon Blvd. & University Dr.

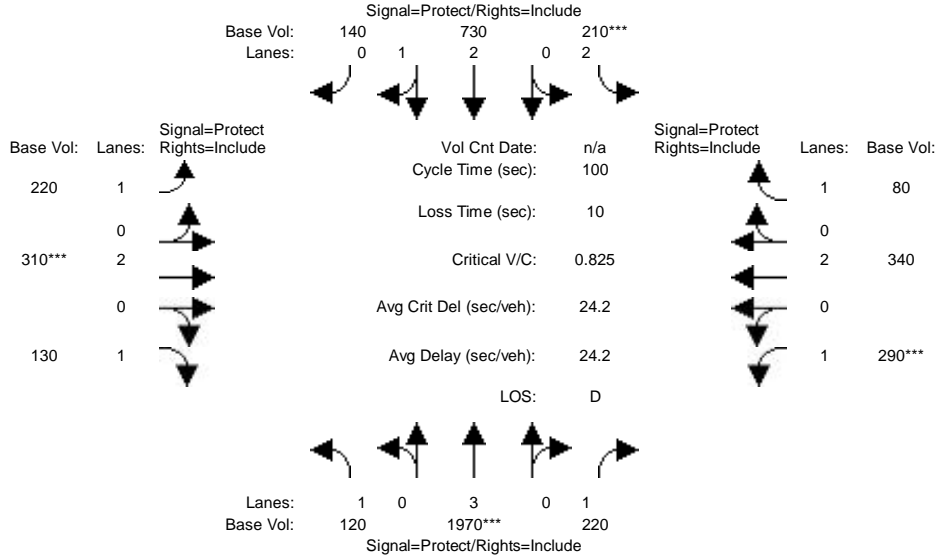


Street Name:	Avalon Blvd.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1080	1070	230	730	0	0	0	0	180	0	130
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1080	1070	230	730	0	0	0	0	180	0	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1080	1070	230	730	0	0	0	0	180	0	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1080	1070	230	730	0	0	0	0	180	0	130
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1080	1070	230	730	0	0	0	0	180	0	130
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.23	0.67	0.04	0.15	0.00	0.00	0.00	0.00	0.00	0.11	0.00
Crit Moves:		****	****							****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Pre-Game

Intersection #26: Avalon Blvd. & Del Amo Blvd.

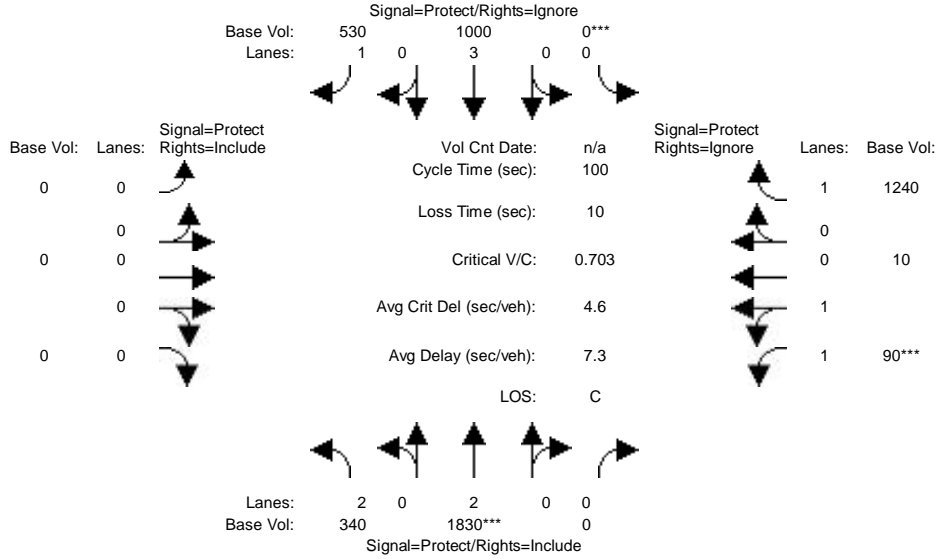


Street Name:	Avalon Blvd.					Del Amo Blvd.						
Approach:	North Bound			South Bound		East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	120	1970	220	210	730	140	220	310	130	290	340	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	120	1970	220	210	730	140	220	310	130	290	340	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	120	1970	220	210	730	140	220	310	130	290	340	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	1970	220	210	730	140	220	310	130	290	340	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	120	1970	220	210	730	140	220	310	130	290	340	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.52	0.48	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4028	772	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.41	0.14	0.04	0.18	0.18	0.14	0.10	0.08	0.18	0.11	0.05
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Pre-Game

Intersection #27: Avalon Blvd. & I-405 NB Ramps

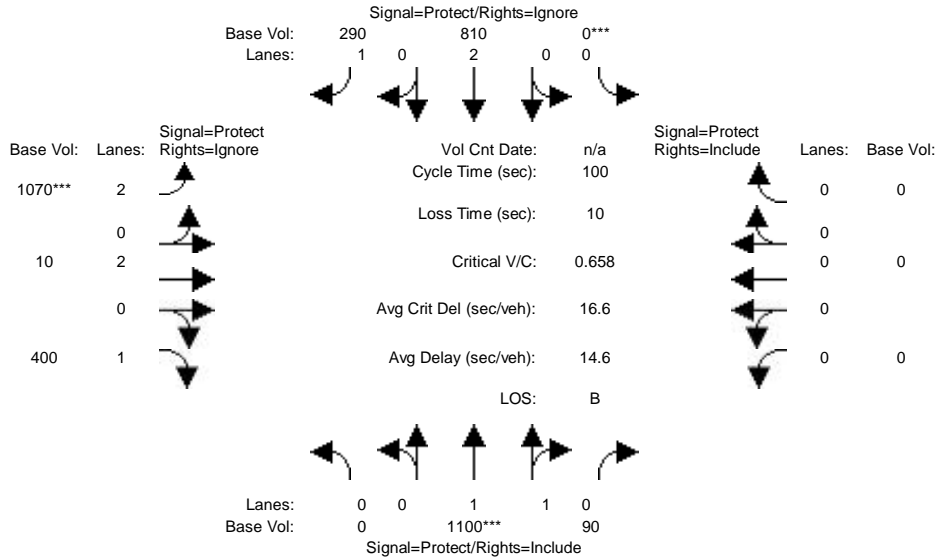


Street Name:	Avalon Blvd.						I-405 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	340	1830	0	0	1000	530	0	0	0	90	10	1240
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	340	1830	0	0	1000	530	0	0	0	90	10	1240
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	340	1830	0	0	1000	0	0	0	0	90	10	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	340	1830	0	0	1000	0	0	0	0	90	10	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Volume:	340	1830	0	0	1000	0	0	0	0	90	10	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.80	0.20	1.00
Final Sat.:	5760	3200	0	0	4800	1600	0	0	0	2880	320	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.57	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.03	0.03
Crit Moves:	****			****						****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Pre-Game

Intersection #28: Avalon Blvd. & I-405 SB Ramps

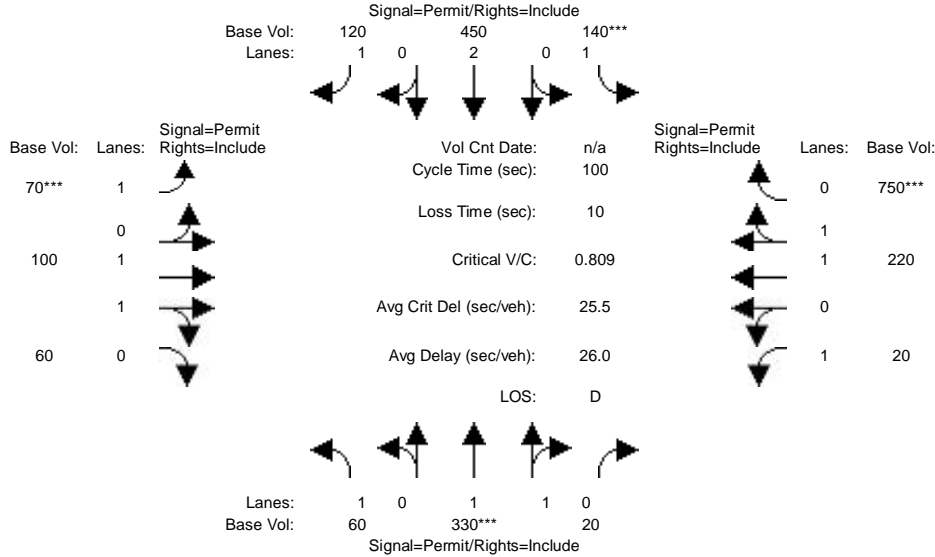


Street Name:	Avalon Blvd.						I-405 SB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1100	90	0	810	290	1070	10	400	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1100	90	0	810	290	1070	10	400	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	1100	90	0	810	0	1070	10	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1100	90	0	810	0	1070	10	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Final Volume:	0	1100	90	0	810	0	1070	10	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.85	0.15	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	0	2958	242	0	3200	1600	5760	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.37	0.37	0.00	0.25	0.00	0.19	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Pre-Game

Intersection #29: Central Ave. & University Dr.

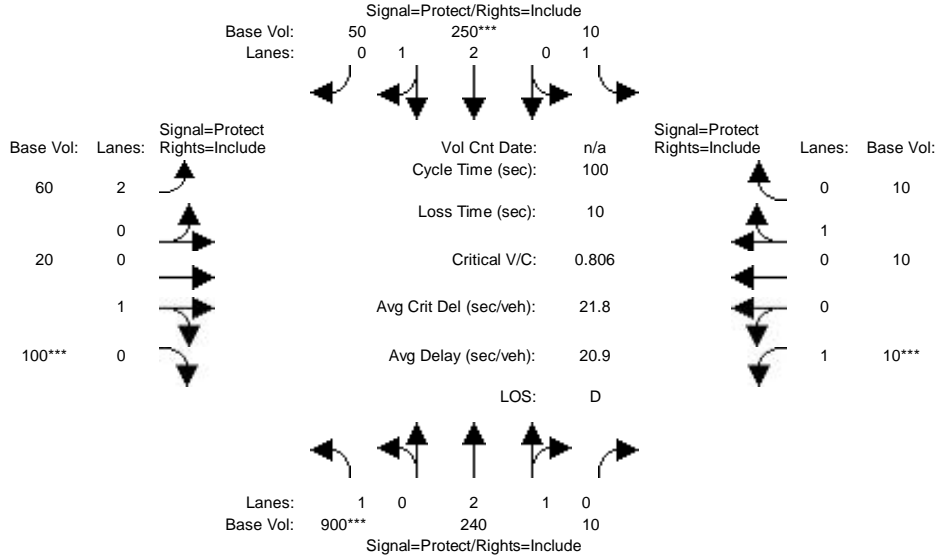


Street Name:	Central Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	60	330	20	140	450	120	70	100	60	20	220	750
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	330	20	140	450	120	70	100	60	20	220	750
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	330	20	140	450	120	70	100	60	20	220	750
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	330	20	140	450	120	70	100	60	20	220	750
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	330	20	140	450	120	70	100	60	20	220	750
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.89	0.11	1.00	2.00	1.00	1.00	1.25	0.75	1.00	1.00	1.00
Final Sat.:	1600	3017	183	1600	3200	1600	1600	2000	1200	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.11	0.11	0.09	0.14	0.08	0.04	0.05	0.05	0.01	0.14	0.47
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Pre-Game

Intersection #30: Wilmington Ave. & University Dr.

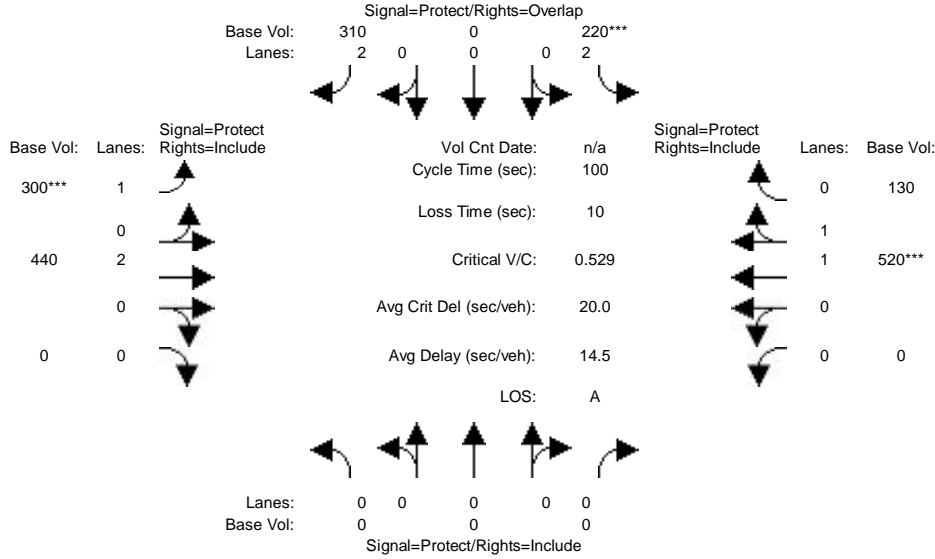


Street Name:	Wilmington Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	900	240	10	10	250	50	60	20	100	10	10	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	900	240	10	10	250	50	60	20	100	10	10	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	900	240	10	10	250	50	60	20	100	10	10	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	900	240	10	10	250	50	60	20	100	10	10	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	900	240	10	10	250	50	60	20	100	10	10	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.88	0.12	1.00	2.50	0.50	2.00	0.17	0.83	1.00	0.50	0.50
Final Sat.:	1600	4608	192	1600	4000	800	5760	267	1333	1600	800	800
Capacity Analysis Module:												
Vol/Sat:	0.56	0.05	0.05	0.01	0.06	0.06	0.01	0.07	0.08	0.01	0.01	0.01
Crit Moves:	****			****			****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Pre-Game

Intersection #31: Central Ave. & Del Amo Blvd.

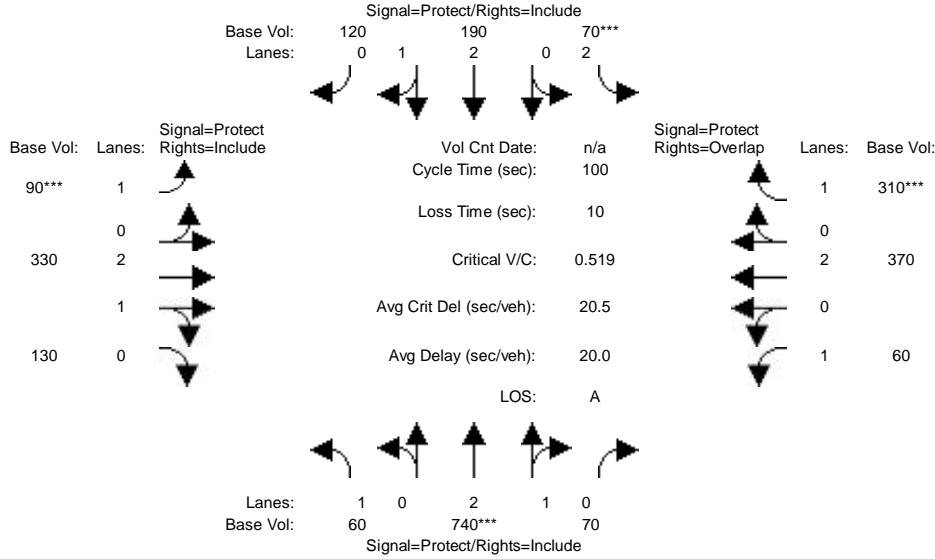


Street Name:	Central Ave.						Del Amo Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	220	0	310	300	440	0	0	520	130
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	220	0	310	300	440	0	0	520	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	220	0	310	300	440	0	0	520	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	220	0	310	300	440	0	0	520	130
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	220	0	310	300	440	0	0	520	130
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	2.00	1.00	2.00	0.00	0.00	1.60	0.40
Final Sat.:	0	0	0	5760	0	3200	1600	3200	0	0	2560	640
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.04	0.00	0.10	0.19	0.14	0.00	0.00	0.20	0.20
OvlAdjV/S:	0.00											
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Pre-Game

Intersection #32: Wilmington Ave. & Del Amo Blvd.

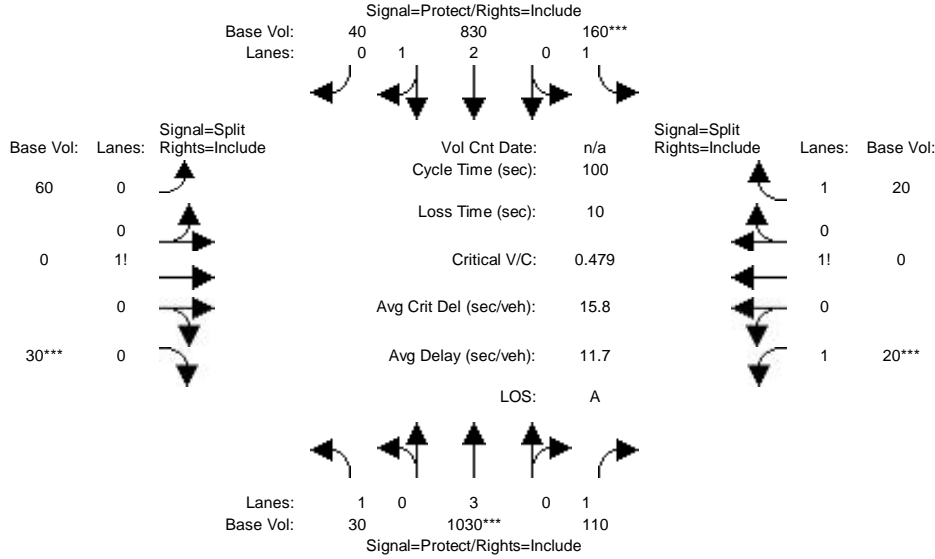


Street Name:	Wilmington Ave.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	60	740	70	70	190	120	90	330	130	60	370	310
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	740	70	70	190	120	90	330	130	60	370	310
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	740	70	70	190	120	90	330	130	60	370	310
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	740	70	70	190	120	90	330	130	60	370	310
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	60	740	70	70	190	120	90	330	130	60	370	310
OvlAdjVol:												291
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.74	0.26	2.00	2.00	1.00	1.00	2.15	0.85	1.00	2.00	1.00
Final Sat.:	1600	4385	415	5760	3200	1600	1600	3443	1357	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.17	0.17	0.01	0.06	0.08	0.06	0.10	0.10	0.04	0.12	0.19
OvlAdjV/S:												0.18
Crit Moves:	****	****		****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Pre-Game

Intersection #38: Avalon Blvd. & 184th St. - Drive A

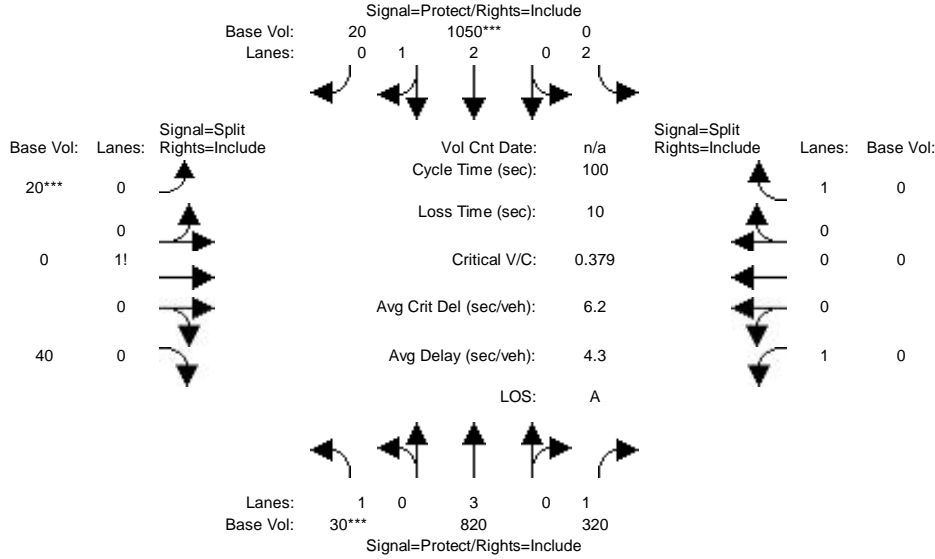


Street Name:	S. Avolon Blvd.						184th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	30	1030	110	160	830	40	60	0	30	20	0	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	1030	110	160	830	40	60	0	30	20	0	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	1030	110	160	830	40	60	0	30	20	0	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	1030	110	160	830	40	60	0	30	20	0	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	1030	110	160	830	40	60	0	30	20	0	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.86	0.14	0.67	0.00	0.33	1.49	0.01	1.50
Final Sat.:	1600	4800	1600	1600	4579	221	1067	0	533	2400	0	2400
Capacity Analysis Module:												
Vol/Sat:	0.02	0.21	0.07	0.10	0.18	0.18	0.06	0.00	0.06	0.01	0.00	0.01
Crit Moves:	****			****			****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Pre-Game

Intersection #39: Avalon Blvd. & 182nd St. - Drive B

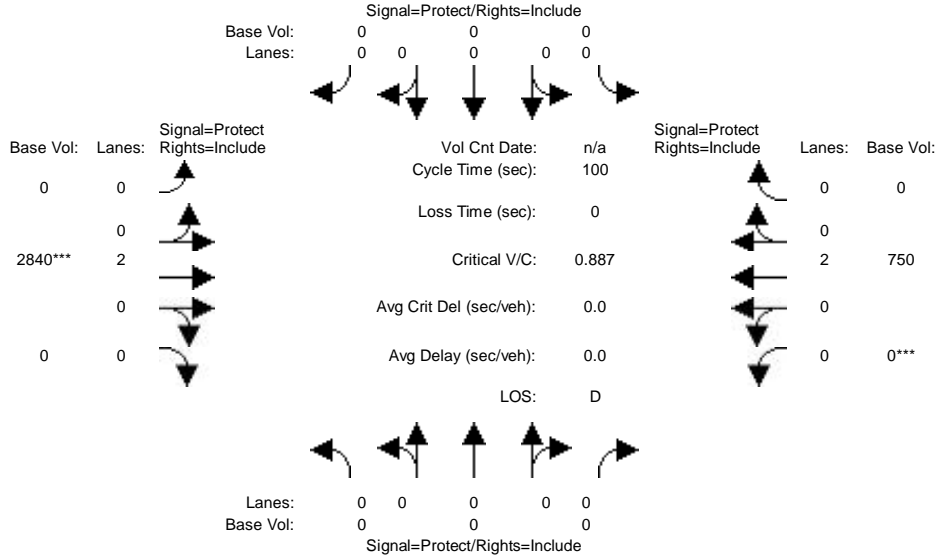


Street Name:	S. Avalon Blvd.				182nd St.							
Approach:	North Bound			South Bound			East Bound		West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	30	820	320	0	1050	20	20	0	40	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	820	320	0	1050	20	20	0	40	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	820	320	0	1050	20	20	0	40	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	820	320	0	1050	20	20	0	40	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	820	320	0	1050	20	20	0	40	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.94	0.06	0.33	0.00	0.67	1.00	0.00	1.00
Final Sat.:	1600	4800	1600	5760	4710	90	533	0	1067	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.02	0.17	0.20	0.00	0.22	0.22	0.04	0.00	0.04	0.00	0.00	0.00
Crit Moves:	****			****		****						

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Pre-Game

Intersection #40: Victoria St. & Drive C

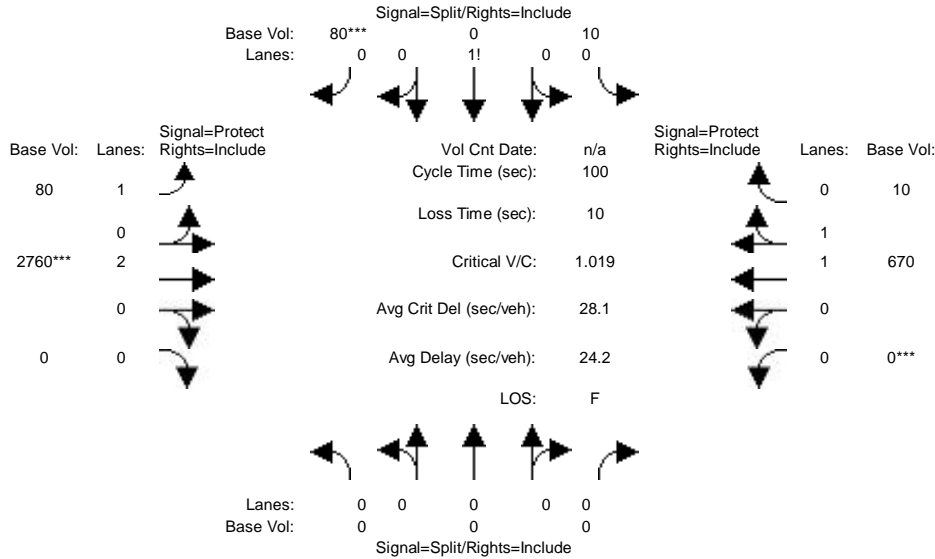


Street Name:	Drive C						E. Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	2840	0	0	0	750
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	0	0	0	0	2840	0	0	0	750
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	0	0	0	0	2840	0	0	0	750
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	0	2840	0	0	0	750
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	0	0	0	2840	0	0	0	750
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00
Final Sat.:	0	0	0	0	0	0	0	3200	0	0	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.89	0.00	0.00	0.23	0.00
Crit Moves:							****		****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Pre-Game

Intersection #41: Victoria St. & Rainsbury Ave.

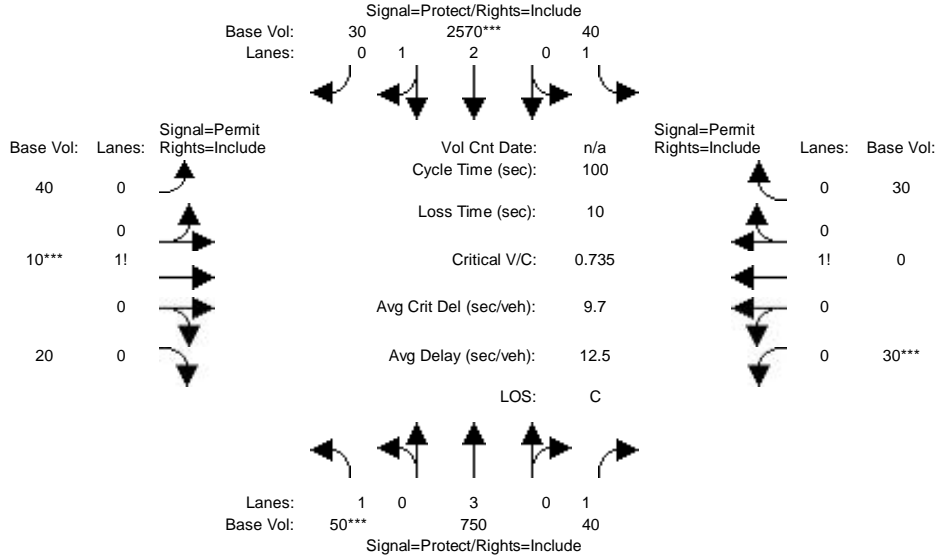


Street Name:	E. Victoria St.				Rainsbury Ave.							
Approach:	North Bound		South Bound		East Bound		West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	10	0	80	80	2760	0	0	670	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	10	0	80	80	2760	0	0	670	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	10	0	80	80	2760	0	0	670	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	10	0	80	80	2760	0	0	670	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	10	0	80	80	2760	0	0	670	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.11	0.00	0.89	1.00	2.00	0.00	0.00	1.97	0.03
Final Sat.:	0	0	0	178	0	1422	1600	3200	0	0	3153	47
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.06	0.00	0.06	0.05	0.86	0.00	0.00	0.21	0.21
Crit Moves:				****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Pre-Game

Intersection #42: Avalon Blvd. & Harbor Village / Colony Cove

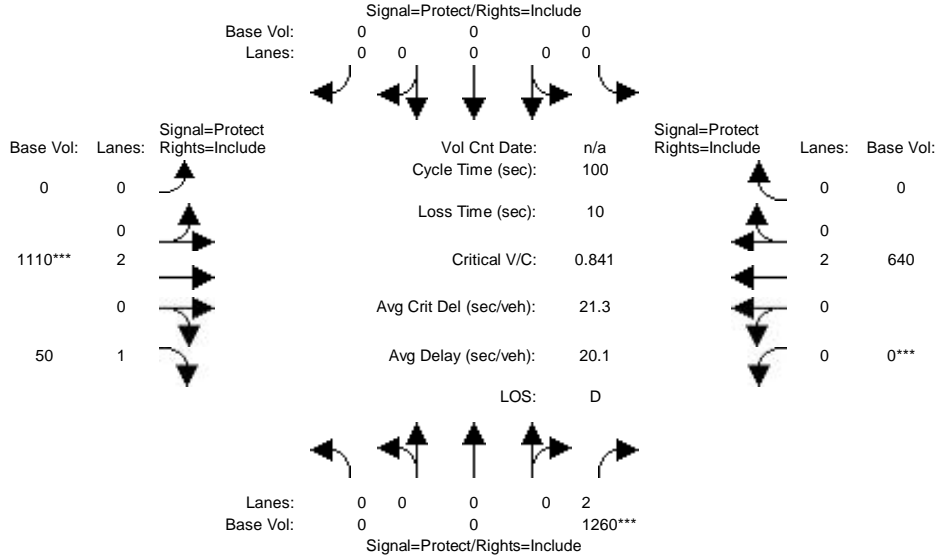


Street Name:	Avalon Blvd.						Harbor Village / Colony Cove					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	50	750	40	40	2570	30	40	10	20	30	0	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	750	40	40	2570	30	40	10	20	30	0	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	750	40	40	2570	30	40	10	20	30	0	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	750	40	40	2570	30	40	10	20	30	0	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	750	40	40	2570	30	40	10	20	30	0	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.97	0.03	0.57	0.14	0.29	0.50	0.00	0.50
Final Sat.:	1600	4800	1600	1600	4745	55	914	229	457	800	0	800
Capacity Analysis Module:												
Vol/Sat:	0.03	0.16	0.03	0.03	0.54	0.54	0.03	0.04	0.04	0.02	0.00	0.04
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Post-Game

Intersection #1: Victoria St. & Drive D

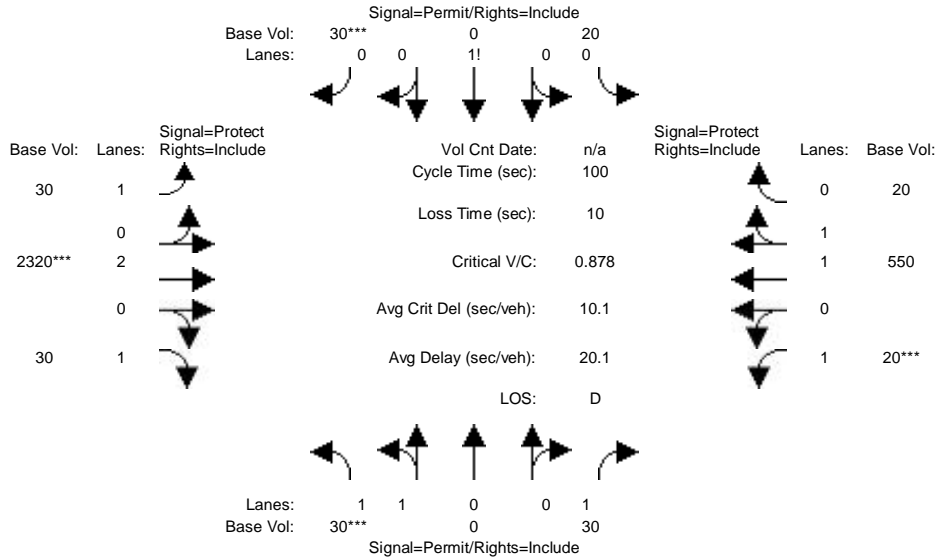


Street Name:	Drive D						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	1260	0	0	0	0	1110	50	0	640	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	1260	0	0	0	0	1110	50	0	640	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	1260	0	0	0	0	1110	50	0	640	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	1260	0	0	0	0	1110	50	0	640	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	1260	0	0	0	0	1110	50	0	640	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00	1.00	0.00	2.00	0.00
Final Sat.:	0	0	3200	0	0	0	0	3200	1600	0	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.39	0.00	0.00	0.00	0.00	0.35	0.03	0.00	0.20	0.00
Crit Moves:			****				****		****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Post-Game

Intersection #2: Victoria St & Tamcliff Ave

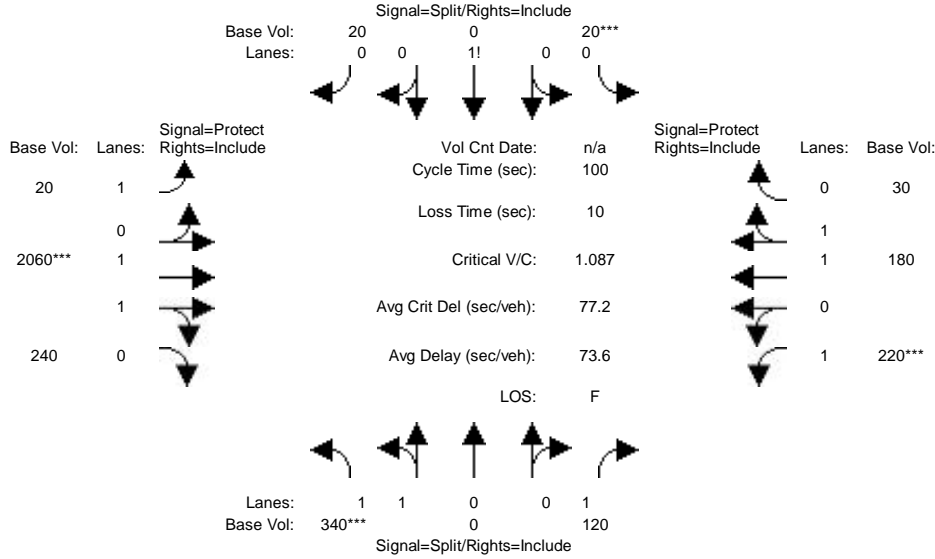


Street Name:	Victoria St						Tamcliff Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	30	0	30	20	0	30	30	2320	30	20	550	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	0	30	20	0	30	30	2320	30	20	550	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	0	30	20	0	30	30	2320	30	20	550	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	0	30	20	0	30	30	2320	30	20	550	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	0	30	20	0	30	30	2320	30	20	550	20
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.40	0.00	0.60	1.00	2.00	1.00	1.00	1.93	0.07
Final Sat.:	3200	0	1600	640	0	960	1600	3200	1600	1600	3088	112
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.02	0.01	0.00	0.03	0.02	0.73	0.02	0.01	0.18	0.18
Crit Moves:	****					****	****		****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Post-Game

Intersection #3: Victoria St. & Birchknoll Dr.

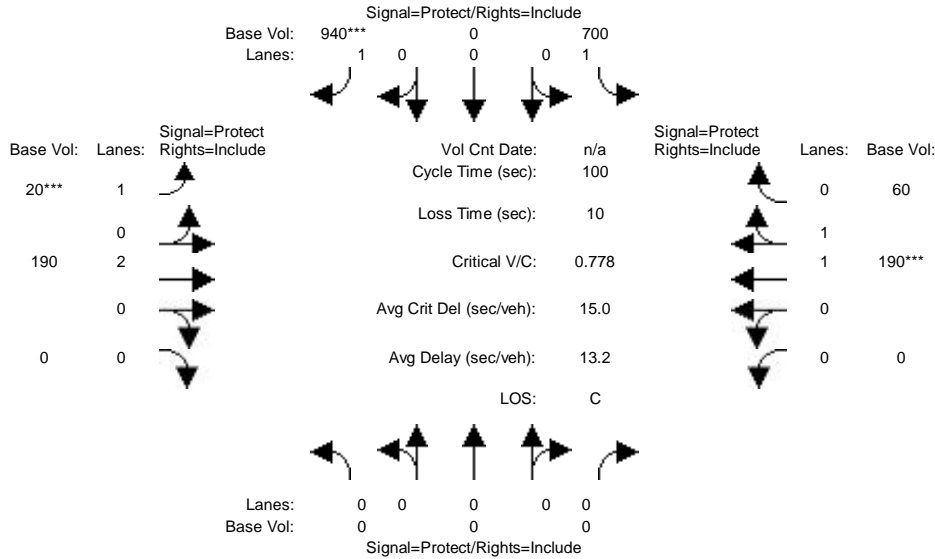


Street Name:	Victoria St.						Birchknoll Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	340	0	120	20	0	20	20	2060	240	220	180	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	340	0	120	20	0	20	20	2060	240	220	180	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	340	0	120	20	0	20	20	2060	240	220	180	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	340	0	120	20	0	20	20	2060	240	220	180	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	340	0	120	20	0	20	20	2060	240	220	180	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.50	0.00	0.50	1.00	1.79	0.21	1.00	1.71	0.29
Final Sat.:	3200	0	1600	800	0	800	1600	2866	334	1600	2743	457
Capacity Analysis Module:												
Vol/Sat:	0.11	0.00	0.08	0.03	0.00	0.03	0.01	0.72	0.72	0.14	0.07	0.07
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Post-Game

Intersection #9: University Dr. & Toro Center Dr.

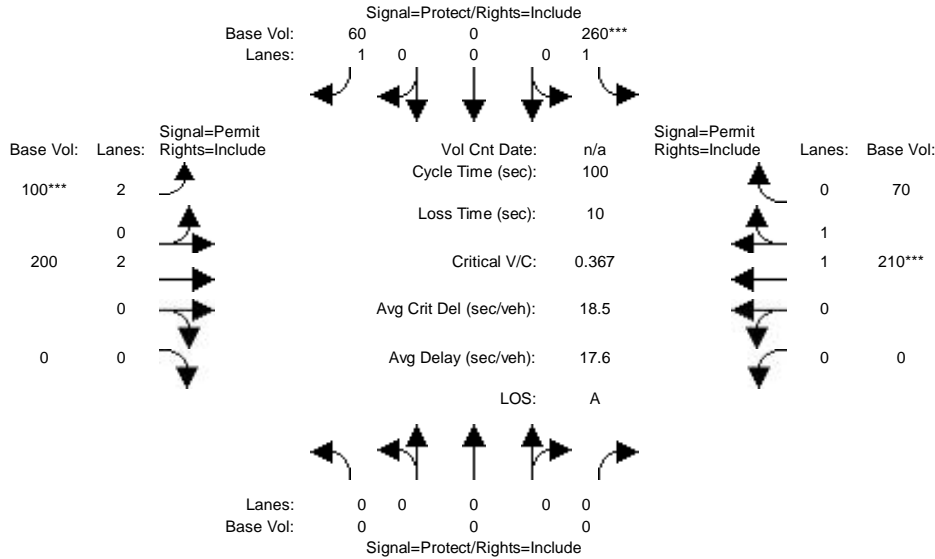


Street Name:	University Dr.						Toro Center Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	700	0	940	20	190	0	0	190	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	700	0	940	20	190	0	0	190	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	700	0	940	20	190	0	0	190	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	700	0	940	20	190	0	0	190	60
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	700	0	940	20	190	0	0	190	60
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	2.00	0.00	0.00	1.52	0.48
Final Sat.:	0	0	0	1600	0	1600	1600	3200	0	0	2432	768
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.44	0.00	0.59	0.01	0.06	0.00	0.00	0.08	0.08
Crit Moves:				****		****				****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Post-Game

Intersection #10: Albertoni St. & SR 91 EB Ramps [Moved from Main St & Albertoni St]

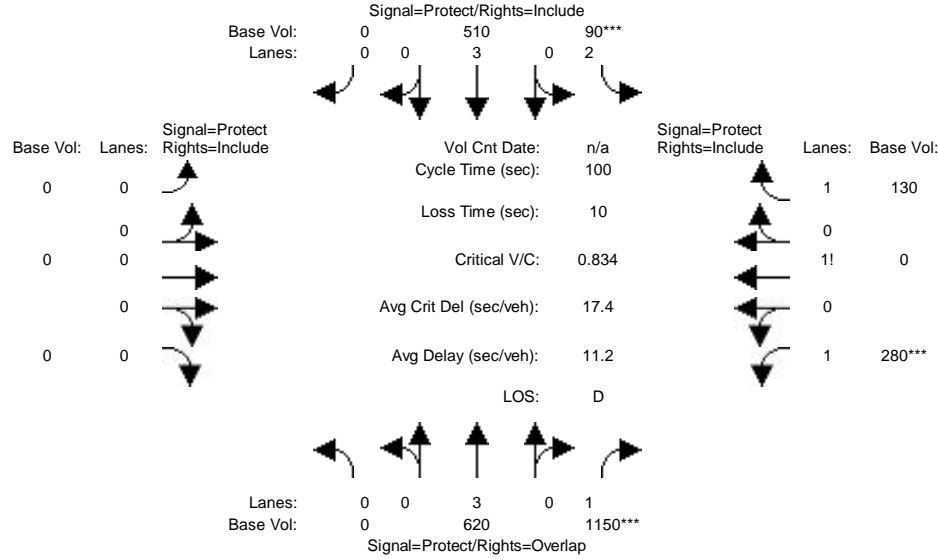


Street Name:	Sr 91 EB Ramps						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	260	0	60	100	200	0	0	210	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	260	0	60	100	200	0	0	210	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	260	0	60	100	200	0	0	210	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	260	0	60	100	200	0	0	210	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	0	0	260	0	60	100	200	0	0	210	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	2.00	0.00	0.00	1.50	0.50
Final Sat.:	0	0	0	1600	0	1600	5760	3200	0	0	2400	800
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.16	0.00	0.04	0.02	0.06	0.00	0.00	0.09	0.09
Crit Moves:				****		****				****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Post-Game

Intersection #11: Avalon Blvd. & SR 91 WB On-Ramp

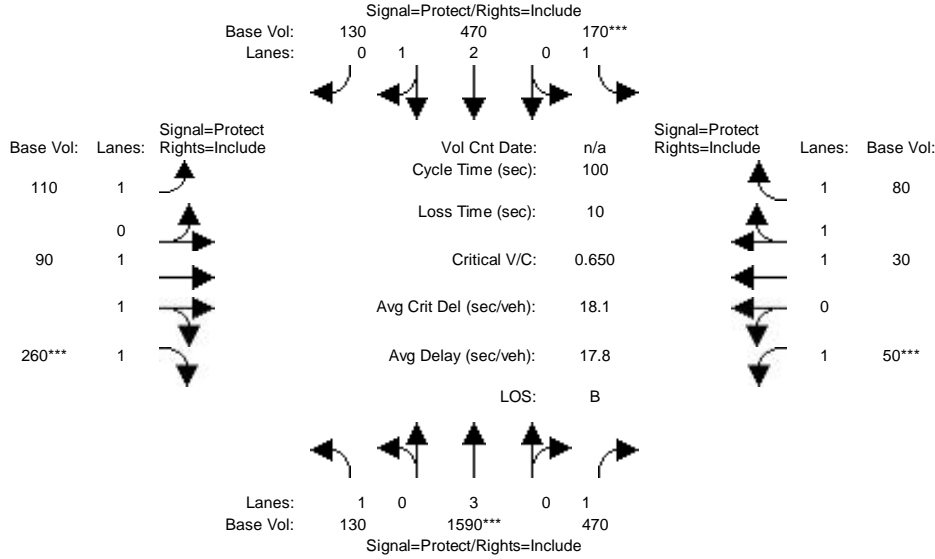


Street Name:	Avalon Blvd.						SR 91 WB On-Ramp					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	620	1150	90	510	0	0	0	0	0	280	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	620	1150	90	510	0	0	0	0	0	280	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	620	1150	90	510	0	0	0	0	0	280	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	620	1150	90	510	0	0	0	0	0	280	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	620	1150	90	510	0	0	0	0	0	280	0
OvlAdjVol:	1010											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	0	3200	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.13	0.72	0.02	0.11	0.00	0.00	0.00	0.00	0.00	0.09	0.00
OvlAdjV/S:	0.63											
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Post-Game

Intersection #12: Avalon Blvd. & Albertoni St.

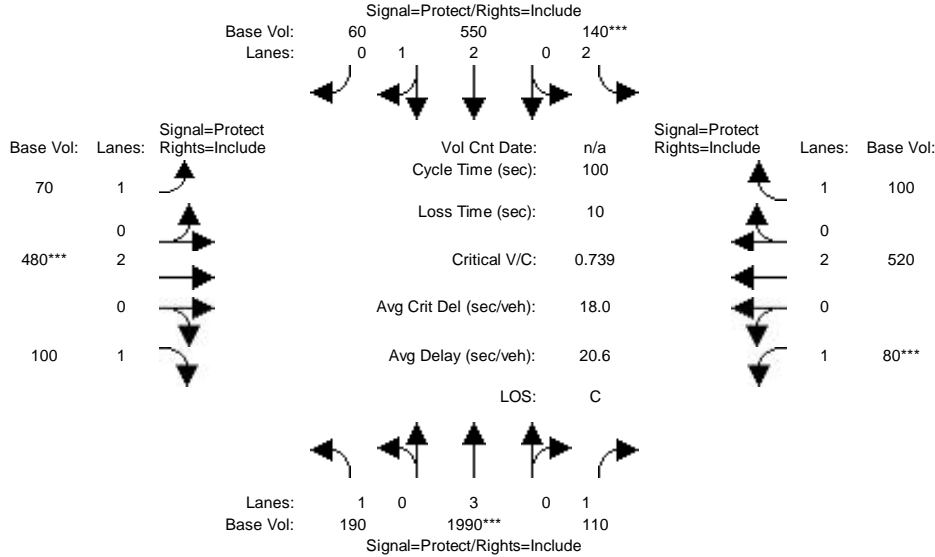


Street Name:	Avalon Blvd.						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	130	1590	470	170	470	130	110	90	260	50	30	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	1590	470	170	470	130	110	90	260	50	30	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	130	1590	470	170	470	130	110	90	260	50	30	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	1590	470	170	470	130	110	90	260	50	30	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	130	1590	470	170	470	130	110	90	260	50	30	80
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.35	0.65	1.00	1.00	2.00	1.00	1.00	2.00
Final Sat.:	1600	4800	1600	1600	3760	1040	1600	1600	3200	1600	1600	3200
Capacity Analysis Module:												
Vol/Sat:	0.08	0.33	0.29	0.11	0.13	0.13	0.07	0.06	0.08	0.03	0.02	0.03
Crit Moves:	****			****			****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Post-Game

Intersection #13: Avalon Blvd. & Victoria St.

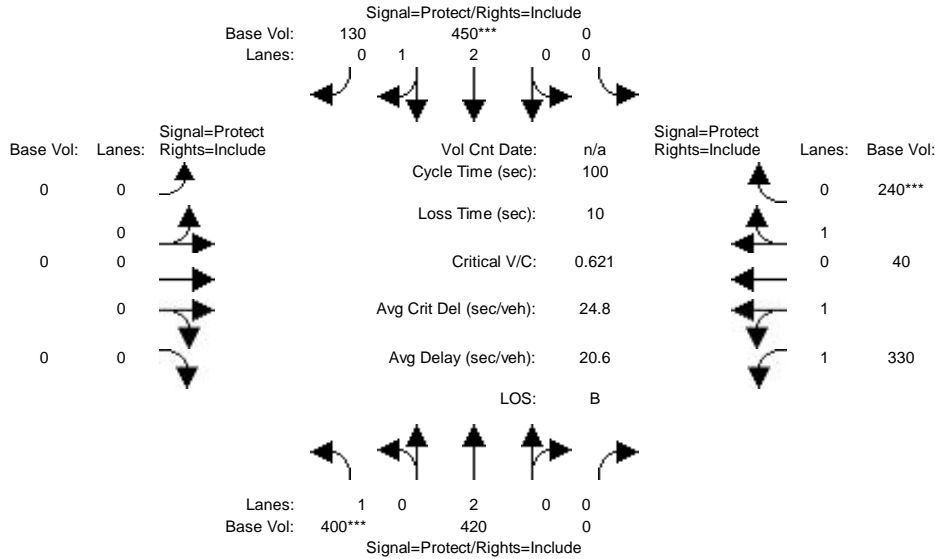


Street Name:	Avalon Blvd.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	190	1990	110	140	550	60	70	480	100	80	520	100
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	190	1990	110	140	550	60	70	480	100	80	520	100
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	190	1990	110	140	550	60	70	480	100	80	520	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	190	1990	110	140	550	60	70	480	100	80	520	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	190	1990	110	140	550	60	70	480	100	80	520	100
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.70	0.30	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4328	472	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.12	0.41	0.07	0.02	0.13	0.13	0.04	0.15	0.06	0.05	0.16	0.06
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Post-Game

Intersection #14: Central Ave. & Artesia Blvd.

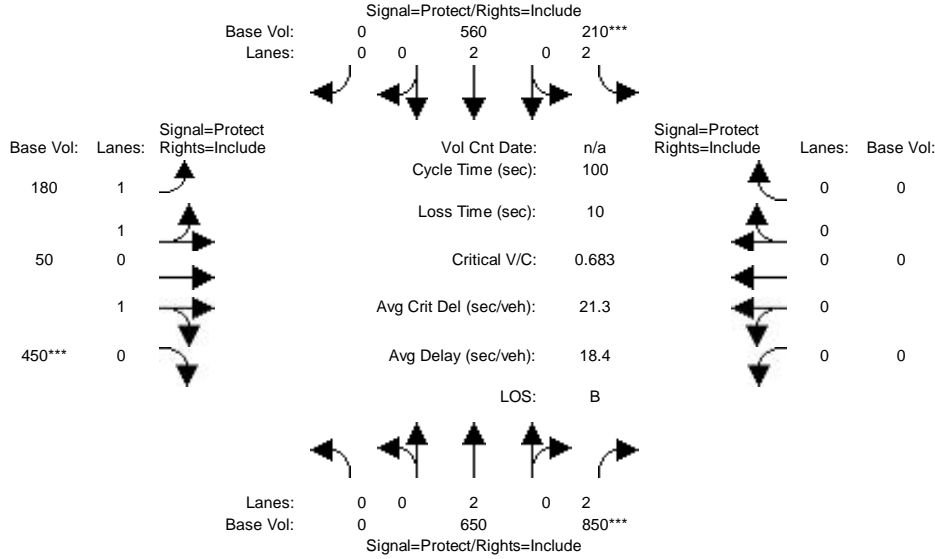


Street Name:	Central Ave.						Artesia Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	400	420	0	0	450	130	0	0	0	330	40	240
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	400	420	0	0	450	130	0	0	0	330	40	240
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	400	420	0	0	450	130	0	0	0	330	40	240
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	400	420	0	0	450	130	0	0	0	330	40	240
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	400	420	0	0	450	130	0	0	0	330	40	240
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.33	0.67	0.00	0.00	0.00	1.78	0.22	1.00
Final Sat.:	1600	3200	0	0	3724	1076	0	0	0	2854	346	1600
Capacity Analysis Module:												
Vol/Sat:	0.25	0.13	0.00	0.00	0.12	0.12	0.00	0.00	0.00	0.12	0.12	0.15
Crit Moves:	****				****					****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Post-Game

Intersection #15: Central Ave. & Albertoni St.

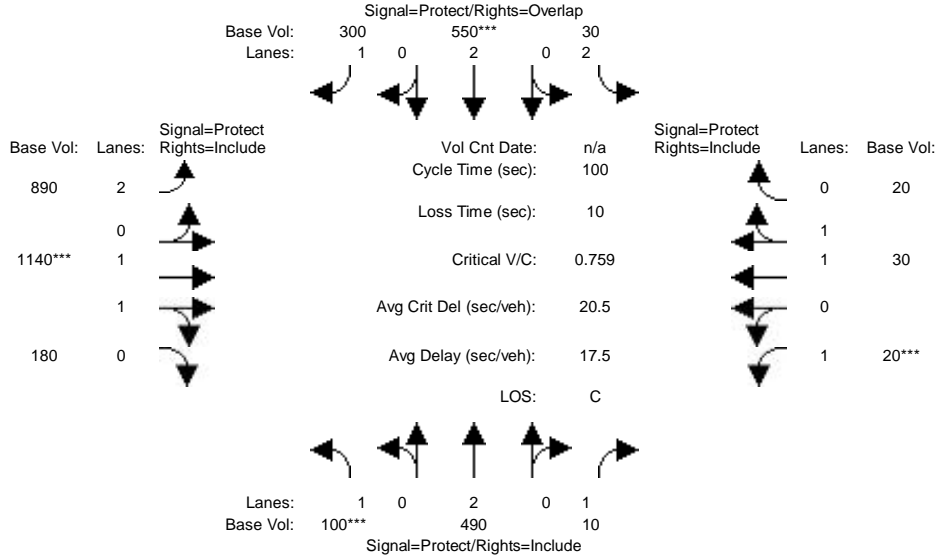


Street Name:	Central Ave.						Albertoni St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	650	850	210	560	0	180	50	450	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	650	850	210	560	0	180	50	450	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	650	850	210	560	0	180	50	450	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	650	850	210	560	0	180	50	450	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	650	850	210	560	0	180	50	450	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.57	0.43	1.00	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	2504	696	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.27	0.04	0.17	0.00	0.07	0.07	0.28	0.00	0.00	0.00
Crit Moves:		****	****				****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Post-Game

Intersection #16: Central Ave. & Victoria St.

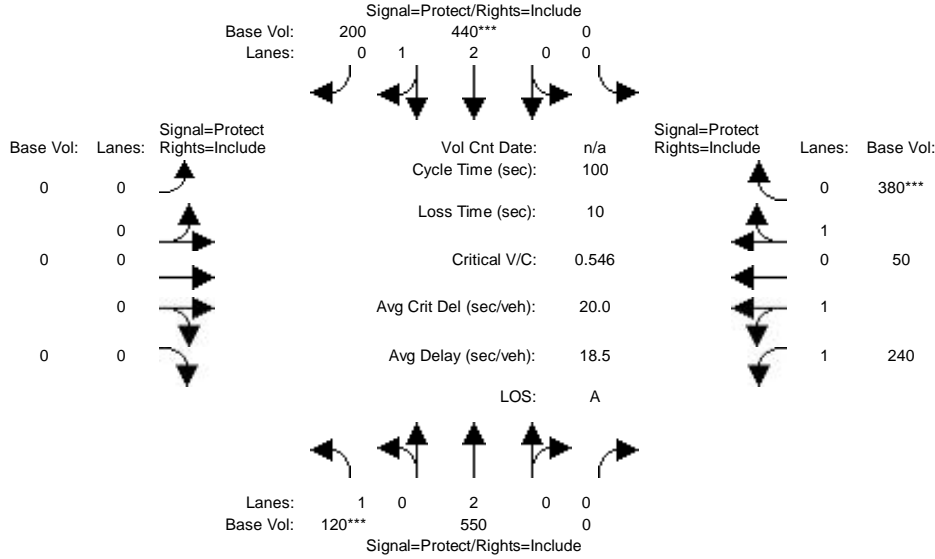


Street Name:	Central Ave.						Victoria St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	100	490	10	30	550	300	890	1140	180	20	30	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	100	490	10	30	550	300	890	1140	180	20	30	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	100	490	10	30	550	300	890	1140	180	20	30	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	100	490	10	30	550	300	890	1140	180	20	30	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	100	490	10	30	550	300	890	1140	180	20	30	20
OvlAdjVol:	53											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	2.00	2.00	1.00	2.00	1.73	0.27	1.00	1.20	0.80
Final Sat.:	1600	3200	1600	5760	3200	1600	5760	2764	436	1600	1920	1280
Capacity Analysis Module:												
Vol/Sat:	0.06	0.15	0.01	0.01	0.17	0.19	0.15	0.41	0.41	0.01	0.02	0.02
OvlAdjV/S:	0.03											
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Post-Game

Intersection #17: Wilmington Ave. & Artesia Blvd. WB

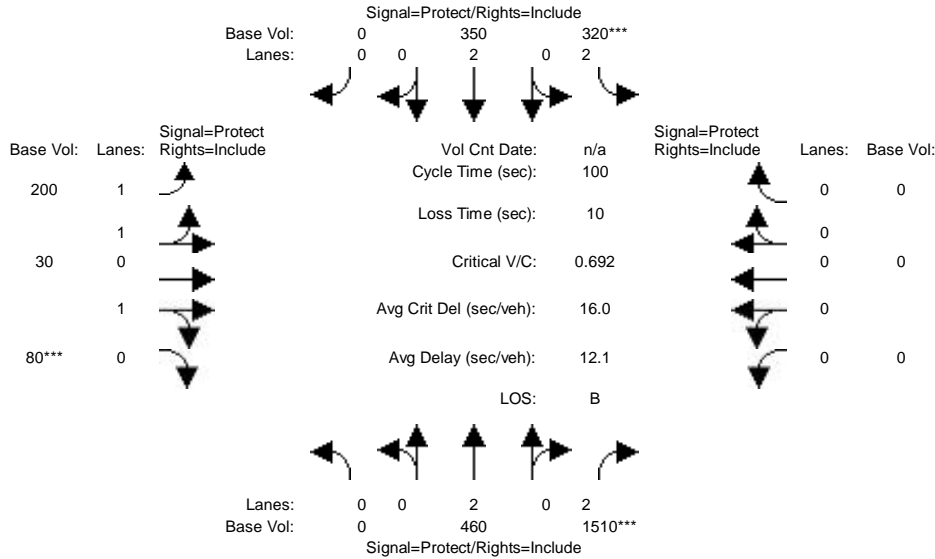


Street Name:	Wilmington Ave.						Artesia Blvd. WB					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	120	550	0	0	440	200	0	0	0	240	50	380
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	120	550	0	0	440	200	0	0	0	240	50	380
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	120	550	0	0	440	200	0	0	0	240	50	380
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	550	0	0	440	200	0	0	0	240	50	380
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	120	550	0	0	440	200	0	0	0	240	50	380
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	2.06	0.94	0.00	0.00	0.00	1.66	0.34	1.00
Final Sat.:	1600	3200	0	0	3300	1500	0	0	0	2648	552	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.17	0.00	0.00	0.13	0.13	0.00	0.00	0.00	0.09	0.09	0.24
Crit Moves:	****				****						****	

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Post-Game

Intersection #18: Wilmington Ave. & Artesia Blvd. EB

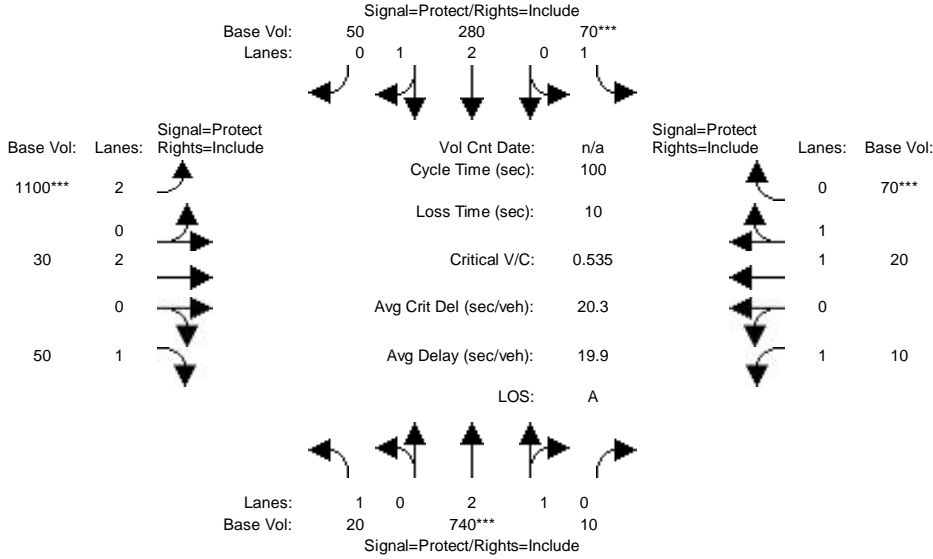


Street Name:	Wilmington Ave.				Artesia Blvd. EB							
Approach:	North Bound		South Bound		East Bound		West Bound					
Movement:	L - T - R	L - T - R	L - T - R	L - T - R	L - T - R	L - T - R	L - T - R					
Min. Green:	0	0	0	0	0	0	0					
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0					
Volume Module:												
Base Vol:	0	460	1510	320	350	0	200	30	80	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	460	1510	320	350	0	200	30	80	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	460	1510	320	350	0	200	30	80	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	460	1510	320	350	0	200	30	80	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	460	1510	320	350	0	200	30	80	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	2.00	2.00	2.00	2.00	0.00	1.94	0.29	0.77	0.00	0.00	0.00
Final Sat.:	0	3200	3200	5760	3200	0	3107	462	1231	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.14	0.47	0.06	0.11	0.00	0.06	0.06	0.07	0.00	0.00	0.00
Crit Moves:		****	****				****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Post-Game

Intersection #19: Wilmington Ave. & Victoria St.

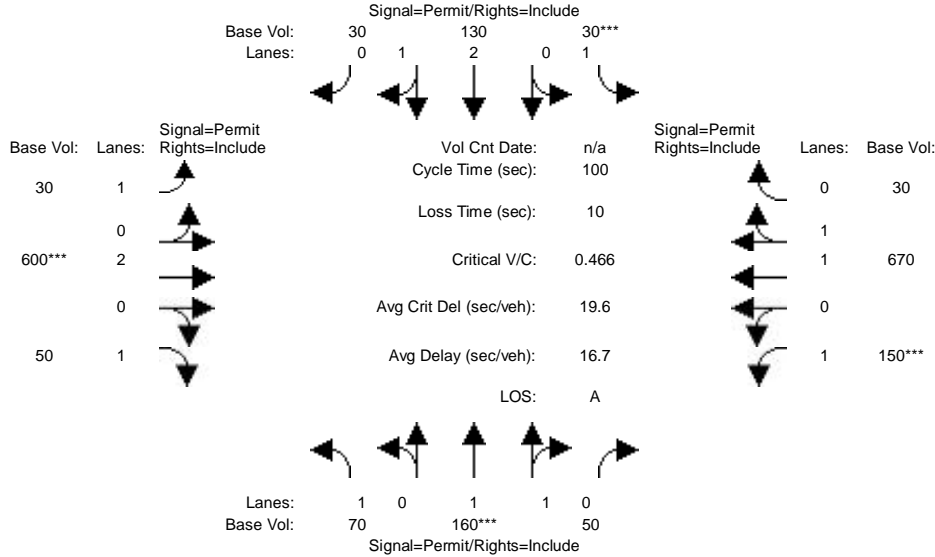


Street Name:	Wilmington Ave.				Victoria St.							
Approach:	North Bound		South Bound		East Bound		West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	20	740	10	70	280	50	1100	30	50	10	20	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	740	10	70	280	50	1100	30	50	10	20	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	740	10	70	280	50	1100	30	50	10	20	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	740	10	70	280	50	1100	30	50	10	20	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	740	10	70	280	50	1100	30	50	10	20	70
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.96	0.04	1.00	2.55	0.45	2.00	2.00	1.00	1.00	1.00	1.00
Final Sat.:	1600	4736	64	1600	4073	727	5760	3200	1600	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.01	0.16	0.16	0.04	0.07	0.07	0.19	0.01	0.03	0.01	0.01	0.04
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Post-Game

Intersection #22: Figueroa St. & 190th St./Victoria St.

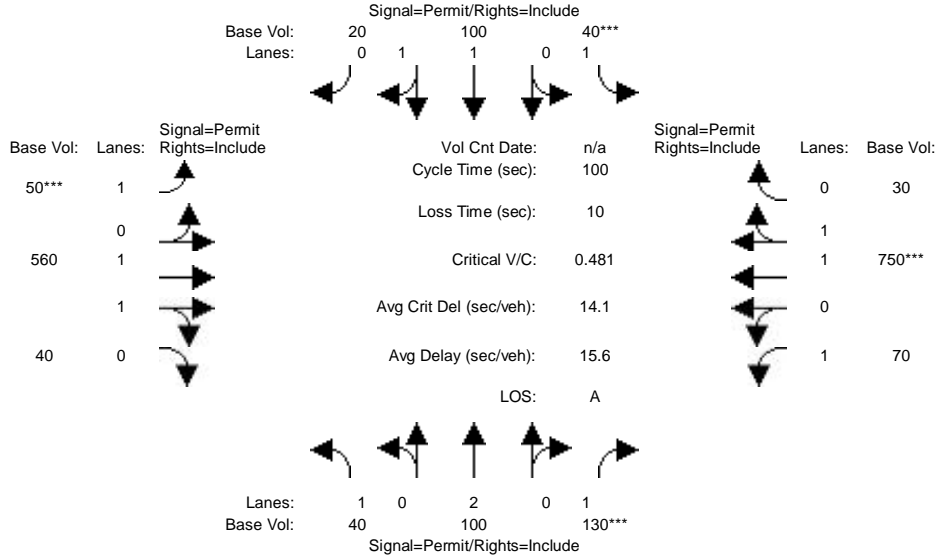


Street Name:	Figueroa St.				190th St./Victoria St.							
Approach:	North Bound		South Bound		East Bound		West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	70	160	50	30	130	30	30	600	50	150	670	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	70	160	50	30	130	30	30	600	50	150	670	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	70	160	50	30	130	30	30	600	50	150	670	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	160	50	30	130	30	30	600	50	150	670	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	70	160	50	30	130	30	30	600	50	150	670	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.52	0.48	1.00	2.44	0.56	1.00	2.00	1.00	1.00	1.91	0.09
Final Sat.:	1600	2438	762	1600	3900	900	1600	3200	1600	1600	3063	137
Capacity Analysis Module:												
Vol/Sat:	0.04	0.07	0.07	0.02	0.03	0.03	0.02	0.19	0.03	0.09	0.22	0.22
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Post-Game

Intersection #24: Main St. & Victoria St.

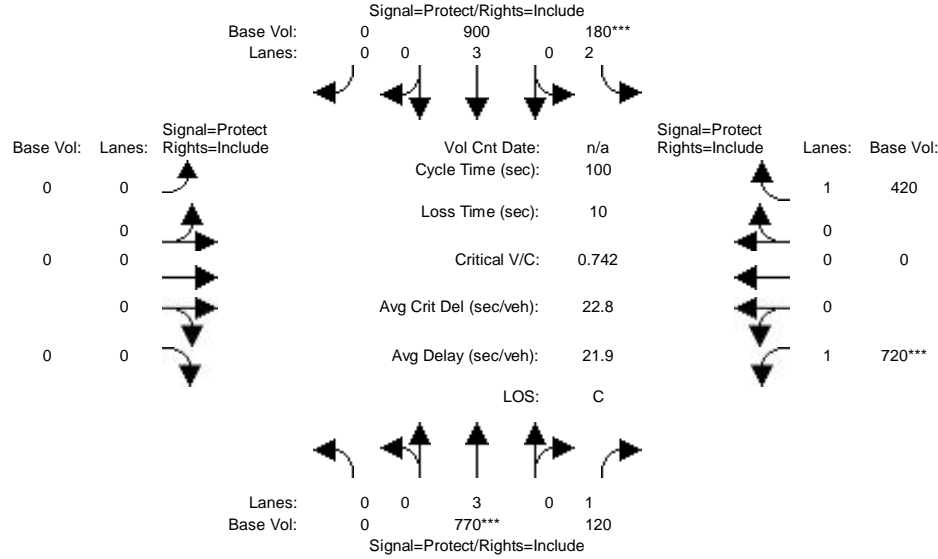


Street Name:	Main St.						Victoria St.					
	North Bound			South Bound			East Bound			West Bound		
Approach:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	40	100	130	40	100	20	50	560	40	70	750	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	40	100	130	40	100	20	50	560	40	70	750	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	40	100	130	40	100	20	50	560	40	70	750	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	40	100	130	40	100	20	50	560	40	70	750	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	100	130	40	100	20	50	560	40	70	750	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.00	1.00	1.00	1.67	0.33	1.00	1.87	0.13	1.00	1.92	0.08
Final Sat.:	1600	3200	1600	1600	2667	533	1600	2987	213	1600	3077	123
Capacity Analysis Module:												
Vol/Sat:	0.03	0.03	0.08	0.03	0.04	0.04	0.03	0.19	0.19	0.04	0.24	0.24
Crit Moves:			****	****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Post-Game

Intersection #25: Avalon Blvd. & University Dr.

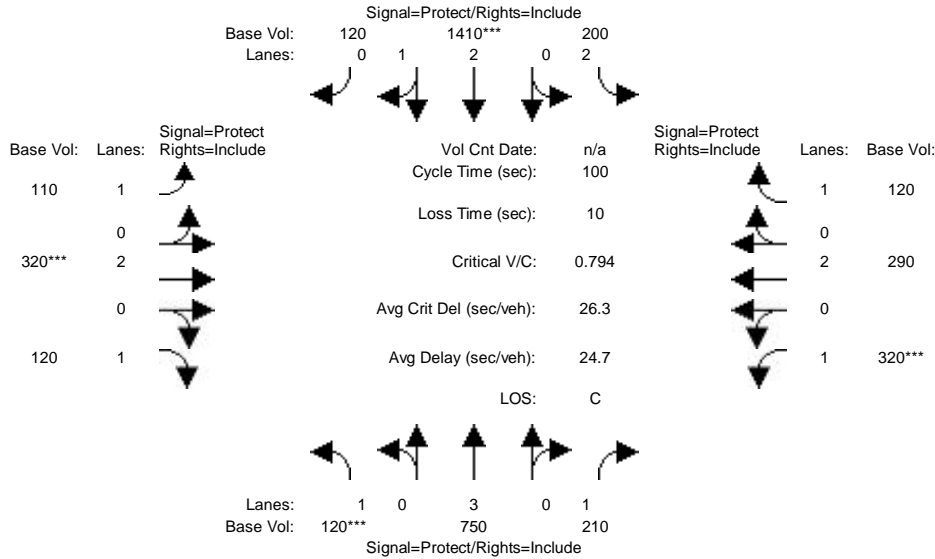


Street Name:	Avalon Blvd.						University Dr.						
Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Volume Module:													
Base Vol:	0	770	120	180	900	0	0	0	0	0	720	0	420
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	770	120	180	900	0	0	0	0	0	720	0	420
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	770	120	180	900	0	0	0	0	0	720	0	420
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	770	120	180	900	0	0	0	0	0	720	0	420
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	770	120	180	900	0	0	0	0	0	720	0	420
Saturation Flow Module:													
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	0	1600	0	1600
Capacity Analysis Module:													
Vol/Sat:	0.00	0.16	0.08	0.03	0.19	0.00	0.00	0.00	0.00	0.00	0.45	0.00	0.26
Crit Moves:	****			****						****			

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Post-Game

Intersection #26: Avalon Blvd. & Del Amo Blvd.

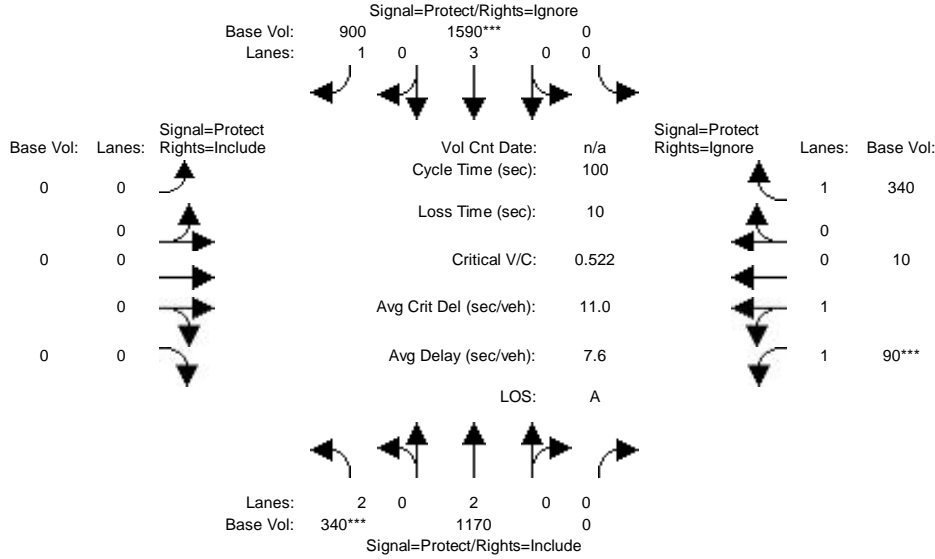


Street Name:	Avalon Blvd.						Del Amo Blvd.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	120	750	210	200	1410	120	110	320	120	320	290	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	120	750	210	200	1410	120	110	320	120	320	290	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	120	750	210	200	1410	120	110	320	120	320	290	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	120	750	210	200	1410	120	110	320	120	320	290	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	120	750	210	200	1410	120	110	320	120	320	290	120
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	2.00	2.76	0.24	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1600	4800	1600	5760	4424	376	1600	3200	1600	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.08	0.16	0.13	0.03	0.32	0.32	0.07	0.10	0.08	0.20	0.09	0.08
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Post-Game

Intersection #27: Avalon Blvd. & I-405 NB Ramps

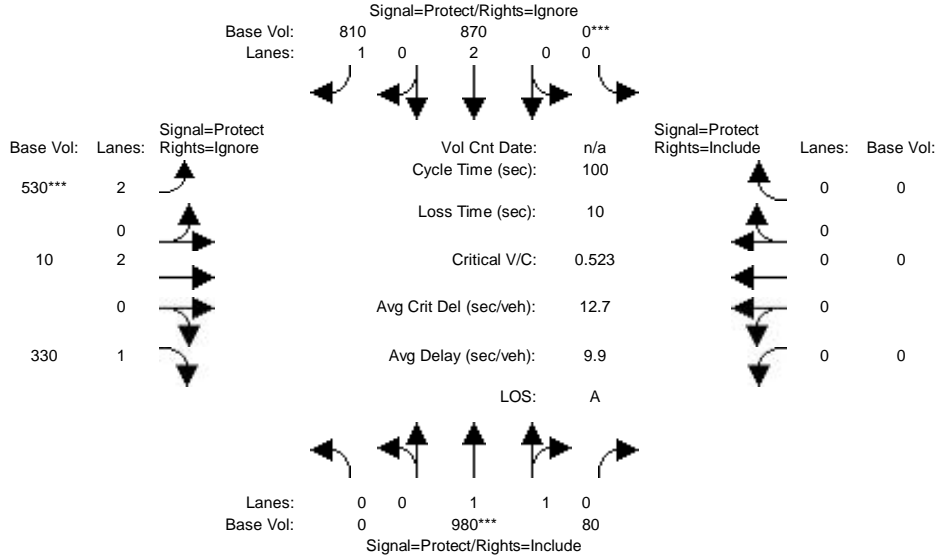


Street Name:	Avalon Blvd.						I-405 NB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	340	1170	0	0	1590	900	0	0	0	90	10	340
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	340	1170	0	0	1590	900	0	0	0	90	10	340
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	340	1170	0	0	1590	0	0	0	0	90	10	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	340	1170	0	0	1590	0	0	0	0	90	10	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
FinalVolume:	340	1170	0	0	1590	0	0	0	0	90	10	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	0.00	3.00	1.00	0.00	0.00	0.00	1.80	0.20	1.00
Final Sat.:	5760	3200	0	0	4800	1600	0	0	0	2880	320	1600
Capacity Analysis Module:												
Vol/Sat:	0.06	0.37	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.03	0.03
Crit Moves:	****				****					****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Post-Game

Intersection #28: Avalon Blvd. & I-405 SB Ramps

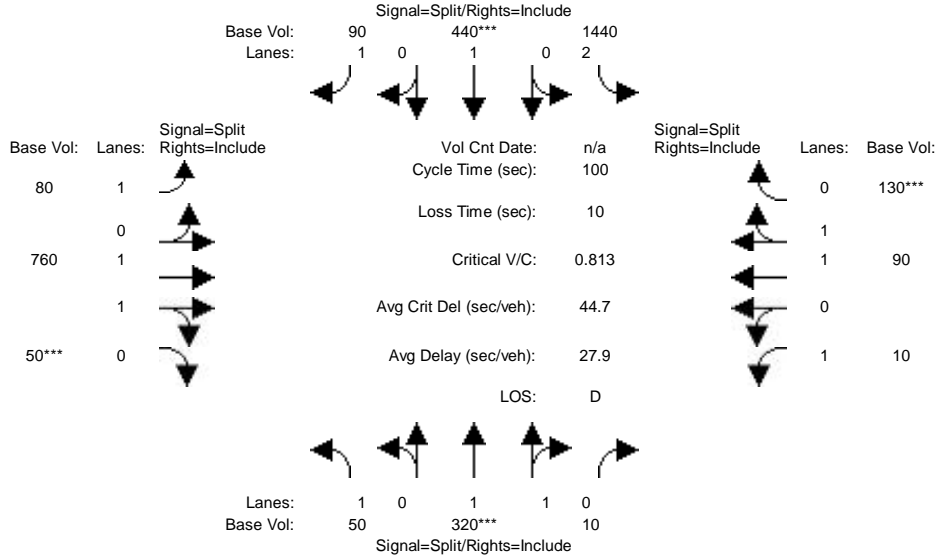


Street Name:	Avalon Blvd.						I-405 SB Ramps					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	980	80	0	870	810	530	10	330	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	980	80	0	870	810	530	10	330	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	980	80	0	870	0	530	10	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	980	80	0	870	0	530	10	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	0	980	80	0	870	0	530	10	0	0	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	1.85	0.15	0.00	2.00	1.00	2.00	2.00	1.00	0.00	0.00	0.00
Final Sat.:	0	2958	242	0	3200	1600	5760	3200	1600	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.33	0.33	0.00	0.27	0.00	0.09	0.00	0.00	0.00	0.00	0.00
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Post-Game

Intersection #29: Central Ave. & University Dr.

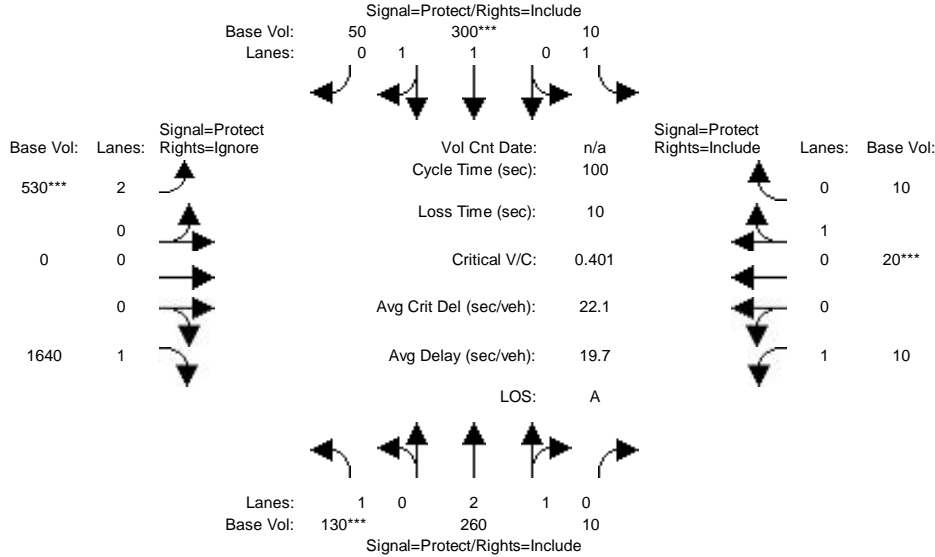


Street Name:	Central Ave.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	50	320	10	1440	440	90	80	760	50	10	90	130
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	320	10	1440	440	90	80	760	50	10	90	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	320	10	1440	440	90	80	760	50	10	90	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	320	10	1440	440	90	80	760	50	10	90	130
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	320	10	1440	440	90	80	760	50	10	90	130
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	1.94	0.06	2.00	1.00	1.00	1.00	1.88	0.12	1.00	1.00	1.00
Final Sat.:	1600	3103	97	5760	1600	1600	1600	3002	198	1600	1600	1600
Capacity Analysis Module:												
Vol/Sat:	0.03	0.10	0.10	0.25	0.28	0.06	0.05	0.25	0.25	0.01	0.06	0.08
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Post-Game

Intersection #30: Wilmington Ave. & University Dr.

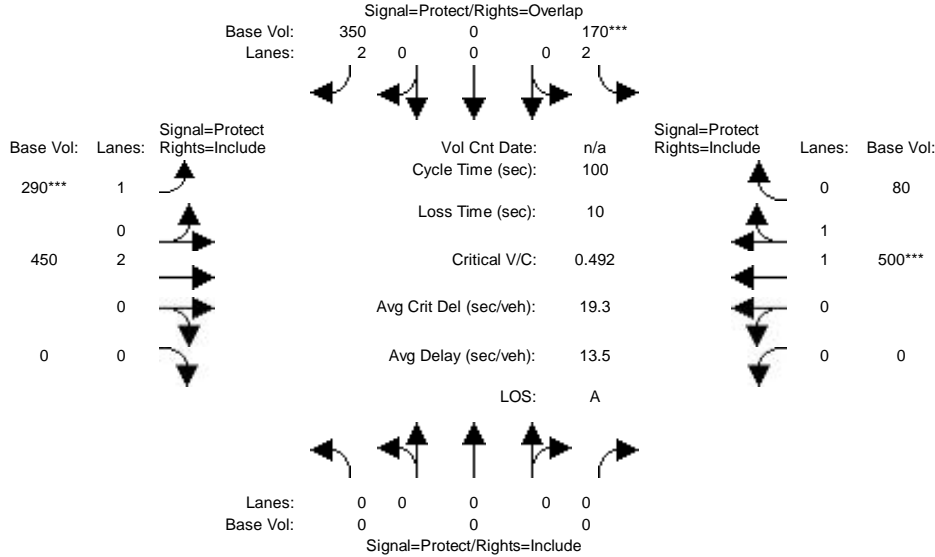


Street Name:	Wilmington Ave.				University Dr.							
Approach:	North Bound		South Bound		East Bound		West Bound					
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	130	260	10	10	300	50	530	0	1640	10	20	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	130	260	10	10	300	50	530	0	1640	10	20	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	130	260	10	10	300	50	530	0	0	10	20	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	260	10	10	300	50	530	0	0	10	20	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	130	260	10	10	300	50	530	0	0	10	20	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.89	0.11	1.00	1.71	0.29	2.00	0.00	1.00	1.00	0.67	0.33
Final Sat.:	1600	4622	178	1600	2743	457	5760	0	1600	1600	1067	533
Capacity Analysis Module:												
Vol/Sat:	0.08	0.06	0.06	0.01	0.11	0.11	0.09	0.00	0.00	0.01	0.02	0.02
Crit Moves:	****			****		****				****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Post-Game

Intersection #31: Central Ave. & Del Amo Blvd.

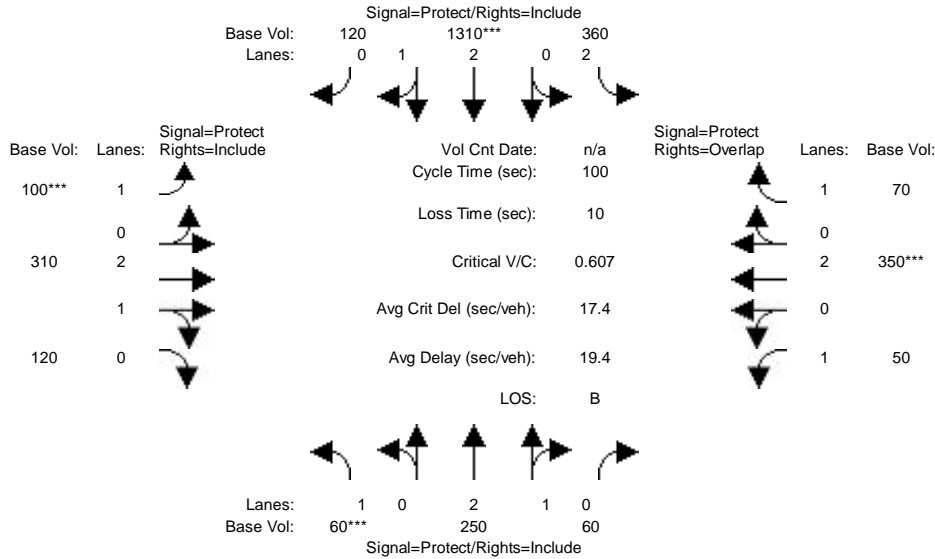


Street Name:	Central Ave.						Del Amo Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	170	0	350	290	450	0	0	500	80
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	170	0	350	290	450	0	0	500	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	170	0	350	290	450	0	0	500	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	170	0	350	290	450	0	0	500	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	170	0	350	290	450	0	0	500	80
OvlAdjVol:	0											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	2.00	1.00	2.00	0.00	0.00	1.72	0.28
Final Sat.:	0	0	0	5760	0	3200	1600	3200	0	0	2759	441
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.03	0.00	0.11	0.18	0.14	0.00	0.00	0.18	0.18
OvlAdjV/S:	0.00											
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Post-Game

Intersection #32: Wilmington Ave. & Del Amo Blvd.

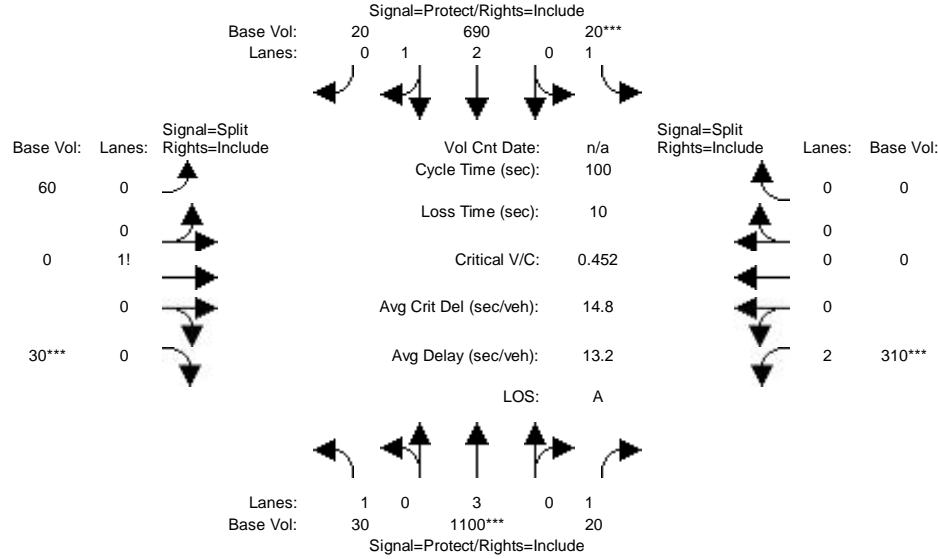


Street Name: Wilmington Ave.						Del Amo Blvd.						
Approach: North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	60	250	60	360	1310	120	100	310	120	50	350	70
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	60	250	60	360	1310	120	100	310	120	50	350	70
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	60	250	60	360	1310	120	100	310	120	50	350	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	60	250	60	360	1310	120	100	310	120	50	350	70
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	60	250	60	360	1310	120	100	310	120	50	350	70
OvlAdjVol:												0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	2.42	0.58	2.00	2.75	0.25	1.00	2.16	0.84	1.00	2.00	1.00
Final Sat.:	1600	3871	929	5760	4397	403	1600	3460	1340	1600	3200	1600
Capacity Analysis Module:												
Vol/Sat:	0.04	0.06	0.06	0.06	0.30	0.30	0.06	0.09	0.09	0.03	0.11	0.04
OvlAdjV/S:												0.00
Crit Moves:	****			****		****				****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Post-Game

Intersection #38: Avalon Blvd. & 184th St. - Drive A

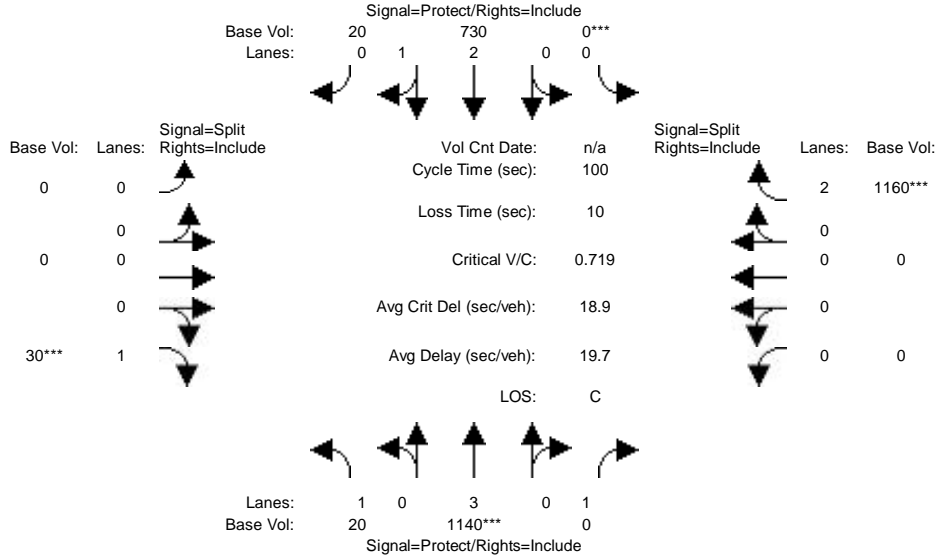


Street Name:	S. Avolon Blvd.						184th St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	30	1100	20	20	690	20	60	0	30	310	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	1100	20	20	690	20	60	0	30	310	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	1100	20	20	690	20	60	0	30	310	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	30	1100	20	20	690	20	60	0	30	310	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	30	1100	20	20	690	20	60	0	30	310	0	0
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.92	0.08	0.67	0.00	0.33	2.00	0.00	0.00
Final Sat.:	1600	4800	1600	1600	4665	135	1067	0	533	5760	0	0
Capacity Analysis Module:												
Vol/Sat:	0.02	0.23	0.01	0.01	0.15	0.15	0.06	0.00	0.06	0.05	0.00	0.00
Crit Moves:	****			****			****	****				

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Post-Game

Intersection #39: Avalon Blvd. & 182nd St. - Drive B

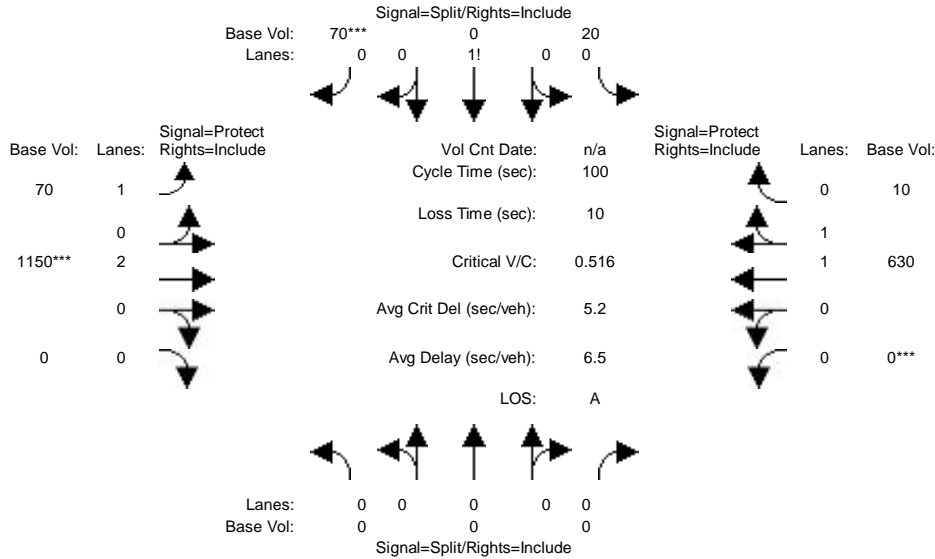


Street Name:	S. Avalon Blvd.						182nd St.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	20	1140	0	0	730	20	0	0	30	0	0	1160
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	1140	0	0	730	20	0	0	30	0	0	1160
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	1140	0	0	730	20	0	0	30	0	0	1160
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	1140	0	0	730	20	0	0	30	0	0	1160
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	20	1140	0	0	730	20	0	0	30	0	0	1160
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	0.00	2.92	0.08	0.00	0.00	1.00	0.00	0.00	2.00
Final Sat.:	1600	4800	1600	0	4672	128	0	0	1600	0	0	3200
Capacity Analysis Module:												
Vol/Sat:	0.01	0.24	0.00	0.00	0.16	0.16	0.00	0.00	0.02	0.00	0.00	0.36
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Post-Game

Intersection #41: Victoria St. & Rainsbury Ave.

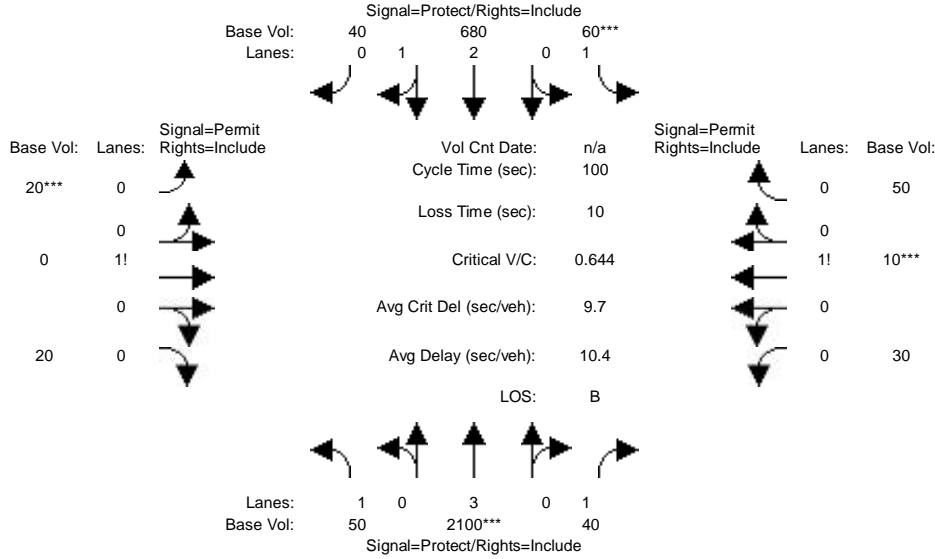


Street Name:	E. Victoria St.						Rainsbury Ave.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	20	0	70	70	1150	0	0	630	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	20	0	70	70	1150	0	0	630	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	20	0	70	70	1150	0	0	630	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	20	0	70	70	1150	0	0	630	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	20	0	70	70	1150	0	0	630	10
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.22	0.00	0.78	1.00	2.00	0.00	0.00	1.97	0.03
Final Sat.:	0	0	0	356	0	1244	1600	3200	0	0	3150	50
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.06	0.00	0.06	0.04	0.36	0.00	0.00	0.20	0.20
Crit Moves:				****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Plus Project Sunday Post-Game

Intersection #42: Avalon Blvd. & Harbor Village / Colony Cove

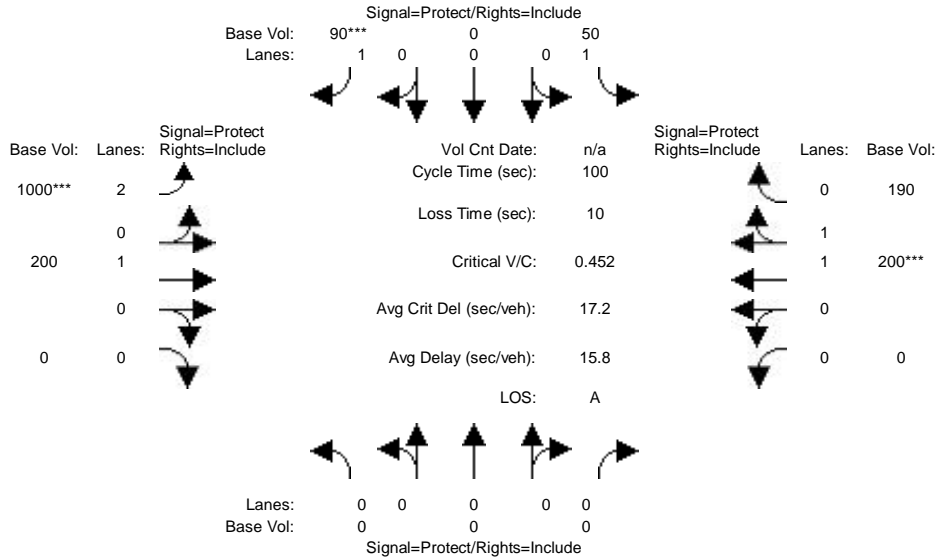


Street Name:	Avalon Blvd.						Harbor Village / Colony Cove					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	50	2100	40	60	680	40	20	0	20	30	10	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	2100	40	60	680	40	20	0	20	30	10	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	2100	40	60	680	40	20	0	20	30	10	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	2100	40	60	680	40	20	0	20	30	10	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	50	2100	40	60	680	40	20	0	20	30	10	50
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	1.00	3.00	1.00	1.00	2.83	0.17	0.50	0.00	0.50	0.33	0.11	0.56
Final Sat.:	1600	4800	1600	1600	4533	267	800	0	800	533	178	889
Capacity Analysis Module:												
Vol/Sat:	0.03	0.44	0.03	0.04	0.15	0.15	0.01	0.00	0.03	0.02	0.06	0.06
Crit Moves:	****			****			****			****		

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Sunday Pre-Game Mitigated

Intersection #9: University Dr. & Toro Center Dr.

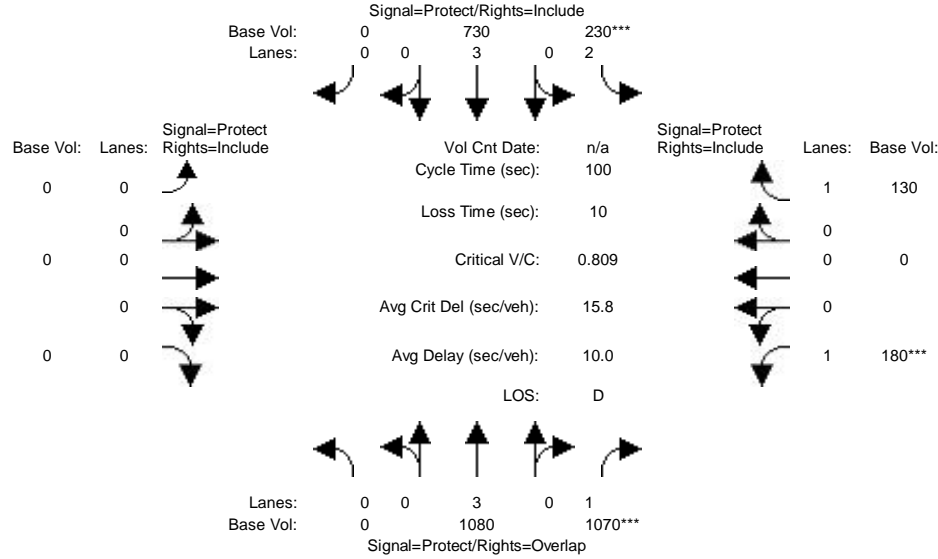


Street Name:	University Dr.						Toro Center Dr.													
Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																				
Base Vol:	0	0	0	50	0	90	1000	200	0	0	200	190								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	0	0	0	50	0	90	1000	200	0	0	200	190								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Volume:	0	0	0	50	0	90	1000	200	0	0	200	190								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	0	0	0	50	0	90	1000	200	0	0	200	190								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
FinalVolume:	0	0	0	50	0	90	1000	200	0	0	200	190								
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600								
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00								
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	2.00	1.00	0.00	0.00	1.03	0.97								
Final Sat.:	0	0	0	1600	0	1600	5760	1600	0	0	1641	1559								
Capacity Analysis Module:																				
Vol/Sat:	0.00	0.00	0.00	0.03	0.00	0.06	0.17	0.13	0.00	0.00	0.12	0.12								
Crit Moves:						****	****				****									

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Sunday Pre-Game Mitigated

Intersection #25: Avalon Blvd. & University Dr.

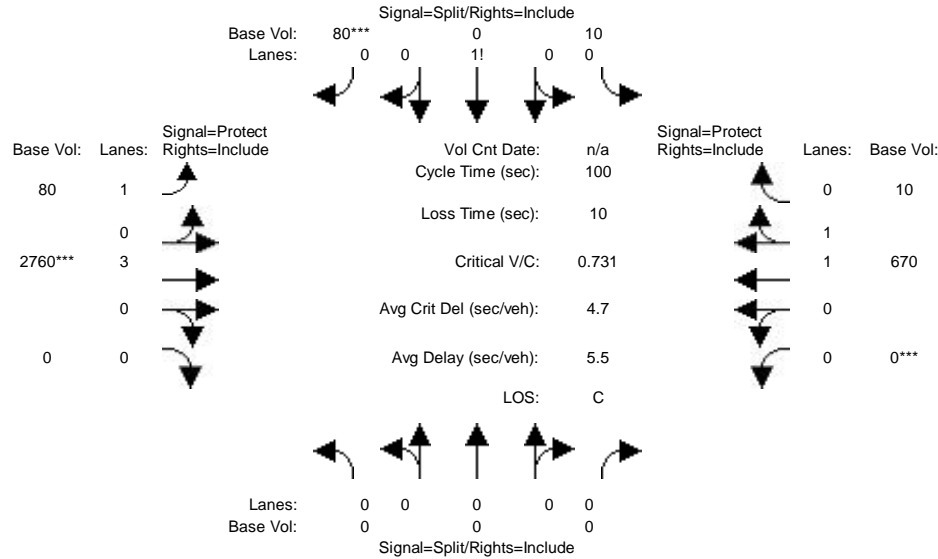


Street Name:	Avalon Blvd.						University Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	1080	1070	230	730	0	0	0	0	180	0	130
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1080	1070	230	730	0	0	0	0	180	0	130
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1080	1070	230	730	0	0	0	0	180	0	130
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1080	1070	230	730	0	0	0	0	180	0	130
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1080	1070	230	730	0	0	0	0	180	0	130
OvlAdjVol:	890											
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	3.00	1.00	2.00	3.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Final Sat.:	0	4800	1600	5760	4800	0	0	0	0	1600	0	1600
Capacity Analysis Module:												
Vol/Sat:	0.00	0.23	0.67	0.04	0.15	0.00	0.00	0.00	0.00	0.11	0.00	0.08
OvlAdjV/S:	0.56											
Crit Moves:	****			****			****					

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Sunday Pre-Game Mitigated

Intersection #41: Victoria St. & Rainsbury Ave.

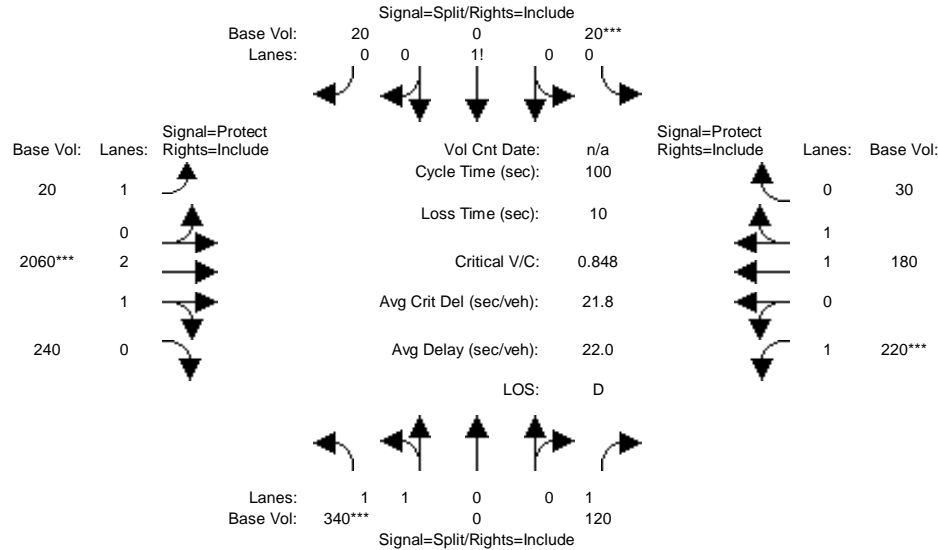


Street Name:	E. Victoria St.						Rainsbury Ave.													
Approach:	North Bound			South Bound			East Bound			West Bound										
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:																				
Base Vol:	0	0	0	10	0	80	80	2760	0	0	670	10								
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Initial Bse:	0	0	0	10	0	80	80	2760	0	0	670	10								
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
PHF Volume:	0	0	0	10	0	80	80	2760	0	0	670	10								
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced Vol:	0	0	0	10	0	80	80	2760	0	0	670	10								
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
FinalVolume:	0	0	0	10	0	80	80	2760	0	0	670	10								
Saturation Flow Module:																				
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600								
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00								
Lanes:	0.00	0.00	0.00	0.11	0.00	0.89	1.00	3.00	0.00	0.00	1.97	0.03								
Final Sat.:	0	0	0	178	0	1422	1600	4800	0	0	3153	47								
Capacity Analysis Module:																				
Vol/Sat:	0.00	0.00	0.00	0.06	0.00	0.06	0.05	0.57	0.00	0.00	0.21	0.21								
Crit Moves:						****		****		****										

Transportation Study for CSUDH Campus Master Plan 2018

Level Of Service Computation Report
 ICU 1(Loss as Cycle Length %) (Base Volume Alternative)
 2035 with 30k-Seat Sunday Post-Game Mitigated

Intersection #3: Victoria St. & Birchknoll Dr.



Street Name:	Victoria St.						Birchknoll Dr.					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	340	0	120	20	0	20	20	2060	240	220	180	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	340	0	120	20	0	20	20	2060	240	220	180	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	340	0	120	20	0	20	20	2060	240	220	180	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	340	0	120	20	0	20	20	2060	240	220	180	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	340	0	120	20	0	20	20	2060	240	220	180	30
Saturation Flow Module:												
Sat/Lane:	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	2.00	0.00	1.00	0.50	0.00	0.50	1.00	2.69	0.31	1.00	1.71	0.29
Final Sat.:	3200	0	1600	800	0	800	1600	4299	501	1600	2743	457
Capacity Analysis Module:												
Vol/Sat:	0.11	0.00	0.08	0.03	0.00	0.03	0.01	0.48	0.48	0.14	0.07	0.07
Crit Moves:	***			***			***			***		

Appendix T

Aerial Photos with Mitigation Measures



Intersection #1, Victoria St./Drive D

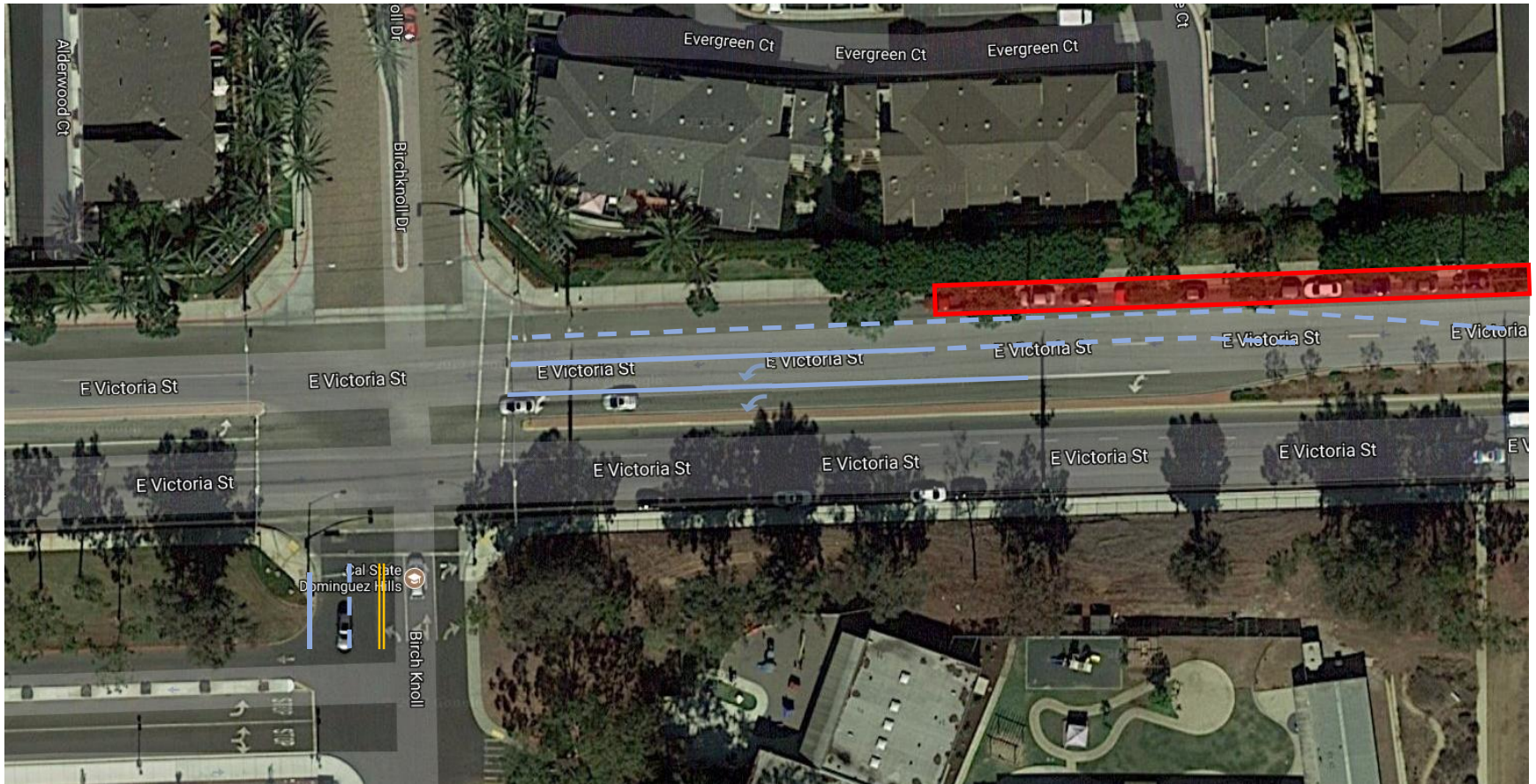
2025 Mitigations (in **Blue**):

Signalize

2035 Mitigations (Additional Mitigations in **Peach**):

Signalize, Add 2nd WB Left-Turn Lane, Add 2nd NB Left-Turn Lane, EB Right-Turn Overlap Phasing

- Two-way left turn lane will become a left turn only lane with median
- Driveway to North will need to be changed to right-turn only as left turns are prohibited by the new median



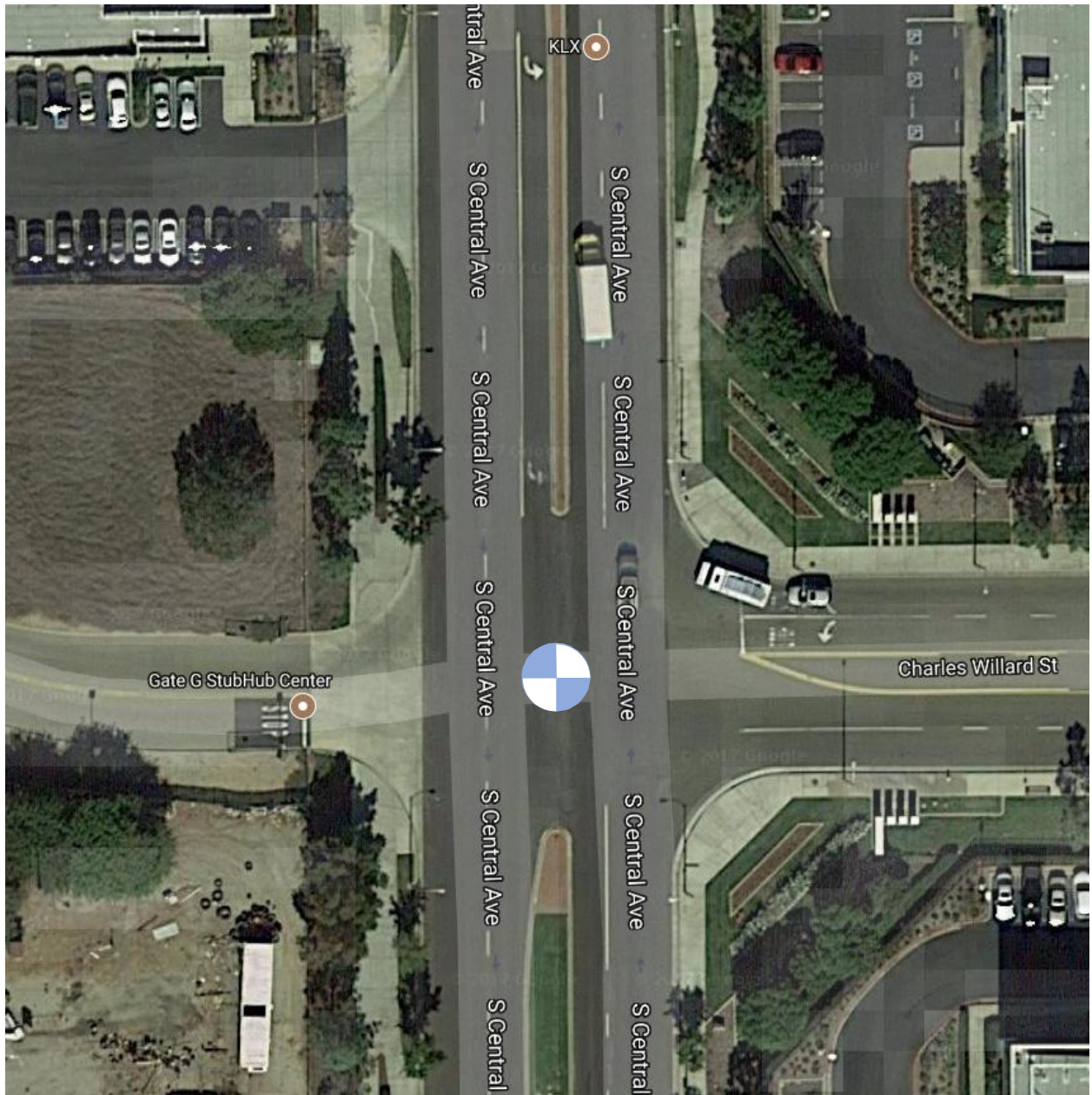
Intersection #3, Victoria St./Birchknoll Dr.

2025 Mitigations (in Blue):

Add 2nd WB Left-Turn Lane

- Requires removal of some on-street parking

2035 Mitigations: Same as 2025 Mitigations

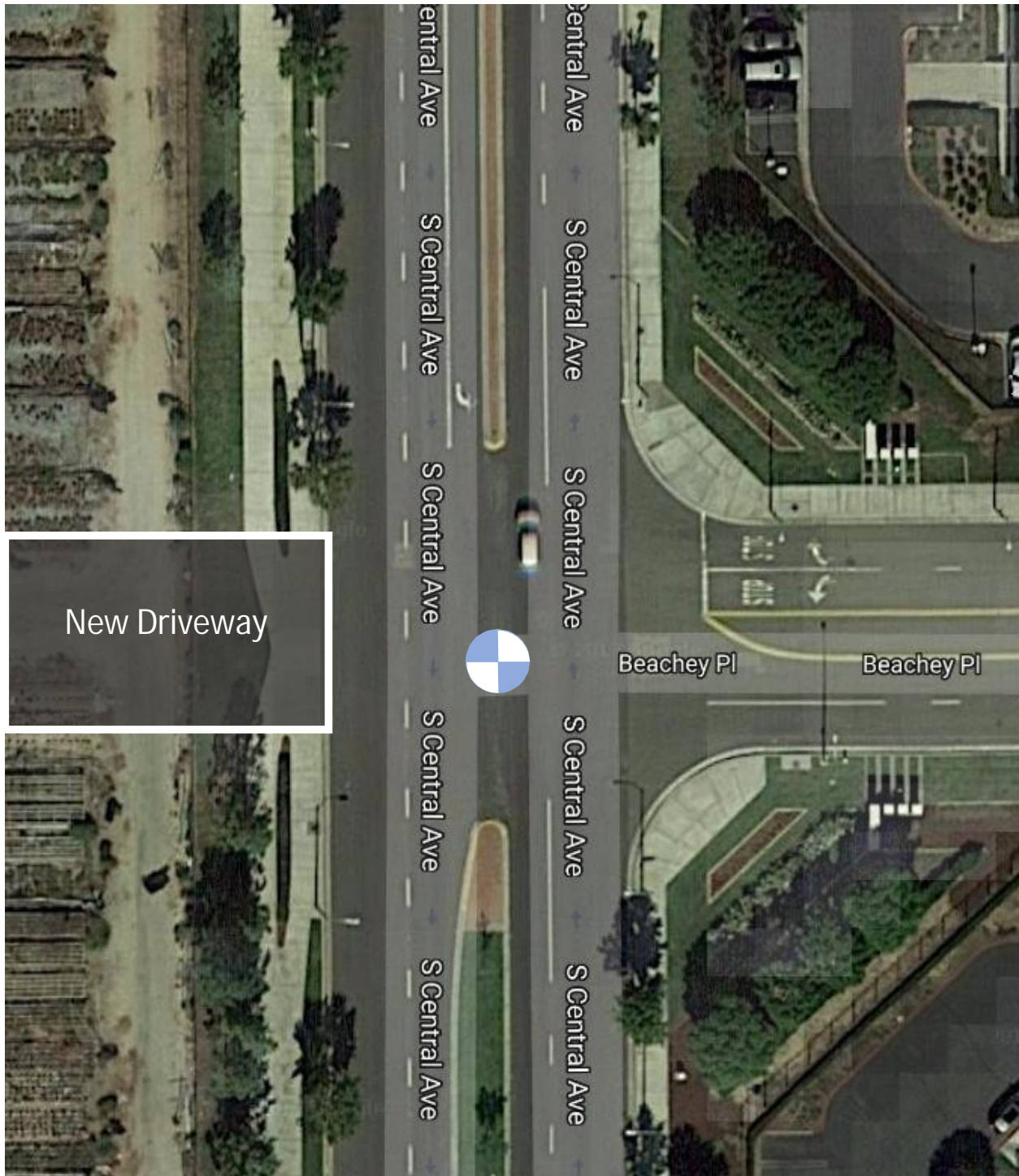


Intersection #5, Central Ave./Charles Willard St.

2025 Mitigations (in **Blue**):

Signalize

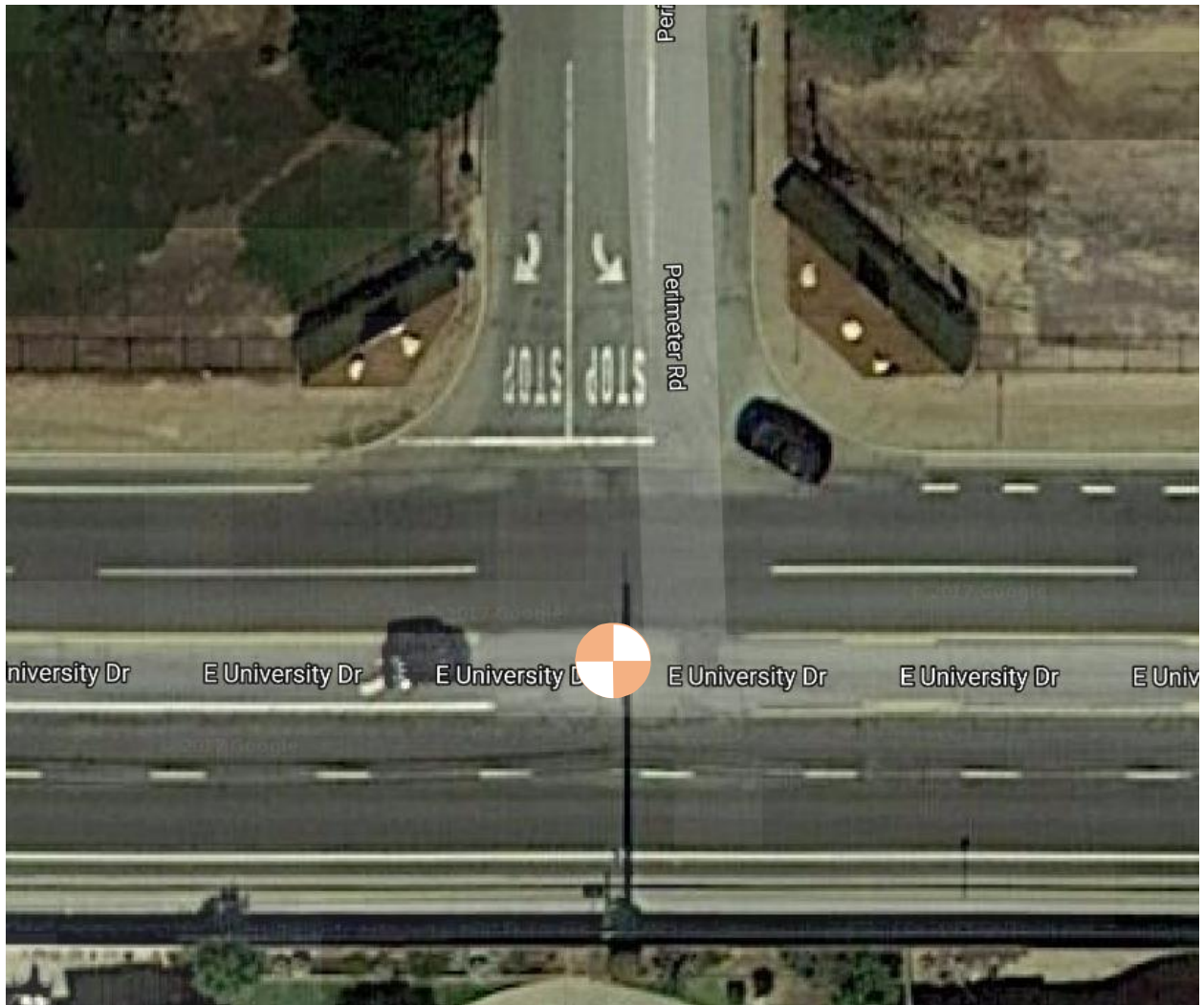
2035 Mitigations: Same as 2025 Mitigations



Intersection #6, Central Ave./Beachey Pl.

2025 Mitigations (in **Blue**):
Signalize

2035 Mitigations: Same as 2025 Mitigations



Intersection #9, University Dr./Toro Center Dr.

2025 Mitigations: No Impact

2035 Mitigations (in **Peach**):

Signalize, WB Right-Turn Overlap Phasing, SB Right-Turn Overlap Phasing

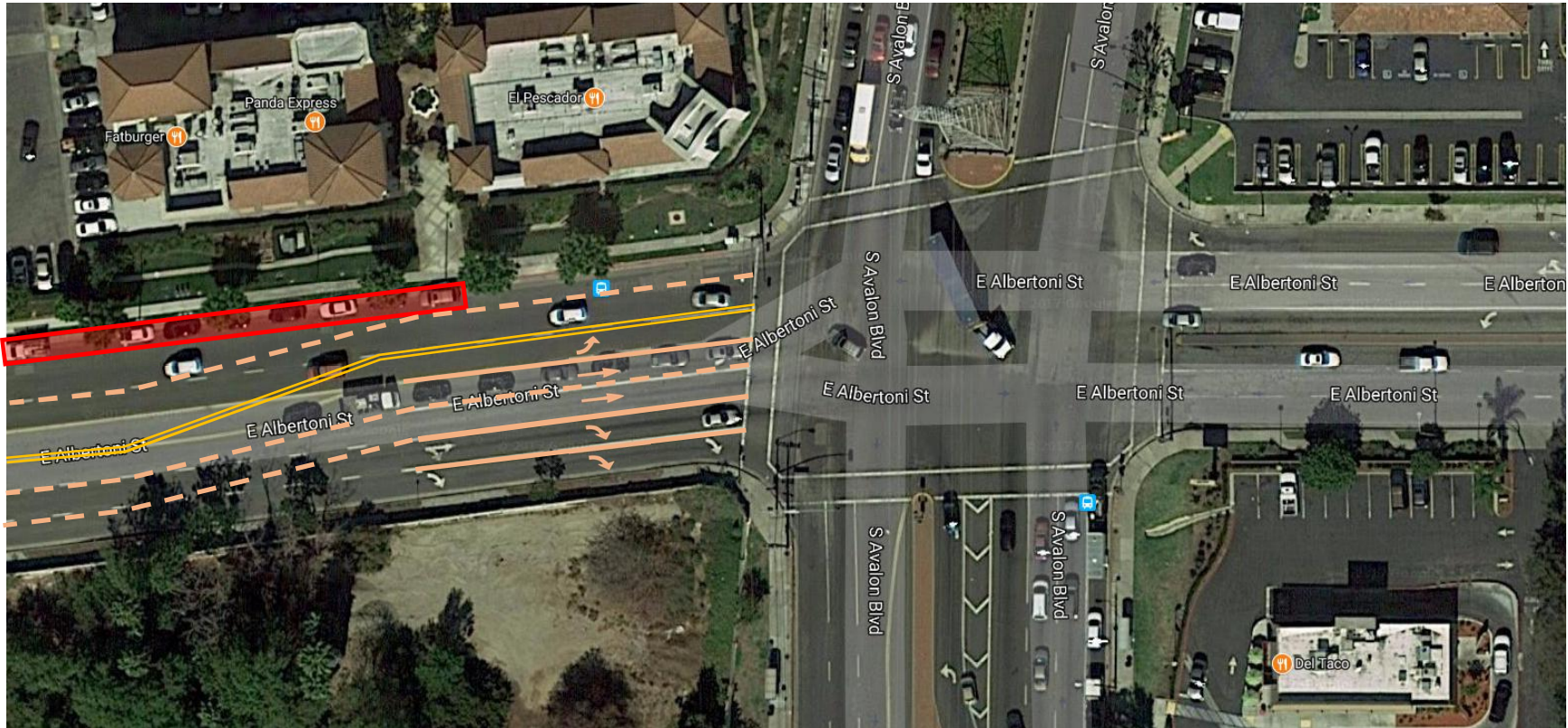


Intersection #10, Albertoni St./SR 91 EB Ramps

2025 Mitigations: No impact

2035 Mitigations (in **Peach**):

Convert SB Exclusive Right-Turn Lane to Shared Left/Right-Turn Lane



Intersection #12, Avalon Blvd./Albertoni St.

2025 Mitigations: No Impacts

2035 Mitigations (in **Peach**):

Add 2nd Exclusive EB Right-Turn Lane

- Requires shifting all lanes on the west leg to the north
- Requires converting the shared through/right-turn lane into an exclusive through lane
- Requires removal of on-street parking to accommodate lane shift
- Buses would need to stop in the lane or stops relocated further west



Intersection #13, Avalon Blvd./Victoria St.

2025 Mitigations (in **Blue**):

Add 2nd NB Left-Turn Lane, Convert EB Exclusive Right-Turn Lane to a Through/Right-Shared Lane, Convert WB Exclusive Right-Turn Lane to a Through/Right-Shared Lane

- Second northbound left-turn lane possible by widening northbound approach into the CSUDH green space in the southeast quadrant
- WB Buses would need to stop in the lane or stops relocated further west

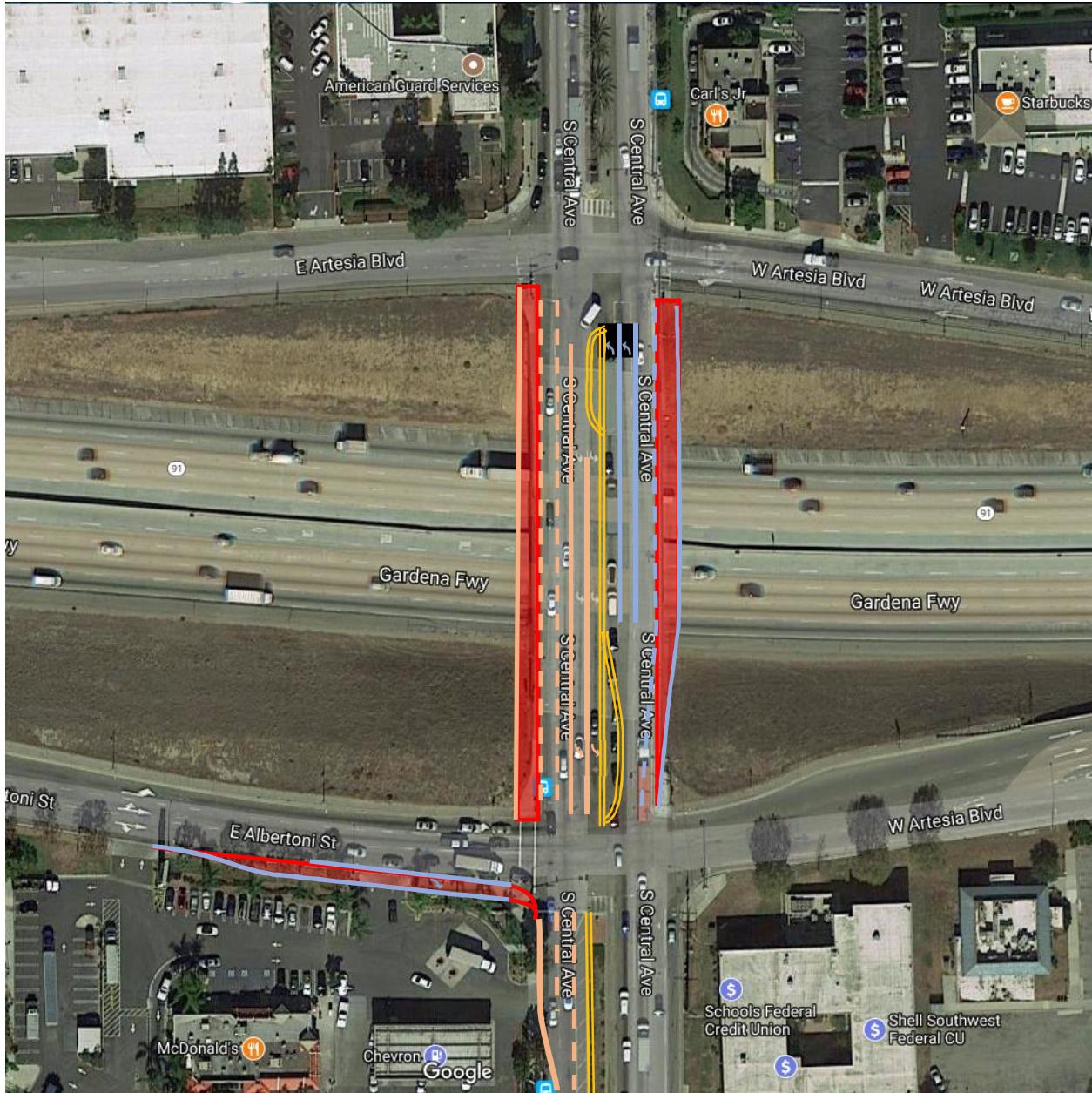


Intersection #13, Avalon Blvd./Victoria St.

2035 Mitigations (Additional Mitigations in **Peach**):

Add 2nd NB Left-Turn Lane, Convert EB Exclusive Right-Turn Lane to a Through/Right-Shared Lane, Add Third Exclusive WB Through Lane

- WB Buses would need to stop in the lane or stops relocated further west
- Third WB through lane and second NB left-turn lanes are possible by widening the south and east legs into the CSUDH green space in the southeast quadrant



2025 Mitigations (in **Blue**)

Intersection #14, Central Ave./Artesia Blvd. WB: Add 2nd NB Left-Turn Lane

- Requires widening the overpass structure

Intersection #15, Central Ave./Albertoni St./Artesia Blvd. EB: Add 2nd EB Right-Turn Lane

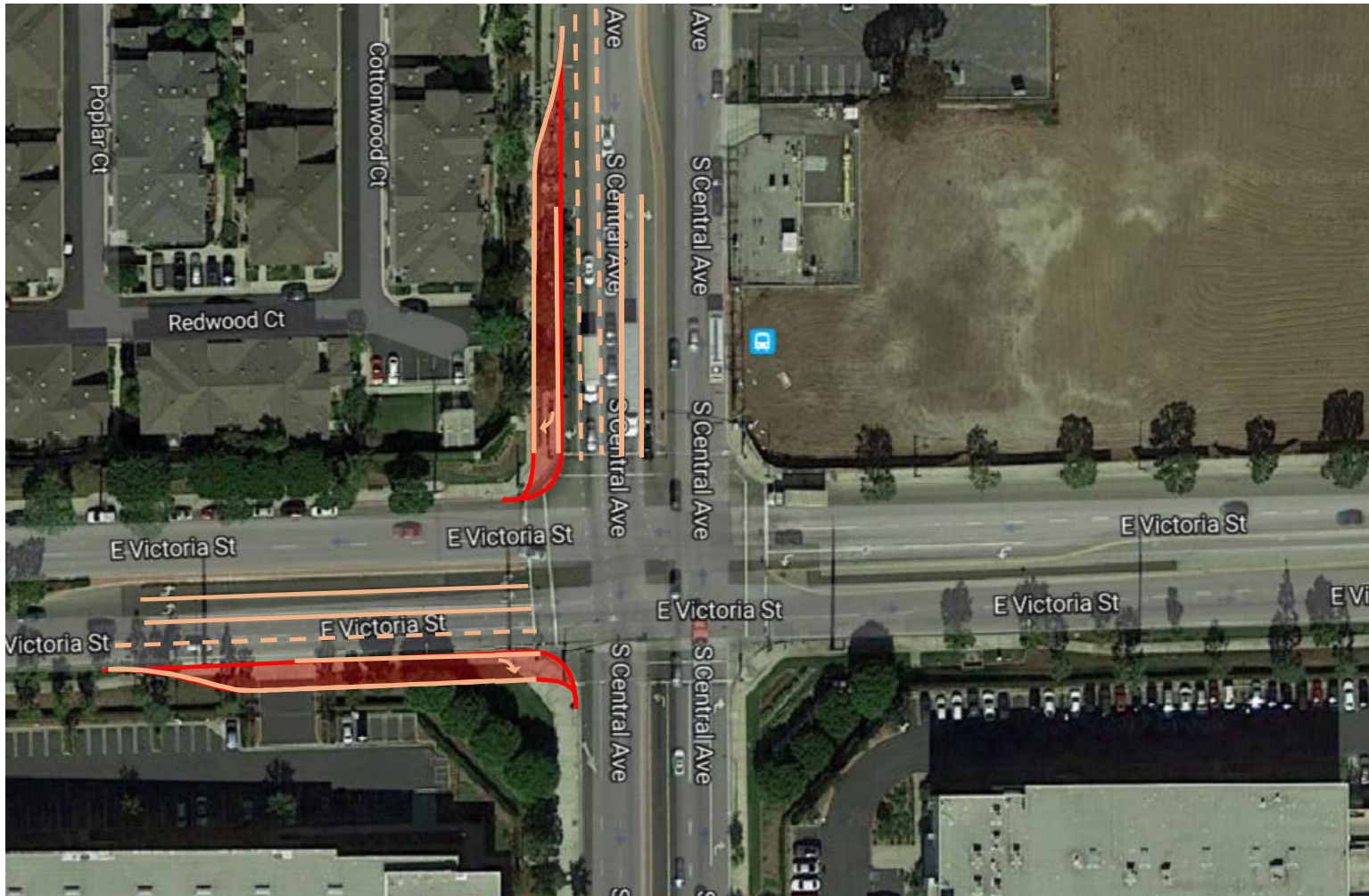
- Right-turn pocket could be added in green space, reducing sidewalks to minimums near the corners

2035 Mitigations (Additional Mitigations in **Peach**)

Intersection #14, Central Ave./Artesia Blvd. WB: Same as 2025 Mitigations

Intersection #15, Central Ave./Albertoni St./Artesia Blvd. EB: Add 3rd SB Through Lane, Add 2nd EB Right-Turn Lane

- Requires widening the overpass structure



Intersection #16, Central Ave./Victoria St.

2025 Mitigations: No Impacts

2035 Mitigations (in **Peach**):

Add 3rd SB Through Lane, Add EB Exclusive Right-Turn Lane

- Right-turn pockets could be added in green space, reducing sidewalks to minimums near the corners



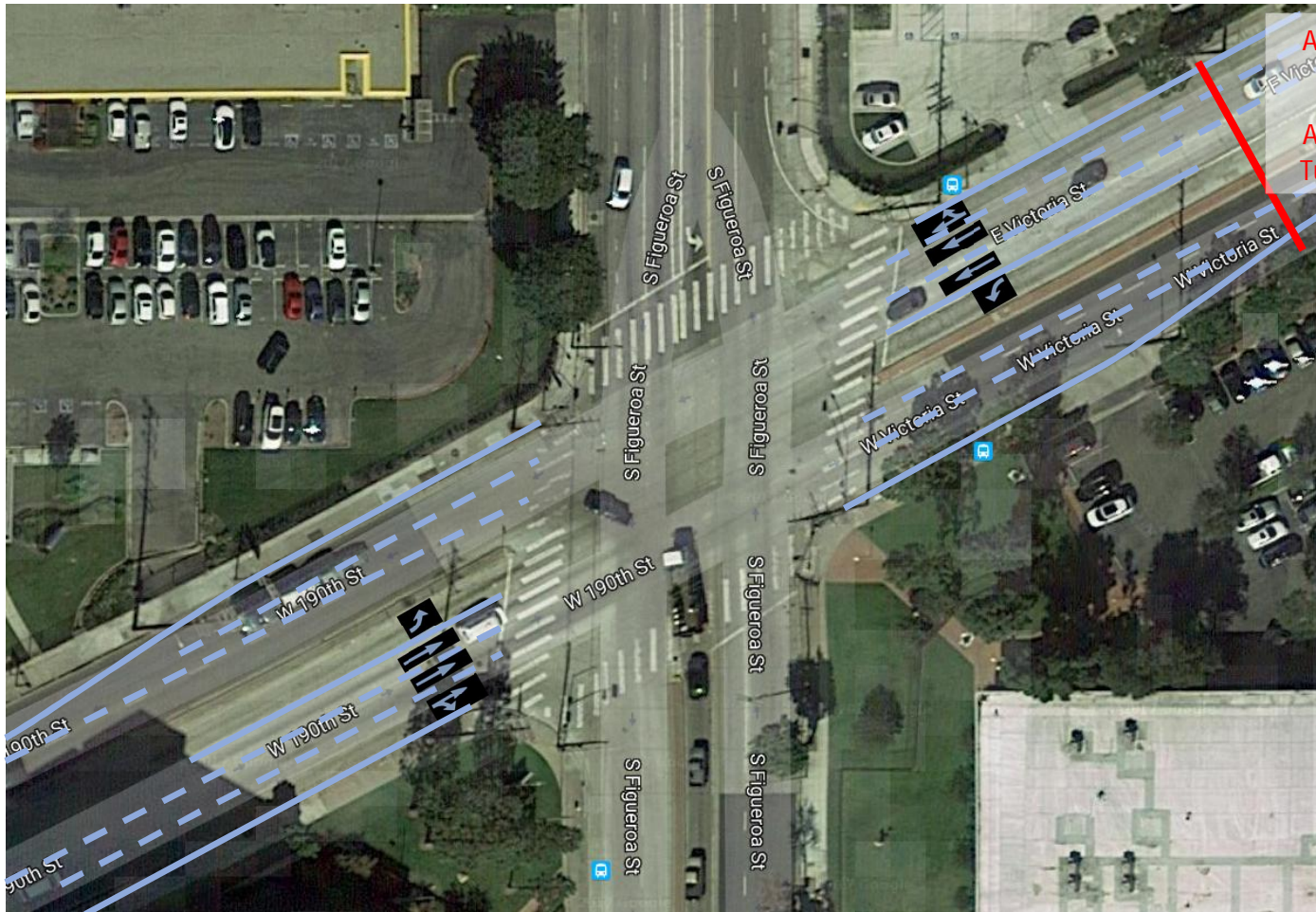
Intersection #20, I-110 SB Off-Ramp/190th St.

2025 Mitigations (in **Blue**):

Add a SB Left/Right-Shared Lane

- There is enough additional right of way on either side of ramp for additional lane

2035 Mitigations: Same As 2025 Mitigations



Approx. 80 Ft width
(curb to curb)
Additional WB Left-Turn Lane Infeasible

Intersection #22, Figueroa St./190th St./Victoria St.

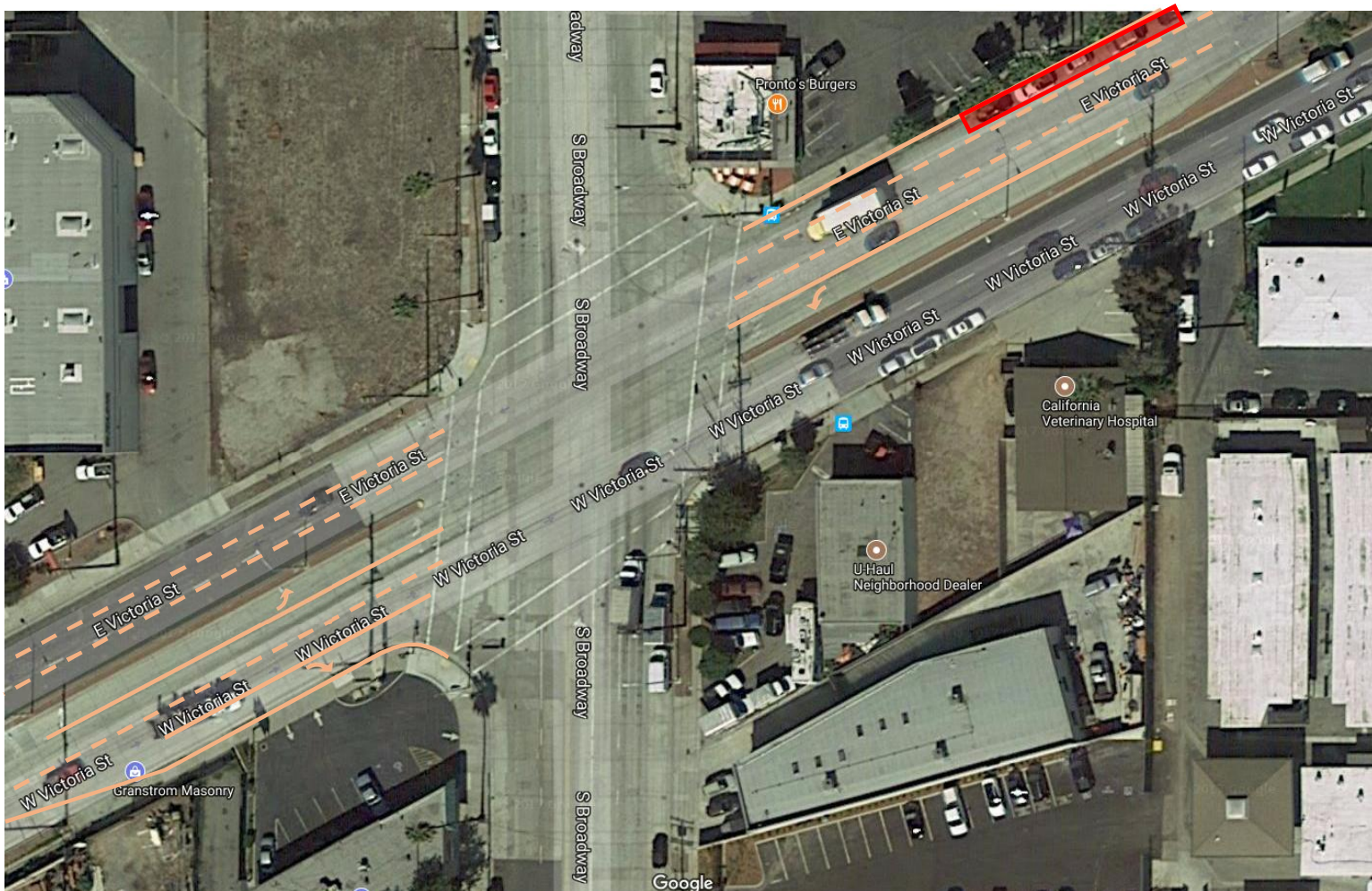
2025 Mitigations (in **Blue**):

Add 3rd WB Through Lane, Add 3rd EB Through Lane

2035 Mitigations (Not feasible in current right of way):

Add 3rd EB Through Lane, Add 3rd WB Through Lane, Add 2nd WB Left-Turn Lane

- Not enough right of way for additional WB left turn lane



Intersection #23, Broadway/Victoria St.

2025 Mitigations: No Impacts

2035 Mitigations (in **Peach**):

Add 3rd WB Through Lane, Add EB Right-Turn Lane

- Requires removal of on-street parking



Intersection #24, Main St./Victoria St.

2025 Mitigations (in **Blue**):

Add WB Exclusive Right-Turn Lane, Add 3rd EB Through Lane

- Requires removal of on street parking



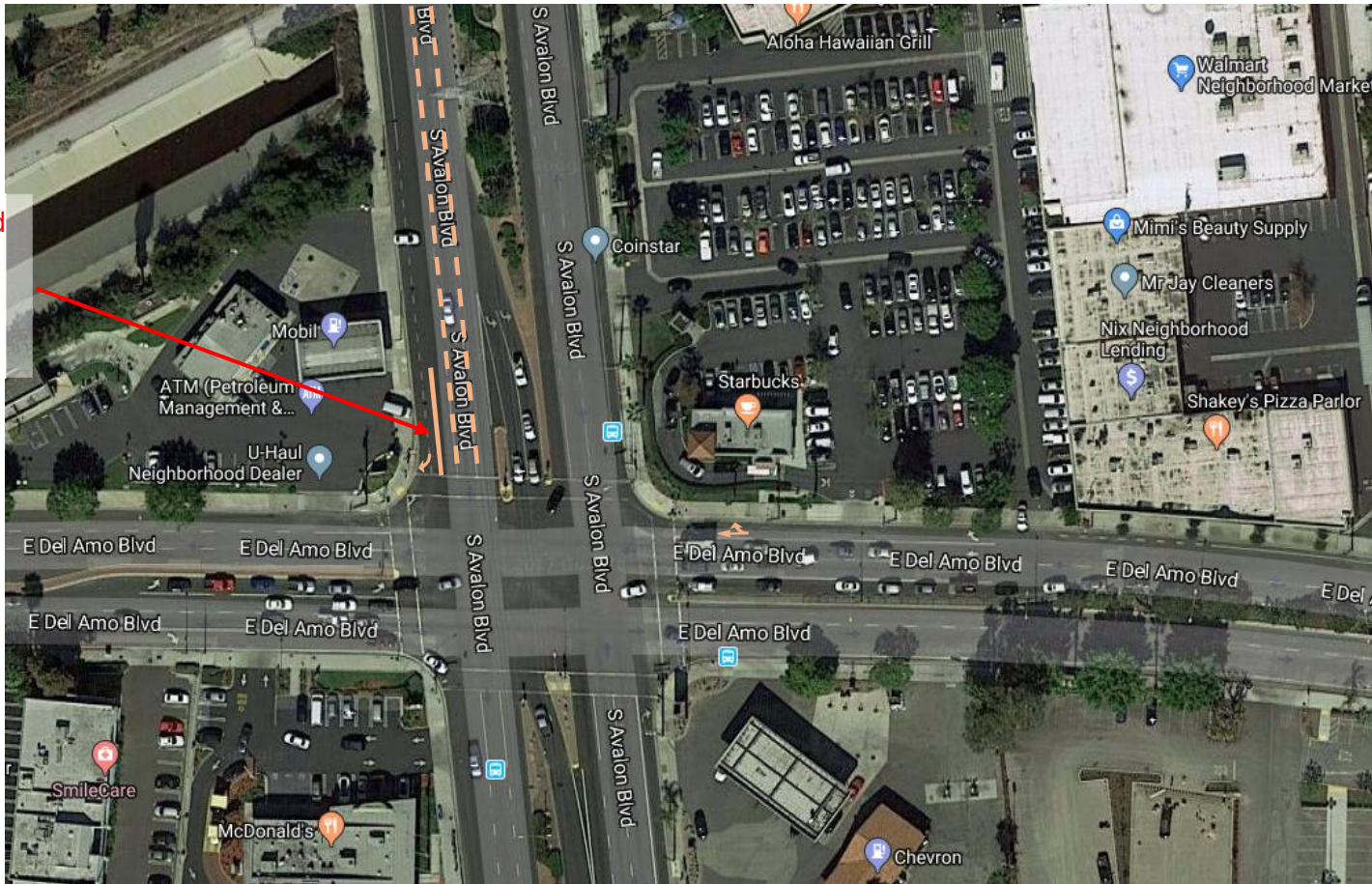
Intersection #24, Main St./Victoria St.

2035 Mitigations (Additional Mitigations in **Peach**):

Add WB Through Lane, Add 3rd EB Through Lane, Add EB Exclusive Right-Turn Lane

- Requires removal of all on street parking
- EB Right-Turn lane is infeasible due to lack of right of way; would require removing parking from corner lot

For Alternative 2, add
SB Exclusive Right-
Turn in 2025



Intersection #26, Avalon Blvd./Del Amo Blvd.

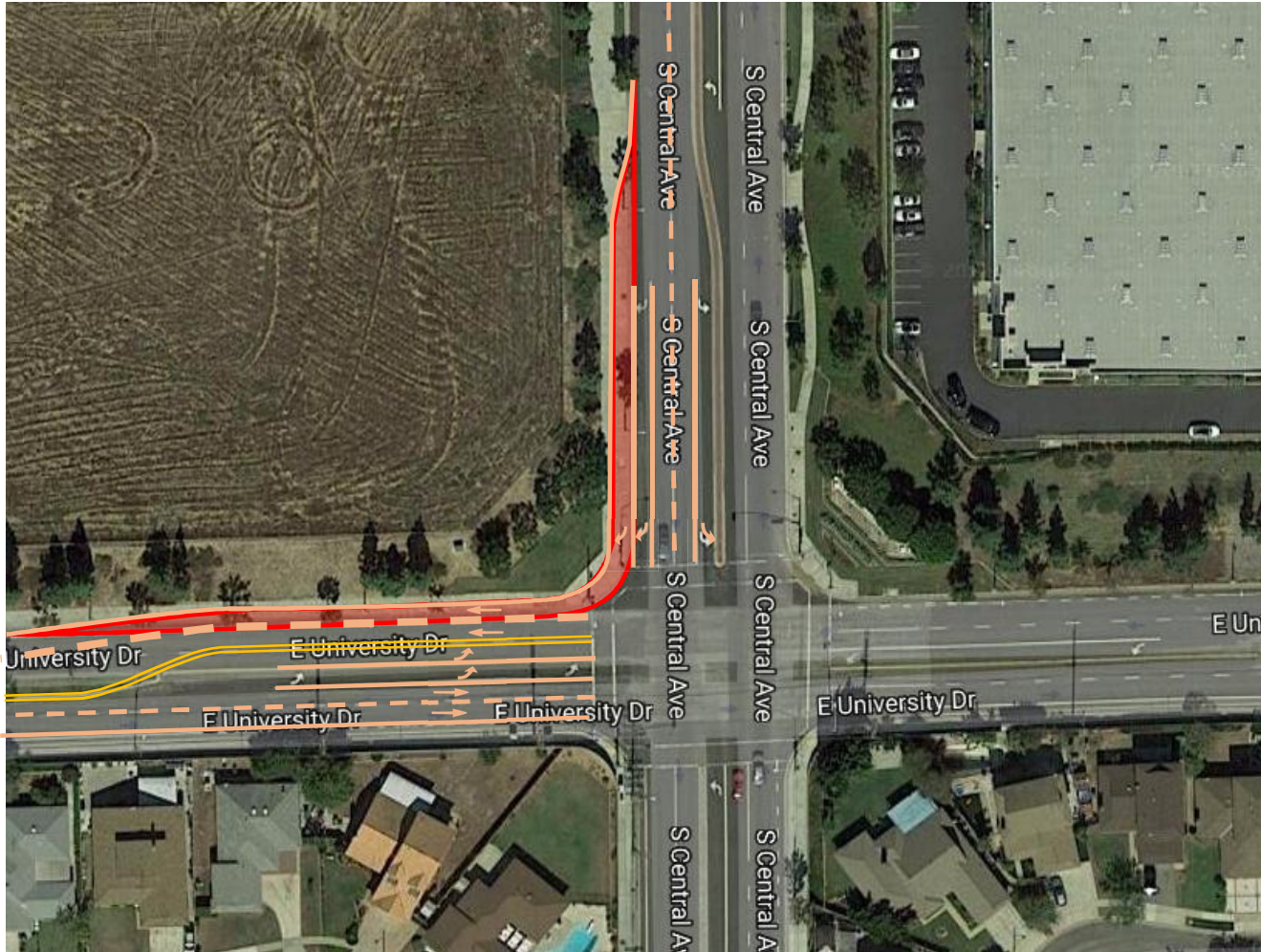
2025 Alternative 1 Mitigations: No Impacts

2025 Alternative 2 Mitigations: Add SB Exclusive Right Turn

2035 Mitigations (in **Peach**):

Add SB Exclusive Right Turn, Convert the WB Exclusive Right-Turn Lane into an WB Through/Right-Shared Lane

- Would need to shorten the SB shoulder bike lane



Intersection #29, Central Ave./University Dr.

2025 Mitigations: No Impacts

2035 Mitigations (in **Peach**):

Add 2nd EB Left-Turn Lane, Add 2nd SB Right-Turn Lane

- Additional ROW is needed to the northwest

**F.2 City of Carson, February 25, 2019 Letter
Requesting Extension**

Re CSU - EIR Review Period Extension Request.txt

Begin forwarded message:

From: Saied Naaseh

<snaaseh@carson.ca.us

> Date: February 25, 2019 at 12:42:34 PM PST

To: David Gamboa <dgamboa@csudh.edu>, Naomi Goodwin <ngoodwin@csudh.edu>, "Jay Bond" <jbond@csudh.edu>

Cc: John Raymond <jraymond@carson.ca.us>, Alvie Betancourt <abetancourt@carson.ca.us>

Subject: CSU - EIR Review Period Extension Request

Hi David, Naomi, and Jay

I tried calling David but he is out of the office. I also left a voice mail for Jay. Unfortunately, I could not find a phone number for Naomi.

Regardless, I wanted to talk to at least one of you before I sent this email which is requesting an extension of the review period because of missing information in the EIR.

Below is our official request:

Public participation is an essential part of the CEQA process. (CEQA Guidelines, Section 15201). "Each public agency should include provisions in its CEQA procedures for wide public involvement, formal and informal, consistent with its existing activities and procedures, in order to receive and evaluate public reactions to environmental issues related to the agency's activities. Such procedures should include, whenever possible, making environmental information available in electronic format on the Internet, on a web site maintained or utilized by the public agency." In *Concerned Citizens of Costa Mesa, Inc. v. 32nd District Agricultural, Assoc.* (1986) 42 Cal. 3d 929, the court emphasized that the public holds a "privileged position" in the CEQA process "based on a belief that citizens can make important contributions to environmental protection and on notions of democratic decision making." For this 2019 Campus Master Plan Project, the Noticed of Availability of the Draft EIR was published on the CSU website on February 11, 2019 (the EIR was not actually accessible until February 12, 2019), the EIR's Transportation Impact Study appendices, did not include (traffic count sheets, volume development worksheets, LOS worksheets, etc.). In addition, volume figures in the traffic study do not show turning volumes correctly. It appears that Adobe is substituting fonts for the volume figures (see screen shot below); therefore, the Public cannot adequately review and meaningfully participate in the environmental review process. This is because essential components of the EIR are not accessible to the public and the public is unable to review the whole of the Project and its impacts. Therefore, the City is requesting CSU extend the public review period by at least 10 additional days to April 8, 2019, to allow for adequate

Re CSU - EIR Review Period Extension Request.txt
time for the City and public,
to review and comment on the EIR in its entirety.

Thanks
Saied Naaseh
Community
Development Director
City of Carson
701 E. Carson Street
Carson, CA 90745
Phone: (310) 952-1728

F.3 City of Carson, March 8, 2019 letter requesting traffic information

March 8 2019 Carson Traffic Request.txt

Begin forwarded message:

From: Saied Naaseh <snaaseh@carson.ca.us>

Date: March 8, 2019 at 10:37:05 AM PST

To: Naomi Goodwin <ngoodwin@csudh.edu>, David Gamboa <dgamboa@csudh.edu>, "Jay Bond" <jbond@csudh.edu>

Subject: FW: CSU EIR Missing Information

Hi All

Our traffic Engineer found more missing information that makes determining the impacts impossible. This would also require an extension to the review period. Please see below.

Here's what we need -

1. Volume development worksheets. As requested earlier, please show how the future volumes were developed. At this time, there are intersections where the future (no project) volumes are increasing by 200% compared to existing volumes for one approach and increasing by 5% for another approach. There are no explanations as to how volumes were developed. Please provide volume development worksheets.
2. Project Trip Distribution & Assignment. Per our previous request, please provide trip distribution and assignment figures (or tables). Since different land uses are likely to have different distribution patterns. The TIS, for example, shows the zip code maps from where faculty, staff and students come from, which is likely to be different from those coming to the retail, residential, and office type uses.

This information is vital to the review of the TIS.

Thanks

Saied Naaseh

Community Development Director

City of Carson

701 E. Carson Street

Carson, CA 90745

Phone: (310) 952-1728

F.3F.4 CSU Dominguez Hills, ~~March 8, 2019~~ March 19, 2019 response letter to the City of Carson, March 8, 2019



**DIVISION OF
ADMINISTRATION & FINANCE**

**OFFICE OF THE VICE PRESIDENT
JAMES L. WELCH HALL (WH) B-470**

**PHONE: (310) 243-3750
FAX: (310) 243-3869**

March 19, 2019

Saied Naaseh
Community Development Director
City of Carson
701 E. Carson Street
Carson, CA 90745
E-mail: snaaseh@carson.ca.us

*Re: California State University Dominguez Hill (CSUDH) 2018 Campus Master Plan
Draft Environmental Impact Report (EIR) Information Request*

Mr. Naaseh: *SAIED -*

This letter is in response to your e-mail dated March 8, 2019, by which you requested the following information related to the traffic analysis presented in the CSUDH Draft EIR, currently out for public review:

- 1. Volume development worksheets. As requested earlier, please show how the future volumes were developed. At this time, there are intersections where the future (no project) volumes are increasing by 200% compared to existing volumes for one approach and increasing by 5% for another approach. There are no explanations as to how volumes were developed. Please provide volume development worksheets.*
- 2. Project Trip Distribution & Assignment. Per our previous request, please provide trip distribution and assignment figures (or tables). Since different land uses are likely to have different distribution patterns. The TIS, for example, shows the zip code maps from where faculty, staff and students come from, which is likely to be different from those coming to the retail, residential, and office type uses.*

In response to your request, we provide the following information:

1. Future Volumes

The Transportation Impact Study (TIS) for the 2018 Campus Master Plan, which was prepared by transportation engineers with WSP, is provided in its entirety in Draft EIR, Appendix G. TIS Sections 9 and 11, respectively, present the future 2025 and 2035 No Project conditions. As explained in Section 9.1, traffic volumes for the 2025 No Project condition were developed by factoring up the existing weekday traffic counts using the growth factor from the Los Angeles Congestion Management Plan and then adding in the traffic for existing, known, and reasonably foreseeable projects. The resulting 2025 No Project traffic volumes are shown on Exhibit 87. As explained in Section 11.1, a similar process was utilized to determine 2035 No Project volumes, which are shown on Exhibit 106. This methodology is consistent with industry best practice.

As to the comment regarding “intersections where the future (no project) volumes are increasing by 200% compared to existing volumes for one approach and increasing by 5% for another approach,” as explained above, the future No Project Scenario includes traffic that would be generated by certain other reasonably foreseeable projects, which would affect traffic in the vicinity of the University; these other projects are listed in TIS Exhibit 85. Additionally, other future projects not yet specifically identified would generate traffic that is captured through the global increase in traffic volumes calculated per the LA County CMP and included within the No Project scenario. These combined future projects will result in increased background traffic volumes that would not be evenly distributed throughout the study area and, instead, would increase more in some locations and less in others, as is typical of travel patterns, dependent upon the location of the various land uses.

2. *Trip Distribution and Assignment*

The trip distribution and assignment used in the TIS also follows industry best practice. As explained in TIS Section 5.5, the distribution for the campus population (students, faculty, and staff) was derived based on existing campus address data. The distribution for the proposed new uses (i.e., business park, market-rate apartments, etc.) followed the procedure outlined in Appendix D of the Los Angeles County Congestion Management Plan using the trip distribution tables found in Exhibit D-3 (see: http://media.metro.net/projects_studies/cmp/images/CMP_Final_2010.pdf).

Section 5.5 of the TIS provides an explanation of the trip generation and distribution process utilized by the traffic engineer. Exhibit 34 provides a step-by-step explanation of how this was done. Exhibits 39, 40, and 41, respectively, illustrate the distribution of off-campus students, faculty, and staff, along with an explanation of how the exhibits were used for trip distribution purposes. TIS Section 5.6 includes separate trip distribution calculations relating to the proposed StubHub Center seating increase. As to the proposed retail, residential, and office uses, the distribution was calculated consistent with LA County CMP procedures, as explained above.

In conclusion, CSUDH appreciates Carson’s interest in the project and looks forward to continuing to work cooperatively with the city towards project development. In the event the City’s traffic engineer would like additional explanation regarding the information presented in the TIS, the EIR traffic engineer would be happy to discuss it in a conference call.



Jay W. Bond
University Planning Consultant
CSU Dominguez Hills
(310) 243-3750

cc: Naomi Goodwin, ngoodwin@csudh.edu
David Gamboa, dgamboa@csudh.edu

F.4F.5 Traffic data requested by the City of Carson

Information Requested in Comments

Land Use (ITE Code)	Size	Unit	AM Peak Hour			PM Peak Hour		
			Rate	Trip		Rate	Trip	
				In	Out		In	Out
On-Campus Student	0	Students	0.033	0	0	0.093	0	0
Off-Campus Student	2,628	Students	0.151	297	99	0.161	178	246
Faculty and Staff	205	Employee	0.067	14	0	0.013	0	3
High School (530)	0	Students	0.430	0	0	0.130	0	0
Child Care Centers	18	Students	0.962	12	6	0.962	6	12
Subtotal for Campus Trips				323	105		184	261
Market Rate Housing (220)	1,063	DU	0.51	108	434	0.62	428	231
Retail (820)	96,085	sq. ft.	1.58	94	58	6.07	280	303
Business Park (770)	720,918	sq. ft.	1.34	821	145	1.21	227	646
Subtotal				1,023	637		935	1,180
Internal Capture %				6%	10%		17%	13%
Internal Trips				62	62		157	157
University Village Net Total				961	575		778	1,023
Weekday Peak Hour Total				1,284	680		962	1,284

Exhibit 1: Trip Generation Table for 2025 Alternative 1 (Net Change)

Land Use (ITE Code)	Size	Unit	AM Peak Hour			PM Peak Hour		
			Rate	Trip		Rate	Trip	
				In	Out		In	Out
On-Campus Student	1,100	Students	0.033	20	16	0.093	48	54
Off-Campus Student	1,528	Students	0.151	172	58	0.161	103	143
Faculty and Staff	205	Employee	0.067	14	0	0.013	0	3
High School (530)	0	Students	0.430	0	0	0.130	0	0
Child Care Centers	18	Students	0.962	12	6	0.962	6	12
Subtotal for Campus Trips				218	80		157	212
Market Rate Housing (220)	1,063	DU	0.51	108	434	0.62	428	231
Retail (820)	96,085	sq. ft.	1.58	94	58	6.07	280	303
Business Park (770)	720,918	sq. ft.	1.34	821	145	1.21	227	646
Subtotal				1,023	637		935	1,180
Internal Capture %				6%	10%		17%	13%
Internal Trips				62	62		157	157
University Village Net Total				961	575		778	1,023
Weekday Peak Hour Total				1,179	655		935	1,235

Exhibit 2: Trip Generation Table for 2025 Alternative 2 (Net Change)

Land Use (ITE Code)	Size	Unit	AM Peak Hour			PM Peak Hour		
			Rate	Trip		Rate	Trip	
				In	Out		In	Out
On-Campus Student	939	Students	0.033	17	14	0.093	41	46
Off-Campus Student	9,823	Students	0.151	1,109	370	0.161	664	921
Faculty and Staff	840	Employee	0.067	57	0	0.013	0	11
High School (530)	0	Students	0.430	0	0	0.130	0	0
Child Care Centers	92	Students	0.962	60	29	0.962	29	60
Subtotal for Campus Trips				1,243	413		734	1,038
Market Rate Housing (220)	2,149	DU	0.51	219	877	0.62	866	466
Retail (820)	96,085	sq. ft.	1.58	94	58	6.07	280	303
Business Park (770)	720,918	sq. ft.	1.34	821	145	1.21	227	646
Subtotal				1,134	1,080		1,373	1,415
Internal Capture %				7%	7%		12%	12%
Internal Trips				78	78		167	167
University Village Net Total				1,056	1,002		1,206	1,248
Weekday Peak Hour Total				2,299	1,415		1,940	2,286

Exhibit 3: Trip Generation Table for 2035 Alternative 1 (Net Change)

Land Use (ITE Code)	Size	Unit	AM Peak Hour			PM Peak Hour		
			Rate	Trip		Rate	Trip	
				In	Out		In	Out
On-Campus Student	1,979	Students	0.033	35	29	0.093	86	97
Off-Campus Student	8,783	Students	0.151	991	331	0.161	593	823
Faculty and Staff	840	Employee	0.067	57	0	0.013	0	11
High School (530)	0	Students	0.430	0	0	0.130	0	0
Child Care Centers	92	Students	0.962	60	29	0.962	29	60
Subtotal for Campus Trips				1,143	389		708	991
Market Rate Housing (220)	1,969	DU	0.51	201	803	0.62	794	427
Retail (820)	96,085	sq. ft.	1.58	94	58	6.07	280	303
Business Park (770)	720,918	sq. ft.	1.34	821	145	1.21	227	646
Subtotal				1,116	1,006		1,301	1,376
Internal Capture %				7%	7%		13%	12%
Internal Trips				75	75		165	165
University Village Net Total				1,041	931		1,136	1,211
Weekday Peak Hour Total				2,184	1,320		1,844	2,202

Exhibit 4: Trip Generation Table for 2035 Alternative 2 (Net Change)

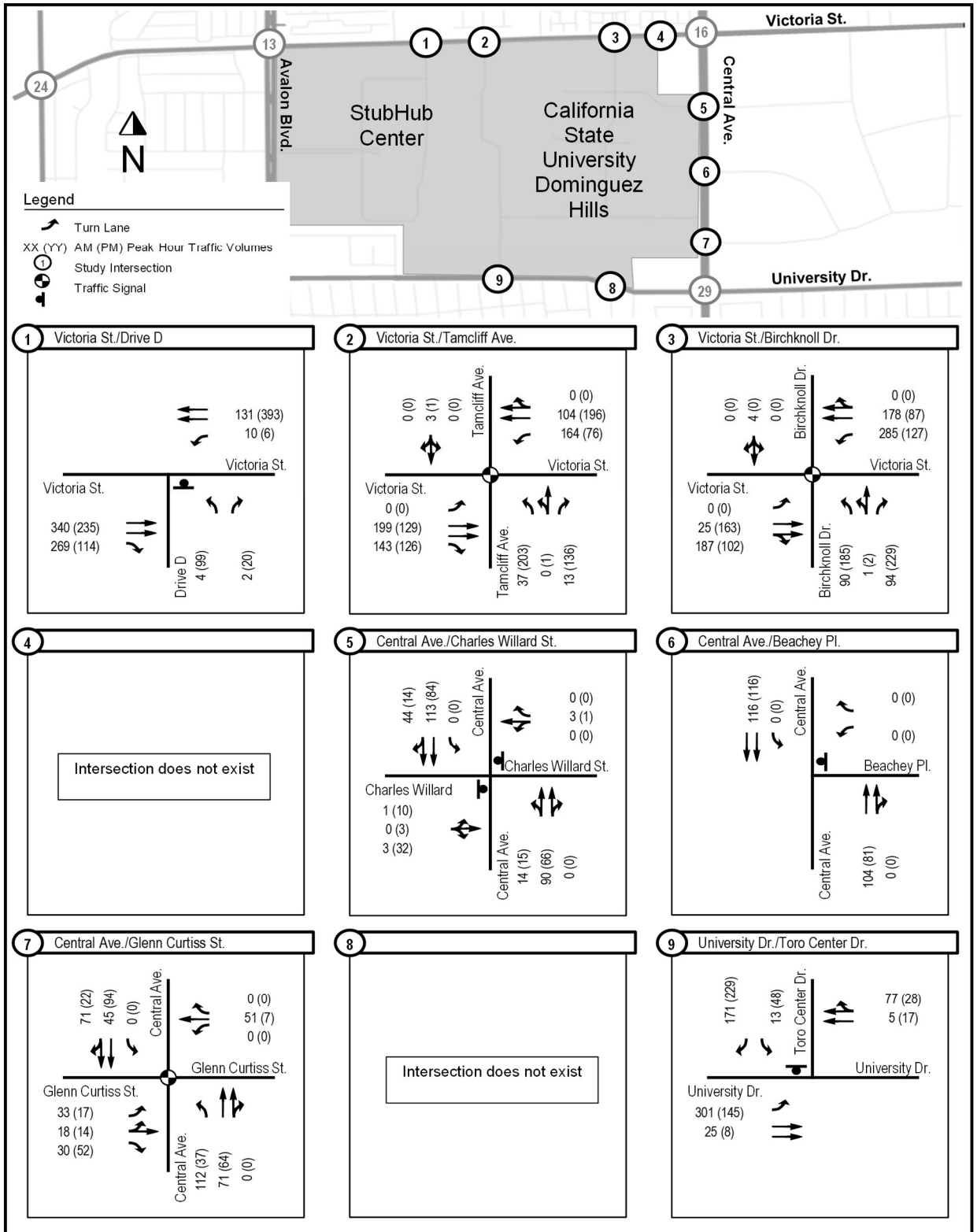


Exhibit 5: Existing Trips at Campus Gateways

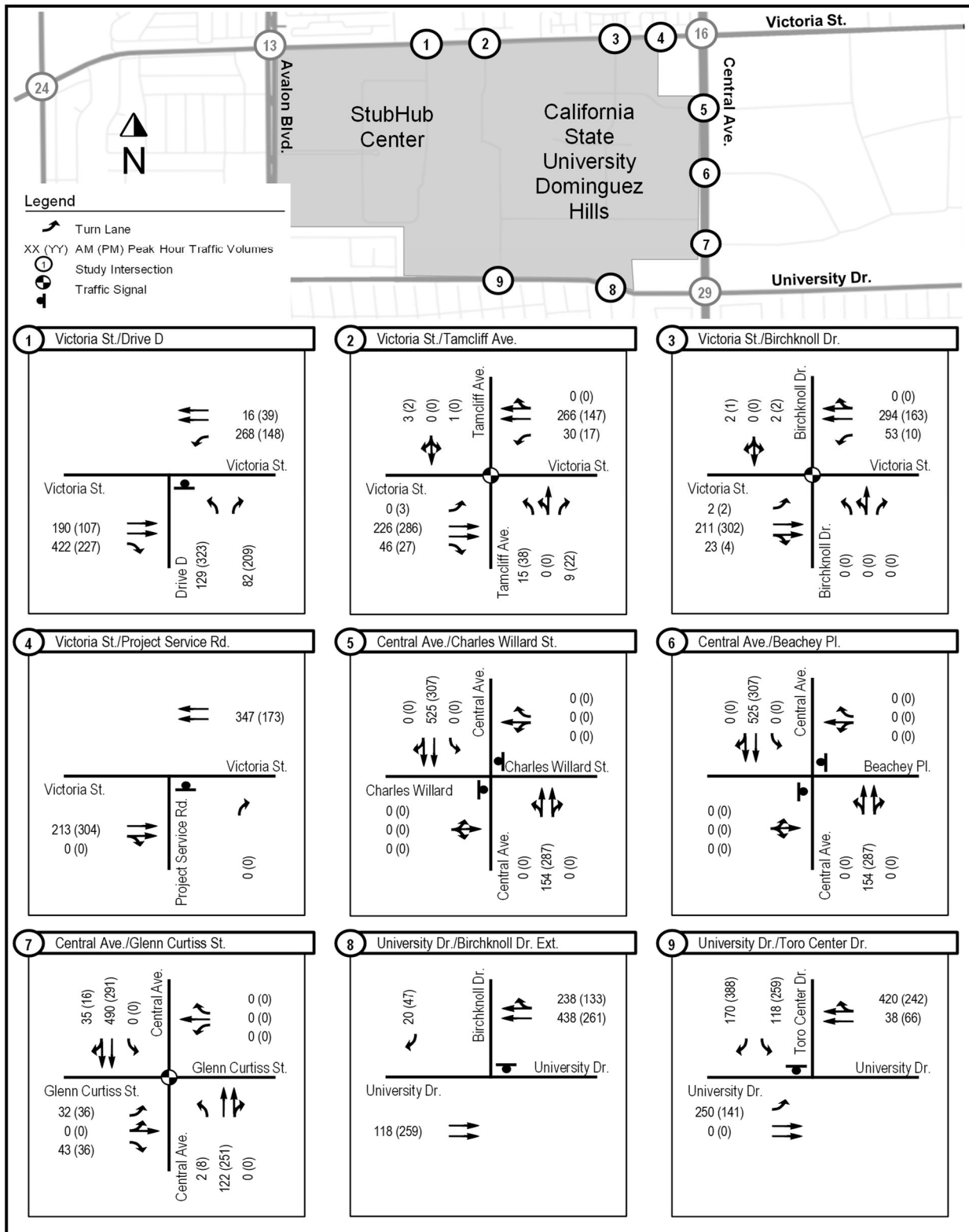


Exhibit 6: Trips from Existing Campus Land Uses at Campus Gateways, as Redistributed in the Existing Plus Project Scenario

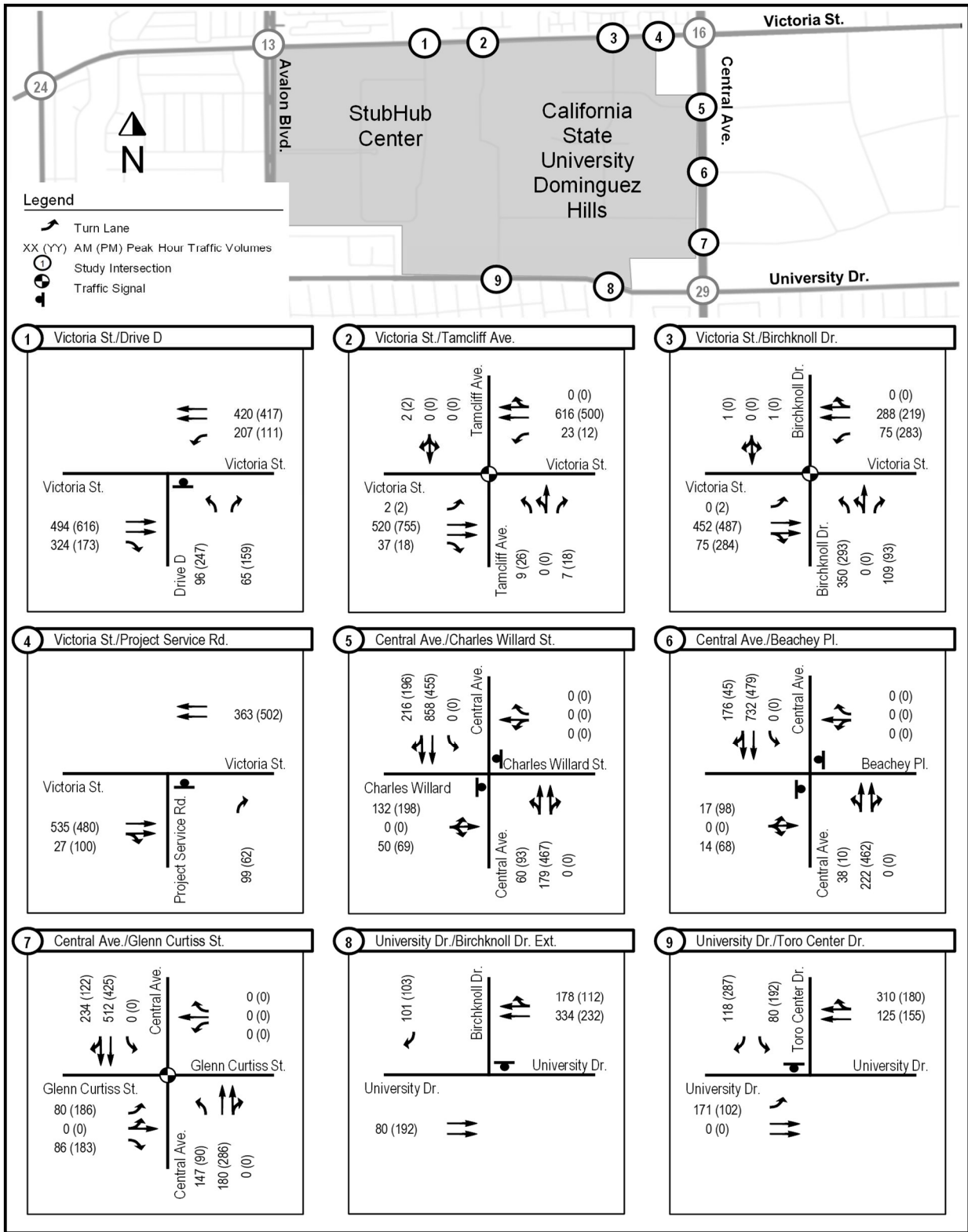


Exhibit 7: Trips from Project Land Uses at Campus Gateways

Appendix G. Utilities

G.1 DES Utilities Engineering (Appendix B.2 of the Master Plan Guidelines 2018)

B.2: DES Utilities Engineering

The **University Village** is an urban design concept within the CSUDH 2018 Master Plan that integrates the academic core and the student residential community with a neighborhood of retail and business communities and residential apartments to create a live/work/play environment with synergistic connections to the University's mission and purpose. The **Land Development Project** (LDP) is a privately-financed and developed mixed-use project on 76.5 acres within the University Village that includes high-quality rental housing for faculty, staff and community members; retail development; and business park development. It is anticipated that the LDP would be developed as a public-private partnership (P3) which could be constructed over a period of years. Student Residence Halls (Parcels 2A and 2B) and Student Apartments (Parcel 3A) are part of the University Village, but are not currently envisioned as part of the LDP P3 land development.

Unless otherwise noted, the analyses and reports produced for this Appendix include all the parcels of the University Village and are not confined to the parcels of the Land Development Project.

B.2	DES UTILITIES ENGINEERING	B.2-1
	CAMPUS CHW SYSTEM	B.2-2
	CAMPUS HHW SYSTEM	B.2-11
	CAMPUS NATURAL GAS SYSTEM	B.2-18
	PHOTOVOLTAIC CONCEPT	B.2-24
	ENERGY USAGE AND GHG EMISSIONS	B.2-35

CAMPUS CHW SYSTEM

CHILLED WATER INFRASTRUCTURE HIGHLIGHTS

PART-A: CORE CAMPUS

Core Area: 1.7 million GSF

Long Term Cooling Capacity: 4,400 Tons

Strategy: Expand central plant to 3,200 Tons; Add 25,000 Ton Hr. TES

Provide Two Satellite Plants, with combined capacity of 1,200 Tons (One at Northwest, One for housing or southern segment)

CORE CAMPUS BUILDINGS LIST

- A Academic
- B Admin
- C Black Box Theatre
- D Academic
- E Rec Center
- I Incubator
- J Academic
- K Academic
- L Student Union Expansion
- M Academic
- N Academic
- O Academic
- P Central Plant Expansion
- Q Satellite Central Plant
- R Facilities Services Complex
- V Child Care
- W Fab Lab Garage
- 2A,B Residency Halls

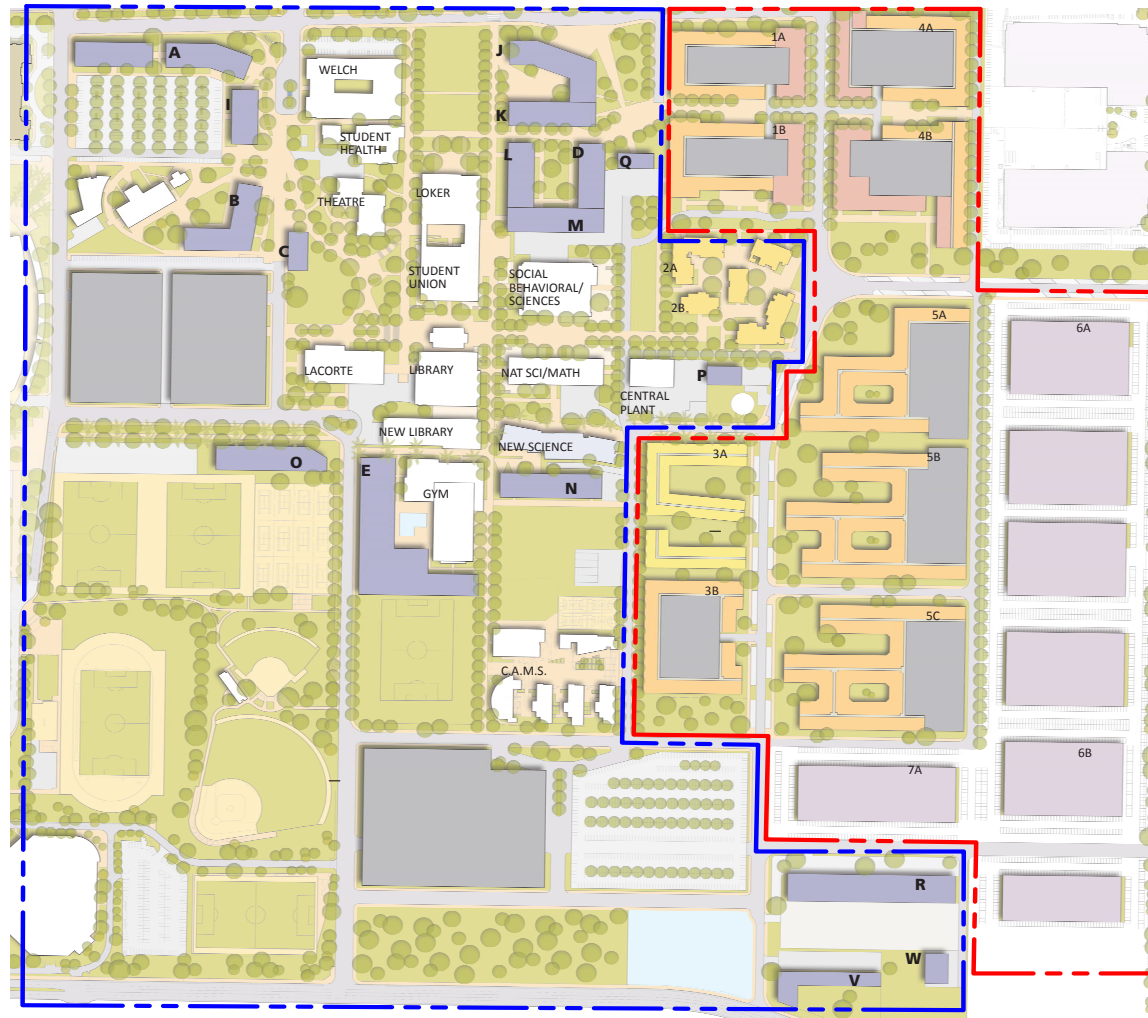
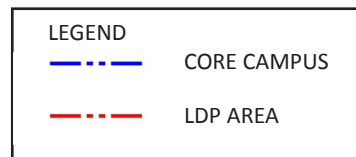


FIGURE 1. HIGHLIGHTS OF CAMPUS MASTER PLAN COOLING INFRASTRUCTURE



PLAN NORTH



PART-B: LDP

LDP Parking Area: 1.9 million GSF

LDP Building Area: 3.8 million GSF

Cooling Tons: 5,550 TONS

Strategy: Satellite Plants or In-building chillers. If Satellite Plants, possibly 3-Total, One for North, Core and South as development occurs

LDP LAND USE

- 1A Mixed Use
- 1B Mixed Use
- 3A Apartments¹
- 3B Apartments
- 4A Mixed Use
- 4B Mixed Use
- 5A Multi Family Rental
- 5B Multi Family Rental
- 5C Multi Family Rental
- 6A Business Park
- 6B Business Park
- 7A Business Park

¹ Parcel 3A is included in analyses of the Land Development Project (LDP) area but it is recognized that the student apartment uses envisioned for that area may be developed by CSUDH and later become part of the campus.

PART A: CAMPUS COOLING INFRASTRUCTURE

A. EXISTING SYSTEMS

The campus central plant has currently two, 1,000 Ton gas fired absorbers that provide cooling to most of the core campus buildings that total approximately 1 million GSF (See Table 1 and Figure 1). Historical observation is that the actual current load is of the order of 1,650 Tons or roughly 600 GSF/Ton.

The campus chilled water distribution system consists of a non-loop system, with a 24" diameter supply header at the central plant. The plant deploys two distribution pumps, each rated at 2,500 GPM to distribute chilled water to the core campus buildings. Generally, under present load conditions, only one pump operates at any time. A single pump, can deliver nearly 1,666 Tons when the chilled water supply and return temperature differential is 16 deg. F. A vast majority of the chilled water steel piping system is in tunnels whereas some of the branch piping to remote parts of the distribution system is in direct buried steel pipes.

The existing plant building includes a 15 MMBtuh boiler as well as all hot water heating pumps, chilled water primary and secondary pumps, and the operator control room, electrical switchgear room, and small administrative offices. There is no room inside the existing plant building to add additional chillers (See

Figure 3). The cooling towers and condenser pumps are situated to the east of the existing central plant, within the same overall central plant yard.

Bld. ID	Building Name	GSF	CHW Tons Served	To Remain/To Be Deleted
2	(SCC-2) SMALL COLLEGE COMPLEX 2	5,313	22	Deleted
5	(SCC-5) SMALL COLLEGE COMPLEX 5	5,315	26	Deleted
6	(SCC-6) SMALL COLLEGE COMPLEX 6	5,841	27	Deleted
7	(SCC-7) SMALL COLLEGE COMPLEX 7	2,145	8	Deleted
8	(SCC-8) SMALL COLLEGE COMPLEX 8	2,920	17	Deleted
10	(SCC-10) SMALL COLLEGE COMPLEX 10	2,145	10	Deleted
11	(SCC-11) SMALL COLLEGE COMPLEX 11	5,841	25	Deleted
14	(COE) SCHOOL OF EDUCATION	26,433	94	Deleted
20	(LIB) LEO F. CAIN LIBRARY	152,006	747	Remains
20A	(LIB) LIBRARY ADDITION	139,569	356	Remains
23	(WH) JAMES L. WELCH HALL	179,952	439	Remains
25	(SHC) STUDENT HEALTH CENTER	20,046	88	Remains
26	(LSU) LOKER STUDENT UNION	123,033	553	Remains
30	(SBS) SOCIAL AND BEHAVIORAL SCIENCES	81,000	225	Remains
40	(LCH) LACORTE HALL	70,331	298	Remains
45	(UT) UNIVERSITY THEATRE	25,201	101	Remains
50	(NSM) NATURAL SCIENCES AND MATH	84,450	379	Remains
TOTAL		931,541		

TABLE 1. EXISTING BUILDINGS SERVED BY CHW PIPING



FIGURE 2. EXISTING CHW SYSTEM

B. SYSTEM CHANGES UNDERWAY (JULY 2017)

A cooling tower replacement project is underway to replace the existing cooling towers that have deteriorated beyond repair. Once these new towers are in place, the towers can provide cooling capacity for 2,400 Tons through high efficiency electric chillers. The cooling tower structure that is being built can accommodate one more tower cell, bringing the total tower capacity to 3,200 Tons as future loads increase.

Since the existing chillers have also nearly reached the end of their useful life and there is a strong desire on part of the campus to reduce the GHG foot print through the use of high efficiency electric chillers, there is a strong likelihood that the existing absorption chillers will be replaced over the next three years. There are currently plans under way to build the first of the three 800 Ton electric chillers to help the central plant meet the additional loads associated with the new Science building which is in design and which is expected to demand approximately 400 Tons. The 800-Ton chiller would work in concert with the existing absorption chillers until there is funding available for replacing both the old absorption chillers with new electric chillers. The plant yard area which is south east of the existing plant building has been targeted as the potential spot for a new cooling system consisting of one or more electric chillers.

C. LOAD GROWTH ASSOCIATED WITH MASTER PLAN

Table 2 summarizes the potential buildings being considered for development as part of the Master Plan. Table 2 shows the area for the Core campus which is within reasonable reach of the existing central plant

Based on addition of about 1.7 million GSF of buildings per Table 2 (net of any buildings that would be replaced), the long term cooling loads that need to be met by the campus cooling infrastructure is estimated at 4,400 Tons. This is based on a diversified load index of 600 GSF/Ton for academic buildings and 750 GSF/Ton for the housing complex, which is comparable to observed diversified cooling intensity based on existing building systems.

Building ID	Building Name	GSF
A	Academic	158,572
B	Admin	131,800
C	Black Box Theatre	7,640
D	Academic	68,000
E	Rec Center	148,400
I	Incubator	57,128
J	Academic	136,050
K	Academic/Admin	105,850
L	Student Union Expansion	85,000
M	Academic/Admin	94,360
N	Academic/Admin	116,250
O	Academic/Admin	104,020
2	Student Housing 1	56,240
2	Student Housing 2	27,180
2	Student Housing 3	102,828
2	Student Housing 4	63,656
2	Student Housing 5	64,952
	New Science Building	85,000
TOTAL		1,612,926

TABLE 2. CORE CAMPUS - POTENTIAL BUILDINGS

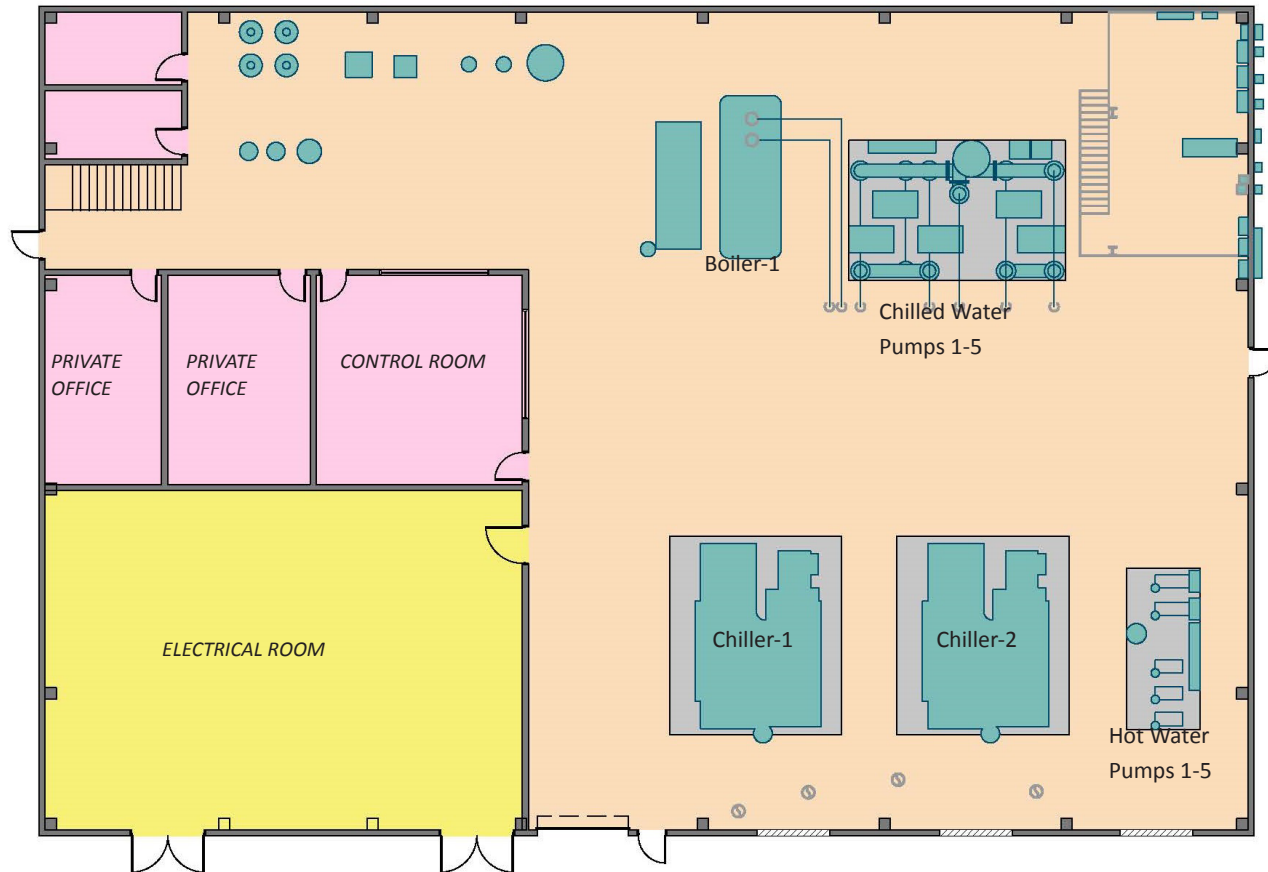


FIGURE 3. EXISTING CENTRAL PLANT LAYOUT

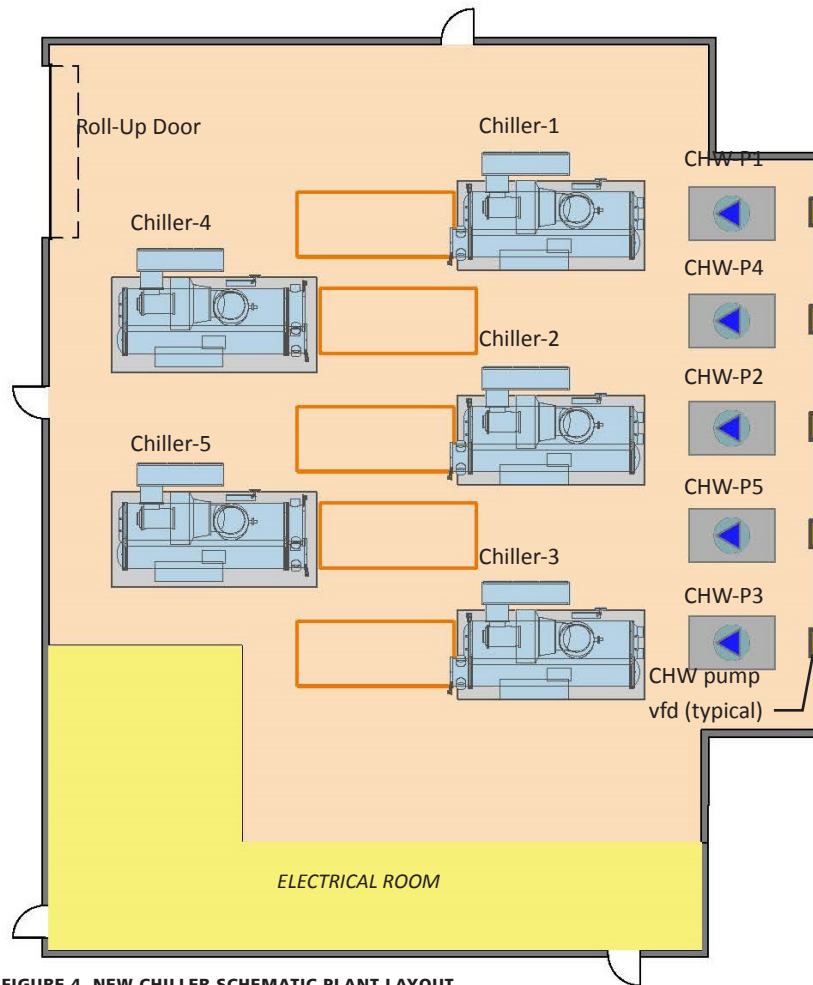


FIGURE 4. NEW CHILLER SCHEMATIC PLANT LAYOUT

D. MEETING LONG TERM COOLING LOADS WITHIN THE CORE CAMPUS

Assuming that the campus secures funding for the conversion of the central plant from the present absorption based cooling system to the electric cooling system, here is one potential scenario for accommodating the 4,400 Tons of long term cooling demand.

1. Provide a new electric chiller plant building inside the existing plant yard (Figure 3). This electric chiller plant building will have eventually FIVE, 800 Ton high efficiency electric chillers. FOUR of these make up a total capacity of 3,200 Tons and one of the chillers will be a redundant chiller.
2. The existing chilled water primary pumps would become obsolete as new electric chillers and associated new primary pumps are installed. In their place, an additional chilled water distribution pump of comparable capacity (e.g., 2,500 GPM, 150 ft. head) would be added to provide the needed redundancy in chilled water distribution capacity.
3. An additional cooling tower cell would be added to bring the total cooling tower capacity to 3,200 Tons of electric chillers.
4. An additional condenser water pump would be added to provide required redundancy as the electric chiller plant is fully built out
5. To help avoid high demand charges associated with the electric chiller plant, add a Thermal Energy Storage Chilled water tank that is approximately 60 ft.in diameter and 96 ft. tall, to provide up to 24,000 Ton Hours of cooling. Such a tank would therefore provide approximately 4,000 Tons of cooling for 6-hours.
6. The existing absorption chillers in the central plant would be removed. Space cleared would be used for providing any needed space for additional boilers required for meeting future heating loads.
7. As campus needs an additional 1,200 Tons of capacity (to reach up to the 4,400 Tons stated in paragraph C. above), consider satellite plant(s) that are interconnected to the central chilled water distribution piping. Figure 5 shows possible locations of satellite plants. Options include a Satellite Plant for the Housing area (SP1), a satellite plant for the North west portion development of the core campus (SP2), and a possible location (SP3) in vicinity of the proposed Recreation center building. Any two of these satellite plant locations could be used to provide the needed incremental capacity of approximately 1,200 Tons.
8. Typically, the satellite plants could consist of either air cooled chillers (for example, 2, 300 Ton air cooled chiller at each satellite plant location) or water cooled chillers and a cooling tower at each location. Choice of actual configuration would be developed based on noise, space

availability, etc. at each applicable location. The satellite plant with a capacity of 600 Tons would need an approximate footprint of 30' x 50'.

9. Also shown in Figure 5 are piping upgrades required to distribute chilled water to the core campus buildings.

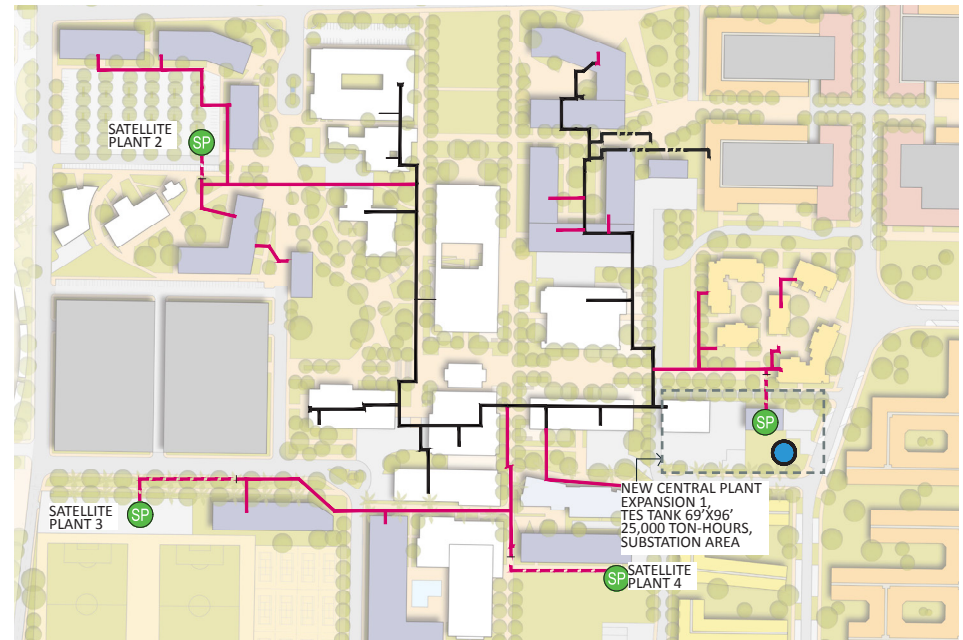
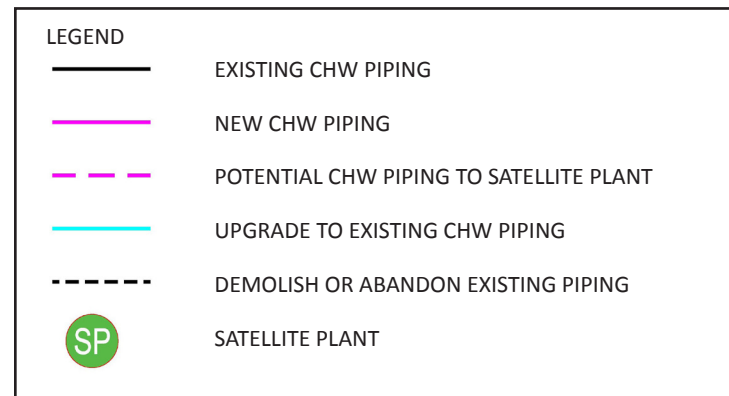


FIGURE 5. NEW CHW DISTRIBUTION AND POSSIBLE SP LOCATIONS



PART B: LDP AREA COOLING INFRASTRUCTURE

A. LOAD GROWTH ASSOCIATED WITH MASTER PLAN

Table 3 summarizes the potential private/public partnership buildings being considered for development as part of the Master Plan in the LDP area. The types of development include 1.9 million GSF of parking structures, 2.6 million GSF of multi-family residential units, 96,085 GSF of retail areas, 536,264 GSF of apartments and 572,400 GSF of business park buildings. Figure 6 shows the LDP buildings. The combined long term cooling loads associated with this development is estimated at approximately 5,550 Tons.

B. MEETING LONG TERM COOLING LOADS WITHIN THE LDP AREA

Since there is very little certainty on how and when these buildings will be developed through private investment, it would be difficult for a prospective developer to sink in funds for developing a single central plant and chilled water distribution system that would be capable of handling the entire long term loads expected in the LDP area. Distributing up to 5,550 Tons could entail a 24" pipe at the central plant. Depending on how these buildings are phased, it is conceivable that three different central plants or satellite plants could be developed. For instance, the entire region can be grouped into three zones (North, Center and South) or grouped by type of buildings that would be developed. When the plant capacity is only 2,000 Tons for instance for a localized plant, the pipe size requirement for distribution reduces to 14".

A more realistic possibility is that each building could be developed on its own, with an in-building chiller that is capable of being tied to a potential common loop that would serve future adjacent buildings within that zone. This strategy provides the opportunity for a prospective building developers to have minimal overheads associated with the initial development cost. Flexibility would be retained to tie the chiller(s) in any building to chiller(s) in the next building that would be developed. Pathways for chilled water piping connecting the buildings could be left clear for the construction of future piping connections. The mechanical rooms and chiller rooms would be strategically situated in each building so that the overheads associated with future piping interconnections are minimized.

The upside of the distributed chiller concept is that risk for a developer would be minimized since substantial investment with cooling infrastructure would not burden any single building. The downside is that long term maintenance cost would be greater in comparison with a central chiller plant.

Either the distributed chiller option or the central plant(s) option can be designed with thermal energy storage as a component in the overall design. The type of thermal storage system that would be cost effective would vary and the pumping schemes would vary depending on which of the cooling infrastructure option is pursued.

	Parking	Multi-Family	Retail	Apartments	Business Park and Misc	TOTAL
GSF	1,853,040	2,560,642	96,085	536,264	572,400	5,618,431
GSF/Ton (Load)	0	750	350	750	500	
Tons	0	3,414	275	715	1,145	5,549

TABLE 3. LDP AREA COOLING LOAD ESTIMATES

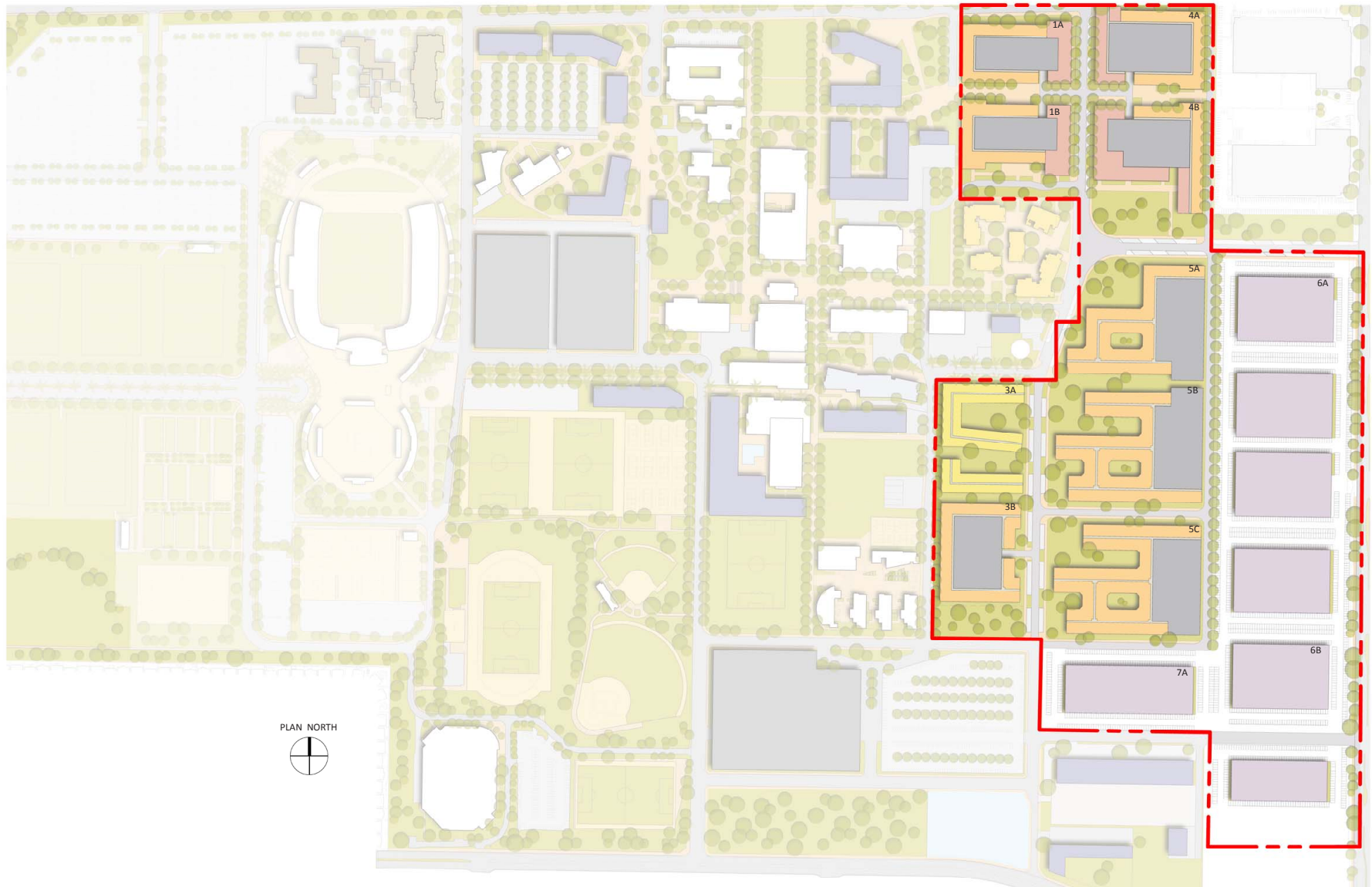


FIGURE 6. LDP BUILDINGS

CAMPUS HHW SYSTEM

HOT WATER INFRASTRUCTURE HIGHLIGHTS

PART-A: CORE CAMPUS

Core Area: 1.7 million GSF

Long Term Central Heating: 15 MMBTUH

Future Distributed In-Building Boiler Capacity: 38 MMBTUH

Strategy: Do not expand the central heating distribution system. Provide all future buildings with in-buildings boilers.

CORE CAMPUS BUILDINGS LIST

- A Academic
- B Admin
- C Black Box Theatre
- D Academic
- E Rec Center
- I Incubator
- J Academic
- K Academic
- L Student Union Expansion
- M Academic
- N Academic
- O Academic
- P Central Plant Expansion
- Q Satellite Central Plant
- R Facilities Services Complex
- V Child Care
- W Fab Lab Garage
- 2A,B Residency Halls

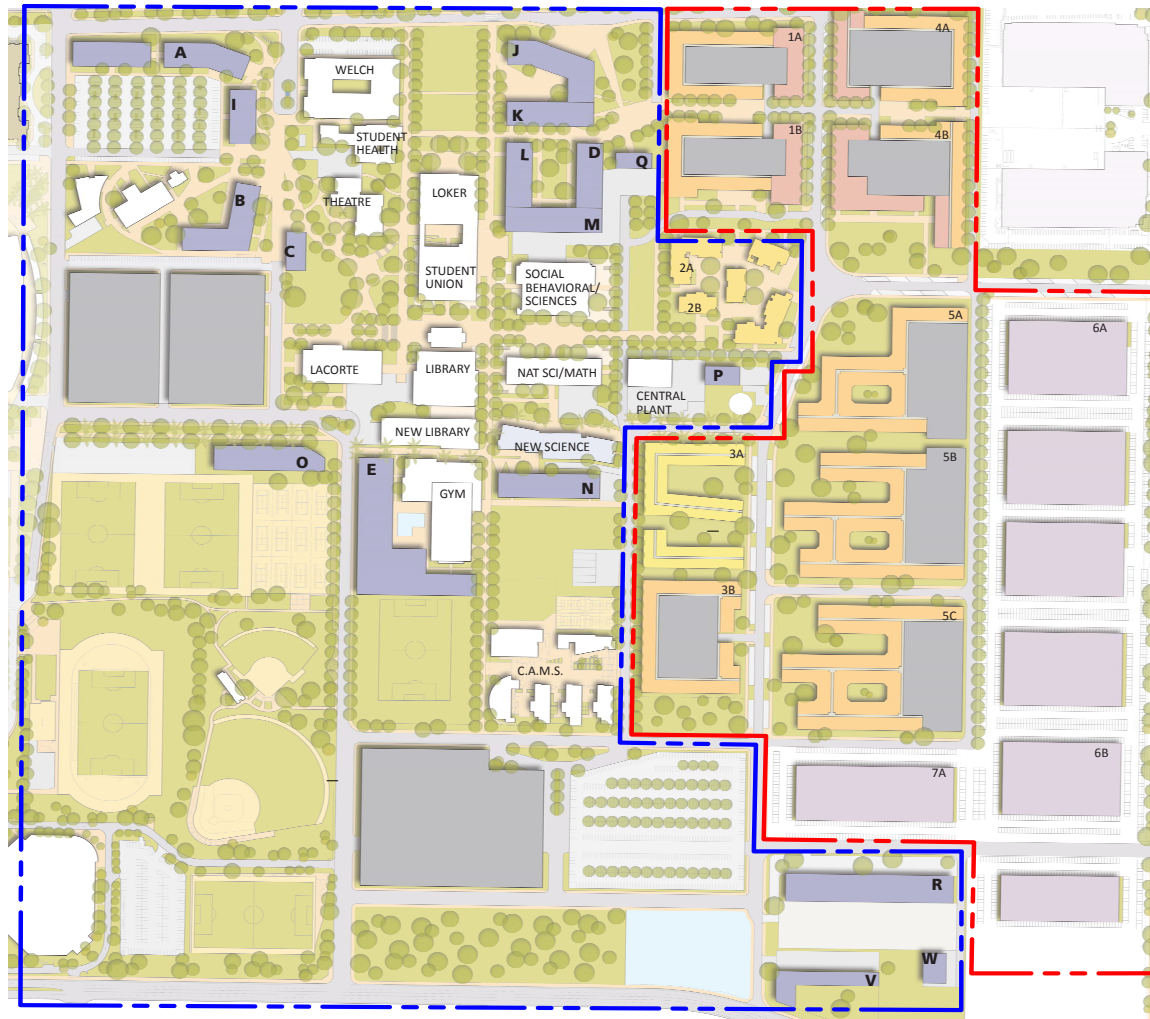
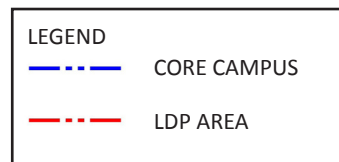


FIGURE 1. HIGHLIGHTS OF CAMPUS MASTER PLAN HEATING INFRASTRUCTURE



PART-B: LDP

LDP Parking Area: 1.9 million GSF

LDP Building Area: 3.8 million GSF

Heating Capacity: 90 MMBTUH

Strategy: Provide in-building boilers for all buildings under LDP.

LDP LAND USE

- 1A Mixed Use
- 1B Mixed Use
- 3A Apartments
- 3B Apartments
- 4A Mixed Use
- 4B Mixed Use
- 5A Multi Family Rental
- 5B Multi Family Rental
- 5C Multi Family Rental
- 6A Business Park
- 6B Business Park
- 7A Business Park



PART A: CORE CAMPUS HEATING INFRASTRUCTURE

A. EXISTING SYSTEMS

The campus central plant has currently one, 12 MMBtuh output gas fired boiler for providing central hot water heating to approximately 875,000 GSF of core campus buildings (See Table-1). In addition, each of the two absorption chillers have the capability to provide an estimated 12 MMBtuh of heat, if called upon to supplement the boiler heating capacity.

The campus hot water distribution system consists of a non-loop system, with a 10" diameter supply header at the central plant (See Figure 1). The plant deploys two distribution pumps, each rated at 1,000 GPM to distribute hot water at around 180 deg. F to the core campus buildings. Generally, under present load conditions, only one pump operates at any time and one remains as a standby pump. Based on campus heating season experience, the heating demand has rarely been greater than 12 MMBtuh. It appears that the original intent was that the hot water heating system would operate at a temperature differential of 60 deg. F. However, during a majority of the time, the hot water temperature differential between supply and return remains under 30 deg. F. Therefore, the realistic maximum heating capacity of the existing infrastructure at the 1,000 GPM pumping rate of the secondary hot water pump is approximately 15 MMBtuh.

B. SYSTEM CHANGES UNDERWAY (JULY 2017)

The new Science center building will be connected to the existing heating hot water system. It is expected that with this building added to the loop, the heating load would jump to an estimated 15 MMBtuh. Currently, the combination of existing boiler and the absorption chiller-heaters can carry the load. However, if these absorption chillers were to be removed from service, campus will need to provide new small boilers to meet the peak heating load of 15 MMBtu for the existing loop, with the Science building added.

Bld. ID	Building Name	GSF	HHW MBH Served	To Remain/To Be Deleted
20	(LIB) LEO F. CAIN LIBRARY	152,006	3,480	Remains
20A	(LIB) LIBRARY ADDITION	139,569	1,057	Remains
23	(WH) JAMES L. WELCH HALL	179,952	3,547	Remains
25	(SHC) STUDENT HEALTH CENTER	20,046	790	Remains
26	(LSU) LOKER STUDENT UNION	123,033	7,347	Remains
30	(SBS) SOCIAL AND BEHAVIORAL SCIENCES	81,000	2,194	Remains
40	(LCH) LACORTE HALL	70,331	3,193	Remains
45	(UT) UNIVERSITY THEATRE	25,201	1,194	Remains
50	(NSM) NATURAL SCIENCES AND MATH	84,450	3,949	Remains
60	(GYM) GYMNASIUM	65,752	10,335	Remains
TOTAL		941,340		

TABLE 1. EXISTING BUILDINGS SERVED BY HHW PIPING

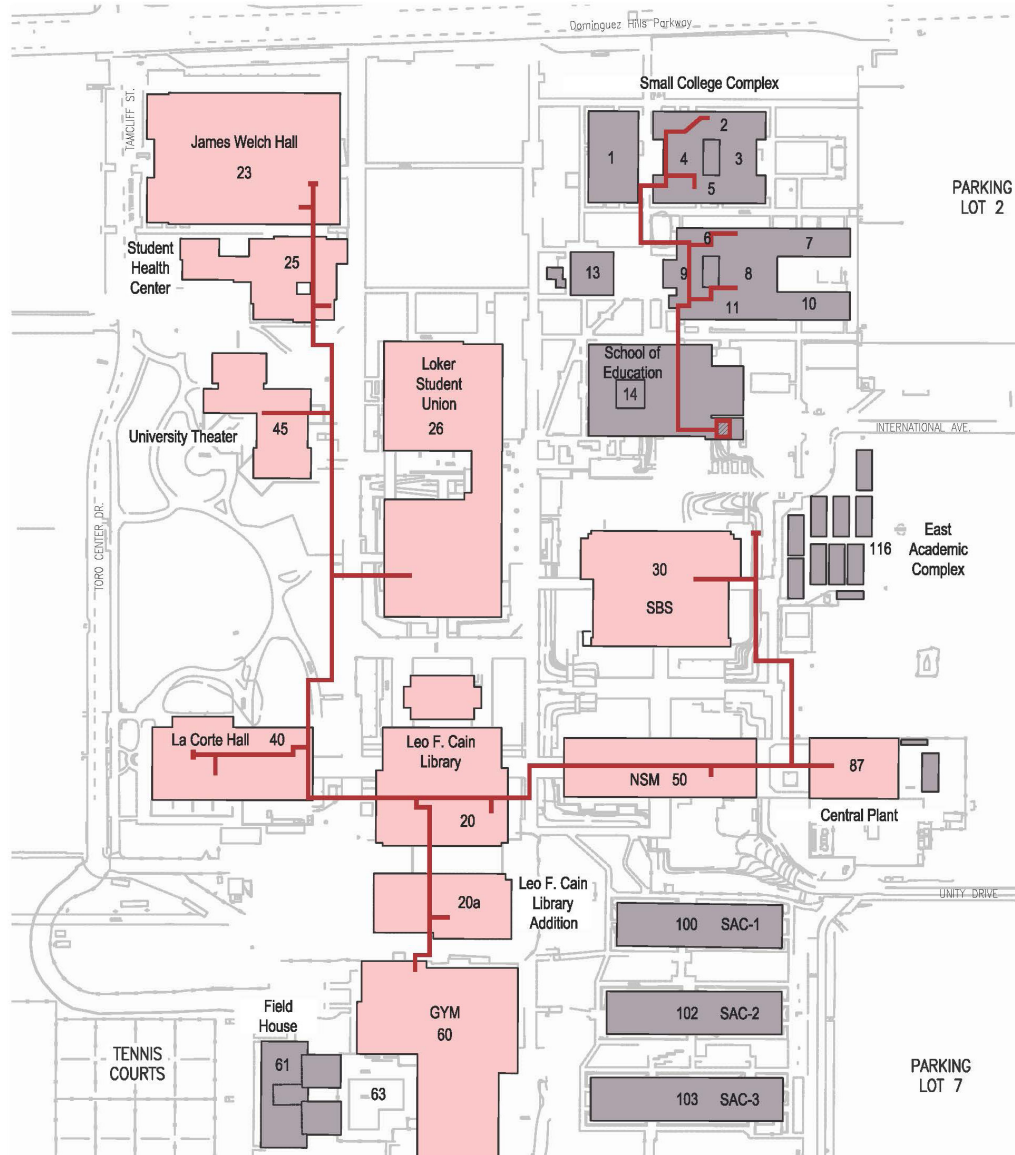


FIGURE 2. EXISTING HHW PIPING

C. LOAD GROWTH ASSOCIATED WITH MASTER PLAN

Table 2 summarizes the potential core campus buildings being considered for development as part of the Master Plan. The listed core campus area buildings are within reasonable reach of the existing central plant.

Based on addition of about 1.7 million GSF of buildings per Table 2 in the core campus, the long term additional heating loads that need to be met by the campus heating infrastructure is estimated at 35 MMBtuh. Of this, the housing complex is expected to be approximately 9 MMBtu and the rest of the new core campus buildings would be approximately 26 MMBtuh. For planning purposes, these estimates use a heating index of 25 Btuh/SFT for housing and 20 Btuh/SFT for rest of the new buildings. The higher index for housing is to accommodate the higher domestic hot water needs due to shower water and dining facility needs.

D. MEETING LONG TERM HEATING LOADS WITHIN THE CORE CAMPUS

Since hot water heating systems entail much more thermal losses in comparison with chilled water distribution systems (primarily due to large temperature differential between ambient and fluid temperature), it would be prudent for the campus to consider a more distributed form of heating system over the long term for planning purposes. With the availability of more efficient condensing boilers that operate at 90% plus efficiency as opposed to the present 75-80% efficiency of central boilers, locating heating capacity in future buildings right within the building helps eliminate distribution losses associated with direct buried piping. Numerous institutions have continually experienced losses and leaks in direct buried hot water distribution system piping and the distributed boiler strategy will also assist in reducing long term maintenance costs associated with hot water piping infrastructure.

Based on the above, this plan does not recommend making significant expansion efforts on the central heating system infrastructure. However, to make the existing system(s) more efficient, the following long term changes are recommended.

1. Replace the existing large 12 MMBtuh boiler with smaller modular boilers, with condensing capability that could be used at least during low load periods.
2. As the old chillers are removed and new electric chillers are provided, provide an addi-

Building ID	Building Name	GSF
A	Academic	158,572
B	Admin	131,800
C	Black Box Theatre	7,640
D	Academic	68,000
E	Rec Center	148,400
I	Incubator	57,128
J	Academic	136,050
K	Academic/Admin	105,850
L	Student Union Expansion	85,000
M	Academic/Admin	94,360
N	Academic/Admin	116,250
O	Academic/Admin	104,020
2	Student Housing 1	56,240
2	Student Housing 2	27,180
2	Student Housing 3	102,828
2	Student Housing 4	63,656
2	Student Housing 5	64,952
	New Science Building	85,000
TOTAL		1,612,926

TABLE 2. CORE CAMPUS - POTENTIAL BUILDINGS

tional capacity in heating for achieving a minimum level of redundancy. The long term configuration could consist of six, 3 MMBtu (input) boilers. Three each could be mounted on each pad currently occupied by the chillers. This will handle existing core campus loads and the proposed new Science building.

3. All new core area buildings would have their own boilers. The combined installed capacity of these boilers is expected to be approximately 32 MMBtuh.

Figure 3 shows the scheme for locating modular condensing boilers within the existing central plant. Figure 4 shows the new hot water piping schematic to the new science center building.

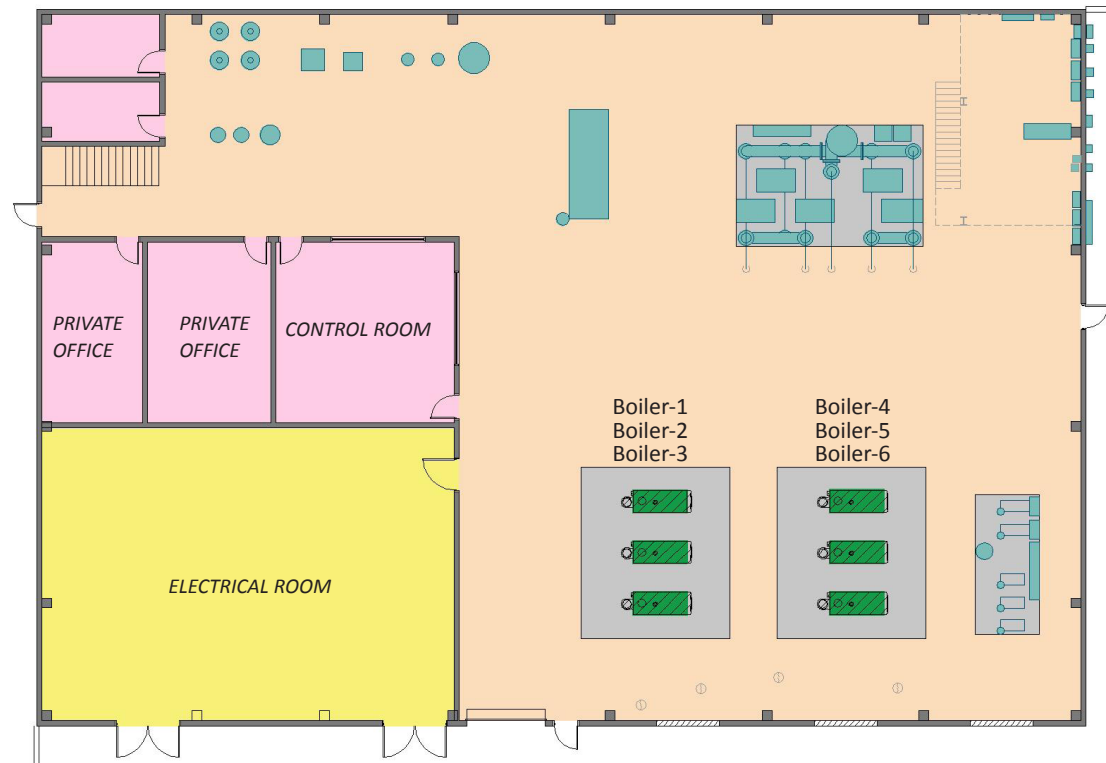


FIGURE 3. BOILER LAYOUT AT CENTRAL PLANT

PART B: LDP AREA HEATING INFRASTRUCTURE

A. LOAD GROWTH ASSOCIATED WITH MASTER PLAN

Table 3 summarizes the potential private/public partnership buildings being considered for development as part of the Master Plan in the LDP area. The types of development include 1.9 million GSF of parking structures, 2.6 million GSF of multi-family residential units, 96,085 GSF of retail areas, 536,264 GSF of apartments and 572,400 GSF of business park buildings. Figure 5 shows the LDP buildings. The combined long term heating loads associated with this development is estimated at approximately 90 MMBtuh.

B. MEETING LONG TERM HEATING LOADS WITHIN THE LDP AREA

Since there is very little certainty on how and when these buildings will be developed through private investment, it would be difficult for a prospective developer to sink in funds for developing a single central plant and hot water distribution system that would be capable of handling the entire long term loads expected in the LDP area. Additionally, it is better to avoid distribution losses in its entirety by placing in-building boilers in each building or each building cluster. Therefore, this plan envisions that each building or groups of buildings within close proximity to each other would have their in-building boilers. The boilers would be typically on the building roof and each building would have its own hydronic distribution pumps to circulate heating hot water through the various heating coils. Roof location for boilers makes it less complex to build flue. Ideally, each building would accommodate a small penthouse for mechanical systems which would include boiler(s) for meeting hot water heating needs.

Based on a combined building development plan of an estimated 3.8 Million GSF (excluding parking structures which do not require any heating), the combined heating capacity in in-building boilers would be approximately 90 MMBtuh.

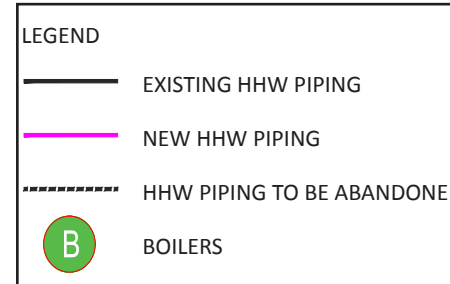
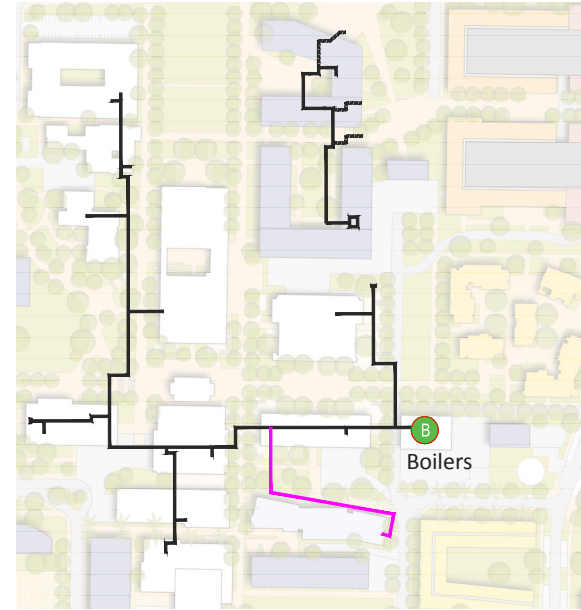


FIGURE 4. HHW PIPING LAYOUT

	Parking	Multi-Family	Retail	Apartments	Business Park and Misc	TOTAL
GSF	1,853,040	2,560,642	96,085	536,264	572,400	5,618,431
BTU/GSF (Load)	0	25	15	25	20	
MMBtuh - Gas Input	0	64	1	13	11	90

TABLE 3. LDP AREA HEATING LOAD ESTIMATES

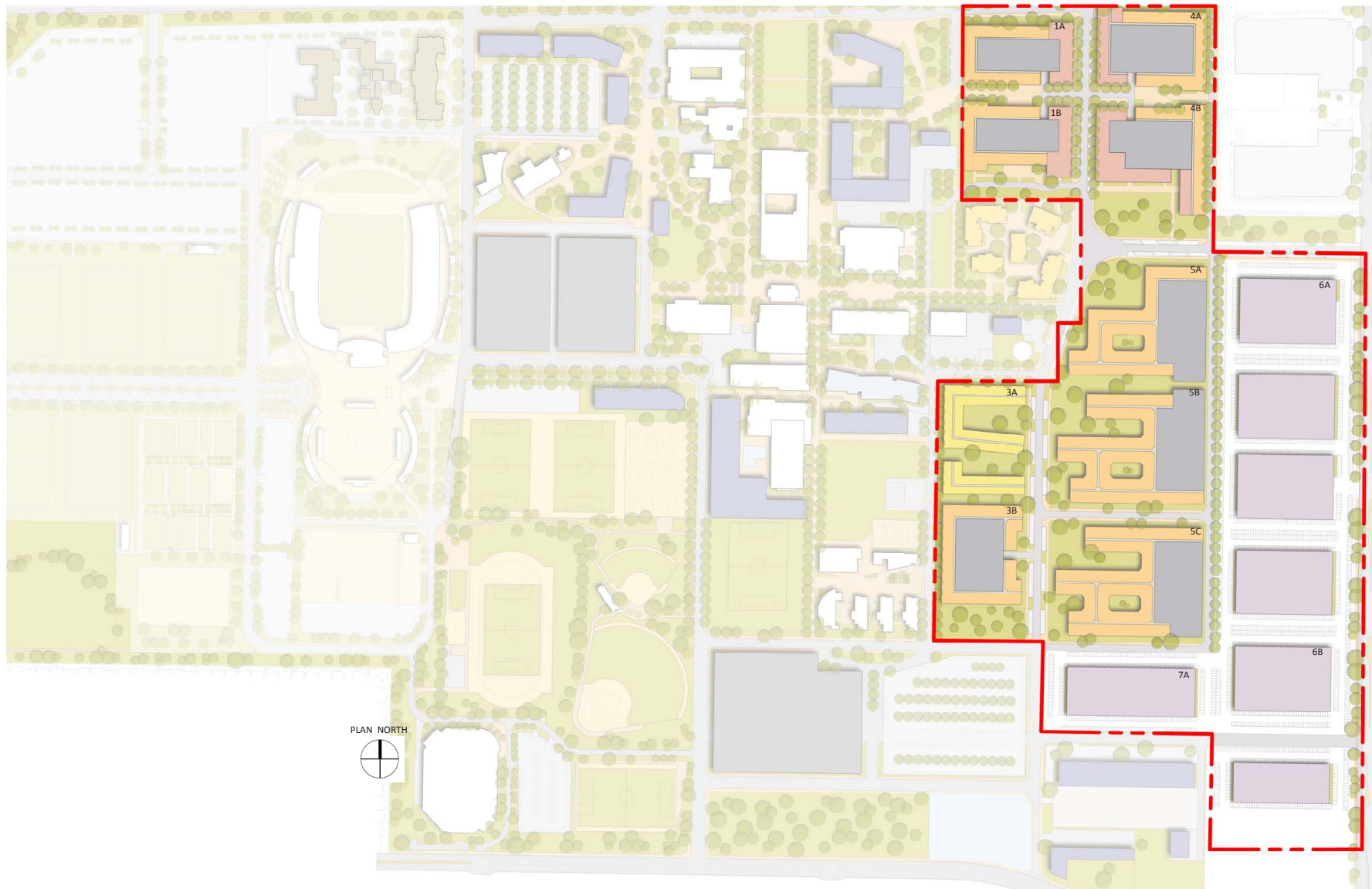


FIGURE 5. LDP BUILDINGS

CAMPUS NATURAL GAS SYSTEM

NATURAL GAS INFRASTRUCTURE HIGHLIGHTS

PART-A: CORE CAMPUS

Core Area: 1.7 million GSF

Long Term Gas Heating: 54 MMBTUH
 (Existing buildings and proposed core campus)

Strategy: Provide new 4" gas line from Central Avenue to the Central Plant. Pickup the north side new core campus buildings from the two 2" SCG lines at Victoria Street.

CORE CAMPUS BUILDINGS LIST

A	Academic
B	Admin
C	Black Box Theatre
D	Academic
E	Rec Center
I	Incubator
J	Academic
K	Academic
L	Student Union Expansion
M	Academic
N	Academic
O	Academic
P	Central Plant Expansion
Q	Satellite Central Plant
R	Facilities Services Complex
V	Child Care
W	Fab Lab Garage
2A,B	Residency Halls

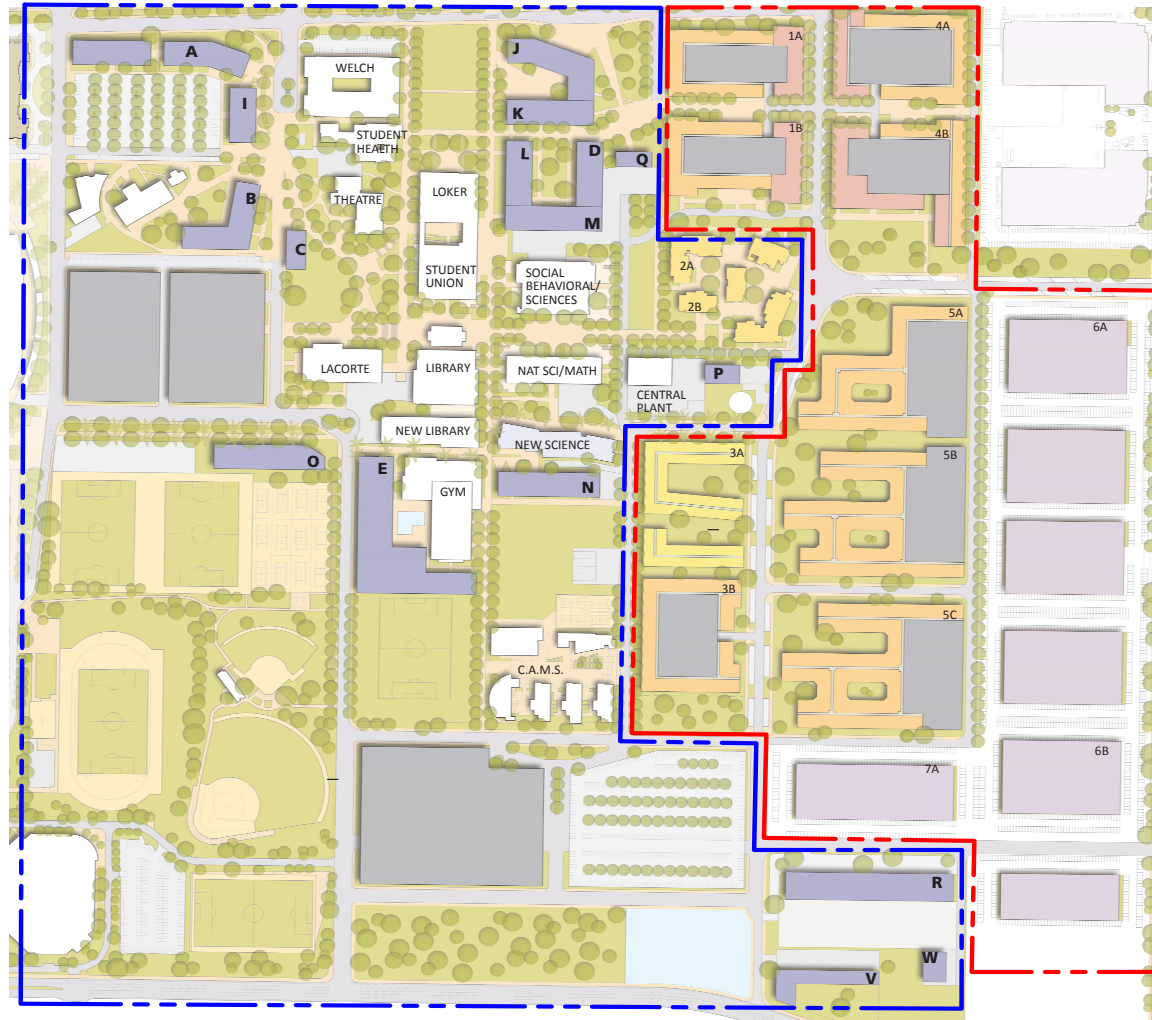
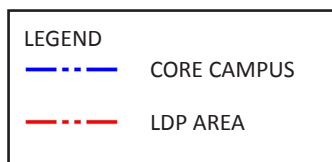


FIGURE 1. HIGHLIGHTS OF CAMPUS MASTER PLAN NATURAL GAS INFRASTRUCTURE



PART-B: LDP

LDP Parking Area: 1.9 million GSF

LDP Building Area: 3.8 million GSF

Long Term Gas Heating: 90 MMBTUH

Strategy: In three-phase development scenario, add three new SCG gas lines from Central Avenue. Lines will be 3" operating at 60 psg. Each line capable of supporting one third of the long term demand of 90 MMBTUH.

LDP LAND USE

1A	Mixed Use
1B	Mixed Use
3A	Apartments ¹
3B	Apartments
4A	Mixed Use
4B	Mixed Use
5A	Multi Family Rental
5B	Multi Family Rental
5C	Multi Family Rental
6A	Business Park
6B	Business Park
7A	Business Park

¹ Parcel 3A is included in analyses of the Land Development Project (LDP) area but it is recognized that the student apartment uses envisioned for that area may be developed by CSUDH and later become part of the campus.

PART A: CORE CAMPUS NATURAL GAS INFRASTRUCTURE

A. EXISTING SYSTEMS

The CSU Dominguez Hills campus has over 15,000 lineal feet of natural gas distribution piping underground and in the tunnel system. This piping can be grouped into the following three categories:

- 1) Southern California Gas Piping (9,500 feet)
- 2) CSU Piping Underground (2,800 feet)
- 3) CSU Piping in Tunnels (2,700 feet)

Southern California Gas (SCG) has main gas lines entering the campus at five different locations. SCG owns and is responsible for the piping up to the meter. Table 1 summarizes the areas served by each SCG main line entrance and respective campus area served. Figure 2 presents a schematic of the existing natural gas infrastructure.

A large part of the natural gas demand for the core campus is attributed to the campus' central heating hot water and chilled water system. For heating hot water, the plant currently has one, 12 MMBtuh output gas fired boiler. For chilled water, the plant has two 1,000 Ton gas-fired absorption chillers. If needed, the absorption chillers are also capable of providing heating hot water to supplement boiler heating capacity.

Main Gas Service Location	Campus Area Served	Meter Location
Victoria Street (1 of 3)	1) Extended Education (Bldg 106)	Building 106
Victoria Street (2 of 3)	1) School of Education (Bldg 14) 2) Small College Complex (Bldgs 1-11, 13)	Building 14
Victoria Street (3 of 3)	1) Student Housing SH-1 (Bldg 70)	Meter at Each Building
Central Avenue	1) Student Housing SH-2 (Bldg 71)	Meter at Each Building
	2) Central Plant (Building 87) & Remaining Campus Bldgs *	Central Plant
	3) South Academic Complex 1, 2, 3 (Bldgs 100, 102, 103, 104)	Building 100
	4) California Academy of Math and Science (Bldg 107)	Building 107
University Drive	1) Physical Plant (Building 80)	At Physical Plant

* Gas from the central plant serves the remaining buildings on campus through the tunnel.

TABLE 1. EXISTING SCG GAS LINES AND AREAS SERVED

B. SYSTEM CHANGES UNDERWAY (JULY 2017)

There are presently no known changes planned or in the works for the natural gas infrastructure.

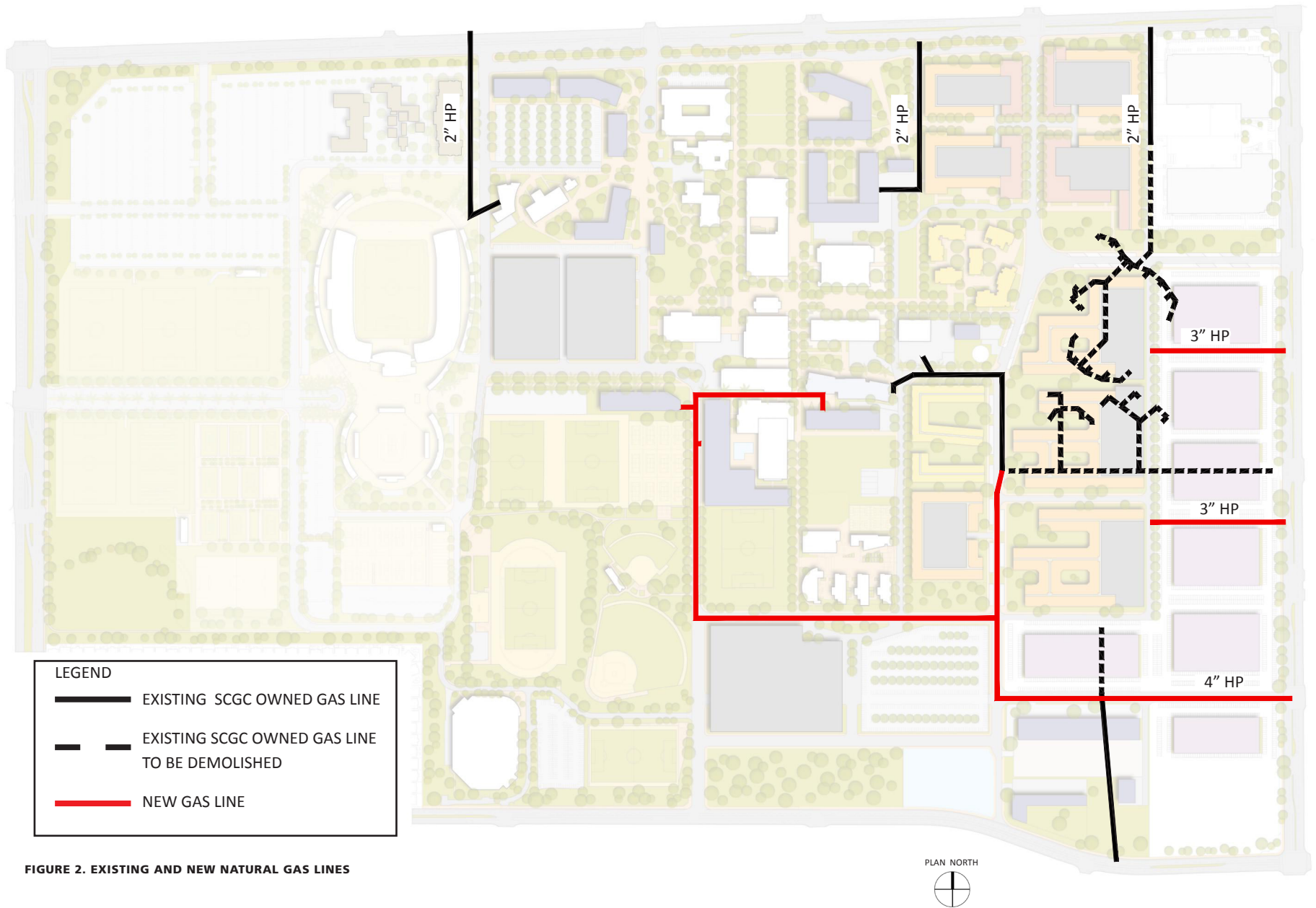


FIGURE 2. EXISTING AND NEW NATURAL GAS LINES

C. LOAD GROWTH ASSOCIATED WITH MASTER PLAN

Table 2 summarizes all the potential core campus buildings being considered for development as part of the Master Plan.

As was outlined in the heating infrastructure section, all new buildings considered for development in the Master Plan are proposed to have in-building natural gas fired boilers to meet their heating needs. Aside from the New Science Building which is presently in construction, none of the new buildings will be tied to the central plant HHW loop.

Based on addition of about 1.7 million GSF of buildings per Table 2, the long term additional gas heating loads that need to be met by the natural gas infrastructure is estimated at 38 MMBtuh. Of this, the housing complex is expected to be approximately 9 MMBtuh and the rest of the new core campus buildings would be approximately 29 MMBtuh. For planning purposes, these estimates use an index of 25 Btuh/SFT for housing and 20 Btuh/SFT for rest of the new buildings. The higher index for housing is to accommodate the higher domestic hot water needs due to shower water and dining facility needs.

D. MEETING LONG TERM NATURAL GAS NEEDS WITHIN THE CORE CAMPUS

The existing Core Area gas heating peak is estimated as 16 MMBtuh. With addition of 38 MMBtuh for the new Core Area heating needs, the total long term Core Area gas peak is estimated as 54 MMBtuh.

Note that the existing absorption chillers are proposed to be replaced with new electric chillers in the future. This will ultimately reduce the required natural gas capacity of the campus.

Since all new buildings in the Master Plan are proposed to have in-building boilers, new natural gas lines will be need to be routed to each. Figure 2 shows the proposed natural gas infrastructure system with natural gas lines to each new building. The figure also shows the gas lines to be demolished and rerouted because of obstructions in the proposed building locations.

The majority of new core campus buildings can likely be picked up by the two 2" SCG gas lines at Victoria Street. For each new building that is tied in to an existing gas line, careful consideration gas pressures, pipe size, and expected losses needs to be taken. Campus will need SCG approval for all gas modifications.

One important item of note is that the existing SCG gas line at Central Avenue will need to be demolished and relocated when the LDP area buildings are developed. Because this

Building ID	Building Name	GSF
A	Academic	158,572
B	Admin	131,800
C	Black Box Theatre	7,640
D	Academic	68,000
E	Rec Center	148,400
I	Incubator	57,128
J	Academic	136,050
K	Academic/Admin	105,850
L	Student Union Expansion	85,000
M	Academic/Admin	94,360
N	Academic/Admin	116,250
O	Academic/Admin	104,020
2	Student Housing 1	56,240
2	Student Housing 2	27,180
2	Student Housing 3	102,828
2	Student Housing 4	63,656
2	Student Housing 5	64,952
P	Central Plant Expansion	12,000
Q	Satellite Central Plant	5,500
R	Facilities Services Complex	46,895
V	Child Care	17,966
W	Fab Lab Garage	6,916
	New Science Building	85,000
TOTAL		1,702,203

TABLE 2. CORE CAMPUS - ALL CORE CAMPUS BUILDINGS

line is critical and presently serves heating and cooling needs of the campus, demolition of the existing line will only occur after a new line is installed and ready to serve present loads.

A 4" line carrying 60 SIG gas will have a pressure drop of less than 10% when 54 MMBtuh of long term gas has to be transported over approximately 3000 feet. This length corresponds to a new line that SCG will need to bring to the Central Plant location. Such a line would be sufficient for meeting long term core campus needs.

PART B: LDP AREA NATURAL GAS INFRASTRUCTURE

A. LOAD GROWTH ASSOCIATED WITH MASTER PLAN

Table 3 summarizes the potential private/public partnership buildings being considered for development as part of the Master Plan in the LDP area. The types of development include 1.9 million GSF of parking structures, 2.6 million GSF of multi-family residential units, 96,085 GSF of retail areas, 536,264 GSF of apartments and 572,400 GSF of business park buildings. Figure 3 shows the LDP buildings.

The long term additional gas heating loads that need to be met by the natural gas infrastructure is estimated at 90 MMBtuh. For planning purposes, these estimates use an index of 25 Btuh/SFT for multi-family residential units and apartments, 20 Btuh/SFT for business park buildings, and 15 Btuh/SFT for retail buildings.

B. MEETING LONG TERM NATURAL GAS NEEDS WITHIN THE LDP AREA

A vast majority of the existing gas piping serving the east end of the campus (i.e., mainly housing buildings) will need to be demolished to accommodate the proposed new LDP area development. Existing gas lines to this area feed from Victoria Street, Central Avenue, and

University Drive.

The LDP development entails a long term load of approximately 90 MMBtuh. A 3,000 ft. long line carrying gas in a 6” pipe will be able to deliver the same to a common metering point if that option is ever pursued. More likely, SCG would consider providing long term capacity in three phases. Each phase could represent a tap off their main line that runs North South along Central Avenue.

Each such phase could involve a 3” line operating at 60 psig. that can carry gas over approximately 2000 feet with less than 10% pressure drop. Each such line would be capable of supporting roughly a third of the long term demand of 90 MMBtuh.

Figure 2 presents the proposed three phase approach for new natural gas service lines to serve the LDP Area.

	Parking	Multi-Family	Retail	Apartments	Business Park and Misc	TOTAL
GSF	1,853,040	2,560,642	96,085	536,264	572,400	5,618,431
BTU/GSF (Load)	0	25	15	25	20	
MMBtuh - Gas Input	0	64	1	13	11	90

TABLE 3. LDP AREA NATURAL GAS NEED ESTIMATES

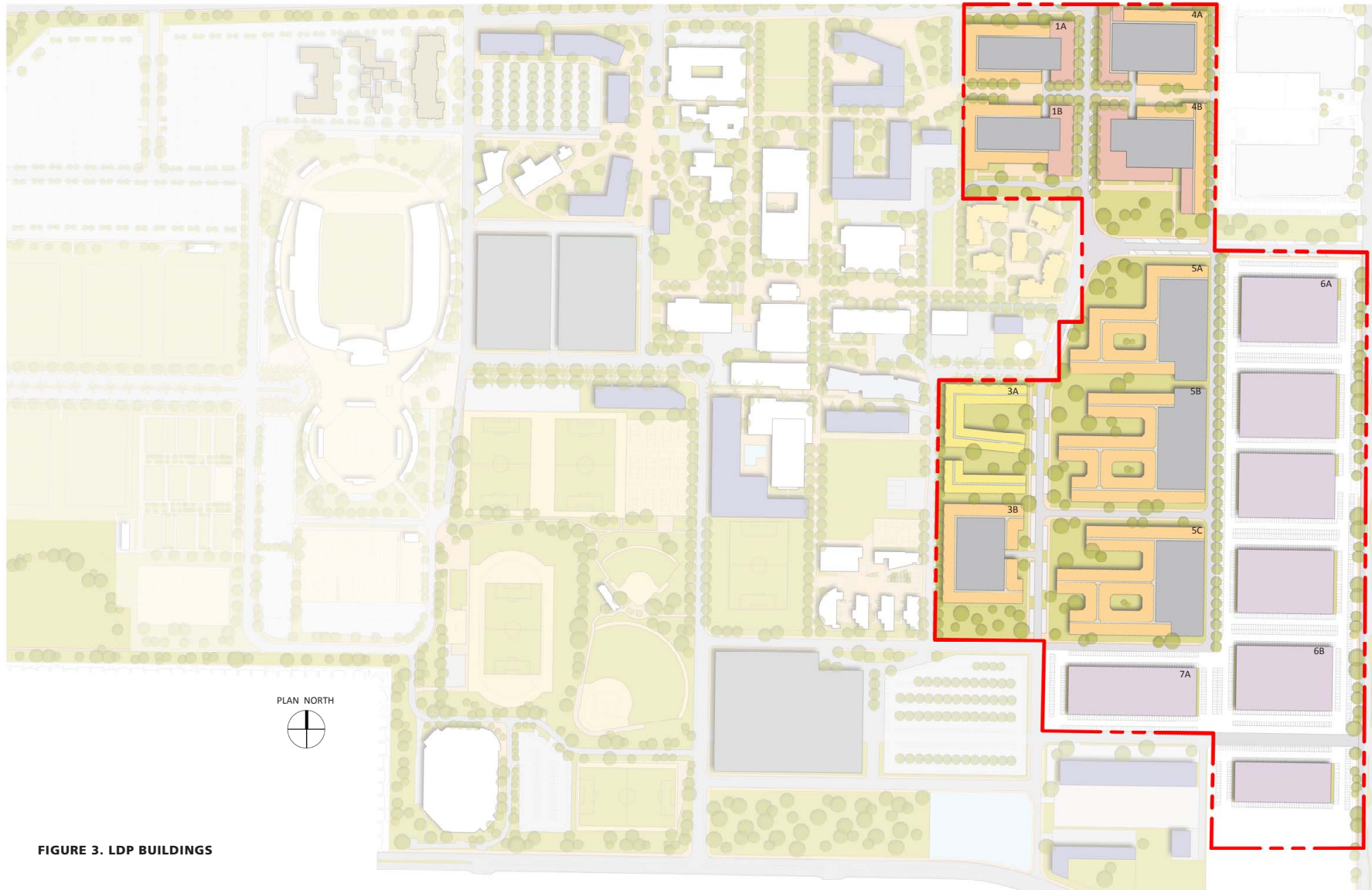


FIGURE 3. LDP BUILDINGS

PHOTOVOLTAIC CONCEPT

PHOTOVOLTAIC CONCEPT HIGHLIGHTS

PART-A: CORE CAMPUS

Core Area: 1.7 million GSF
 Long Term PV Capacity: 7.6 MW

CORE CAMPUS BUILDINGS LIST

- A Academic
- B Admin
- C Black Box Theatre
- D Academic
- E Rec Center
- I Incubator
- J Academic
- K Academic
- L Student Union Expansion
- M Academic
- N Academic
- O Academic
- P Central Plant Expansion
- Q Satellite Central Plant
- R Facilities Services Complex
- V Child Care
- W Fab Lab Garage
- 2A,B Residency Halls

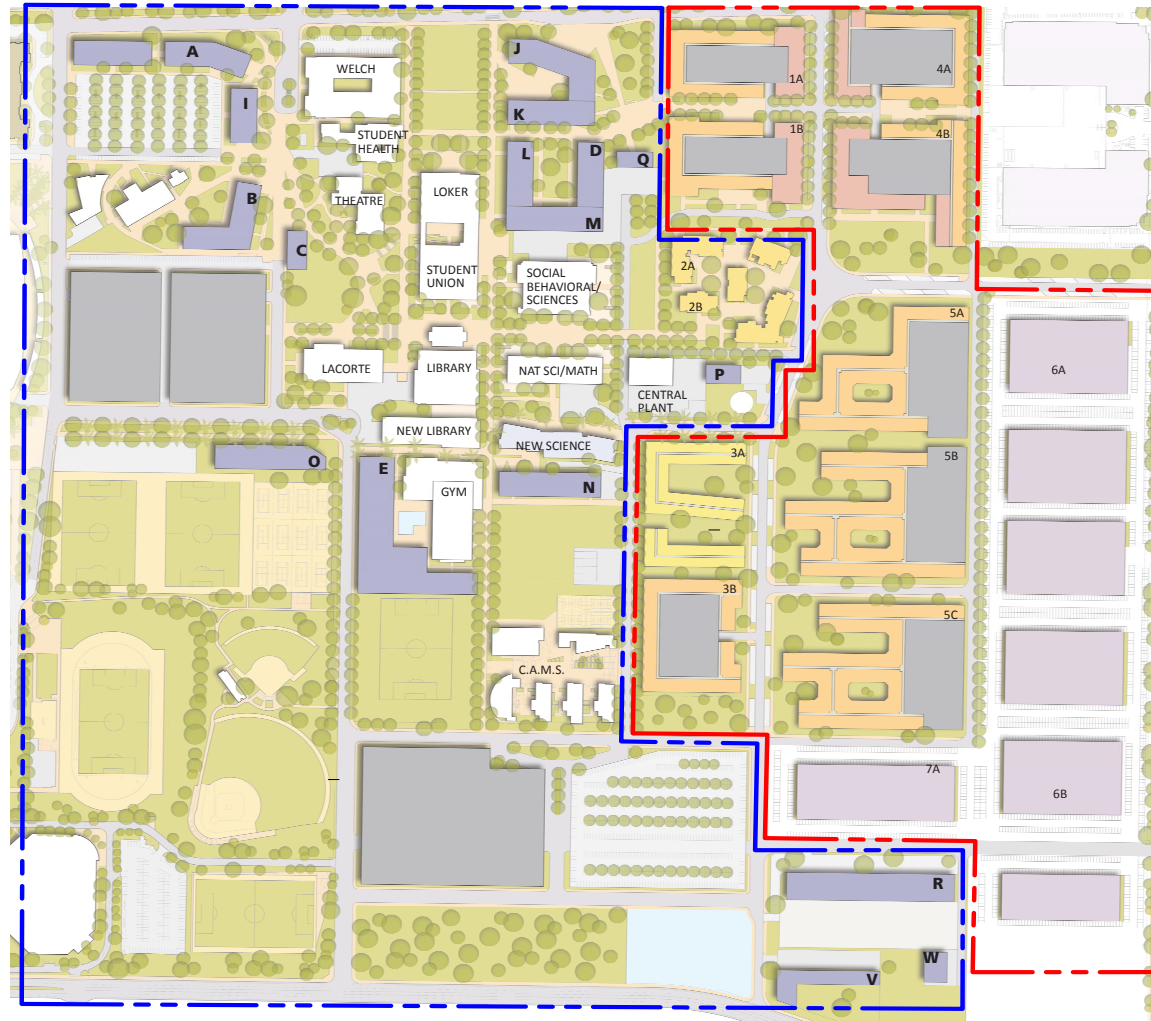
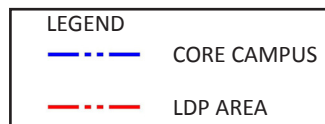


FIGURE 1. CORE CAMPUS AND LDP SEGREGATION



PART-B: LDP

LDP Parking Area: 1.9 million GSF
 LDP Building Area: 3.8 million GSF
 Projected PV Capacity: 9.9 MW

LDP LAND USE

- 1A Mixed Use
- 1B Mixed Use
- 3A Apartments¹
- 3B Apartments
- 4A Mixed Use
- 4B Mixed Use
- 5A Multi Family Rental
- 5B Multi Family Rental
- 5C Multi Family Rental
- 6A Business Park
- 6B Business Park
- 7A Business Park

¹ Parcel 3A is included in analyses of the Land Development Project (LDP) area but it is recognized that the student apartment uses envisioned for that area may be developed by CSUDH and later become part of the campus.

SUMMARY

Part A

Estimates for photovoltaic potential were determined for the core campus area based on layout of PV arrays, using the solar module Solarworld-350. Each array consists of anywhere between 120 and 4,980, in strings of twelve modules, with a combined circuit voltage of 576 Volts (DC). It is assumed that the overall installation will have distributed inverters on the roofs of the buildings and structures, with the AC output delivered to a common switchboard in the electrical room. The core campus area has a potential of 7.6 MW of PV. This is based on using a maximum of 40% roof area for buildings, and allowing the balance for access as well as potential HVAC equipment.

Part B

The LDP area photovoltaic potential is projected based on assuming 21 sq. ft. per installed PV module, for a maximum of 33% of total roof area for buildings and 48% roof area for parking structures, the average percent coverages on the core campus buildings.

The overall campus photovoltaic potential is summarized as 7.6 MW for the core campus, and 7.1 MW for the LDP building rooftops and 2.8 MW for the LDP parking structures, a total of 9.9 MW for the LDP.

PART A: CORE CAMPUS PHOTOVOLTAIC CONCEPT

A. SITE MAP AND LAYOUT SUMMARY

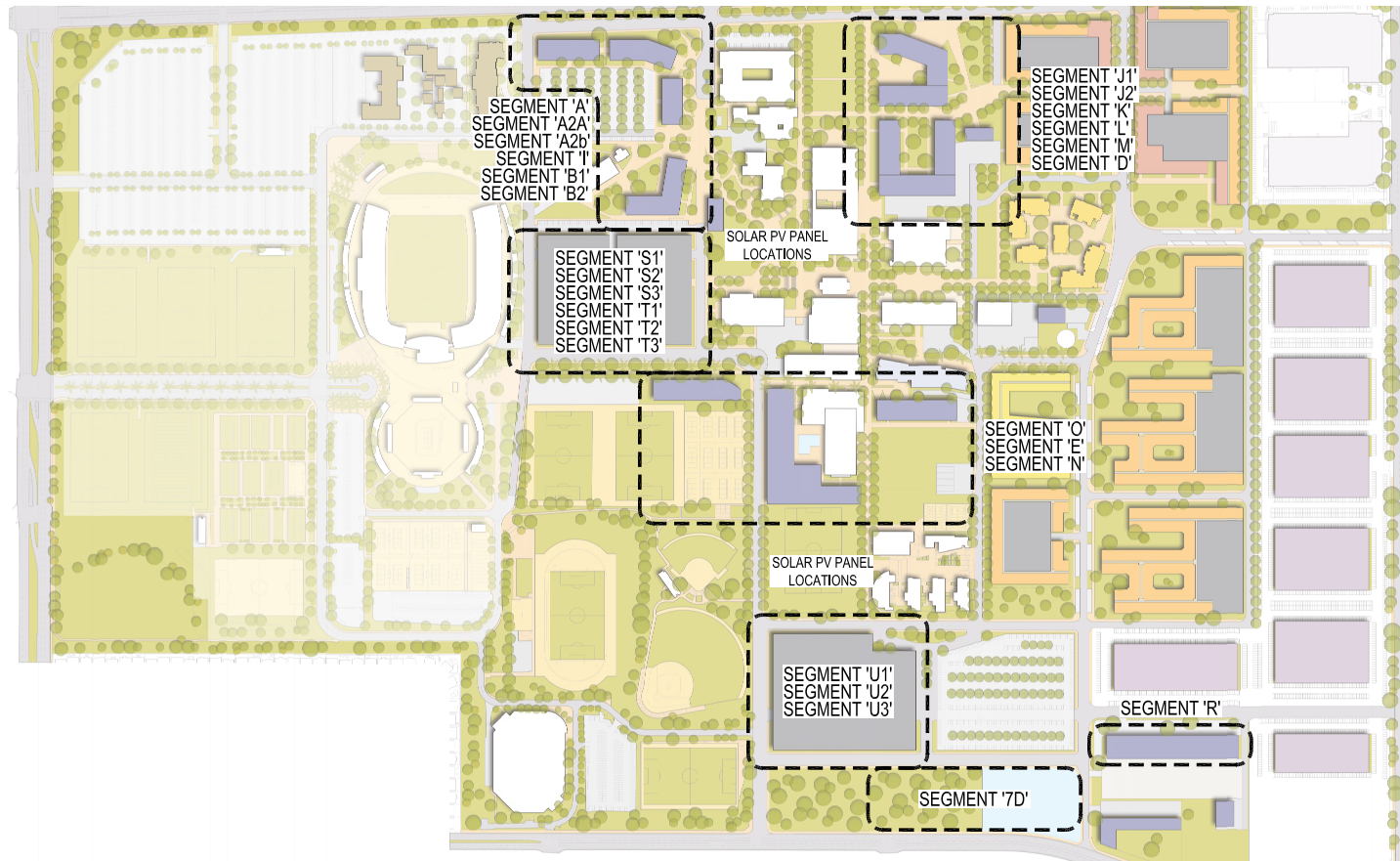


FIGURE 1: PRELIMINARY LAYOUT FOR PHOTOVOLTAIC SYSTEMS ON NEW BUILDINGS, PARKING STRUCTURES, AND LAND PARCEL.

B. PV PANEL SCHEDULE AND SUMMARY OF ROOF AREA

Building/Area	Plan ID	# of PV Modules	Total DC Capacity (kW)	Estimated AC Generation (kWh)	Total Roof Area (sq. ft.)	Total PV Area (sq. ft.)	Percent of Roof Space (%)	Total GSF (sq. ft.)
A WEST	A1	300	105	157,500	19,006	6,300	33%	198,215
A EAST	A2a	168	59	88,200	20,638	6,509	32%	
	A2b	144	50	75,600				
I	I	228	80	119,700	14,282	4,830	34%	71,410
B	B1	264	92	138,600	26,360	8,082	31%	105,440
	B2	120	42	63,000				
J	J1	120	42	63,000	22,262	6,090	27%	111,310
	J2	168	59	88,200				
K	K	348	122	182,700	19,915	7,349	37%	99,570
L, M, & D	L	300	105	157,500	59,591	21,418	36%	298,185
	M	420	147	220,500				
	D	300	105	157,500				
O	O	420	147	220,500	26,005	8,819	34%	130,025
E	E	1,428	500	749,700	75,575	30,028	40%	151,148
N	N	396	139	207,900	24,755	8,315	34%	123,770
S1	S1	2,160	756	1,134,000				
S2	S2	204	71	107,100				
S3	S3	204	71	107,100				
T1	T1	2,448	857	1,285,200				
T2	T2	204	71	107,100				
T3	T3	204	71	107,100				
U1	U1	4,908	1,718	2,576,700				
U2	U2	324	113	170,100				
U3	U3	264	92	138,600				
R	R	720	252	378,000	47,610	15,119	32%	47,000
7D	7D	4,980	1,743	2,614,500				
Total		21,744	7,610	11,415,600	355,998	122,859	35%	1,336,073

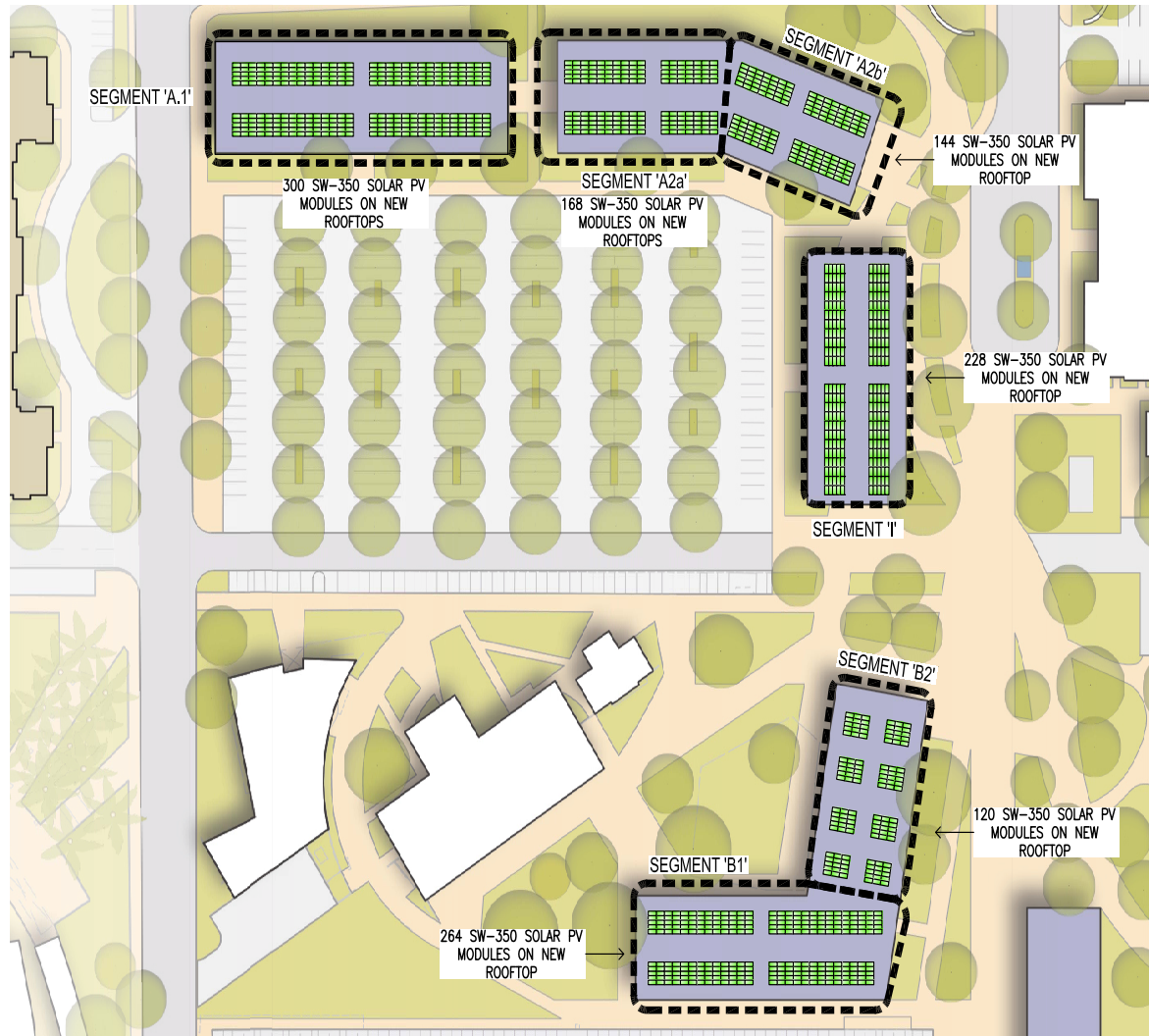
NOTES

1. The photovoltaic panel type and module used in this design is Solarworld monocrySTALLINE SW-350 with dimensions of 78.46”L X 39.4”W.
2. Panels are tilted at 12° and the gap provided between panels is 1/2”.
3. Array types are fixed (low-framed sloped rail racking system) for rooftop and ground mount systems, and fixed (canopy-single and double bay) for parking structure systems.
4. AC generation is estimated at 1,500 kWh per kW DC installed.
5. Minimum gaps of 20’ are provided on all rooftops as provision for mechanical system space.

TABLE 1. PV PANEL SCHEDULE AND

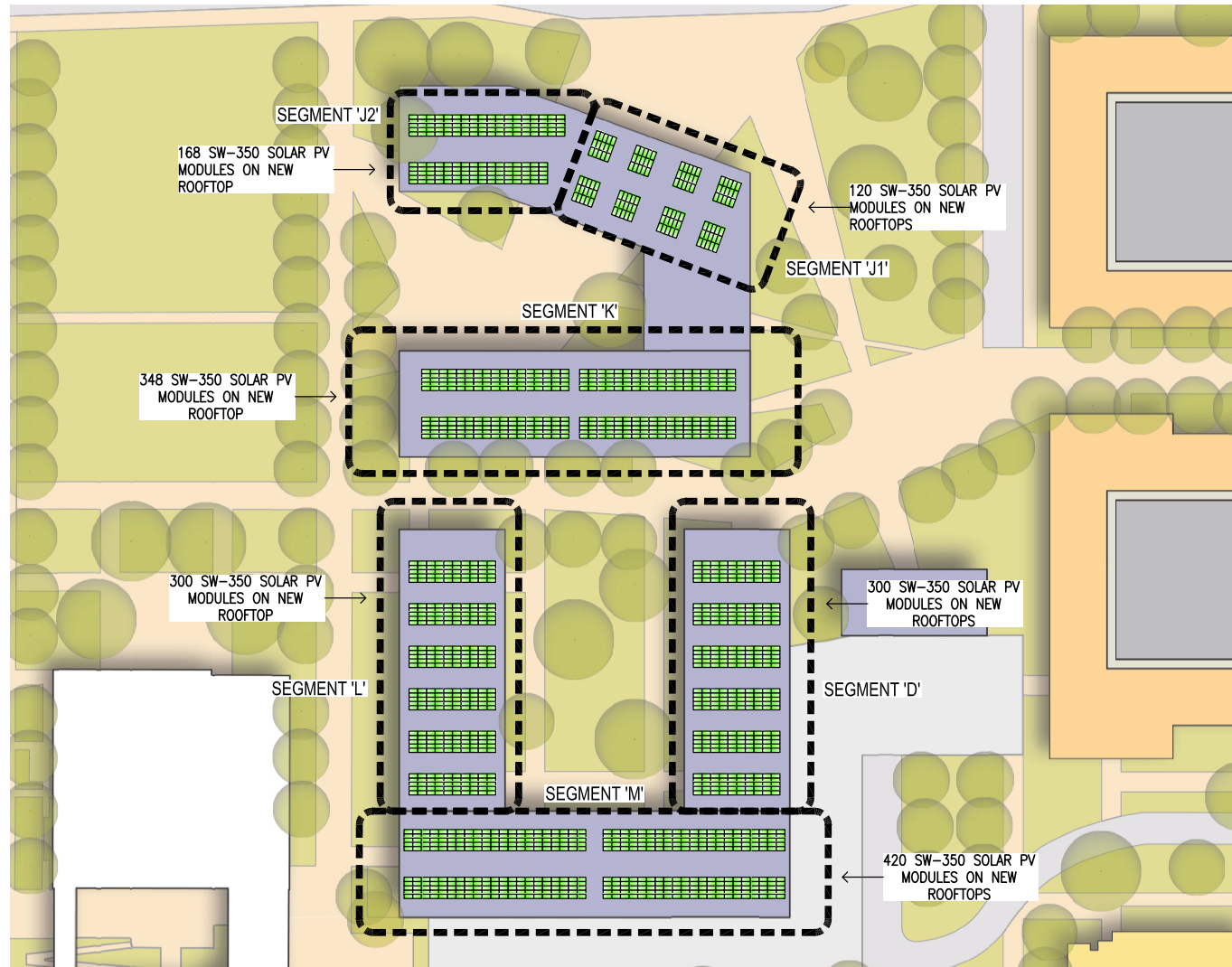
C. PV PANEL LAYOUTS

C.1 A BUILDINGS, BUILDING I, AND BUILDING B



NOTES:
1. PANELS FACING SOUTH (SEGMENTS 'A1', 'A2A', AND 'B1'), SOUTHWEST (SEGMENT 'A2B'), WEST (SEGMENT 'I'), AND SOUTH-SOUTHWEST (SEGMENT 'B2').

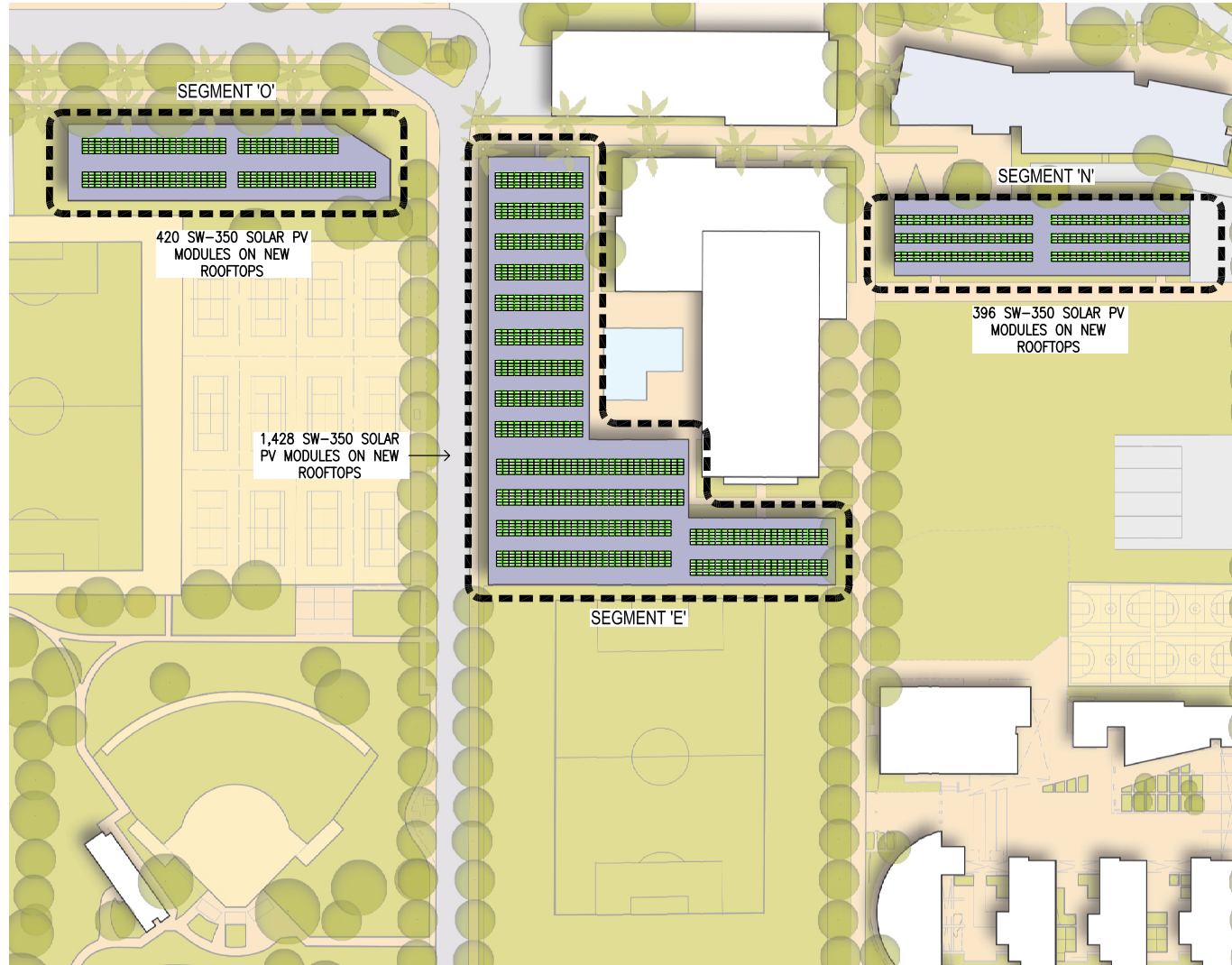
C.2 BUILDINGS J, K, L, M, AND D



NOTES:

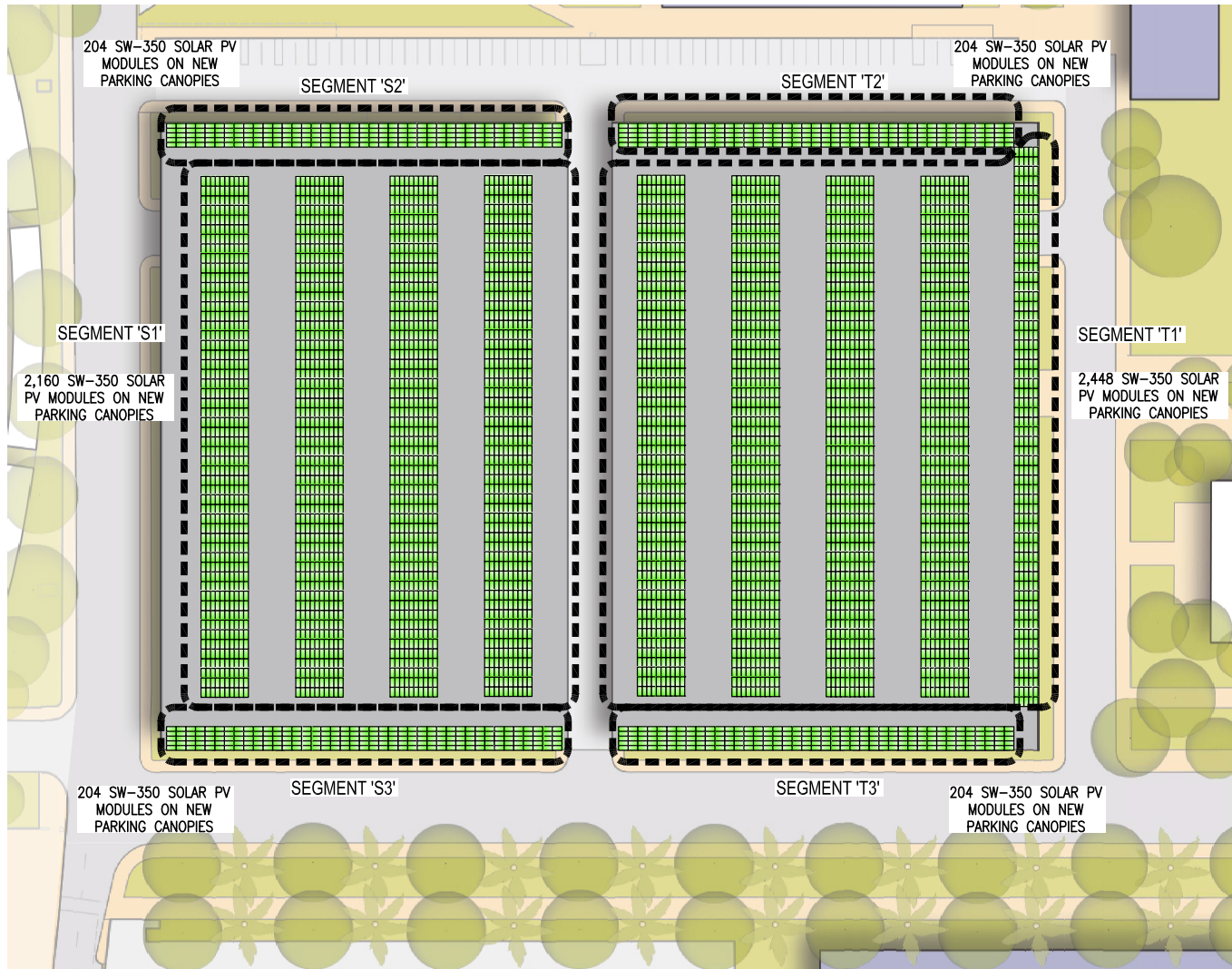
1. PANELS FACING SOUTH (SEGMENTS 'J2', 'K', 'L', 'M', AND 'D'), AND WEST-SOUTHWEST (SEGMENT 'J1').

C.3 BUILDINGS O, E, AND N



NOTES:
1. PANELS FACING SOUTH (ALL SEGMENTS).

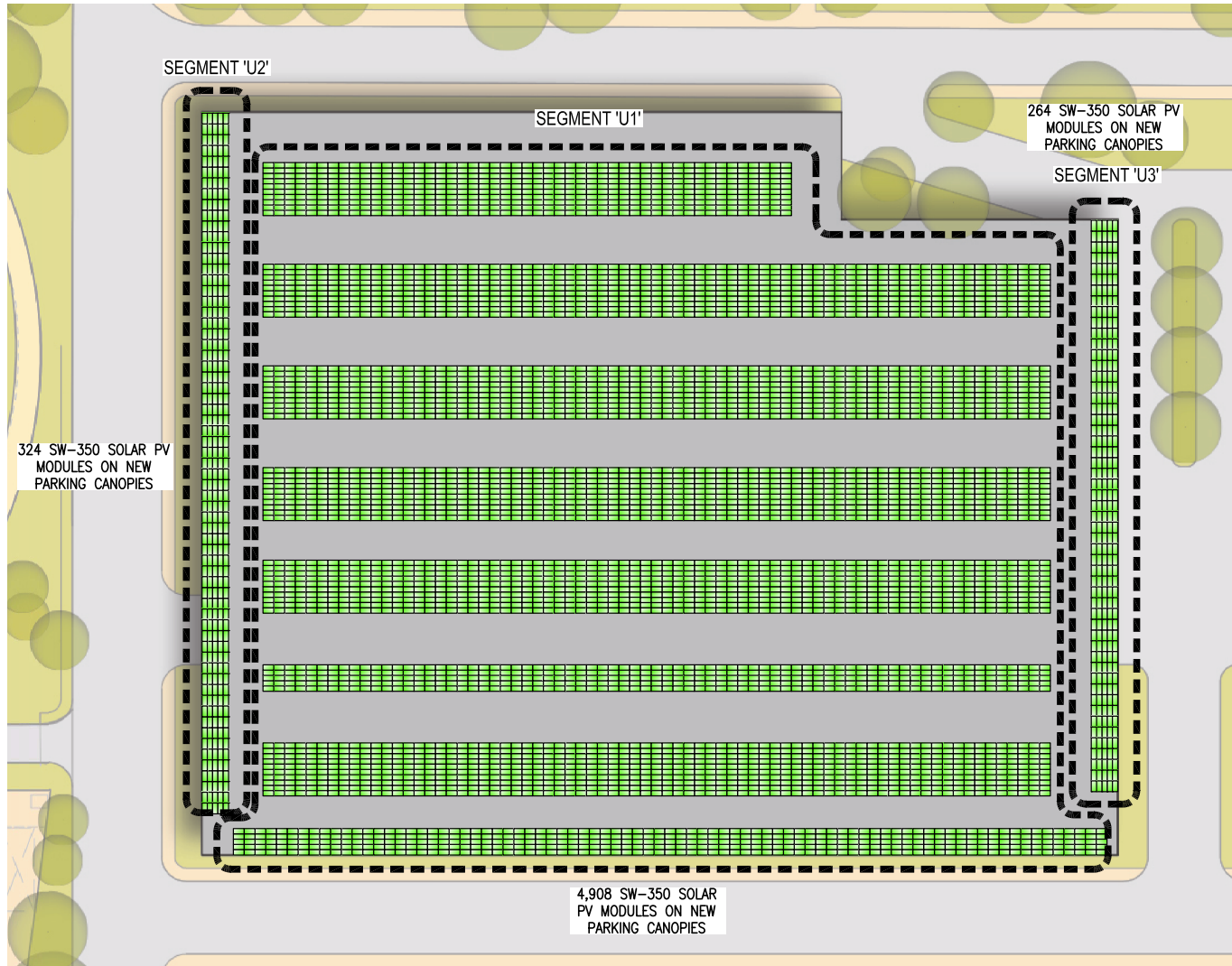
C.4 PARKING STRUCTURES S AND T



NOTES:

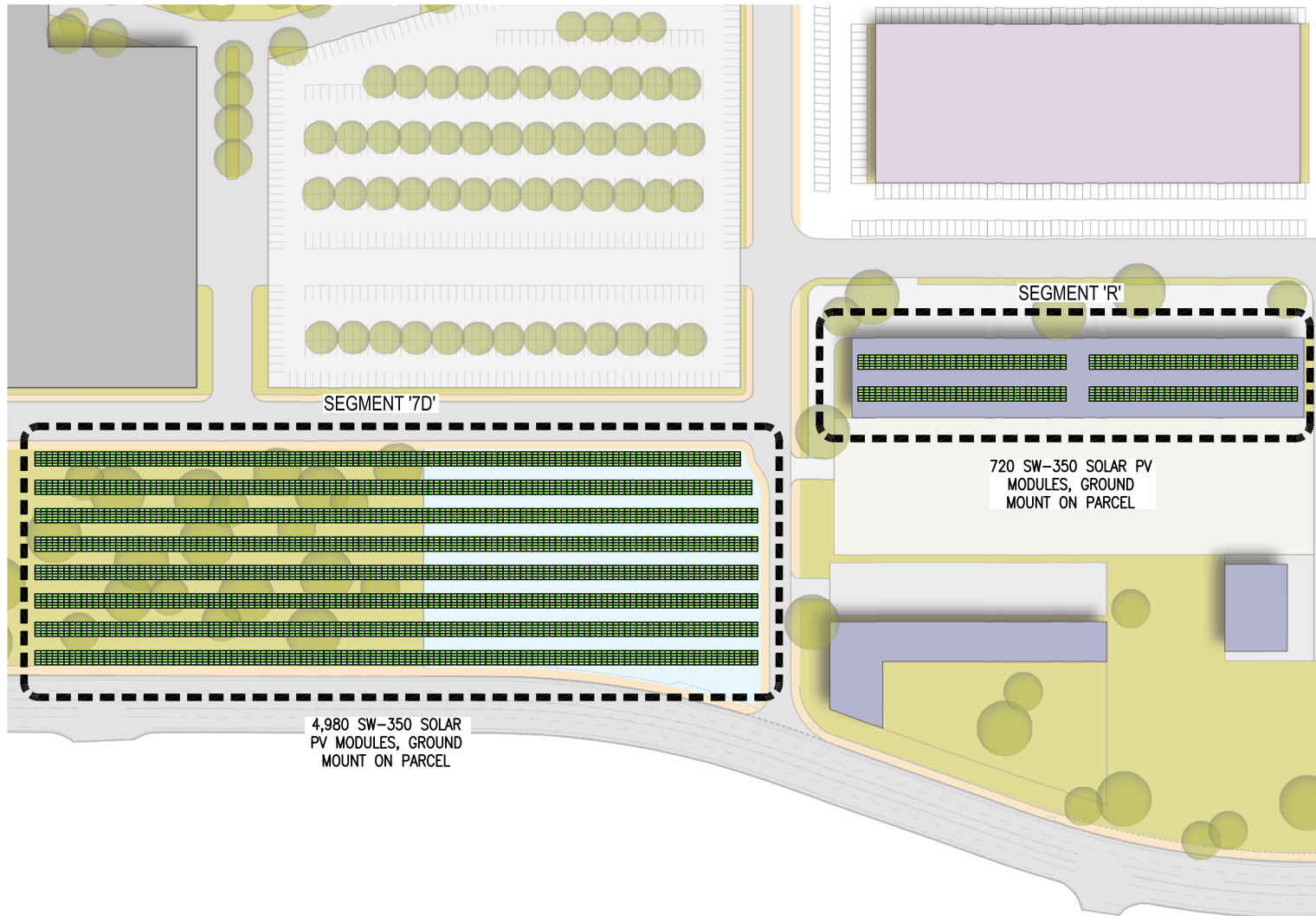
1. PANELS FACING WEST (SEGMENTS 'S1' AND 'T1'), AND SOUTH (SEGMENTS 'S2', 'S3', 'T2', AND 'T3').

C.5 PARKING STRUCTURE U



NOTES:
1. PANELS FACING SOUTH (SEGMENT 'U1'), AND WEST (SEGMENTS 'U2' AND 'U3').

C.6 BUILDING R AND PARCEL 7D



NOTES:
1. PANELS FACING SOUTH (ALL SEGMENTS).

PART B: LDP AREA PHOTOVOLTAIC PROJECTION

A. LDP PROJECTED CAPACITIES

Building/Area	Plan ID	# of PV Modules	Total DC Capacity (kW)	Estimated AC Generation (kWh)	Total Roof Area (sq. ft.)	Total PV Area (sq. ft.)	Percent of Roof Space (%)	Total GSF (sq. ft.)
1A	1A	840	294	441,000	54,039	17,833	33%	333,040
1A Parking	1A	840	294	441,000	37,204	17,858	48%	223,200
1B	1B	948	332	497,700	60,591	19,995	33%	351,470
1B Parking	1B	840	294	441,000	37,204	17,858	48%	223,200
3A	3A	1,176	412	617,400	75,139	24,796	33%	301,384
3B	3B	1,524	533	800,100	97,204	32,077	33%	389,556
4A	4A	840	294	441,000	54,040	17,833	33%	310,345
4A Parking	4A	840	294	441,000	37,204	17,858	48%	223,200
4B	4B	1,116	391	585,900	71,293	23,527	33%	403,246
4B Parking	4B	1,188	416	623,700	52,162	25,038	48%	313,200
5A	5A	1,320	462	693,000	84,386	27,847	33%	337,804
5A Parking	5A	1,452	508	762,300	64,031	30,735	48%	256,080
5B	5B	1,776	622	932,400	113,207	37,358	33%	453,168
5B Parking	5B	1,452	508	762,300	64,031	30,735	48%	246,480
5C	5C	1,776	622	932,400	113,239	37,369	33%	453,260
5C Parking	5C	1,404	491	737,100	61,630	29,582	48%	246,480
6A	6A	5,424	1,898	2,847,600	345,424	113,990	33%	345,600
6B	6B	2,196	769	1,152,900	140,366	46,321	33%	140,400
7A	7A	1,356	475	711,900	86,395	28,510	33%	86,400
Total		28,308	9,908	14,861,700	1,648,788	597,120	36%	5,637,513

TABLE 2. LDP PROJECTED CAPACITIES

NOTES

Projected PV for the LDP based on the benchmark of an average 33% coverage for core building rooftops and 48% coverage for core parking structures.

LDP potential capacities are 20,292 panels for 7.102 MW installed and an estimated 10,653,300 kWh generated, for building rooftops, and 8,016 panels for 2.806 MW installed and an estimated 4,208,400 kWh generated, for parking structures.

ENERGY USAGE AND GHG EMISSIONS

A. EXISTING ENERGY USE AND GHG EMISSIONS

During the latest calendar year (2016), campus energy use records indicate that the overall electricity use was 16.5 million kWh and Natural Gas usage was approximately 985,000 Therms. For the 1.25 million GSF of buildings on campus, this is equivalent to a site energy use index of 12.9 kWh/GSF for electricity and 0.79 Therms/GSF for natural gas. The overall site Energy Use Index (EUI) is estimated as 122,708 Btu/kWh. The existing GHG (Scope 1 and Scope 2) emissions are estimated at 10,068 Tons, which is approximately 3,803 Tons greater than the 1990 emission levels recorded at campus based on the 1990 energy use levels (See Figure 1).

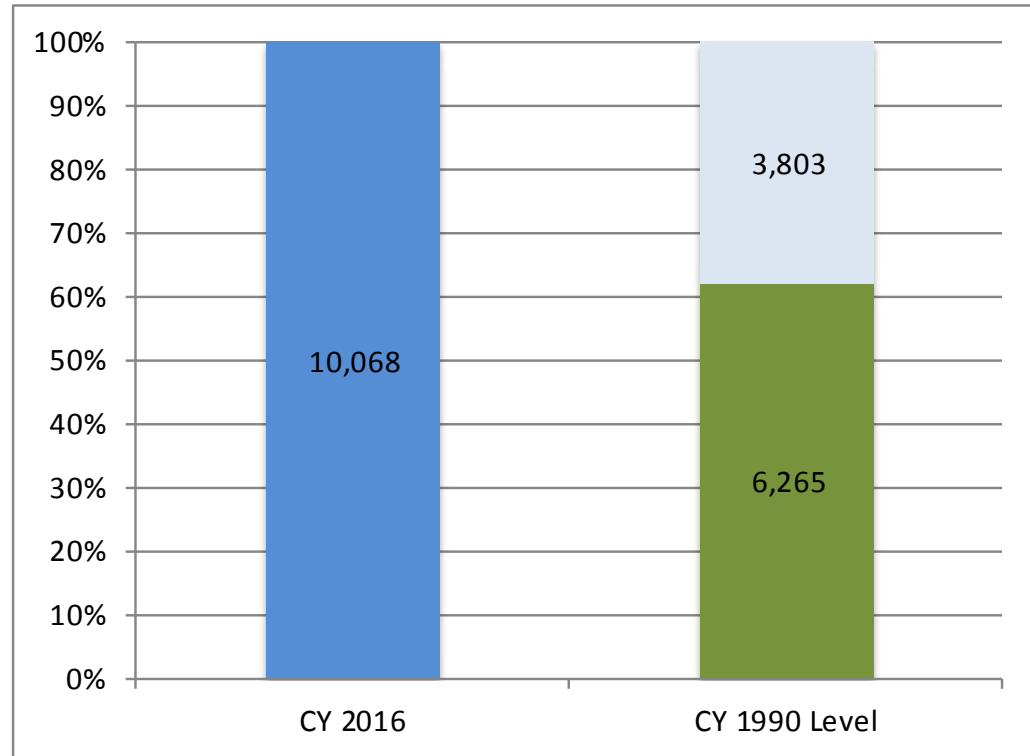


FIGURE 1. GHG EMISSIONS (METRIC TONNES) 2016 VS. 1990 LEVELS (REDUCTION REQUIRED PER AB 32 - 3,803 TONNES)

B. ONGOING AND FUTURE CONSERVATION EFFORTS

One of the significant sources of GHG emissions is presently the two, 1,000 Ton gas fired absorption chillers that are used for providing cooling to a majority of the campus buildings. Conversion of the gas based absorption cooling to an electric chiller based cooling system using high efficiency electric chillers will result in a substantial reduction in the GHG footprint. Best estimates show that the proposed conversion will reduce GHG footprint by approximately 2000 Tons/year as shown below in Table 1.

Peak Tons	Annual Use (Ton Hours) [3]	Absorber Therms/Ton [1]	Annual Gas Use (Therms)	GHG lbs./Therm	GHG Emissions (Lbs./Year)	GHG Emissions, Metric Tons/Year
1600	2,522,880	0.18	454,118	11.69	5,308,142	2,408
Peak Tons	Annual Use (Ton Hours)	Electric Chiller kW/Ton [2]	Annual Electricity	GHG lbs./kWh	GHG Emissions (Lbs./Year)	GHG Emissions, Metric Tons/Year
1600	2,522,880	0.55	1,387,584	0.65	895,463	406
Reduction Expected with All Electric Chiller Configuration (Metric Tons/Year)						2,002

TABLE 1. GHG REDUCTION THROUGH CONVERSION TO ELECTRIC CHILLERS

In addition, the campus continually strives to enhance the energy efficiency in buildings through a variety of measures. The ongoing and future measures are expected to include such projects as:

- Renovation of building lighting systems using LED lighting technology
- Use of smart lighting controls where every fixture has the capability to be programmed and dimmed based on occupancy and daylight levels
- Upgrade of old control HVAC controls to modern direct digital controls
- Replacement of old HVAC units with high efficiency HVAC units
- Ongoing monitoring based commissioning program
- Use of more efficient (energy valves) control valves for the control of building heating and cooling coils

Based on a long term energy use reduction of 35% in building energy usage using such projects, Table 2 presents an estimate of reduction in GHG emissions based on energy efficiency improvements.

	Reduction
Assumption: Building electricity use reduction target (%) through lighting and HVAC improvements	35%
Heating use reduction through improved HVAC system operation	35%
Base Line Base Case Electricity use (kWh)	5,791,581
Base Case Gas use Therms (Excluding cooling related)	171,516
Reductions GHG Reduction due to Building electricity conservation (lbs)	3,737,539
GHG Reduction due to Building Heating system energy efficiency (lbs)	2,004,832
Total Efficiency Related GHG Reduction (Metric Tons)	2,605
Impact Most recent GHG Emissions Inventory (Metric Tons)	10,068
% Reduction due to Energy Efficiency campuswide	26%

TABLE 2. ESTIMATED IMPACT OF ENERGY EFFICIENCY ON GHG EMISSIONS

C. IMPACT OF MASTER PLAN LOAD GROWTH- CORE CAMPUS

As energy standards become increasingly more stringent, there is reason to believe that new buildings developed over the next 20-years would be significantly more efficient than the buildings currently in operation. Table-4 estimates the energy use impact associated with new core campus buildings proposed under the Master Plan. Shown are impacts of both core campus growth and removals of the existing Pubelo Dominguez housing associated with the future development of the LDP area. Table 3 presents the extent of PV capacity required on campus to offset the net increases in GHG emissions and sustain the overall GHG carbon footprint to 1990 levels. Estimates show that an estimate 7.2 MW of PV, together with the 35% energy efficiency improvements, can help sustain the overall GHG footprint

D. IMPACT OF MASTER PLAN LOAD GROWTH- LDP AREA

While LDP area buildings are situated on campus property, it is assumed for the purposes of the analysis presented herein that the GHG emissions associated with the LDP buildings would not count towards the campus GHG footprint. Accordingly, all emission estimates and discussion and findings related to achieving compliance with AB32 GHG emission levels are limited to the core area campus buildings only.

Item	Value
Baseline GHG Emissions (Metric Tons)	10,068
Master Plan Related Load Growth (Metric Tons)	4,161
SUM OF Existing and MP Related Additions	14,228
Reduction From use of All Electric Chiller (Metric Tons)	2,002
Reduction From campuswide Building efficiency (Metric Tons)	2,605
Balance Reduction Desired through Renewable energy (Metric Tons)	3,356
Sum of All Target Reductions	7,963
NET AFTER REDUCTIONS (Or 1990 Levels)	6,265
Equivalent Amount of kWh To be Renewable (kWh)	11,466,174
Estimated kWh/Installed PV kW (kWh)	1,600
Estimated Installed PV Required (kW)	7,166

TABLE 3. RENEWABLE ENERGY PURCHASES REQUIRED FOR EMISSION REDUCTION TO 1990 LEVELS

Building ID	Building Name	Funding ID	GSF	Estimated Electricity and Gas Usage [1]				GHG Emissions (lbs.)
				kWh/SFT	Therms/GSF	kWh/Year	Therms/Year	
A	Academic	1	158,572	6.2	0.085	983,146	13,479	359
B	Admin	1	131,800	6.2	0.085	817,160	11,203	299
C	Black Box Theatre	1	7,640	6.2	0.085	47,368	649	17
D	Academic	1	68,000	6.2	0.085	421,600	5,780	154
E	Rec Center	2	148,400	6.2	0.085	920,080	12,614	336
I	Incubator	3	57,128	6.2	0.085	354,194	4,856	129
J	Academic	1	136,050	6.2	0.085	843,510	11,564	308
K	Academic/Admin	1	105,850	6.2	0.085	656,270	8,997	240
L	Student Union Expansion	3	85,000	6.2	0.085	527,000	7,225	193
M	Academic/Admin	1	94,360	6.2	0.085	585,032	8,021	214
N	Academic/Admin	1	116,250	6.2	0.085	720,750	9,881	263
O	Academic/Admin	1	104,020	6.2	0.085	644,924	8,842	236
P	Central Plant Expansion	1	12,000	6.2	0.085	74,400	1,020	27
Q	Satellite Central Plant	1	5,500	6.2	0.085	34,100	468	12
R	Facilities Services Complex	1	46,895	6.2	0.085	290,749	3,986	106
V	Child Care	1	17,966	6.2	0.085	111,389	1,527	41
W	Fab Lab Garage	1	6,916	6.2	0.085	42,879	588	16
	New Science Building	1	85,000	18.5	0.34	1,572,500	28,900	614
2	Student Housing 1	4	56,240	4.3	0.12	241,832	6,749	107
2	Student Housing 2	4	27,180	4.3	0.12	116,874	3,262	52
2	Student Housing 3	4	102,828	4.3	0.12	442,160	12,339	195
2	Student Housing 4	4	63,656	4.3	0.12	273,721	7,639	121
2	Student Housing 5	4	64,952	4.3	0.12	279,294	7,794	123
TOTAL			1,702,203			11,000,932	177,382	4,161

TABLE 4. ESTIMATION OF ENERGY USE ASSOCIATED WITH NEW ADDITIONS

**G.2 PES Electrical Infrastructure/Information
Technology and Communication (Appendix B.3 to
Master Plan Guidelines 2018)**

B.3: PES Electrical Infrastructure/Information Technology and Communication

The **University Village** is an urban design concept within the CSUDH 2018 Master Plan that integrates the academic core and the student residential community with a neighborhood of retail and business communities and residential apartments to create a live/work/play environment with synergistic connections to the University's mission and purpose. The **Land Development Project** (LDP) is a privately-financed and developed mixed-use project on 76.5 acres within the University Village that includes high-quality rental housing for faculty, staff and community members; retail development; and business park development. It is anticipated that the LDP would be developed as a public-private partnership (P3) which could be constructed over a period of years. Student Residence Halls (Parcels 2A and 2B) and Student Apartments (Parcel 3A) are part of the University Village, but are not currently envisioned as part of the LDP P3 land development.

Unless otherwise noted, the analyses and reports produced for this Appendix include all the parcels of the University Village and are not confined to the parcels of the Land Development Project.

B.3	PES ELECTRICAL INFRASTRUCTURE/INFORMATION TECHNOLOGY AND COMMUNICATION	B.3-1
	ELECTRICAL INFRASTRUCTURE HIGHLIGHTS	B.3-2
	PART A: CAMPUS 12KV POWER INFRASTRUCTURE	B.3-3
	PART B: LDP AREA ELECTRIC POWER INFRASTRUCTURE	B.3-14
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ELECTRICAL INFRASTRUCTURE HIGHLIGHTS

PART-A : CORE CAMPUS

Core Area: 1.7 million GSF

Long Term 12kV Power Capacity:
 20,000 MVA

Strategy: Construct a new SCE service substation with a campus-owned transformer rated up to 20,000 kVA. Install a new 12kV, 1200A or 2000A main service switchgear with 8 new feeder breakers. Reconnect the existing Central Plant switchgear to the new service. Install two new 12kV loop feeders to supply a total of four 12kV loops. Rearrange and upgrade the campus 12kV infrastructure to create four areas to match the loop feeder capacity.

CORE CAMPUS BUILDINGS LIST

- A Academic
- B Admin
- C Black Box Theatre
- D Academic
- E Rec Center
- I Incubator
- J Academic
- K Academic
- L Student Union Expansion
- M Academic
- N Academic
- O Academic
- P Central Plant Expansion
- Q Satellite Central Plant
- R Facilities Services Complex
- V Child Care

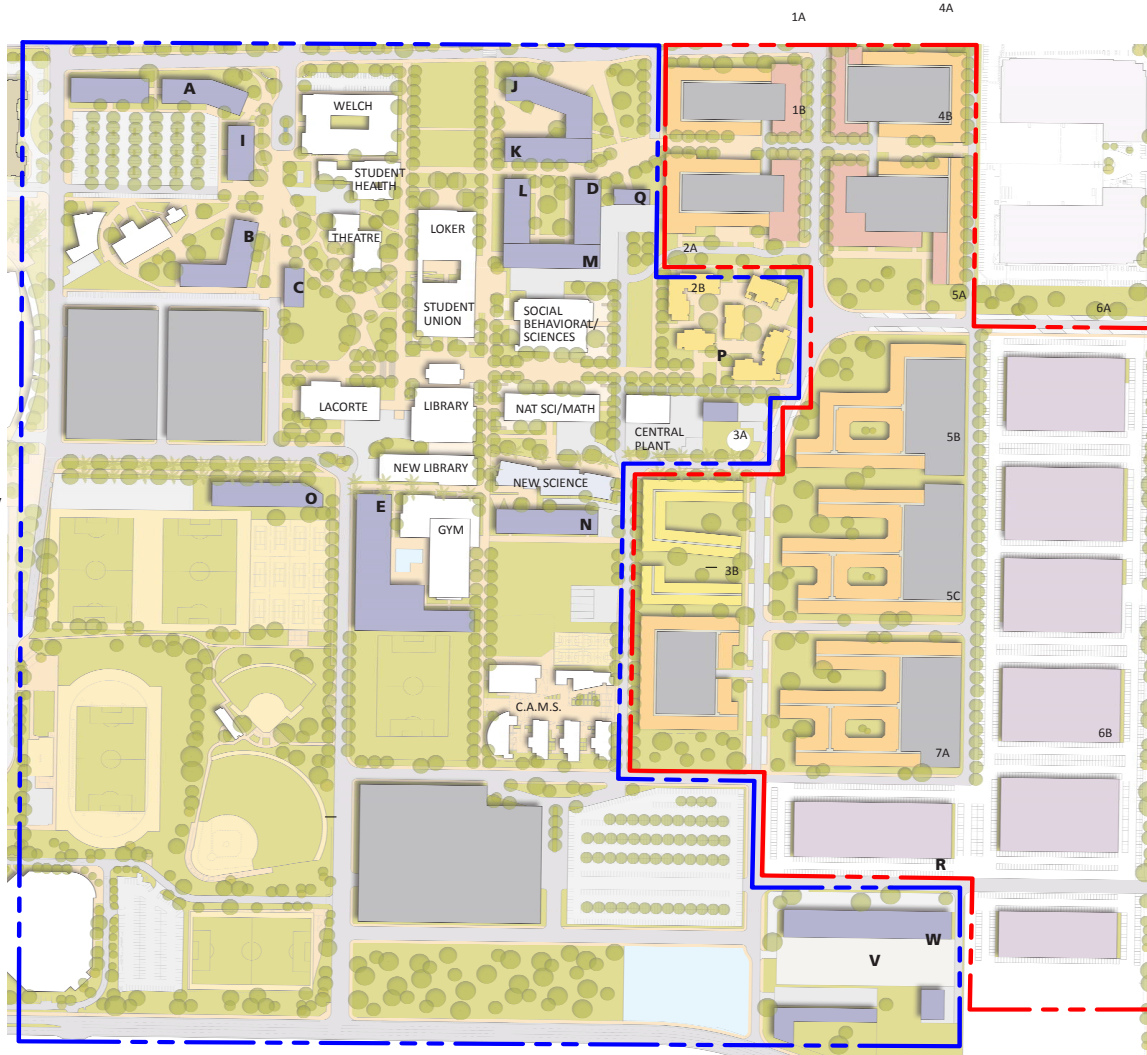
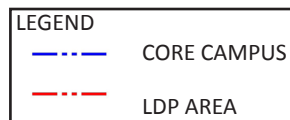


FIGURE 1. HIGHLIGHTS OF CAMPUS MASTER PLAN ELECTRIC POWER INFRASTRUCTURE



LDP BUILDINGS LIST (CONT.)

- 7A Business Park
- 6B Business Park

- W Fab Lab Garage
- 2A,B Residency Halls

PART-B : LDP

LDP Parking Area: 1.9 million GSF
 LDP Building Area: 3.8 million GSF

Long Term 16.5kV Power Capacity:
 25 kV

Strategy: The LDP will consist of residential, commercial, retail, parking, and office occupancies. Most of the occupancies will be third party operated, and separately metered. The LDP area load cannot be supplied by the new SCE Core Campus Substation. A separate SCE service substation with SCE operated and maintained distribution system is required. The LDP Authority has the option to own and operate the 12kV system. SCE operated distribution is preferred. The distribution system would have four SCE 16.5kV dedicated distribution system circuits, with each loop capable of supplying the entire load it serves from one or both feeders. Outdoor padmount sectionalizing switches and padmount transformers will supply the individual building parcels.

LDP LAND USE

- 1A Mixed Use
- 1B Mixed Use
- 3A Apartments
- 3B Apartments
- 4A Mixed Use
- 4B Mixed Use
- 5A Multi Family Rental
- 5B Multi Family Rental
- 5C Multi Family Rental
- 6A Business Park

PART A: CAMPUS 12KV POWER INFRASTRUCTURE

A. EXISTING CONDITIONS

The core campus utility electrical service is provided by SCE and consists of two 16.5kV overhead distribution feeders configured in a preferred-emergency (PE) automatic transfer switch (ATS) configuration that was common at that time the service was originally installed. The second SCE 16.5kV service feeder was referred to as “emergency” which meant it was to be used as a backup in the event the “preferred” feeder was unavailable. However, in the event of a total loss of the utility distribution system power, no power is available. CSUDH leases the 16.5kV outdoor PE service switchgear from SCE. The substation was installed by SCE and included SCE metering, station power, and two 16.5kV - 12kV, 5,000/6,250kVA transformers with low resistance grounded neutral. The campus SCE 16.5kV - 12kV service equipment is 47 years old. The two SCE transformers are shown in project records to be askarel-filled (PCB). The campus peak load is approximately 3323kVA, which is roughly 3.3Watts/GSF.

The SCE service entrance cable is single conductor 500kcmil, 25kV rated cable and capable of carrying 450A continuously, which is equivalent to 9.4MVA. The SCE underground cable is the determining limiting factor for the existing campus service capacity. SCE needs to be consulted to establish the capacity limit of

the existing 16.5kV service. The 16.5kV-12kV service capacity for a single transformer is 5MVA/6.25MVA. The peak load today is near 3.32MVA. The campus load is roughly 66% of the single transformer service capacity. Several new projects will result in an increase in the peak demand.

The CSUDH Central Plant 12kV switchgear campus feeders include HV-1 and HV-2, HV-5 and HV-6. The feeders are paired with one feeder from each side of the main service switchgear tie-breaker to form a 12kV loop distribution system. The original campus main 12kV switchgear was replaced circa 2004, along with sectionalizing switches (new SF6 switches). The two paired loop feeders are 250kcmil with an ampacity of 310A and are installed from Central Plant to the buildings on campus. However, the loop feeder conductor is reduced to #2AWG, Cu along its path limiting the loop to 130A. Feeders HV-1 and HV-2 supply power to the west part of the main campus, while feeders HV-5 and HV-6 supply power to the east side of campus with the dividing line being the main north-south pedestrian mall. Each loop is capable of supplying up to 6400kVA of load from a single feeder breaker, if the entire loop consisted of 250kcmil cable. The #2AWG limits the loop capacity to 2700kVA.

In addition to the SCE Central Plant 12kV service, the campus has three other SCE services. The Physical Plant, Student Housing 1, and illuminated Campus Sign at Avalon and Victoria are all served by SCE at 480V or 208V.

B. SYSTEM CHANGES UNDERWAY (APRIL 2017)

The core campus is supplied power from SCE at 16.5kV via two overhead distribution circuits and two underground service laterals that terminate at the Central Plant 16.5kV service entrance PE ATS switchgear. The two SCE 16.5kV circuits are supplied from two different SCE distribution substations. Each SCE circuit is capable of supplying the entire campus load with an ultimate limit of approximately 9400kVA. The existing SCE PE ATS service switchgear is leased from SCE. The lease expires in late 2017. SCE has been requested to provide options regarding lease renewal or replacement.

A new 1,000kW Battery Storage System will be installed and operational in 2017. The Battery Storage System will be connected to existing switch CP-CPHV5 with a 250kcmil feeder conductor size. The Battery Storage System will be controlled by STEM, who will operate the battery system to reduce electric power peak demand by 1000kW for up to 4-hours. The operation of the battery system is controlled by SCE and at other times as determined by STEM, under the agreement between STEM, SCE, and the University.

The new 12kV, 250kcmil feeder installed for the Battery Storage System will also be used to supply power to the new electric chiller installation. A 3750kVA, 12kV – 480V transformer will be installed to supply a total of three new 800-Ton electric chillers and associated pumps that are planned for installation. Construction for the new chiller installation will

begin in June of 2017. A second transformer rated 2000kVA will be required to supply two additional 800-Ton chillers in the future. The electric chiller and battery system project designs must be closely coordinated.

The new cooling tower replacement project will be completed in 2017. The new cooling tower replacement project will be supplied 480V power from the existing Central Plant 12kV unit substation, CPT1 and CPT2. This new project will result in a net increase in load when all three cooling tower cells are in operation.

The new 75,000GSF Science Building will begin construction in 2017. The existing 12kV source feeder for the SAC buildings is connected to switch CP-CPHV5 and is sized to #2AWG, Cu. The cable installed from CP-CPHV5 will be removed. Two (2) new 250kcmil feeders will be installed from NSM-201HV1 and NSM-201HV2 to a new four-way SF6 switch. The new Science Building and CMS Buildings will be supplied from the new SF6 switch. The Science Building will result in an estimated

Bld. ID	Building Name	GSF	Watts/SF	Peak Load kW	To Remain/Demo
1	(SCC-1) SMALL COLLEGE COMPLEX 1	8,529	2.10	18	Demo
2	(SCC-2) SMALL COLLEGE COMPLEX 2	5,313	2.10	11	Demo
3	(SCC-3) SMALL COLLEGE COMPLEX 3	1,263	2.10	3	Demo
4	(SCC-4) SMALL COLLEGE COMPLEX 4	1,263	2.10	3	Demo
5	(SCC-5) SMALL COLLEGE COMPLEX 5	5,315	2.10	11	Demo
6	(SCC-6) SMALL COLLEGE COMPLEX 6	5,841	2.10	12	Demo
7	(SCC-7) SMALL COLLEGE COMPLEX 7	2,145	2.10	5	Demo
8	(SCC-8) SMALL COLLEGE COMPLEX 8	2,920	2.10	6	Demo
9	(SCC-9) SMALL COLLEGE COMPLEX 9	1,626	2.10	3	Demo
10	(SCC-10) SMALL COLLEGE COMPLEX 10	2,145	2.10	5	Demo
11	(SCC-11) SMALL COLLEGE COMPLEX 11	5,841	2.10	12	Demo
13	(SCC-13) SMALL COLLEGE COMPLEX 13	5,290	2.10	11	Demo
14	(COE) SCHOOL OF EDUCATION	26,433	2.10	55	Demo
61	(FH) FIELD HOUSE	13,650	0.90	12	Demo
71	(BLDG X) PUEBLO DOMINGUEZ SH-2	76,093	1.05	80	Demo
100	(SAC-1) SOUTH ACADEMIC COMPLEX 1	15,500	1.27	20	Demo
103	(SAC-3) SOUTH ACADEMIC COMPLEX 3	17,280	1.27	22	Demo
116	(EAC) EAST ACADEMIC COMPLEX	17,760	5.82	103	Demo
	VDC #1	N/A	N/A	38	Demo
	VDC #3	N/A	N/A	11	Demo
20	(LIB) LEO F. CAIN LIBRARY	152,006	1.50	228	To Remain
20	LIBRARY ADDITION	139,569	2.22	310	To Remain
23	(WH) JAMES L WELCH HALL	179,952	1.50	270	To Remain
25	(SHC) STUDENT HEALTH CENTER	20,046	3.09	62	To Remain
26	(LSU) LOKER STUDENT UNION NEW BUILDING	123,033	N/A	207	To Remain
26	(LSU) LOKER STUDENT UNION OLD BUILDING		N/A	103	To Remain
30	(SBS) SOCIAL/BEHAVIORAL SCIENCES	81,000	1.91	155	To Remain
40	(LCH) LACORTE HALL	70,331	2.15	151	To Remain
45	(UT) UNIVERSITY THEATRE	25,201	1.75	44	To Remain
50	(NSM) NATURAL SCIENCES/MATHEMATICS	84,450	2.13	180	To Remain
60	(GYM) GYMNASIUM	65,752	1.15	76	To Remain
87	(CP) CENTRAL PLANT w/ ABSORPTION CHILLER	12,840	16.11	207	To Remain
102	(SAC-2) SOUTH ACADEMIC COMPLEX 2	15,940	1.27	20	To Remain
106	(EE) EXTENDED EDUCATION CENTER	24,619	3.25	80	To Remain
107	(CAMS) CA. ACADEMY OF MATH AND SCIENCE	31,667	3.05	97	To Remain
111	BASEBALL/SOFTBALL STORAGE	3,380	0.45	2	To Remain
107	(CAMS) CA. ACADEMY OF MATH AND SCIENCE	13,548	4.58	62	To Remain
120	(CDC) CHILD DEVELOPMENT CENTER	4,320	5.39	23	To Remain
121	(ITC) INFANT TODDLER CENTER	4,320	5.39	23	To Remain
	VELODROME SPORTS CENTER	N/A	N/A	282	To Remain
TOTAL kW				3024	
TOTAL kVA				3323	

TABLE 1. EXISTING BUILDINGS SERVED BY CORE CAMPUS 12KV SYSTEM

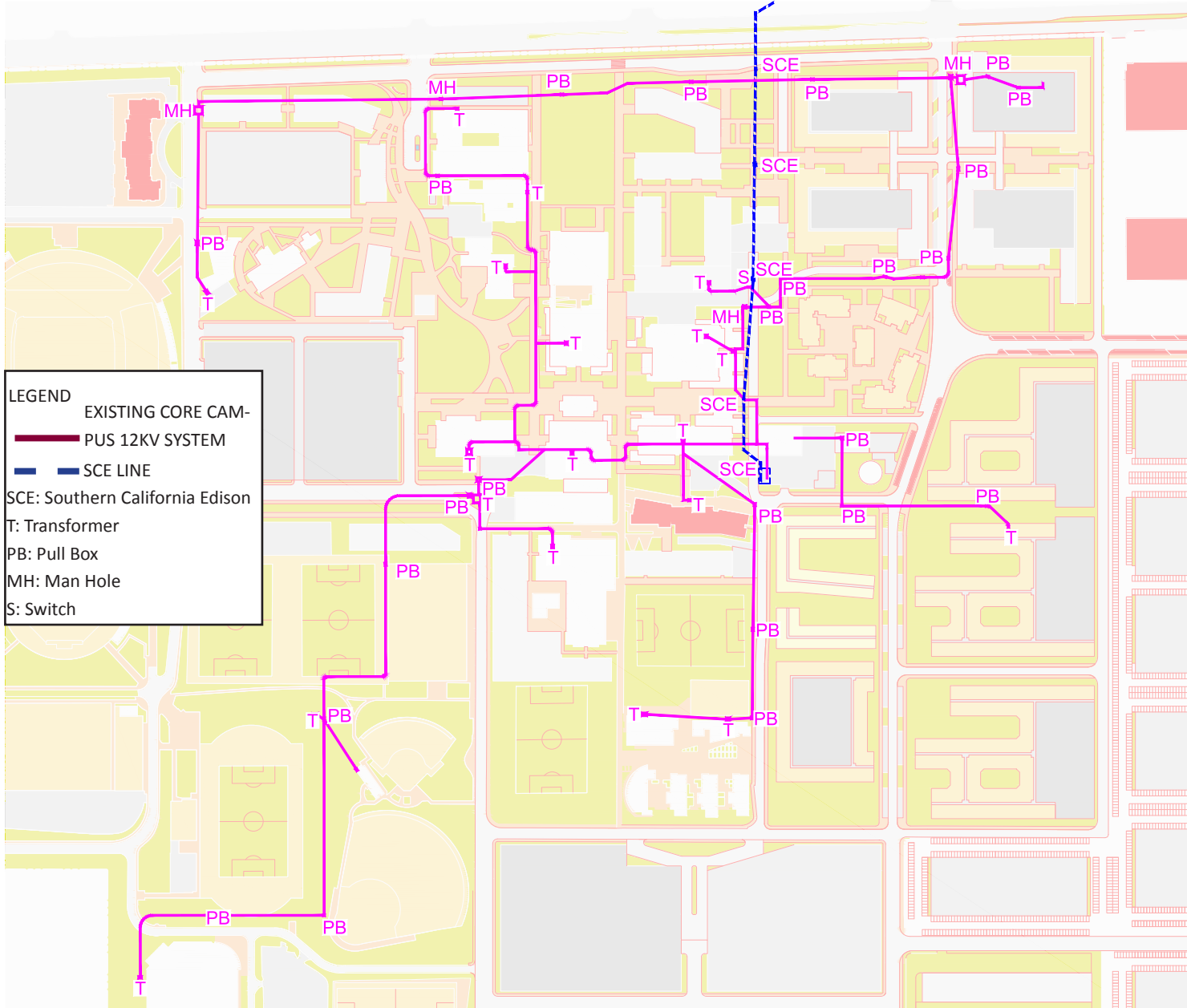


FIGURE 2. EXISTING CORE CAMPUS 12KV SYSTEM

net increase of up to 425kVA based on 5W/sqft. SAC 100 is being demolished as part of the Science Building project and will result in a decrease of 100kVA or so.

The Student Housing Phase III project is in conceptual design phase and occupancy is planned for the Fall 2019 term. The project may or may not include cooling for the dorm rooms. A 1,000kVA, 12kV-208Y/120V loop feed transformer will be installed and connected to SBS 100 HV5 or SBS 100 HV6. The new load is estimated at 4W/sqft, 390kW. This excludes cooling loads.

C. LOAD GROWTH ASSOCIATED WITH MASTER PLAN

Table 2 summarizes the buildings being considered for development as part of the Master Plan. Table 2 shows the Core Campus buildings, GSF, kW demand per sqft, and estimated peak demand. Table 2 also includes peak demand if rooftop PV is installed. A new electric service is required to supply the total load. The existing service transformers cannot supply the total load, and the space where the existing service equipment is installed is not adequate for the new larger transformers. Construction dates have been assigned to new buildings in order to prepare a load growth estimate. Based on the estimate, a new campus service is required sometime between 2023 and 2025, if planned construction is completed according to the dates assigned. The load forecast should be updated when actual planned construction dates become available.

The LDP electric load cannot be supplied from the existing or new electric service for the Core Campus if the SCE service voltage remains 16.5kV. The alternative to 16.5kV service is 66kV, which requires a larger substation area (115' x 160'), and major upfront investment.

Based on the addition of up to 1.4 million GSF of new buildings, net of any existing building load to be demolished, the long term electric power coincident peak demand to be supplied to campus load is estimated at 19,750kW, or 21,944kVA.

The building electric power load diversity will typically result in a lower actual peak demand than is estimated. The non-coincident peak demand is estimated at 15,800kW using a factor of 0.8 to account for load variability. The estimates for W/GSF included in this study are based on empirical “real world” values for the local climate zone, and are adjusted. It is important to err on the conservative side when determining the “minimum” electric power service and distribution feeder size requirements because the planned infrastructure must support the next 40 years of campus operations and construction. The “extra” capacity provided as a result of the more conservative approach will allow for flexibility in design and future load growth. The new service should be designed and rated to allow for at least 40 years of load growth and changes.

One component of the new load is electric vehicle charging station loads. A typical Level 2 charger consumes 8kVA for 3-4 hours to fully charge a vehicle battery. Fast chargers

presently consume 60kVA of power for 1-2 hours. The California Building Code, California Energy Code, and California Green Building Code all include requirements for residential and non-residential electric vehicle supply equipment (EVSE). A total of 6% of all new parking spaces must be designated as EVSE and include provisions for the electrical system capacity to install EVSE charging systems. The percentage of EVSE compliant parking spaces required has recently increased from 3% to 6%, which translates to a very large increase in electric power demand and capacity. This is a very good example of future load growth that did not exist 5-years ago. The load estimates for parking structures in this study include up to 10% of all spaces as EVSE equipped. This exceeds the 6% mandatory requirement, but is deemed prudent given the rapid growth in EV use and demand. Future development in commuter transportation options, including ride sharing and autonomous vehicles, as well as bi-directional vehicle charging equipment require designers to prepare for flexibility in their electrical system designs.

The load estimate in Table 2 and Table 3 includes a reduction in daytime peak demand due to photovoltaic (PV) produced power. Refer to Appendix 4 for details regarding the Photovoltaic Concept for the Core Campus.

D. MEETING LONG TERM ELECTRIC POWER LOADS WITHIN THE CORE CAMPUS

The existing campus electric service is 47-years old. The original design and capacity included two 5000kVA transformers, each one capable of supplying the entire campus load. The 12kV distribution system includes a 1200A main-tie-main switchgear and two separate 12kV loop feed distribution feeders. The design provides a high level of reliability that should be maintained as the system is renovated and new loads are added. The future development and expansion of the Core Campus electric infrastructure envisioned in this study maintains and expands upon the original design approach. A potential scenario to accommodate the increase in campus electric power capacity is summarized below.

1) Continue to utilize the existing SCE service and establish the maximum existing service capacity. Begin planning for a new higher capacity substation with SCE. The ultimate capacity of the new substation should be on the order of 20,000kVA. Establish the schedule to construct and energize the new service substation based on the timing for construction and energization of new Core Campus loads and SCE requirements for planning and construction. Given the information available regarding plans for new facilities, a new substation may be required by 2023-2025. Planning, design, and funding should start immediately. SCE will require up to 4-years to plan, construct, and energize. The new Campus Core substation design must be coor

Building ID	Building Name	GSF	Watts/SF	Peak Load (kW)	PV Peak Capacity (kW)	Net Peak Load with PV (kW)	Year Energized
A	Academic	198,215	3.00	595	176	419	2035
B	Admin	105,440	3.00	316	110	206	2035
C	Black Box Theatre	7,640	2.00	15	0	15	2035
D	Academic	85,000	3.00	255	86	169	2035
E	Rec Center	151,148	2.00	302	410	-108	2023
I	Incubator	71,410	5.00	357	65	292	2022
J	Academic	111,310	3.00	334	83	251	2021
K	Academic/Admin	99,570	3.00	299	100	199	2023
L	Student Union Expansion	85,000	5.00	425	86	339	2023
M	Academic/Admin	128,185	3.00	385	121	264	2030
N	Academic/Admin	123,770	4.00	495	114	381	2030
O	Academic/Admin	130,025	4.00	520	121	400	2030
P	Plant Operations	5,170	N/A	3000	0	3000	2019
SP2	Satellite Central Plant 2	2,000	N/A	600	0	600	2022
SP3	Satellite Central Plant 3	2,000	N/A	600	0	600	2030
SB	New Science Building	75,000	7.00	525	0	525	2019
RH1	Residence Hall: Housing	88,200	1.40	123	0	123	2019
RH2	Residence Hall: Housing	56,700	1.40	79	0	79	2019
RH3	Residence Hall: Food Service & Activity Space	15,000	8.00	120	0	120	2021
RH4	Residence Hall: Housing	88,200	1.40	123	0	123	2021
RH5	Residence Hall: Housing	56,700	1.40	79	0	79	2021
RH6	Residence Hall: Housing	56,700	1.40	79	0	79	2021
SP1	Satellite Central Plant (400 Ton)		N/A	400	0	400	2019
Lot 3	Surface Parking (288 Spaces) 29 EV Spaces	100,700	2.30	232	0	232	2022
Lot 6A & 6B	Parking Structure (2893 Spaces) 289 EV Spaces	1,012,508	2.38	2412	1557	855	2025
Lot 4A & 4B	Parking Structure (2732 Spaces) 273 EV Spaces	956,116	2.39	2284	1577	707	2030
South Surface	Parking Structure (2626 Spaces) 262 EV Spaces	919,060	2.39	2196	0	2196	2020
Small Lot North of Welch Hall	Surface Parking (45 Spaces) 5 EV Spaces	15,840	2.27	36	0	36	2020
			TOTAL	17188	4605	12583	

TABLE 2. NEW BUILDINGS SERVED BY CORE CAMPUS 12KV SYSTEM

B.3-8 Appendix B: Technical Reports
 B.3: PES Electrical / Telecom

Building ID	Building Name	GSF	Watts/SF	Peak Load (kW)	PV Peak Capacity (kW)	Net Peak Load with PV (kW)
20	(LIB) LEO F. CAIN LIBRARY	152,006	1.50	228	0	228
20	LIBRARY ADDITION	139,569	2.22	310	0	310
23	(WH) JAMES L WELCH HALL	179,952	1.50	270	0	270
25	(SHC) STUDENT HEALTH CENTER	20,046	3.09	62	0	62
26	(LSU) LOKER STUDENT UNION NEW BUILDING	123,033	N/A	207	0	207
26	(LSU) LOKER STUDENT UNION OLD BUILDING		N/A	103	0	103
30	(SBS) SOCIAL/BEHAVIORAL SCIENCES	81,000	1.91	155	0	155
40	(LCH) LACORTE HALL	70,331	2.15	151	0	151
45	(UT) UNIVERSITY THEATRE	25,201	1.75	44	0	44
50	(NSM) NATURAL SCIENCES/MATHEMATICS	84,450	2.13	180	0	180
60	(GYM) GYMNASIUM	65,752	1.15	76	0	76
87	(CP) CENTRAL PLANT	12,840	16.11	207	0	207
106	(EE) EXTENDED EDUCATION CENTER	24,619	3.25	80	0	80
107	(CAMS) CA. ACADEMY OF MATH AND SCIENCE	31,667	3.05	97	0	97
111	BASEBALL/SOFTBALL STORAGE	3,380	0.45	2	0	2
107	(CAMS) CA. ACADEMY OF MATH AND SCIENCE	13,548	4.58	62	0	62
120	(CDC) CHILD DEVELOPMENT CENTER	4,320	5.39	23	0	23
121	(ITC) INFANT TODDLER CENTER	4,320	5.39	23	0	23
	VELODROME SPORTS CENTER	N/A	N/A	282	0	282
A	Academic	198,215	3.00	595	176	419
B	Admin	105,440	3.00	316	110	206
C	Black Box Theatre	7,640	2.00	15	0	15
D	Academic	85,000	3.00	255	86	169
E	Rec Center	151,148	2.00	302	410	-108
I	Incubator	71,410	5.00	357	65	292
J	Academic	111,310	3.00	334	83	251
K	Academic/Admin	99,570	3.00	299	100	199
L	Student Union Expansion	85,000	5.00	425	86	339
M	Academic/Admin	128,185	3.00	385	121	264
N	Academic/Admin	123,770	4.00	495	114	381
O	Academic/Admin	130,025	4.00	520	121	400
P	Plant Operations (Central Plant)	5,170	N/A	3000	0	3000
SP2	Satellite Central Plant 2	2,000	N/A	600	0	600
SP3	Satellite Central Plant 3	2,000	N/A	600	0	600
SB	New Science Building	75,000	7.00	525	0	525
RH1	Residence Hall: Housing	88,200	1.40	123	0	123
RH2	Residence Hall: Housing	56,700	1.40	79	0	79
RH3	Residence Hall: Food Service & Activity Space	15,000	8.00	120	0	120
RH4	Residence Hall: Housing	88,200	1.40	123	0	123
RH5	Residence Hall: Housing	56,700	1.40	79	0	79
RH6	Residence Hall: Housing	56,700	1.40	79	0	79
SP1	Satellite Central Plant (400 Ton)	N/A	N/A	400	0	400
Lot 3	Surface Parking (288 Spaces) 29 EV Spaces	100,700	2.30	232	0	232
Lot 6A & 6B	Parking Structure (2893 Spaces) 289 EV Spaces	1,012,508	2.38	2412	1557	855
Lot 4A & 4B	Parking Structure (2732 Spaces) 273 EV Spaces	956,116	2.39	2284	1577	707
South Surface	Parking Structure (2626 Spaces) 262 EV Spaces	919,060	2.39	2196	0	2196
Small Lot North of Welch Hall	Surface Parking (45 Spaces) 5 EV Spaces	15,840	2.27	36	0	36
			TOTAL	19750	4605	15146

TABLE 3. ALL BUILDINGS SERVED BY CORE CAMPUS, FINAL PLAN

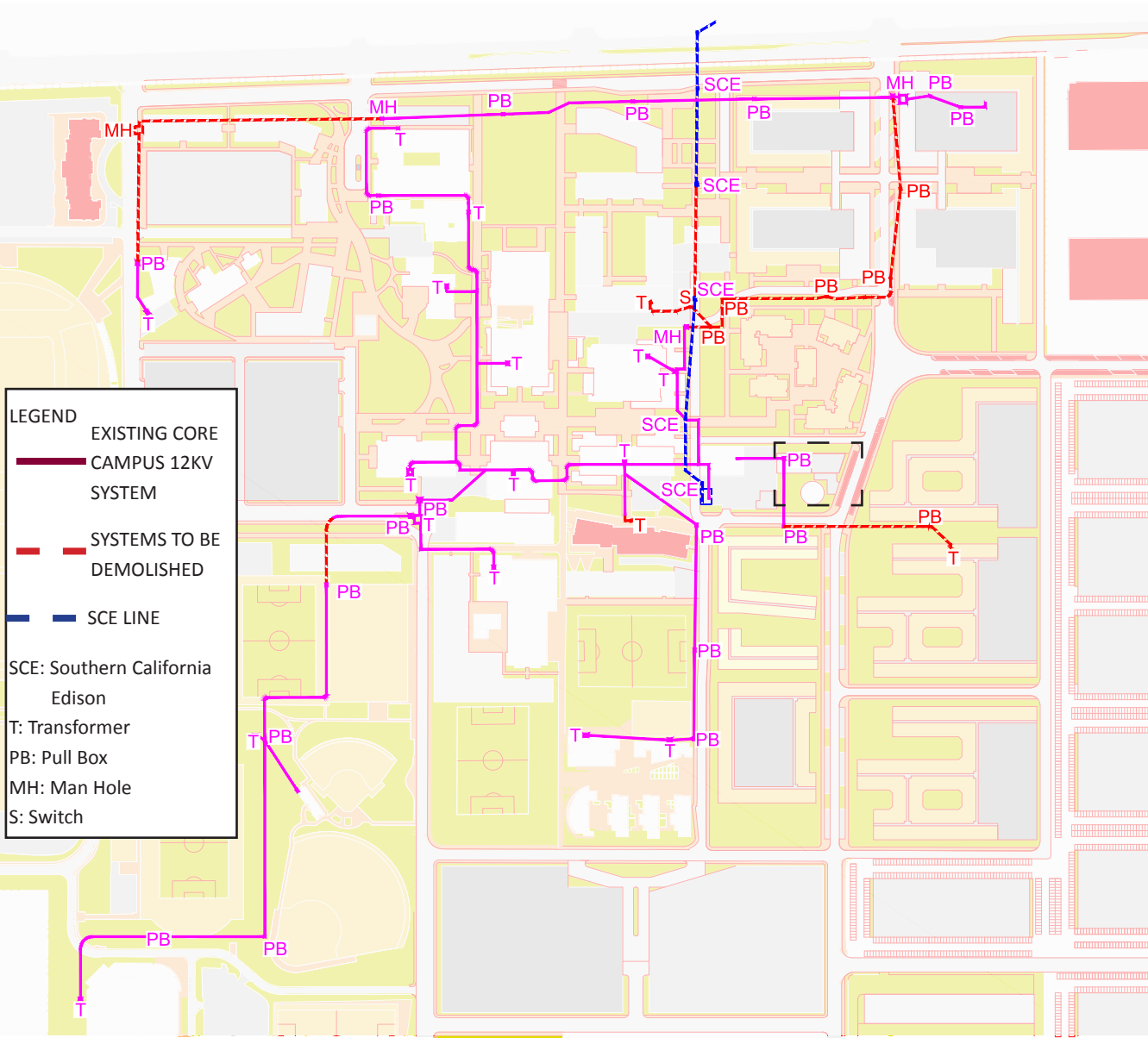


FIGURE 3. EXISTING 12KV POWER DISTRIBUTION LAYOUT, DEMO PLAN

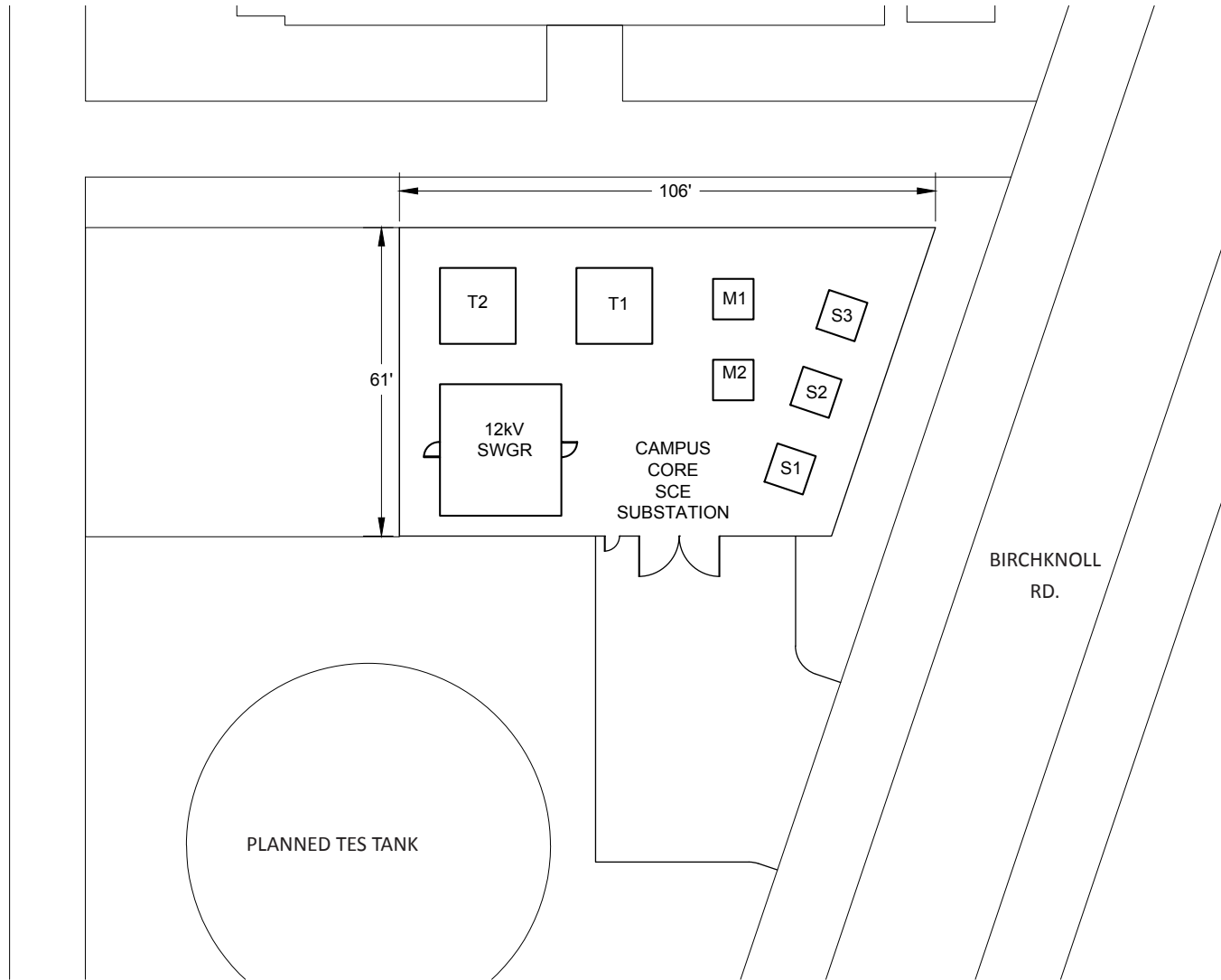


FIGURE 4. SCE NEW SUBSTATION

minated with the SCE design and planning for the LDP area.

2) Provide new feeders, sized at 250kcmil minimum, for the new Science Building, new Student Housing complex, and new Chiller Plant. The 250kcmil conductor size is a minimum size for a loop feeder.

3) As load increases, and until a new Core Campus substation is energized, rebalance the loads between the two 12kV 5000kVA transformers and main breakers to avoid an overload of either 5000kVA transformer. Install meters to continuously monitor the load at the main 12kV switchgear. Establish the maximum load SCE can provide from the existing service.

4) Monitor the 12kV feeder loads. Rebalance the feeders by switching building loads between the 12kV feeders to avoid an overload of an individual feeder. Install meters to continuously monitor the feeder loads. Replace the existing @2AWG loop feed cables with 250kcmil.

5) The new SCE Core Campus substation will be located northeast of the proposed new TES tank. A concept design for the new substation is shown in Figure 3. The final design must include SCE requirements. The new substation will include SCE 16.5kV distribution equipment maintained and operated by SCE. The substation will also include campus owned transformers and 12kV switchgear. The maximum capacity of the substation should be 20,000kVA, based on the Master Plan load estimate. The load estimate basis excludes the mitigating effects of campus installed generation, such as PV or fuel cells, and also energy storage, such as batteries, which will reduce the peak load when in operation. SCE will need to confirm the ultimate capacity available for the new substation. The new substation will include Rule 21 provisions for customer owned generation.

6) The new 12kV distribution system will consist of four loop feed circuits, requiring eight total feeders. Two existing loop feeders with 250kcmil cable will need to be upgraded overtime to replace some #2AWG cable in order to provide 310A, or 6400kVA, of full capacity of the loop. The existing loop feeder will also need to have some existing switches replaced in order to address configuration issues in the future. Two new loop feeders will also be required to supply the new loads. One of the new loop feeders can be connected at the existing 12kV main switchgear using spare breakers HV3 and HV4. The other new loop feeder will be connected to the new 12kV substation switchgear. The existing 12kV main switchgear located in the Central Plant will be reconnected and supplied from the new service with parallel phase conductors capable of supplying 1200A continuously. The two new loop feeder circuits should be 500kcmil cable to provide for future load growth and back-up feeder capability to cross connect to the two existing 250kcmil feeders. The cross connect capability will be utilized during modification of the infrastructure, when sections of existing duct bank are removed as part of demolition for site preparation. Power system studies will be required and existing equipment short circuit interrupting

ratings will need to be checked versus the new higher short circuit duty. The existing SCE service equipment will be demolished after the new substation is energized with the Core Campus loads.

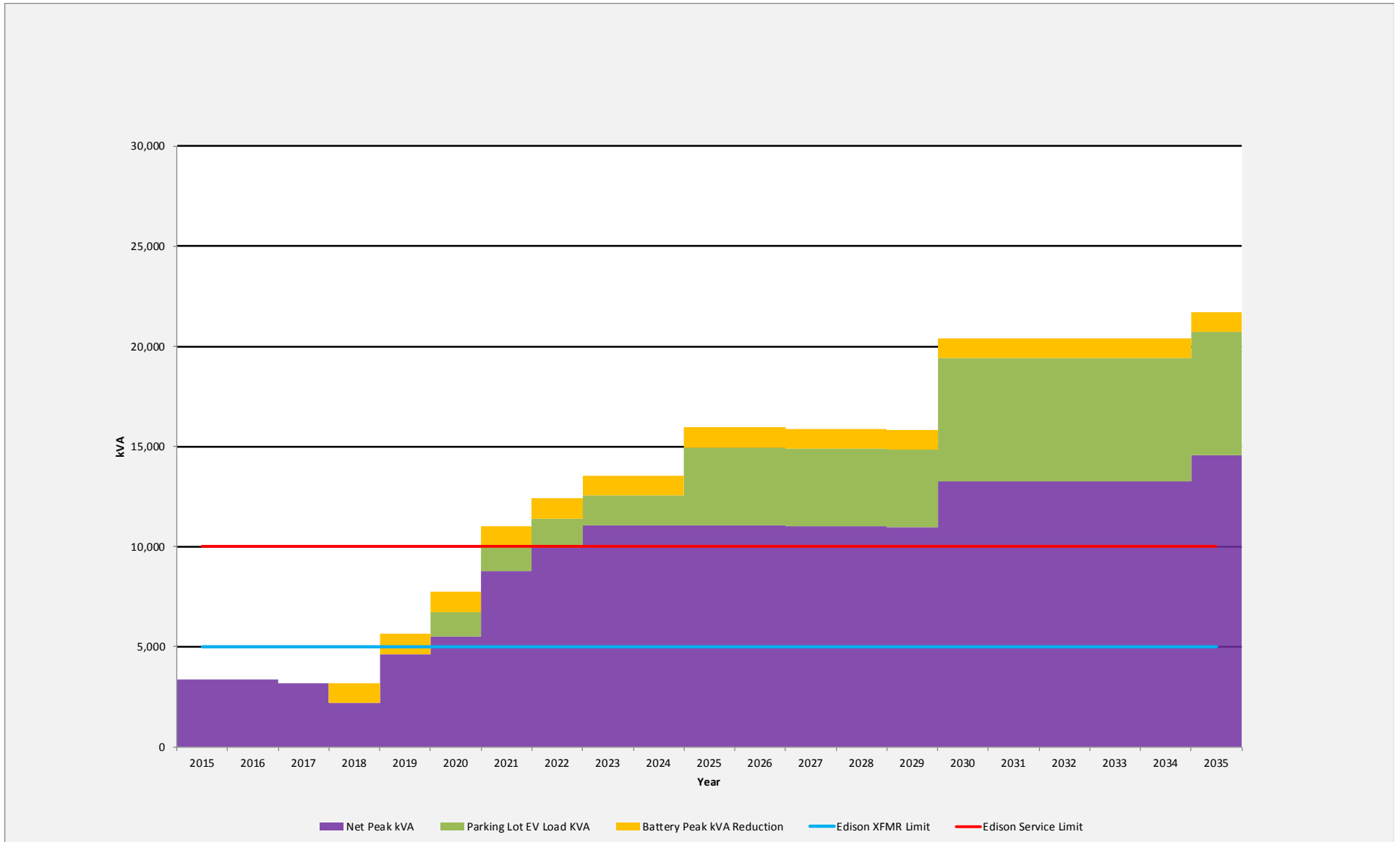
7) Include electric power infrastructure costs for demolition and replacement in the cost for each building project. The costs should include all duct banks, manholes, loop feed cable, 12kV sectionalizing switches, and building service cable and transformers that are associated with the work necessary to maintain continuity of service to existing campus loads, connect new buildings and loop feeders, and make provisions for the ultimate system configuration. This will add significant costs to each project, so project feasibility studies should include scope and costs for infrastructure installation and replacement.

8) Meet with SCE to define Rule 21 requirements and the location for a Utility Line Disconnect (ULD) for all utility interactive inverters associated with energy sources that operate in parallel with the utility. It is preferred to have a ULD at each location where an inverter is installed rather than have the campus main service designated as the ULD.

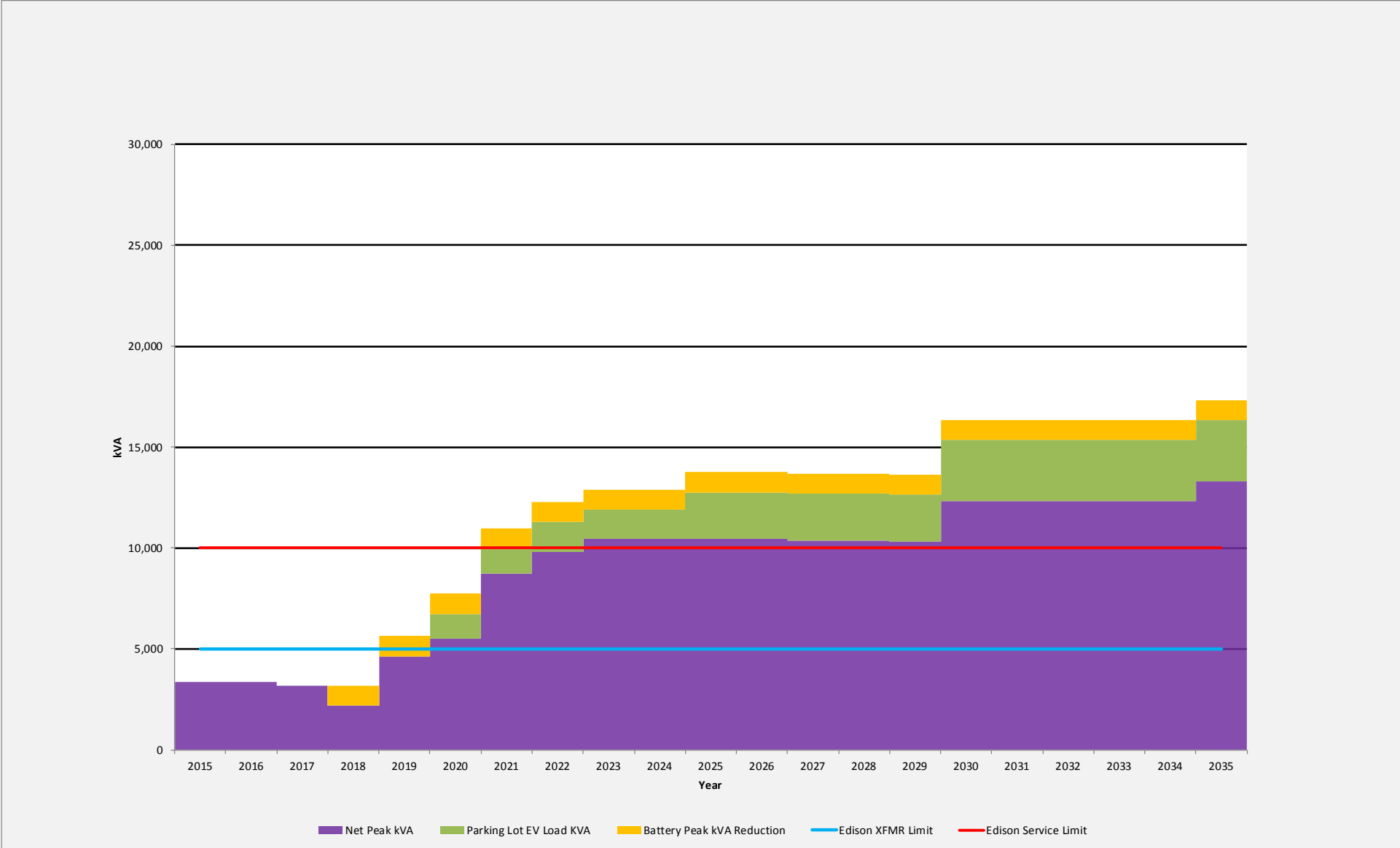
9) The campus should review the requirements for electric vehicle supply equipment (EVSE) and establish compliance objectives. The 6% mandatory requirement established by the California Codes and Regulations is applicable to all new parking lots and parking structures. The total power capacity required to supply 6% of the 8,584, or so, new parking spaces, or 515 EVSE required spaces, is 4,120kVA. This is roughly 25% of the estimated peak demand for the new construction included in the Master Plan.

10) Develop a phasing plan, budget cost estimate, and a capital project request for each phase of construction for new infrastructure and new campus SCE service substation.

11) Graph 1 and Graph 2 depict the Core Campus peak load profile. Graph 1 is the Core Campus load without PV, and Graph 2 is the Core Campus load with PV. The peak load reduction due to battery operation is also shown.



GRAPH 1. CSUDH CORE CAMPUS LOAD PROFILE WITHOUT PV



GRAPH 2.CSUDH CORE CAMPUS LOAD PROFILE WITH PV

PART B: LDP AREA ELECTRIC POWER INFRASTRUCTURE

A. LOAD GROWTH ASSOCIATED WITH MASTER PLAN

The LDP area is subdivided into building parcels that will be developed over a 15-year time period. The planned development of the LDP is very dense consisting of 1.7 million GSF of parking structures, 2.5 million GSF of multi-family residential units, 94,000 GSF of retail, 690,000 GSF of apartments, and 591,000 GSF of business park buildings. Table 4 includes the estimated electric power demand associated with each parcel with and without photovoltaics. The total estimated peak load for the LDP area is 23,195kVA without photovoltaic power considered. Electric vehicle EVSE loads will add another 4,900kVA of power demand. Graph 3 and Graph 4 show the load profile for the LDP with and without photovoltaic power. Provisions for photovoltaic power are now included in the Title 24 Energy Code, however, the amount of PV that could be installed is variable.

B. ELECTRIC POWER SERVICE OPTIONS FOR THE LDP AREA

Electric power for the LDP area development can be provided in several ways as follows:

- 1) Supply power from a new upgraded SCE substation that also supplies power to the Core Campus with the infrastructure owned and operated by the campus. A consolidated single substation would require 66kV service and a 115' x 160' substation. Rule 18 compliant metering would be required.
- 2) Supply power to all LDP parcels from an SCE operated and maintained underground 16.5kV distribution system, with up to four 16.5kV circuits configured in two loops.
- 3) Supply power to LDP area loads from a combination of new SCE Core Campus substation and campus infrastructure and new SCE operated and maintained infrastructure. The capacity of the new SCE Core Campus substation is limited and could not accommodate the LDP loads.

There are several issues to consider with the three options for supplying power to the LDP area.

- 4) The existing campus Phase 1 Housing project and existing Operations Buildings are presently located in the LDP area and are supplied from separate SCE services. Both of these occupancies will ultimately be demolished, however the precedence for SCE service of the LDP area of the

campus is important because it establishes an SCE presence on campus, which is covered under California Public Utilities Commission (CPUC) Rule 16 for line extensions on private property. SCE has the option to install, operate, maintain, and meter such line extensions and provide service equipment to customer owned occupancies requiring multiple meters. SCE is also providing power to a privately owned parcel located on the northeast corner of the LDP area that is supplied from the same distribution circuit that supplies the Phase 1 Housing. This SCE underground feeder may require relocation based on the proposed development and building plans for the LDP.

5) The new SCE substation required for the Core Campus will be supplied from SCE 16.5kV distribution circuits. A dedicated distribution circuit capacity limit for a 16.5kV circuit is roughly 17,000kVA. Based on the load forecast for the Core Campus, there is no spare or excess capacity to supply LDP area loads. A new 66kV service would be required to supply both the Core Campus and the LDP areas. The advantage of a 66kV service is that there is a 20% energy cost savings. The disadvantage is the higher first cost and SCE Added Facilities charges. SCE would need to prepare a Method of Service Study for both 16.5kV and 66kV service options to better inform the options, costs, design, and construction schedules.

6) An underground 16.5kV distribution system that is operated and maintained by SCE is feasible. The site plan shown in Figure 5 is based on SCE operated and maintained service. There are many advantages to this approach including:

a. The cost for SCE cable and equipment is largely offset by new service credits, which will reduce the project first costs.

b. Individual occupancies can be separately metered by SCE reducing the cost and burden for campus installed metering systems and costs for accounting, billing, customer relations, and collections.

c. The campus avoids the first cost for installation of cable and equipment, maintenance and operations, metering systems and billing, trouble calls, etc.

7) CPUC Rule 18, Part E requires all separate premises to be individually metered. A customer is prohibited from the re-sale of electric energy, unless a utility grade metering system is installed. However, none of the costs associated with metering and billing can be charged to the end user. For the LDP, maintenance of a campus owned metering system would be a significant cost for both labor and operations and on-going financial burden. For this reason, an SCE operated and maintained distribution system with SCE meters is recommended.

8) The site distribution plan shown in Figure 5 is relevant and applicable to either an SCE operated system or a campus operated system. The main considerations are:

a. First Cost. The customer is responsible to install underground structures. The developer or the campus must pay for duct banks, manholes, and equipment pads, regardless if SCE or campus operated. The overall first cost including cable and equipment is lower if SCE service credits for new load can be applied.

b. 66kV vs. 16.5kV. SCE will need to complete a Method of Service Study in order to provide a cost estimate and schedule for service options. A location for a 66kV substation would need to be identified and would likely be near a major thoroughfare in order to reduce 66kV construction costs. The campus should initiate discussions with SCE as soon as possible to begin a Method of Service Study for both the Core Campus and LDP. SCE will charge a significant upfront fee for the MOS.

c. Metering. The LDP area will include thousands of occupancies. How are those occupancies to

be metered and charged for energy use? Installation of meters by SCE is the better option for many reasons.

Parcel	Building Name	GSF	Watts/SF	Peak Load (kW)	PV Peak Capacity (kW)	Net Peak Load with PV (kW)	Peak Load (kVA)	Net Peak Load with PV (kVA)	Year Energized
1-A	Multi-Family Rental	316,595	4.00	1,266	241	1,228	1,407	1,419	YEAR 3
	Retail	16,445	12.30	202			225		YEAR 3
	Parking Structure	148,800	4.10	610	241	369	610	455	YEAR 3
1-B	Multi-Family Rental	330,840	4.00	1,323	272	1,305	1,470	1,512	YEAR 5
	Retail	20,630	12.30	254			282		YEAR 5
	Parking Structure	223,200	2.73	610	241	369	610	455	YEAR 5
3-A	Student Apartments	301,384	4.00	1,206	338	868	1,339	1,046	YEAR 3
3-B	Faculty Apartments	389,556	4.00	1,558	437	1,121	1,731	1,351	YEAR 11
4-A	Multi-Family Rental	292,650	4.00	1,171	241	1,200	1,301	1,388	YEAR 3
	Child Care	13,125	4.00	53			58		YEAR 3
	Retail	17,695	12.30	218			242		YEAR 3
	Parking Structure	223,200	2.73	610	241	369	610	455	YEAR 3
4-B	Multi-Family Rental	363,751	4.00	1,455	320	1,621	1,617	1,873	YEAR 5
	Retail	39,495	12.30	486			540		YEAR 5
	Parking Structure	313,200	2.61	816	341	475	816	593	YEAR 5
5-A	Multi-Family Rental	337,804	4.00	1,351	379	972	1,501	1,172	YEAR 14
	Parking Structure	256,080	2.68	686	417	269	686	402	YEAR 14
5-B	Multi-Family Rental	453,168	4.00	1,813	510	1,303	2,014	1,571	YEAR 14
	Parking Structure	256,080	2.68	686	417	269	686	402	YEAR 14
5-C	Multi-Family Rental	453,260	4.00	1,813	510	1,303	2,014	1,572	YEAR 14
	Parking Structure	246,480	2.69	663	403	260	663	389	YEAR 14
6A	Business Park	86,400	2.92	252	1,557	4	280	729	YEAR 4
	Business Park	86,400	2.92	252			280		YEAR 4
	Business Park	86,400	2.92	252			280		YEAR 4
	Business Park	86,400	2.92	252			280		YEAR 4
	Surface Parking				553			553		YEAR 4
6B	Business Park	86,400	2.92	252	630	5	280	297	YEAR 4
	Business Park	54,000	2.93	158			176		YEAR 4
	Surface Parking			225			225		YEAR 4
7A	Business Park	86,400	2.92	252	389	1	280	182	YEAR 11
	Surface Parking			138			138		YEAR 11
			TOTAL	21,436	8,124	13,311	23,195	17,264	

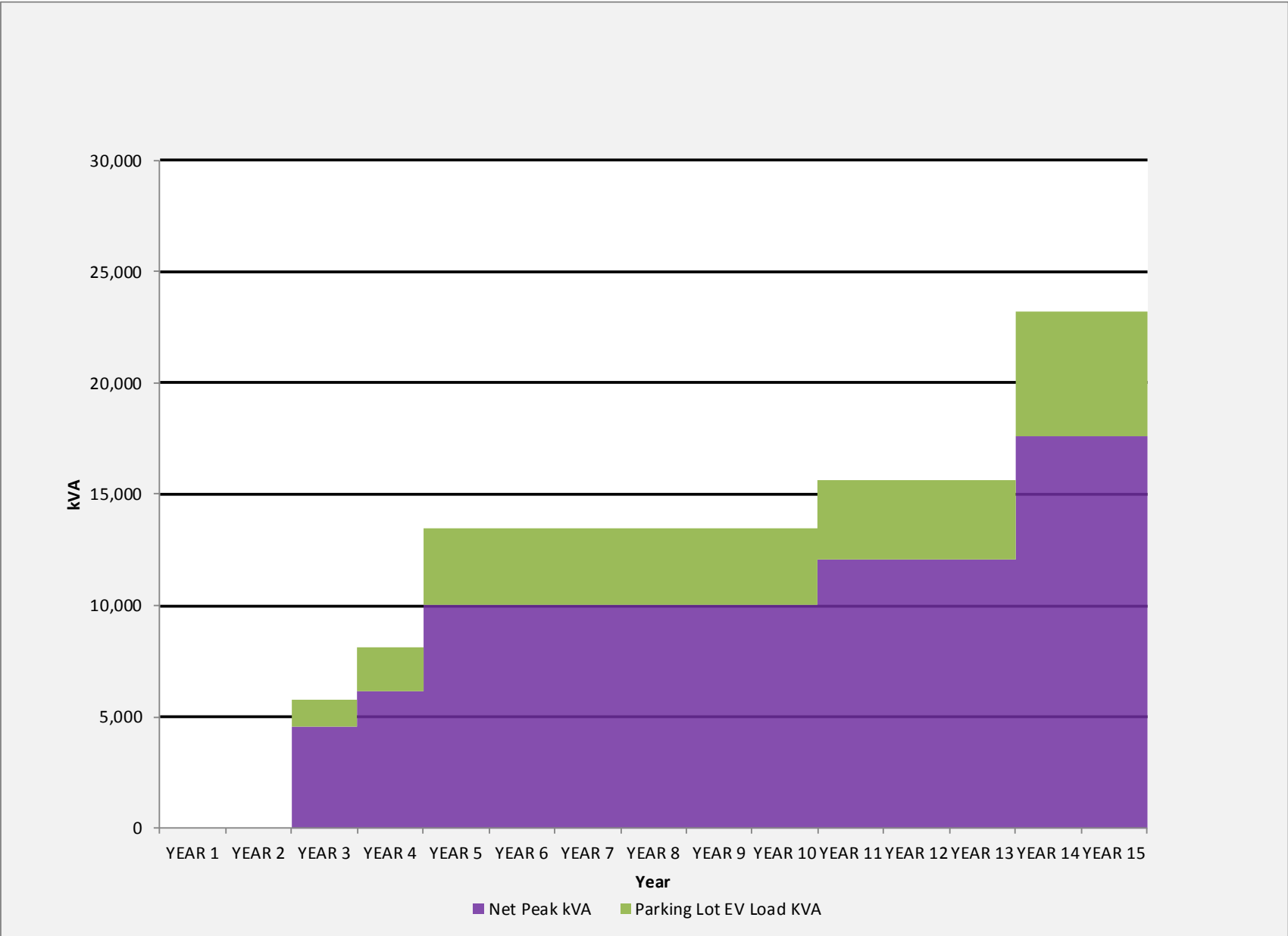
TABLE 4. LDP AREA LOAD FORECAST WITH AND WITHOUT PHOTOVOLTAIC POWER

C. EXISTING 12KV POWER DEMOLITION AND RELOCATION

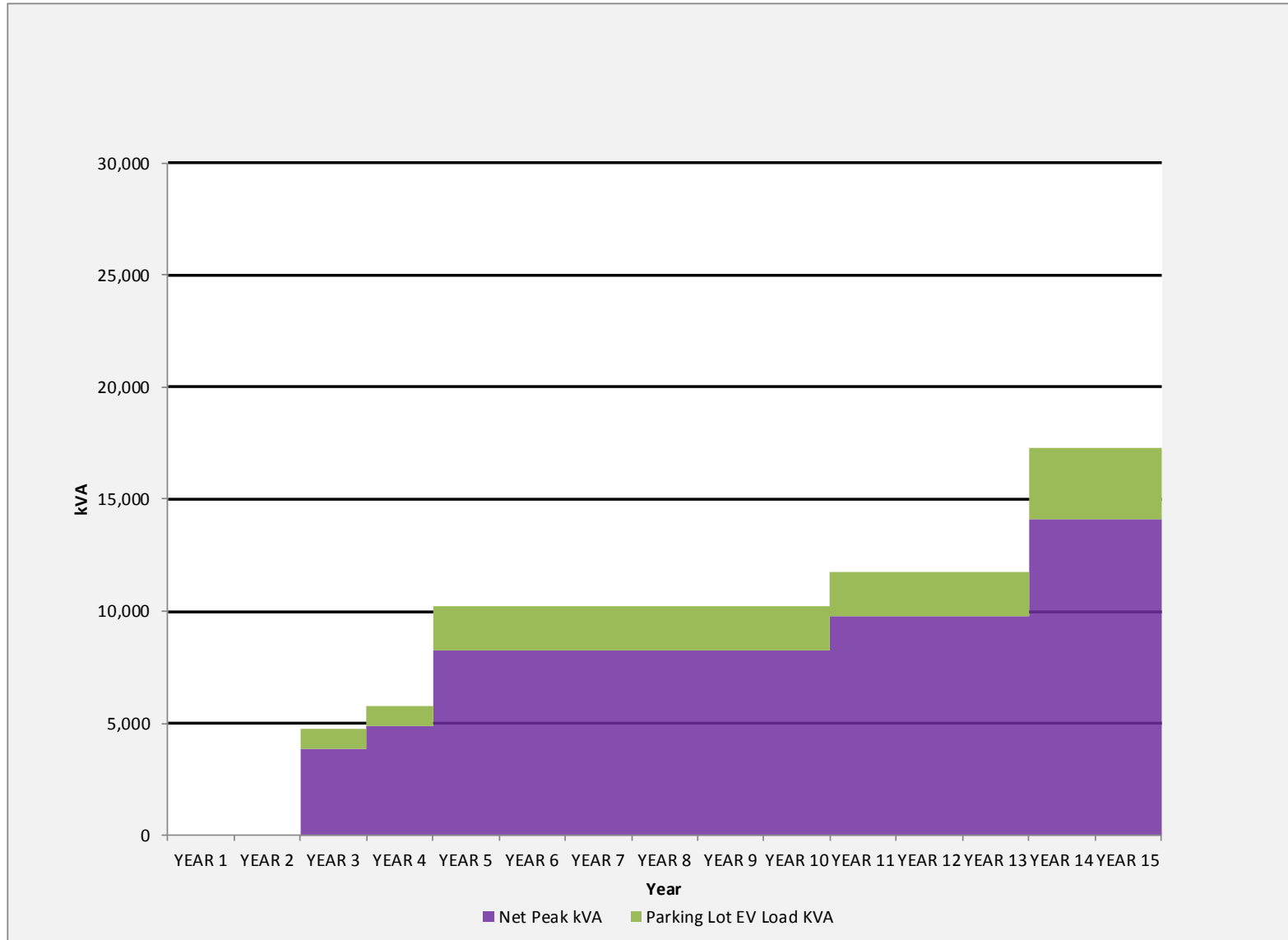
The Core Campus HV-6 12kV loop feeder is connected from the SBS Building to Vault 2 and then to Vault 3 through a duct bank and series of manholes and pull boxes that cross the LDP area. The ductbank supplies power to VDC Substation #2 and the Childhood Development Center (CDC) and Infant Toddler Center (ITC) as well as Parking Lot 1 photovoltaic installation. The 12kV source to the CDC and ITC will need to be modified since it will be demolished during development.

The Student Housing SH-1 SCE 12kV source duct bank also supplies power to the commercial buildings located at the northeast corner by Central Avenue and Victoria Street. LDP development will need to be coordinated with the existing SCE underground circuit. The Student Housing SH-2 is supplied from the campus 12kV via Central Plant. The duct bank and equipment associated with SH-2 will be demolished.

The Facilities Services (FS) complex is supplied power by SCE at 480V. The SCE service will be demolished when the FS building is vacated.



GRAPH 3. CSUDH LDP AREA LOAD PROFILE WITHOUT PV



GRAPH 4. CSUDH LDP AREA LOAD PROFILE WITH PV

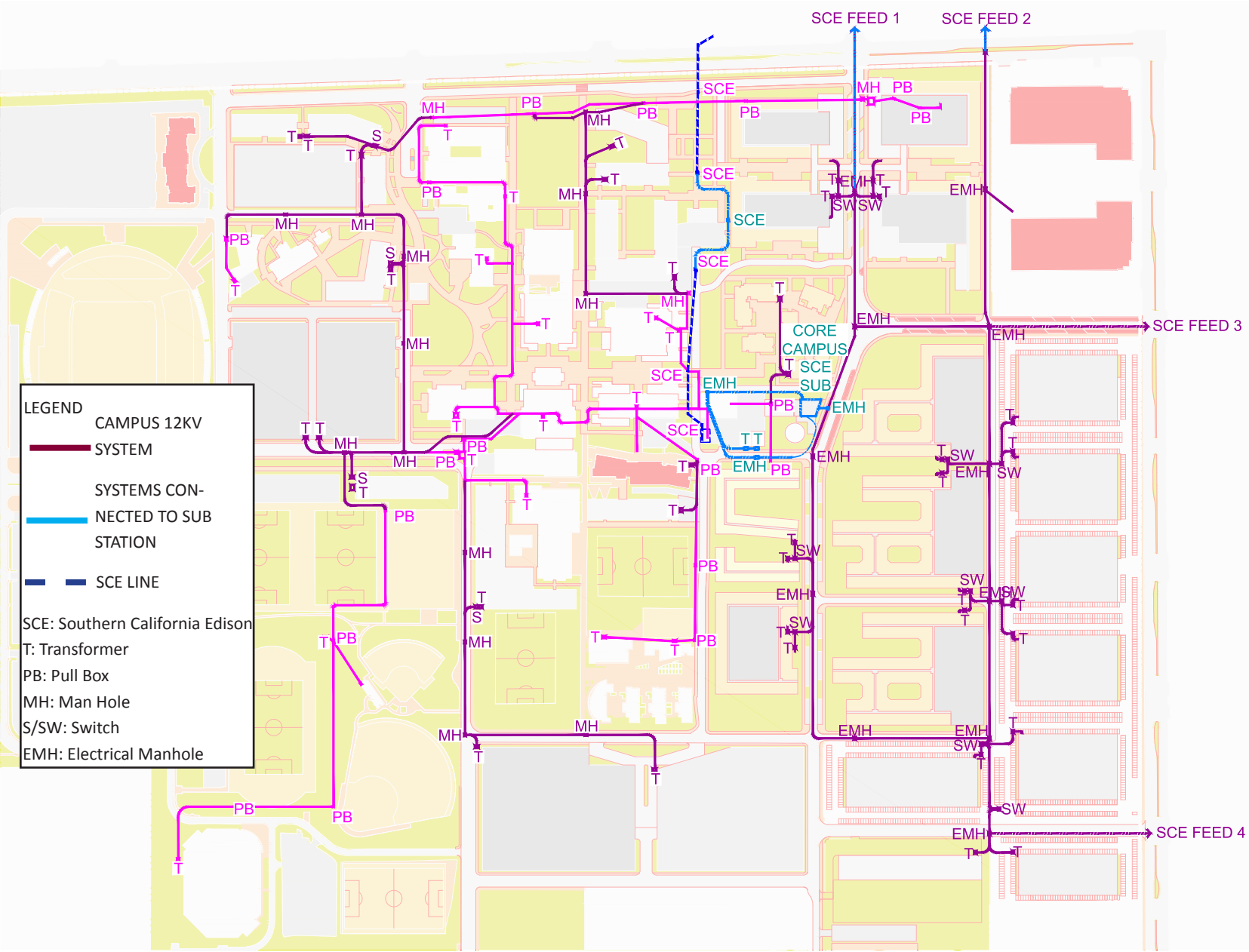


FIGURE 5. ELECTRIC POWER SITE DISTRIBUTION PLAN

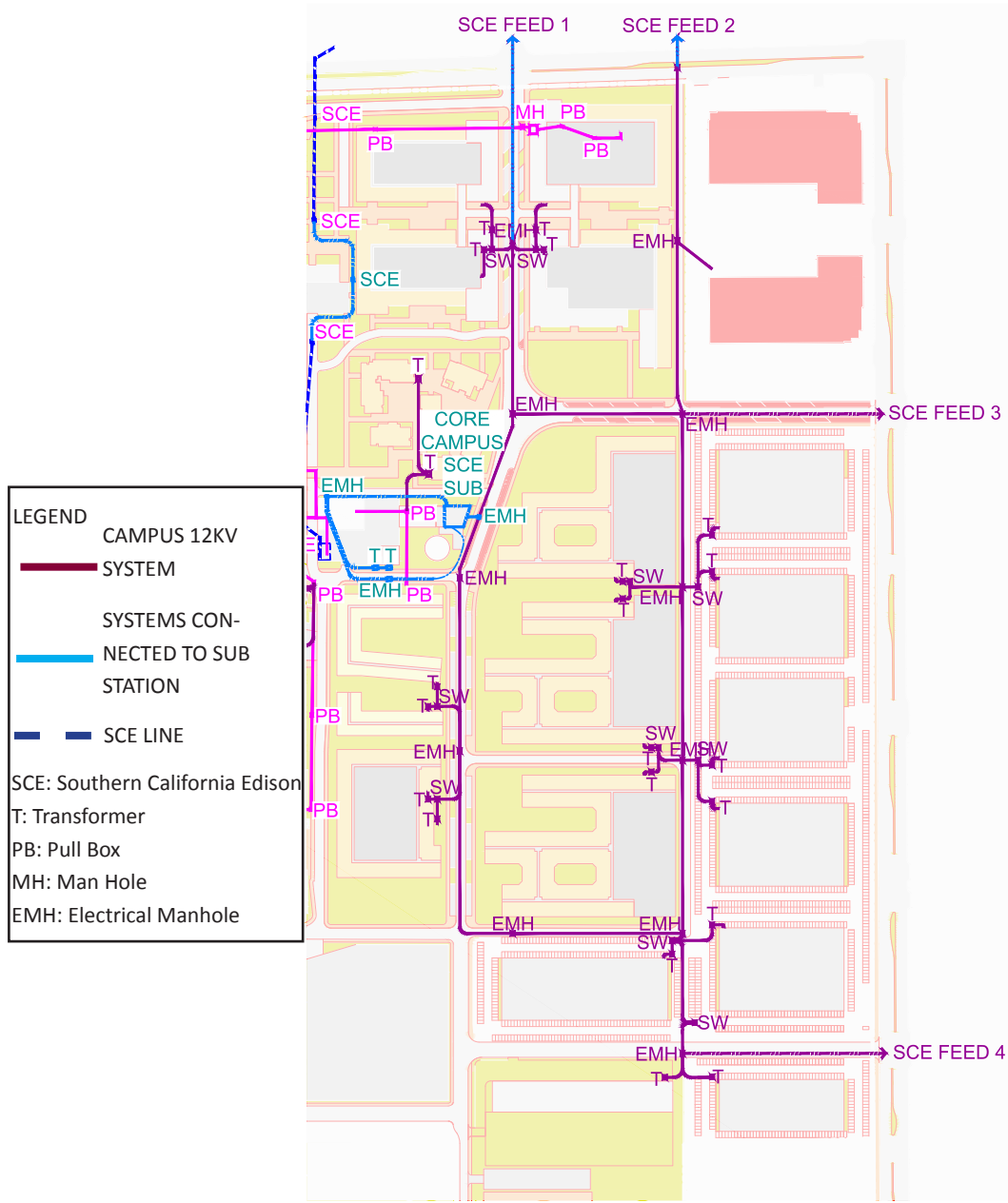


FIGURE 6. LDP AREA ELECTRIC POWER SITE DISTRIBUTION PLAN

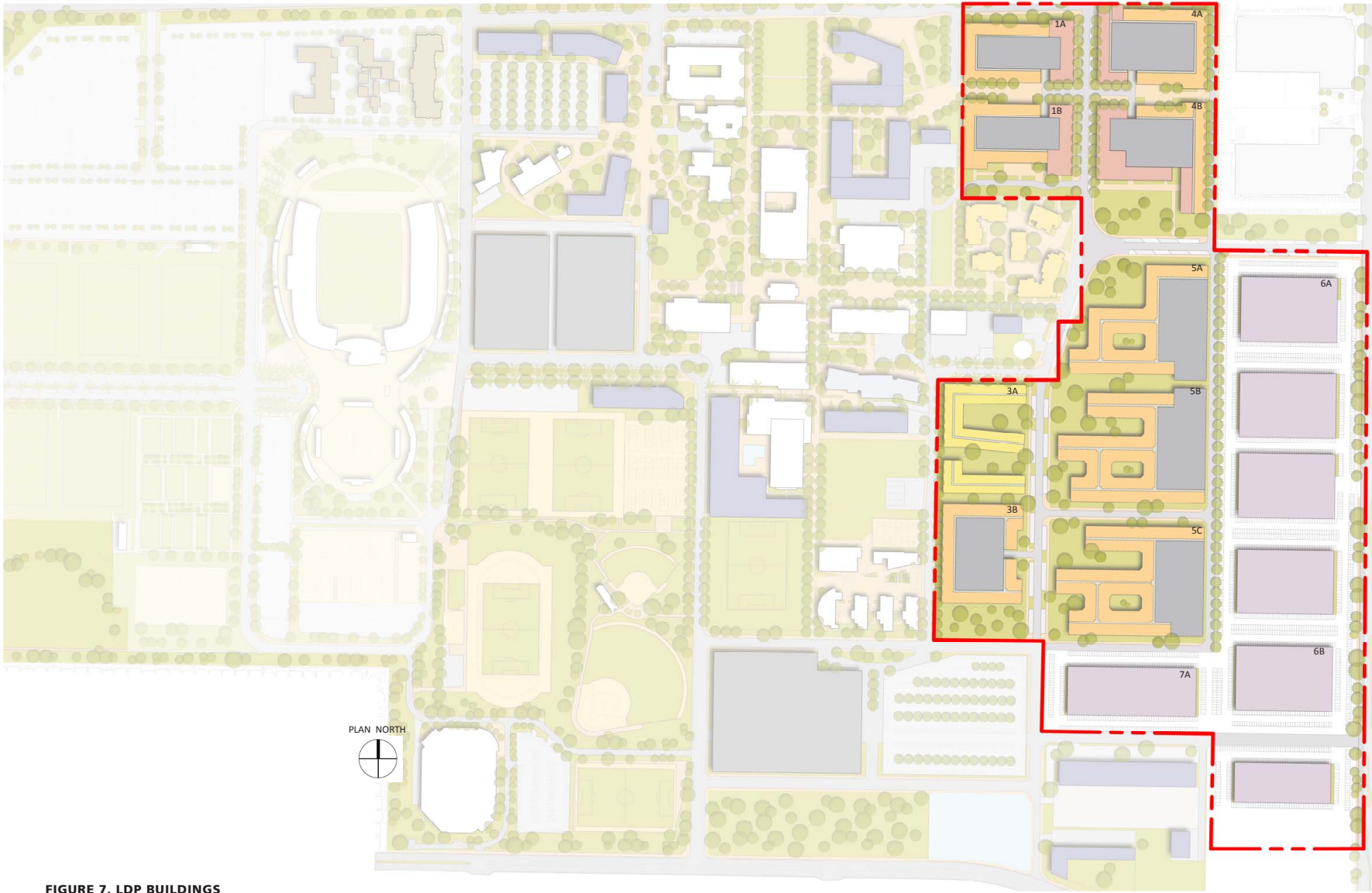


FIGURE 7. LDP BUILDINGS

IT INFRASTRUCTURE HIGHLIGHTS

PART-A: CORE CAMPUS

Core Area: 1.7 million GSF

Strategy: Work with service providers to enhance data and internet bandwidth and data transmission speeds. Upgrade the Core servers and switches. Install two separate cables to each building via different paths for redundancy. Provide increased backup power capacity to the Data Center and Campus network servers and switches. Enhance reliability and bandwidth for additional services by installing additional GigaMAN services to separate new MPOE locations.

CORE CAMPUS BUILDINGS LIST

A	Academic
B	Admin
C	Black Box Theatre
D	Academic
E	Rec Center
I	Incubator
J	Academic
K	Academic
L	Student Union Expansion
M	Academic
N	Academic
O	Academic
P	Central Plant Expansion
Q	Satellite Central Plant
R	Facilities Services Complex
V	Child Care
W	Fab Lab Garage
2A,B	Residency Halls

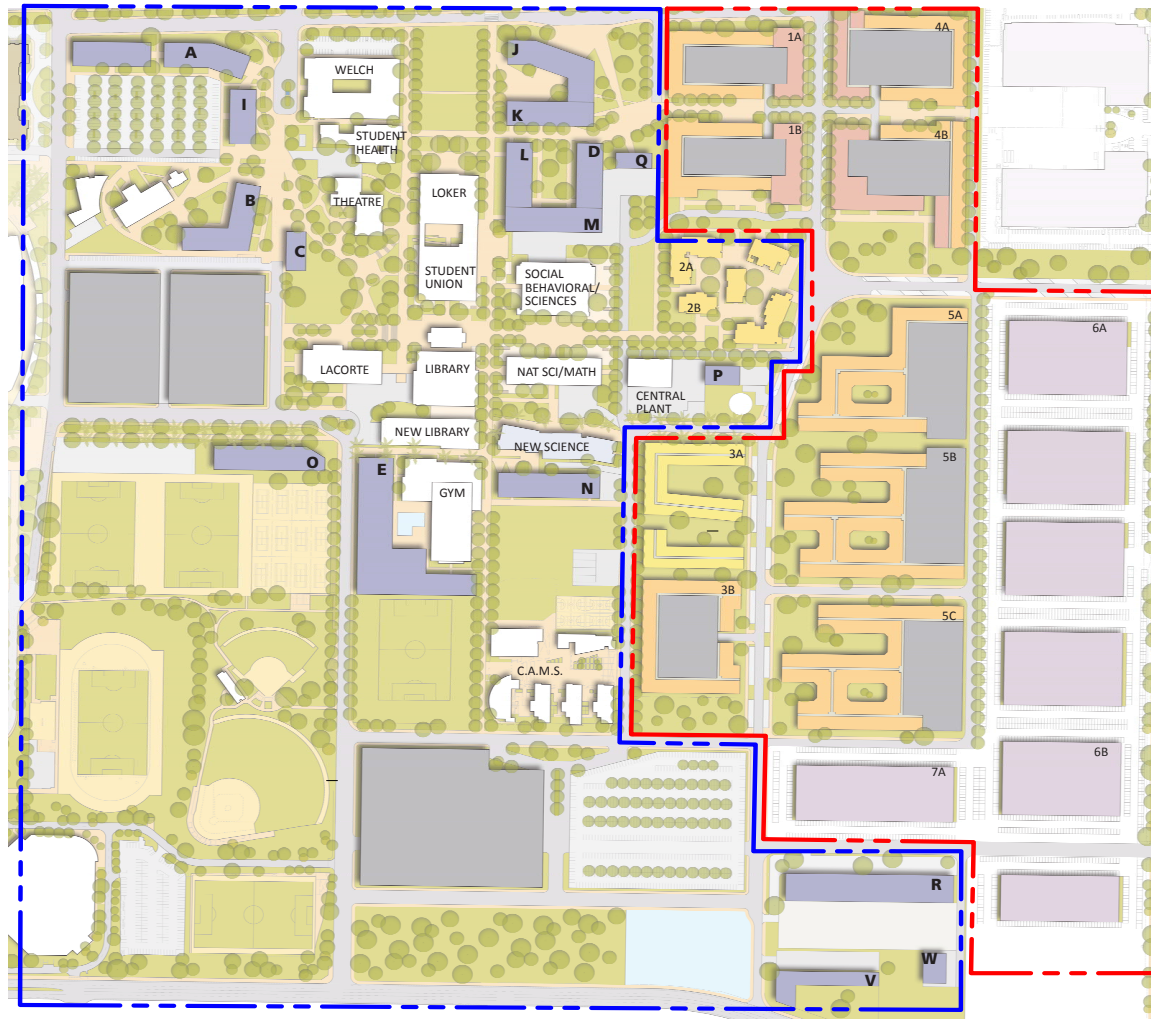
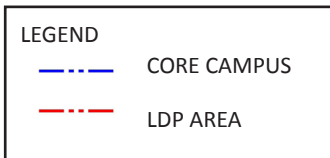


FIGURE 1. HIGHLIGHTS OF CAMPUS MASTER PLAN IT INFRASTRUCTURE



PART-B: LDP

LDP Parking Area: 1.9 million GSF

LDP Building Area: 3.8 million GSF

Strategy: The LDP will consist of residential, commercial, retail, parking, and office occupancies. Most of the occupancies will be third party operated, and separately metered. The LDP will be connected to the Core Campus via fiber optic cable or through Virtual Private Network (VPN) access. Data and internet service should also be provided by third party entities. A joint infrastructure will be utilized to deliver IT services to all occupants. The campus can provide cloud services for academic, incubator and residents. Separate Wifi networks will be needed.

LDP LAND USE

1A	Mixed Use
1B	Mixed Use
3A	Apartments
3B	Apartments
4A	Mixed Use
4B	Mixed Use
5A	Multi Family Rental
5B	Multi Family Rental
5C	Multi Family Rental
6A	Business Park
6B	Business Park
7A	Business Park

PART A: CORE CAMPUS IT INFRASTRUCTURE

A. EXISTING SYSTEMS

The campus has three Primary Rate Interface (PRI) lines that provide a total of 72 trunks for external local telephone calls and two T1 lines that provide a total of 48 lines for external long distance telephone calls. The PRIs and T1 lines are provided from a variety of service providers including MCI, ATT and others. The PRI lines are routed via overhead fiber optic utility lines that enter at the north of campus and are routed underground down to the Main Point of Entry (MPOE) located in the ERC Library Building. The PRI lines terminate at the Intecom E PBX now supported by Mitel/Aastra. The Aastra PBX was installed in 1996. The campus has been converting the telephone service to a cloud based Voiceover IP (VoIP) system since 2014.

Figure 2 shows the campus IT infrastructure of the existing data/telecom systems infrastructure and the relative position of key points of service at campus buildings. The cabling installed in the utility tunnel is not shown.

The campus has redundant network service utilities that have divergent paths onto campus from different source connections. The network service is provided by CENIC over AT&T GigaMan fiber optic cable. The service provides connectivity with 1 GB of bandwidth.

The primary network service enters campus from Victoria Street north of the SCC-1 building and is routed underground to the MPOE located in the ERC Library Building. The backup network service enters campus east of the Child Development Center and is routed underground before terminating at its MPOE located in the Welch Hall Building. The backup service remains inactive and only becomes active when the primary service fails. During a primary service failure, external internet traffic is automatically re-routed to the backup service.

The campus has two MPOE locations. One MPOE is located on the first floor of the ERC Library Building. This MPOE houses the telephone equipment, including the PBX, and the primary network service equipment. The equipment located in the ERC Library Building MPOE is provided with a variety of rack mounted Uninterruptible Power Supplies (UPS) or battery backups that are supplied power from a backup generator during a utility power failure.

The second MPOE is located on the third floor of the Welch Hall Building within the Campus Main Data Center and houses the backup network service equipment. The networking equipment and Data Center servers are connected to a variety of rack mounted UPS units which are backed up by a backup generator. The Data Center houses the campus computer network servers.

The network services installed in the ERC Library and Welch Hall MPOEs are connected together via fiber optic cabling. The fiber optic

cabling is installed in underground pathways and the utility tunnel between the two buildings.

Telephone service for all campus buildings are networked back to the primary MPOE located in the Library Building over copper lines that were originally installed to provide all telecommunication services to the buildings. Since 2014, buildings telecommunication services have been migrated to fiber optic cables to provide VoIP service to the buildings. The building Main Distribution Frame (MDF) and Intermediate Distribution Frame (IDF) rooms have been equipped with VoIP POE switches to connect VoIP handsets to a cloud based VoIP utilizing broadband internet access. The copper and fiber optic cables are routed mostly in underground ductbanks that connect between the Library Building MPOE and rest of the campus buildings.

Internet and internal networks are routed through the fiber optic network cables to the ERC Library Building MPOE. Network routers and switches are used to route the network traffic to the internal servers or to the internet as required.

The campus has multiple utility cables that provide the telephone service. Redundancy is provided over the multiple utility cables for telephone service. Though, the utility cables provide redundancy, a failure in the cable would result in a reduction of the system capacity. The PBX System is not provided with redundancy for the telephone system. The campus has two different utility cables that provide internet service. Both the primary

and secondary utility serves are provided by CENIC over fiber optic cable. Both services are rated for a 1GBps connection. The primary and secondary service cables have divergent paths. The campus has two service routers that provide redundancy for routing the internet traffic. Each service router is associated with one of the two service connections. In the event of a service or router failure, the backup router and service will handle the networking duties.

The campus has a primary Data Center located on the 3rd Floor of Welch Hall. A backup Data Center, located in the ERC Library, provides some redundancy to the campus network services. The backup Data Center is limited to only critical services. As a result, only partial redundancy is provided. The campus has two core switches that provide network redundancy between the Data Center and each campus building due to a switch/router failure. However, each campus building is served

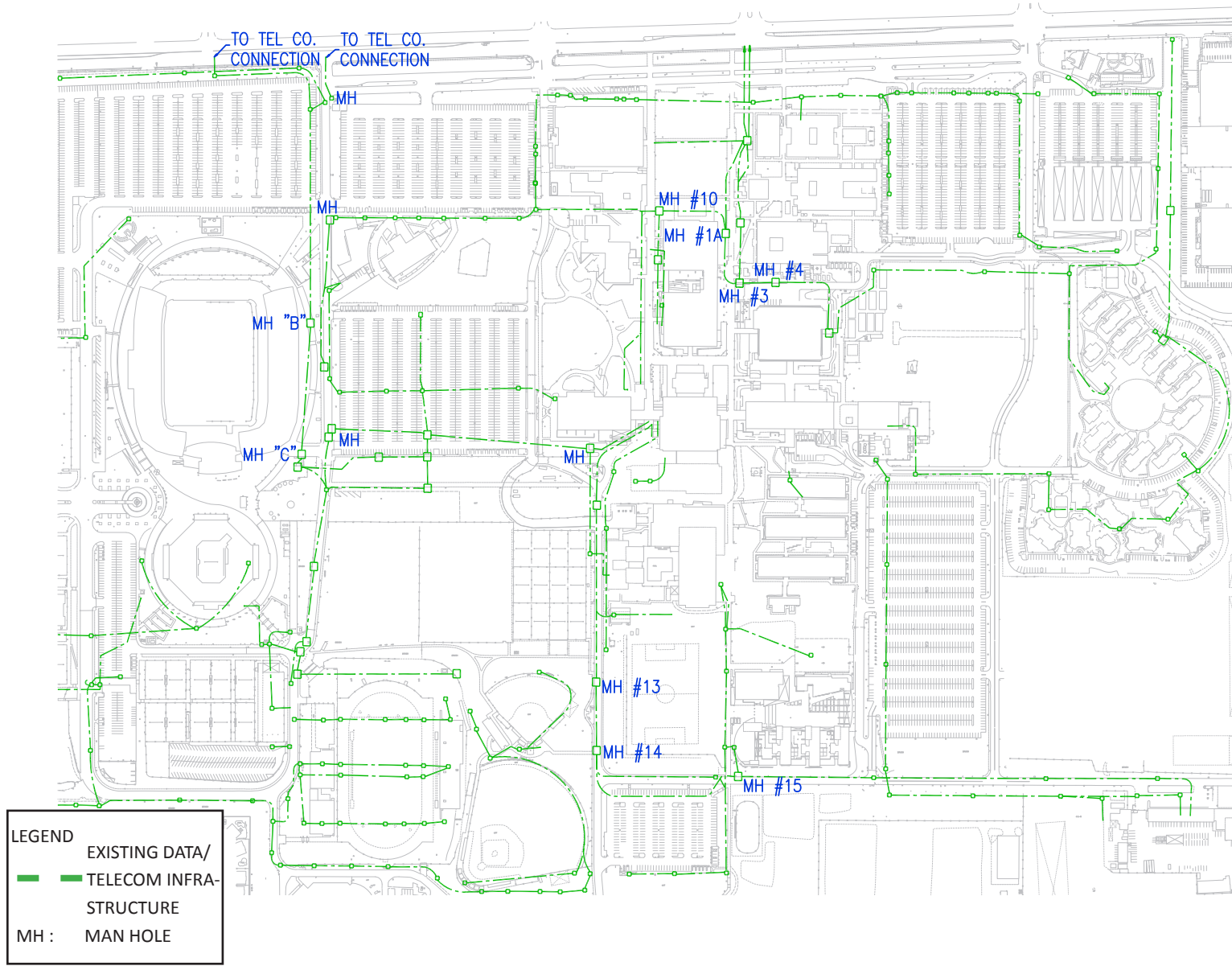


FIGURE 2. EXISTING CAMPUS DATA/TELECOM SYSTEM INFRASTRUCTURE

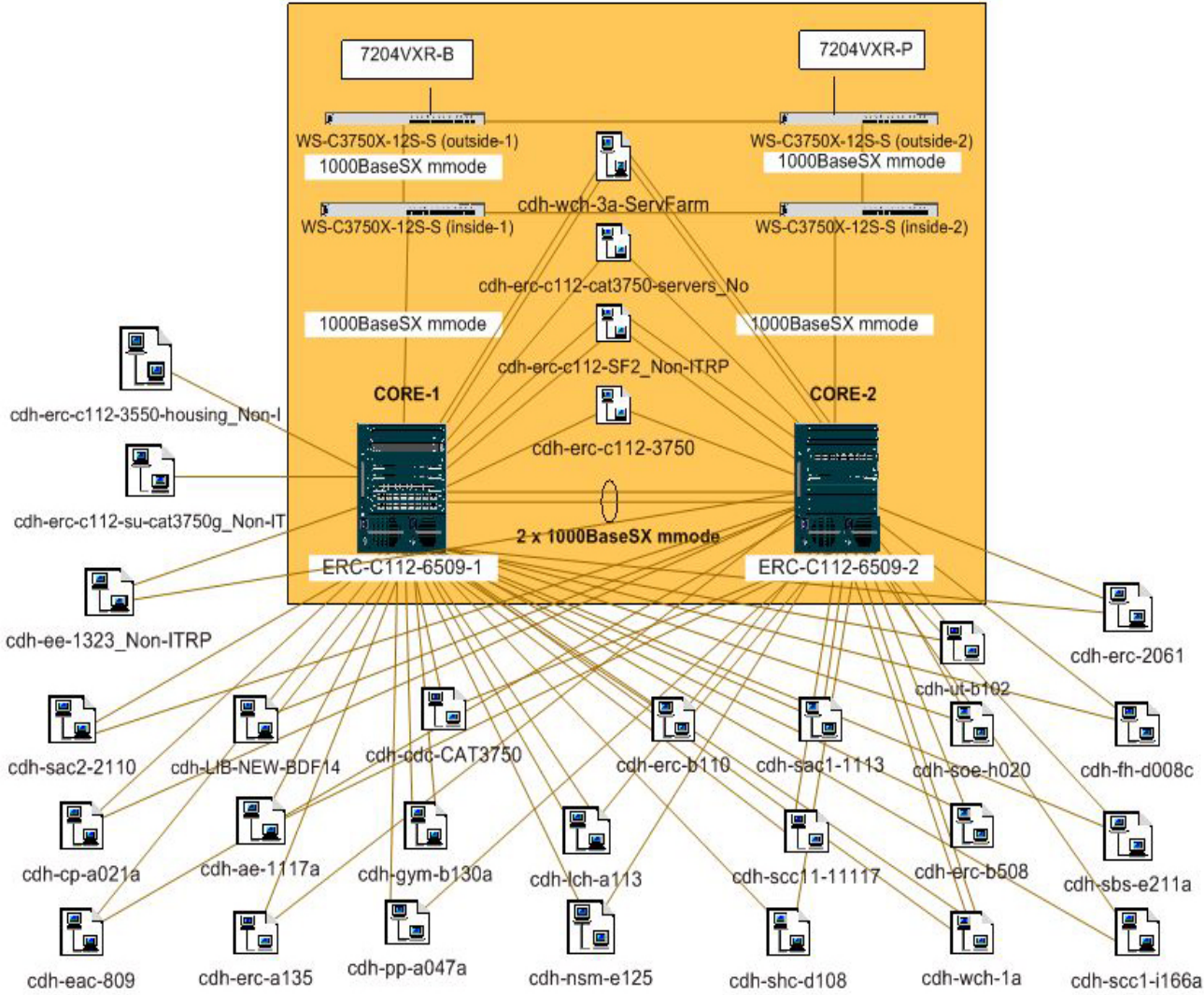


FIGURE 3. EXISTING CAMPUS IP NETWORK TOPOLOGY

through a single cable, providing no redundancy due to a cable failure and no alternate path to provide service in the event of a cable failure, damage to the cable, or demolition of the existing path. Figure 3 shows the existing campus IP network topology.

B. SYSTEM CHANGES UNDERWAY (APRIL 2017)

The Core Campus IT and Telephone services and building-to-building cable infrastructure is satisfactory for campus operations. The fiber optic cable installed to individual buildings lacks a redundant pathway, and both of the fiber connections are included in the same cable. Damage to the cable will result in a loss of communications with the building.

The system changes planned in the near term include:

- 1)Data Center power system upgrades to replace UPS units and power system capacity.
- 2)Connection of the new Science Building and Student Housing project.
- 3)VoIP system upgrades for individual buildings.
- 4)Installation of wireless access points for greater WIFI coverage in buildings and on campus.

C. SYSTEM USAGE GROWTH ASSOCIATED WITH MASTER PLAN

The IT infrastructure facilitates the deployment of IT services according to campus-wide needs. The existing campus IT infrastructure utilizes the utility tunnel that extends to twelve of the original campus buildings. The

infrastructure extends to outlying buildings and areas via ductbanks, pullboxes, and manholes. Many of the building connections are single radial installed cables.

All new buildings will require fiber optic cable installed from two separate pathways to the MDF of the building. Each connection should be continuous from the campus core switches. The new fiber optic cables will provide VoIP telephone service, IT service, and internet service to each building. Copper cables were traditionally installed for telephone service. The use of copper cables should be reviewed and minimized for campus-wide communications.

Refer to Figure 4 which shows the existing IT infrastructure that will be impacted by new construction.

D. MEETING LONG TERM TELECOMMUNICATIONS NEEDS OF THE CORE CAMPUS

The planned new construction will require many of the existing ductbanks, pullboxes, and cables to be removed in order to clear construction sites for buildings, parking structures, and roadways. A new IT system infrastructure is required. The new system will be designed with reference to the California State University Telecommunications Infrastructure Planning (TIP) Standards, Fourth Edition. Industry Standards, such as Building Industry Consulting Service International (BICSI), Customer Owned Outside Plant (CO-OSP) Design Manual, should also be used to establish campus requirements for campus network design.

Building ID	Building Name	GSF
A	Academic	158,572
B	Admin	131,800
C	Black Box Theatre	7,640
D	Academic	68,000
E	Rec Center	148,400
I	Incubator	57,128
J	Academic	136,050
K	Academic/Admin	105,850
L	Student Union Expansion	85,000
M	Academic/Admin	94,360
N	Academic/Admin	116,250
O	Academic/Admin	104,020
2	Student Housing 1	56,240
2	Student Housing 2	27,180
2	Student Housing 3	102,828
2	Student Housing 4	63,656
2	Student Housing 5	64,952
	New Science Building	85,000
TOTAL		1,612,926

TABLE 1. CORE CAMPUS - POTENTIAL BUILDINGS

The infrastructure should be standardized with the minimum size of manholes and pullboxes established and the minimum quantity of conduits specified. It is typical for manholes to be a minimum of 4' x 6' x 6' and for pullboxes to be 4' x 4' x 4' in dimension. Ductbanks should consist of 12-4" C for main ductbank and 4-4" C for the building service laterals.

The manholes and ductbank entries to the Core Network locations and MPOE should be increased in size. Manhole sizes and Core Network and Data Center locations should be a minimum of 8' x 10' x 6' and the banks should increase to a minimum of 12-4" C at the Core Network locations. The Core Network locations should also have two points of entry.

The internet service is presently provided by CENIC over AT&T GigaMAN fiber optic cable with a bandwidth of 1GB. The campus will need to evaluate options to increase the bandwidth and data transmission speed in the future, such as 10GB Ethernet.

The campus should evaluate the existing MPOE and Data Center for long term needs to confirm the space available, power available, and cooling available is satisfactory. The building emergency power system capacity to maintain both the network equipment and Data Center room cooling system in operation during an extended utility power outage is essential. Refer to Figure 5 which shows possible routing for new ductbanks to replace the existing campus IT infrastructure. It is recommended that the Data Centers be migrated to the stand alone "Data Center In A Box" concept support by a local standby generator. The stand alone Data Center requires roughly 20'x20' with additional space for a generator..

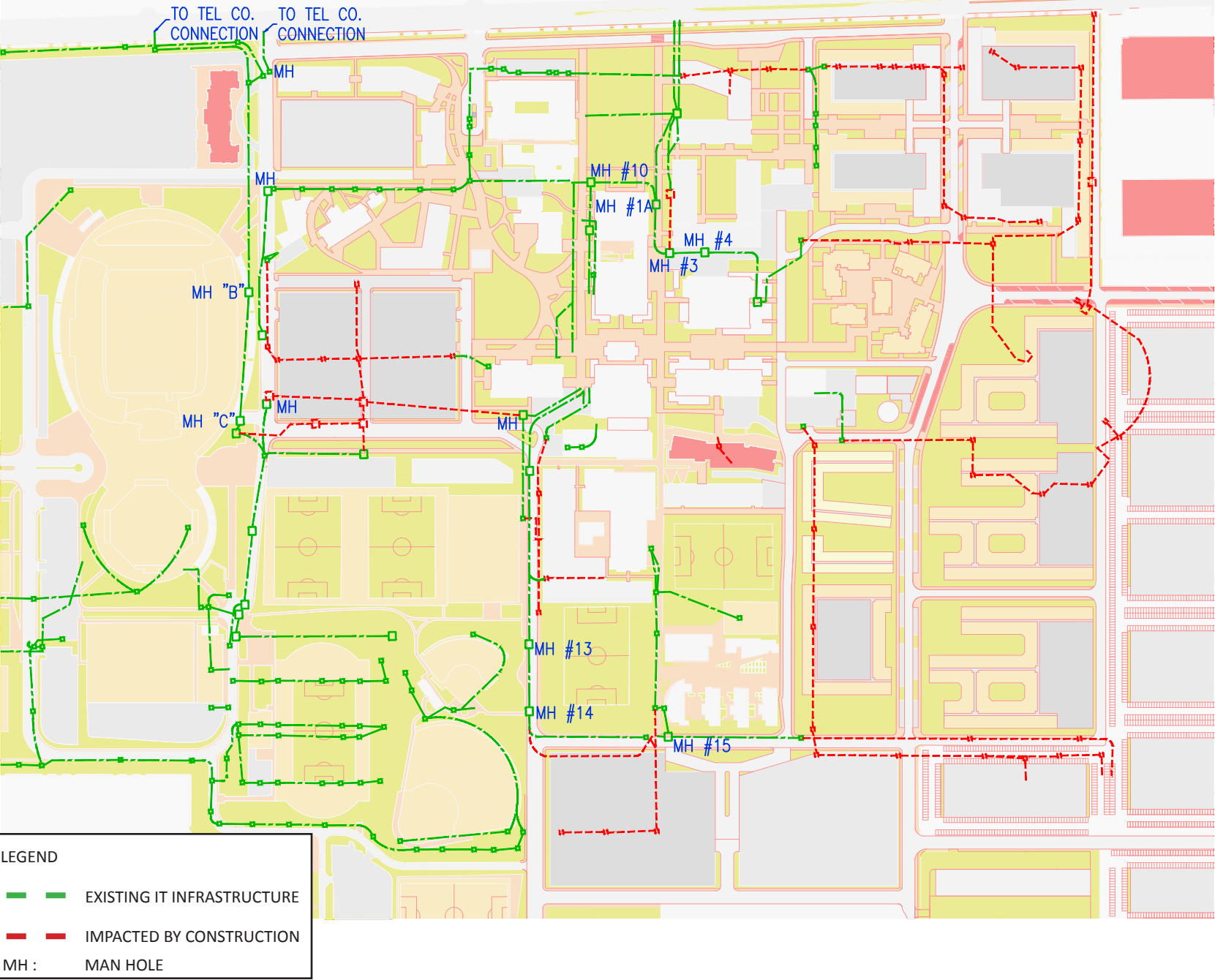


FIGURE 4. EXISTING IT INFRASTRUCTURE IMPACTED BY NEW CONSTRUCTION

PART B: LDP AREA IT INFRASTRUCTURE

A. COMMUNICATIONS, INTERNET, AND DATA ASSOCIATED WITH MASTER PLAN

The LDP area is subdivided into building parcels that will be developed over a 15-year time period. The planned development of the LDP is very dense consisting of 1.7 million GSF of parking structures, 2.5 million GSF of multi-family residential units, 94,000 GSF of retail, 690,000 GSF of apartments, and 591,000 GSF of business park buildings.

The LDP area will be provided with communications, telephone, data, internet, and cable television services by third party providers who will require a pathway to install their cable and equipment to buildings, and occupancies. The LDP will also be connected to the campus network and services. The buildings will require MDF and IDF rooms to house third party and campus equipment. The equipment will include fiber optic cable terminator cabinets, routers, and switches. Each MDF and IDF will require ample power for equipment and cooling loads. The building developer will need to determine the IT services to be provided and work with each service provider to include facilities required for service.

B. DATA AND COMMUNICATIONS OPTIONS FOR THE LDP AREA

Figure 6 includes a site plan with proposed ductbank and manhole infrastructure for data, network, and communications cable systems. The backbone duct bank structure may require up to 12-4" conduits. The ductbank and manhole infrastructure constitute the backbone for the entire LDP. Each service provider will install their own fiber optic cable in the backbone structure to each building or occupancy. Each provider should have their own dedicated 4" conduit into each building. The buildings will be designed to include an MDF to provide adequate space for all third party equipment. Each provider will establish their own requirements. The LDP area IT infrastructure design should be based on industry standards such as the BICSI Customer Owned Outside Plant, Telecommunications Industry Association (TIA) publications, and ANSI/TIA/EIA-758, Customer Owned Outside Plant Telecommunications Cabling Standard.

Connection to the campus network can be accomplished in several ways. The campus can install cable and equipment to provide cloud services, CENIC fiber optic service for academic occupancies, WIFI service in select areas of the LDP such as Student Housing and retail. Connection to the campus network can also be accomplished via LAN, WAN, and VPN. The campus IT depart-

ment will evaluate the extent to which they will support campus network connections within the LDP area for a variety of IT services, and then communicate their requirements for cable and equipment installation to the developer. The IT infrastructure shown in Figure 5 will support the campus cable requirements.

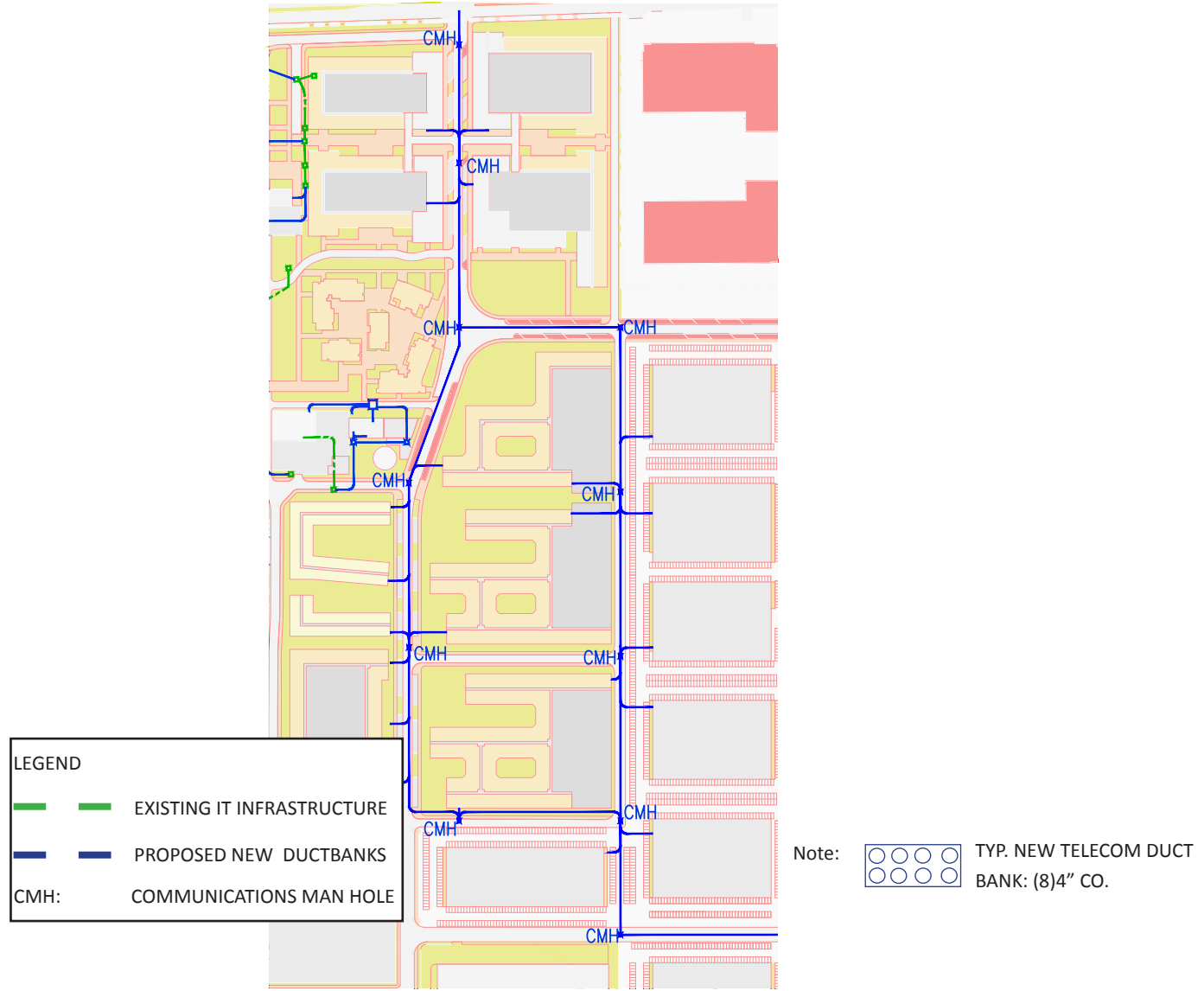


FIGURE 6. PROPOSED DUCTBANK AND MANHOLE IT INFRASTRUCTURE FOR LDP AREA

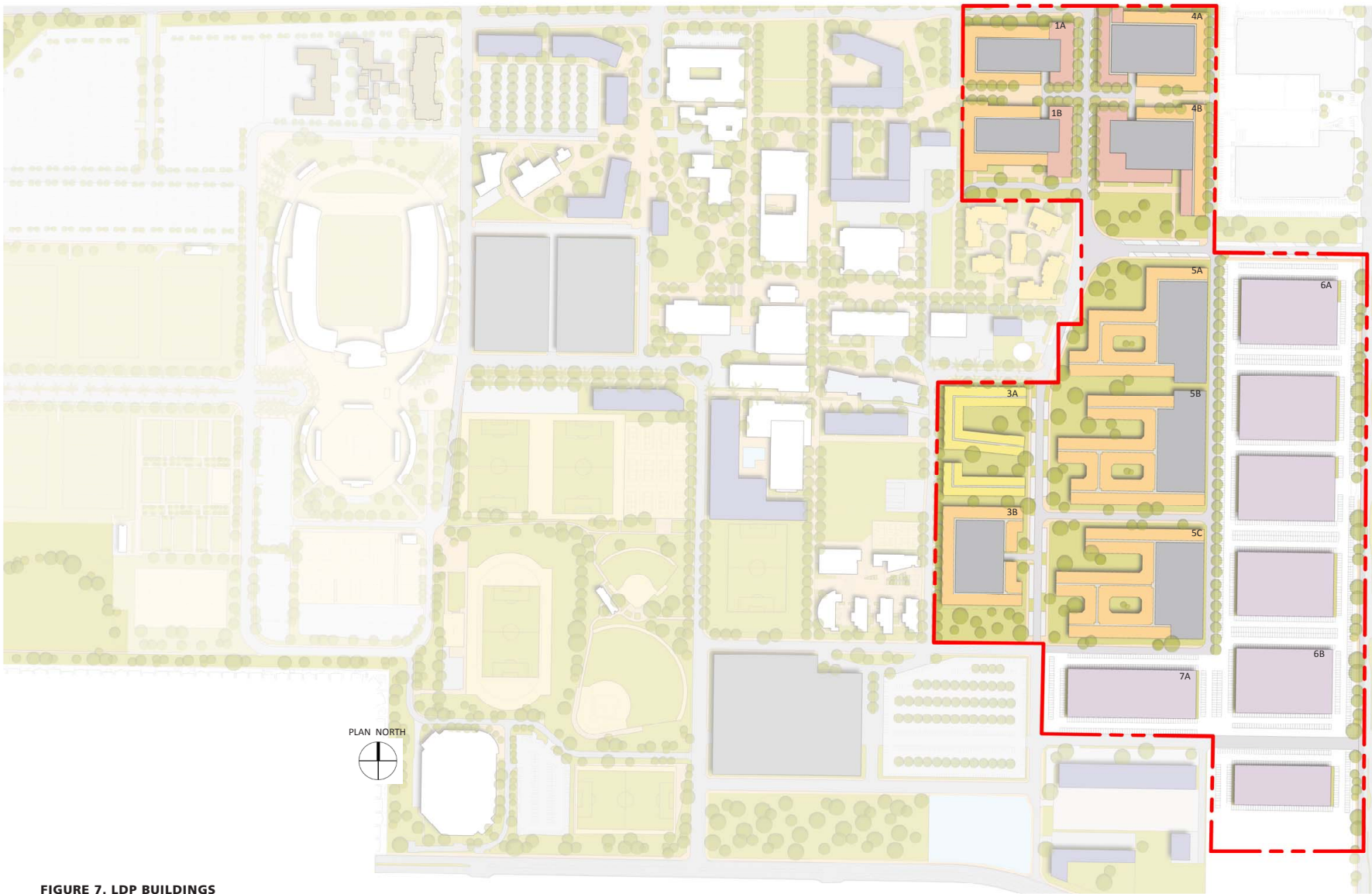


FIGURE 7. LDP BUILDINGS

G.3 Errata to the Civil Engineer Report 2017

Civil Engineer Report (2018)

Errata to the Civil Engineer Report (2017)

The appendices that follow this page includes updates to the Civil Engineer Report (Wheeler & Gray, 2017) that was included in the 2018 Campus Master Plan Guidelines as Appendix B.4. This errata is referenced in the Draft Guidelines to the 2018 Campus Master Plan EIR Utilities section as the “Civil Engineer Report. 2018”.

The order of files are as follows:

- G.4 Table 1. Existing Demand Flow (Wheeler & Grey, 2018)
- G.5 Table 2. Proposed Demand Flow (Wheeler & Grey, 2018)
- G.6 Civil Engineer Report Appendix B.4 (Wheeler & Gray, 2017)
- G.7 Civil Engineering Report 2018 Water Supply Narrative (Wheeler & Grey, 2018)

~~G.4 Table 1. Existing Demand Flow~~

G.4 Table 1. Existing Demand Flow has been superseded by G.8 Water Supply Assessment 2019. Table 1 has been removed from the Final EIR Appendix G.

~~G.5 Table 2. Proposed Demand Flow~~

G.5 Table 2. Proposed Demand Flow has been superseded by G.8 Water Supply Assessment 2019. Table 2 has been removed from the Final EIR Appendix G.

G.6 Civil Engineer Report 2017 (Appendix B.4 to the Master Plan Guidelines 2018)

B.4: Civil Engineer Report

The **University Village** is an urban design concept within the CSUDH 2018 Master Plan that integrates the academic core and the student residential community with a neighborhood of retail and business communities and residential apartments to create a live/work/play environment with synergistic connections to the University's mission and purpose. The **Land Development Project** (LDP) is a privately-financed and developed mixed-use project on 76.5 acres within the University Village that includes high-quality rental housing for faculty, staff and community members; retail development; and business park development. It is anticipated that the LDP would be developed as a public-private partnership (P3) which could be constructed over a period of years. Student Residence Halls (Parcels 2A and 2B) and Student Apartments (Parcel 3A) are part of the University Village, but are not currently envisioned as part of the LDP P3 land development.

Unless otherwise noted, the analyses and reports produced for this Appendix include all the parcels of the University Village and are not confined to the parcels of the Land Development Project.

B.4	CIVIL ENGINEER REPORT	B.4-1
	CAMPUS SANITARY SEWER SYSTEM	B.4-2
	CAMPUS DOMESTIC WATER INFRASTRUCTURE	B.4-10
	CAMPUS STORM DRAINAGE SYSTEM	B.4-18

CAMPUS SANITARY SEWER SYSTEM

SANITARY SEWER INFRASTRUCTURE HIGHLIGHTS

PART-A: CORE CAMPUS

Core Area: 1.7 million GSF

Strategy: The addition of sewer flow from new buildings and facilities will increase velocities and improve operation of the system. Provide new 6-inch service or multiple 4-inch services.

CORE CAMPUS BUILDINGS LIST

- A Academic
- B Admin
- C Black Box Theatre
- D Academic
- E Rec Center
- I Incubator
- J Academic
- K Academic
- L Student Union Expansion
- M Academic
- N Academic
- O Academic
- P Central Plant Expansion
- Q Satellite Central Plant
- R Facilities Services Complex
- V Child Care
- W Fab Lab Garage
- 2A,B Residency Halls

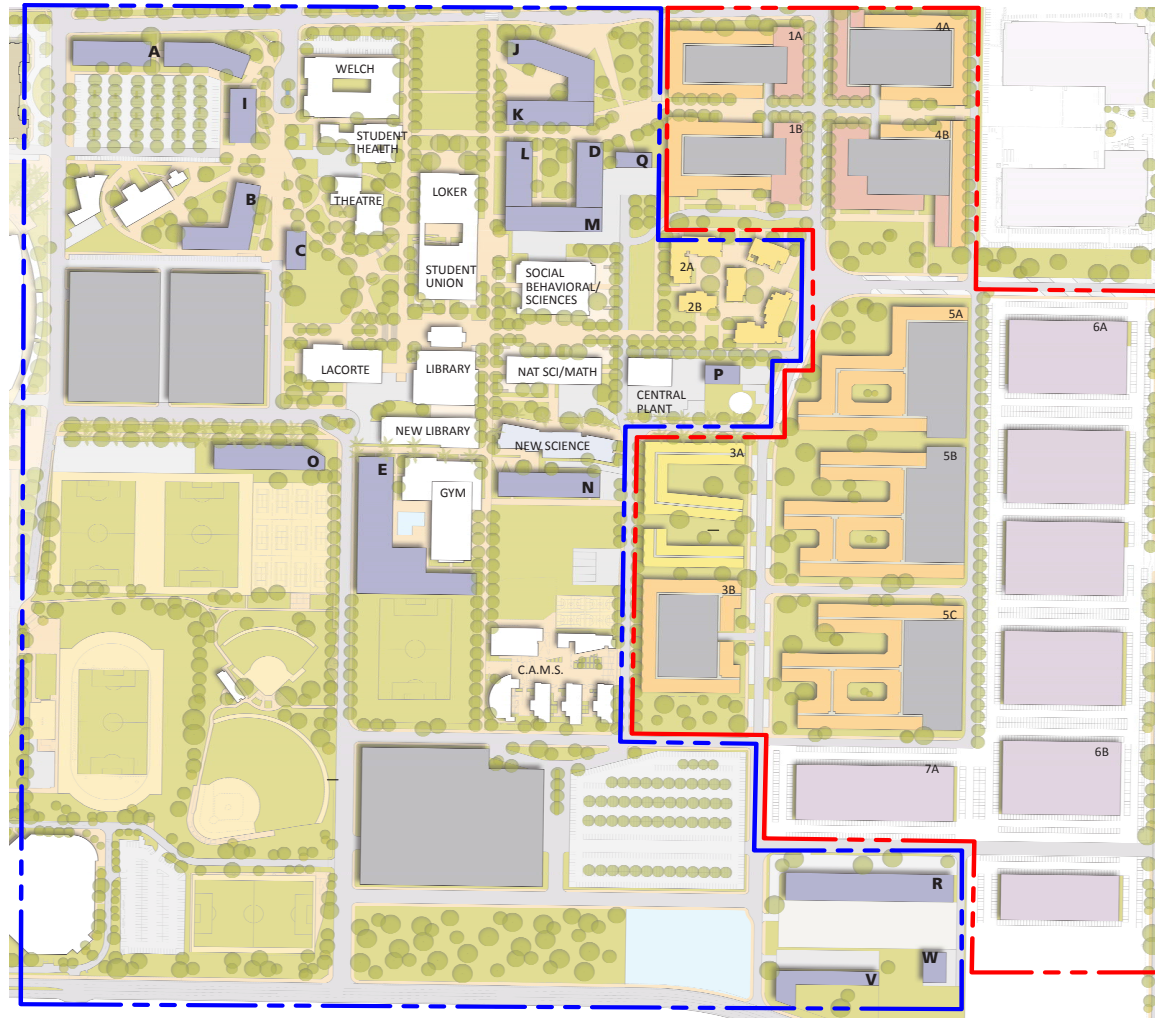
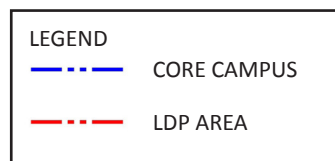


FIGURE 1. HIGHLIGHTS OF CAMPUS MASTER PLAN SEWER INFRASTRUCTURE



PART-B: LDP

LDP Parking Area: 1.9 million GSF
 LDP Building Area: 3.8 million GSF

Strategy: sewer lines will connect with core campus to help reach necessary transport velocities.

LDP LAND USE

- 1A Mixed Use
- 1B Mixed Use
- 3A Apartments¹
- 3B Apartments
- 4A Mixed Use
- 4B Mixed Use
- 5A Multi Family Rental
- 5B Multi Family Rental
- 5C Multi Family Rental
- 6A Business Park
- 6B Business Park
- 7A Business Park

¹ Parcel 3A is included in analyses of the Land Development Project (LDP) area but it is recognized that the student apartment uses envisioned for that area may be developed by CSUDH and later become part of the campus.

PART A: CORE CAMPUS SANITARY SEWER INFRASTRUCTURE

A. EXISTING SYSTEMS

The existing sewer provides service to the entire CSUDH campus (Central Campus, Child Development Center, Continuing Ed and Facilities) the on-site California Academy of Mathematics and Science School (CAMS) and the Stub Hub sports complex (formerly the Home Depot Center).

Sanitary sewer service is provided to the campus by the City of Carson at four connections; an 8-inch line at the north side of campus on Victoria Street; second a 12-inch pipe on the western portion of the campus on Avalon Blvd which serves the Extended Education buildings as well as the privately owned and run Stub Hub sports complex. The remaining two sewer connections are on the south side of the campus at University Drive; a 12-inch line at Fariman Drive that serves the central campus, Student Housing 2, and the University sports fields to the southwest; and an 8-inch connection to the east of Caney Ave that serves the Physical Plant.

B. SYSTEM CHANGES UNDERWAY (APRIL 2017)

In general, the existing sanitary sewer network on campus is oversized. While this provides

more than sufficient capacity for existing facilities and significant expansion, the system does not create transport velocities in several reaches of the system at peak rates. Additional sewer flow from new buildings and faculties will increase velocities and improve operation of the system. For this reason, no improvements to the downstream reaches are necessary.

Table 1 represents the existing demand flow for both sanitary sewer and domestic water lines. Unit flows can be found from the Board of Directors of County Sanitation District No.8 ordinance. The average water flow must be calculated in order to obtain a sewer peak flow. Loading for Each Class of Land Use – LACSD: <http://www.lacsd.org/civicax/filebank/blobload.aspx?blobid=3531>

Table 2 represents the proposed demand flow for both sanitary sewer and domestic water-lines for new campus buildings. Unit flows can be found from the Board of Directors of County Sanitation District No. 8 ordinance. Loading for Each Class of Land Use – LACSD: <http://www.lacsd.org/civicax/filebank/blobload.aspx?blobid=3531>

BUILDING NAME	PLANNED USE	EXISTING DEMAND FLOW				PEAK SEWER FLOW (GPM)
		BASIC GSF	UNIT FLOW (GPD/1000 SF)	AVERAGE WATER/SEWER FLOW (GPD)	AVERAGE WATER FLOW (GPM)	
(SCC-1) SMALL COLLEGE COMPLEX 1	CLASSROOM/OFFICE	8,529	200	1,706	1.18	7.11
(SCC-2) SMALL COLLEGE COMPLEX 2	CLASSROOM/OFFICE	5,313	200	1,063	0.74	4.43
(SCC-3) SMALL COLLEGE COMPLEX 3	CLASSROOM/OFFICE	1,263	200	253	0.18	1.05
(SCC-4) SMALL COLLEGE COMPLEX 4	CLASSROOM/OFFICE	1,263	200	253	0.18	1.05
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(SCC-6) SMALL COLLEGE COMPLEX 6	CLASSROOM/OFFICE	5,841	200	1,168	0.81	4.87
(SCC-7) SMALL COLLEGE COMPLEX 7	CLASSROOM/OFFICE	2,145	200	429	0.30	1.79
(SCC-8) SMALL COLLEGE COMPLEX 8	CLASSROOM/OFFICE	2,920	200	584	0.41	2.43
(SCC-9) SMALL COLLEGE COMPLEX 9	CLASSROOM/OFFICE	1,626	200	325	0.23	1.36
(SCC-10) SMALL COLLEGE COMPLEX 10	CLASSROOM/OFFICE	2,145	200	429	0.30	1.79
(SCC-11) SMALL COLLEGE COMPLEX 11	CLASSROOM/OFFICE	5,841	200	1,168	0.81	4.87
(SCC-13) SMALL COLLEGE COMPLEX 13	CLASSROOM/OFFICE	5,290	200	1,058	0.73	4.41
(COE) SCHOOL OF EDUCATION	CLASSROOM/OFFICE	26,433	200	5,287	3.67	22.03
(LIB) LEO F. CAIN LIBRARY	LIBRARY	152,006	100	15,201	10.56	63.34
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(WH) JAMES L. WELCH HALL	CLASSROOM/OFFICE	179,952	200	35,990	24.99	149.96
(SHC) STUDENT HEALTH CENTER	PROFESSIONAL BLDG	20,046	300	6,014	4.18	25.06
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(LCH) LACORTE HALL	CLASSROOM/OFFICE	70,331	200	14,066	9.77	58.61
(UT) UNIVERSITY THEATRE	INDOOR THEATRE	25,201	125	3,150	2.19	13.13
(NSM) NATURAL SCIENCES/MATHEMATICS	CLASSROOM/OFFICE	85,500	200	17,100	11.88	71.25
(GYM) GYMNASIUM	GYM. W/ SHOWER	65,752	600	39,451	27.40	164.38
(FH) FIELD HOUSE	CLASSROOM/OFFICE	13,650	200	2,730	1.90	11.38
(SP) SWIMMING POOL	SWIMMING POOL	-	-	2,600	1.81	10.83
(BLDG A) PUEBLO DOMINGUEZ SH-1	RESIDENCE HALL	89,220	300	26,766	18.59	111.53
(BLDG X) PUEBLO DOMINGUEZ SH-2	RESIDENCE HALL	76,093	300	22,828	15.85	95.12
(PP) PHYSICAL PLANT	PLANT/OFFICES	27,826	200	5,565	3.86	23.19
(CP) CENTRAL PLANT	PLANT	12,840	150	1,926	1.34	8.03
(SAC-1) SOUTH ACADEMIC COMPLEX 1	CLASSROOM/OFFICE	15,500	200	3,100	2.15	12.92
(SAC-2) SOUTH ACADEMIC COMPLEX 2	CLASSROOM/OFFICE	15,940	200	3,188	2.21	13.28
(SAC-3) SOUTH ACADEMIC COMPLEX 3	CLASSROOM/OFFICE	17,280	200	3,456	2.40	14.40
(HC) HUGHES ATHLETIC AND EDUCATION	CLASSROOM/OFFICE	2,843	200	569	0.39	2.37
(EE) EXTENDED EDUCATION CENTER	CLASSROOM/OFFICE	24,619	200	4,924	3.42	20.52
(CAMS) CA. ACADEMY OF MATH AND SCIENCE	CLASSROOM/OFFICE	31,667	200	6,333	4.40	26.39
BASEBALL/SOFTBALL STORAGE	WAREHOUSING	3,380	25	85	0.06	0.35
(EAC) EAST ACADEMIC COMPLEX	CLASSROOM/OFFICE	17,760	200	3,552	2.47	14.80
(CAMS) CA. ACADEMY OF MATH AND SCIENCE	CLASSROOM/OFFICE	13,548	200	2,710	1.88	11.29
(CDC) CHILD DEVELOPMENT CENTER	CLASSROOM/OFFICE	4,320	200	864	0.60	3.60
(ITC) INFANT TODDLER CENTER	CLASSROOM/OFFICE	4,320	200	864	0.60	3.60
	TOTAL	1,387,120		304,883		

TABLE 1. EXISTING DEMAND FLOW

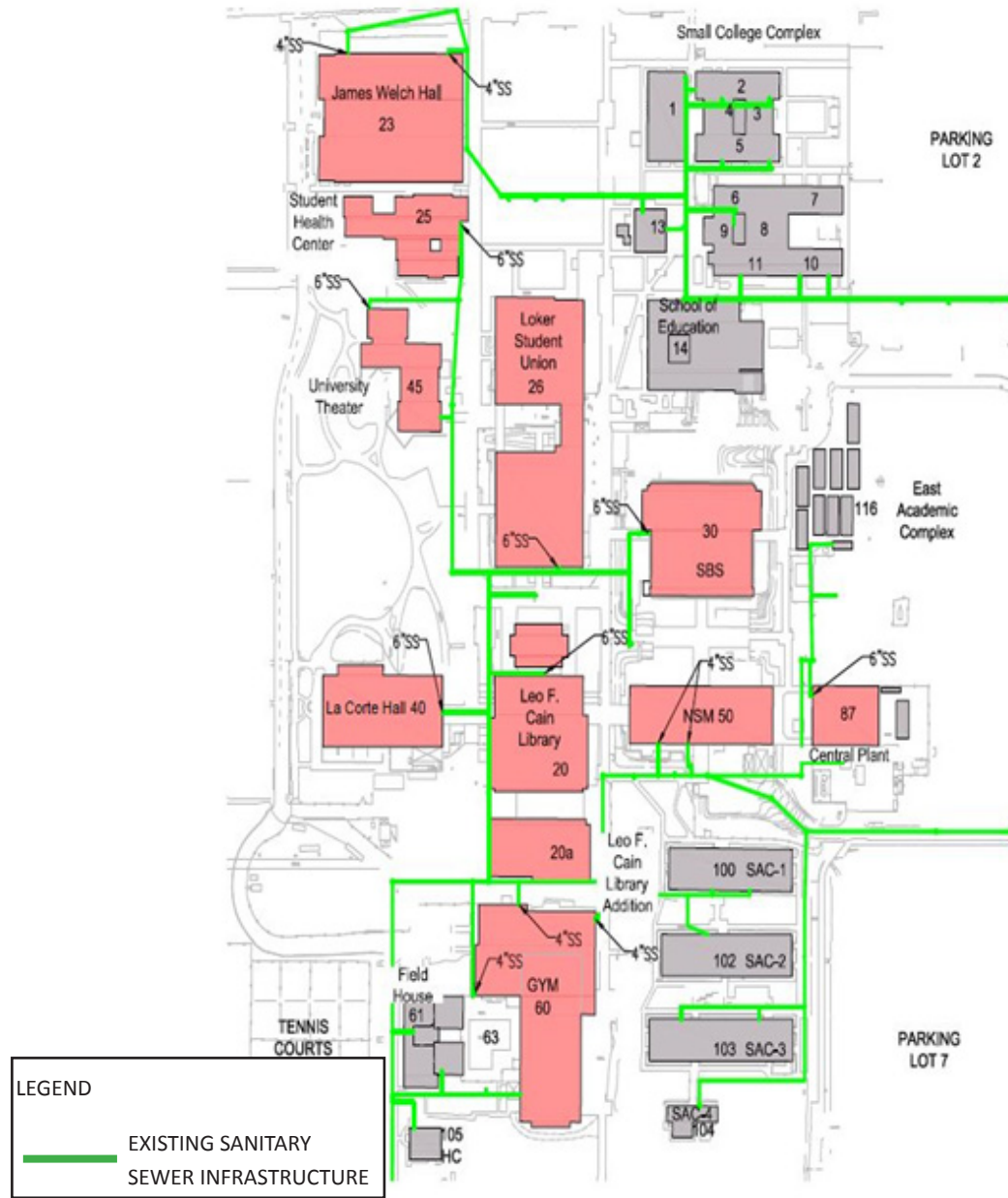


FIGURE 2. EXISTING SANITARY SEWER INFRASTRUCTURE

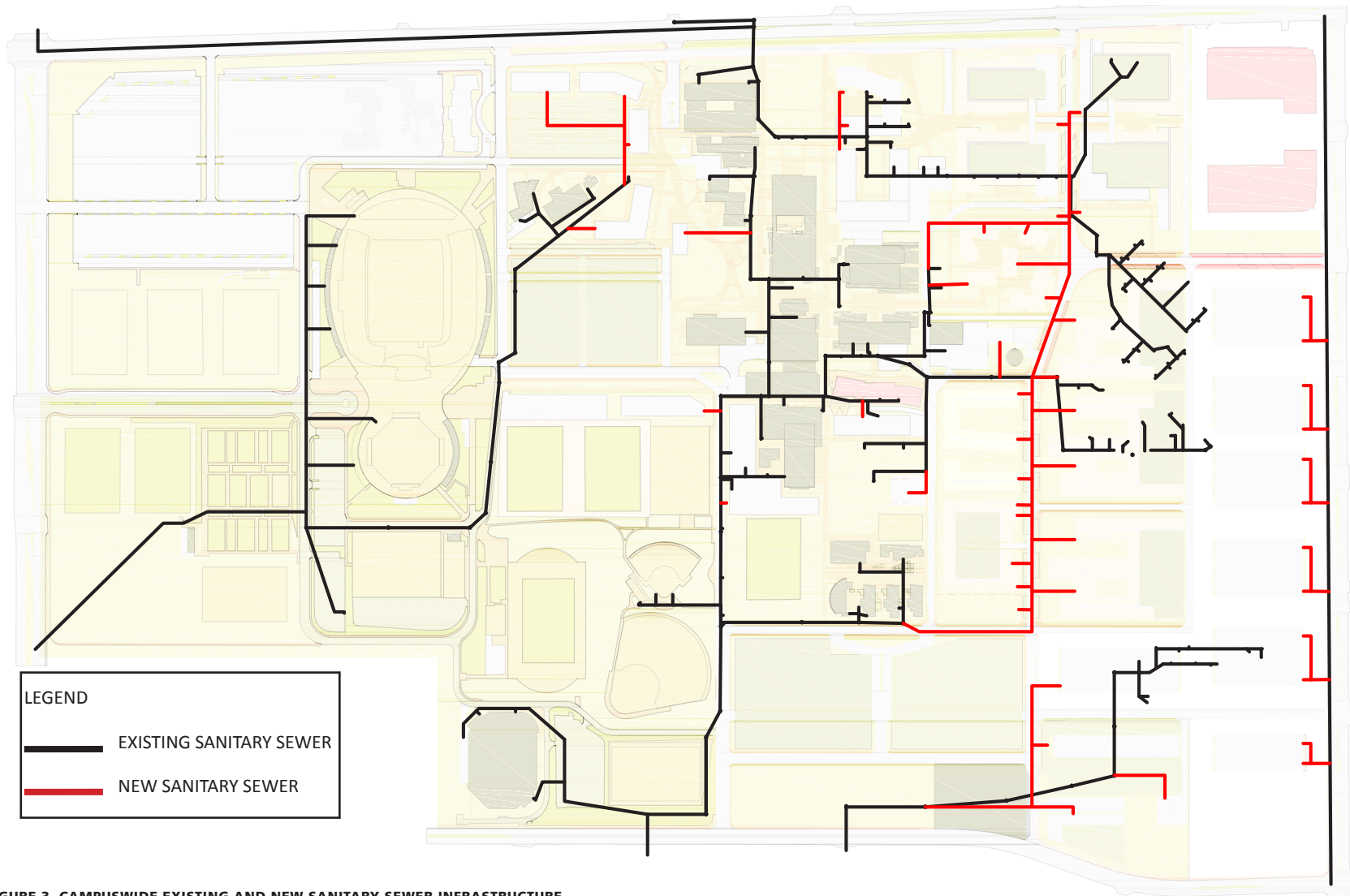
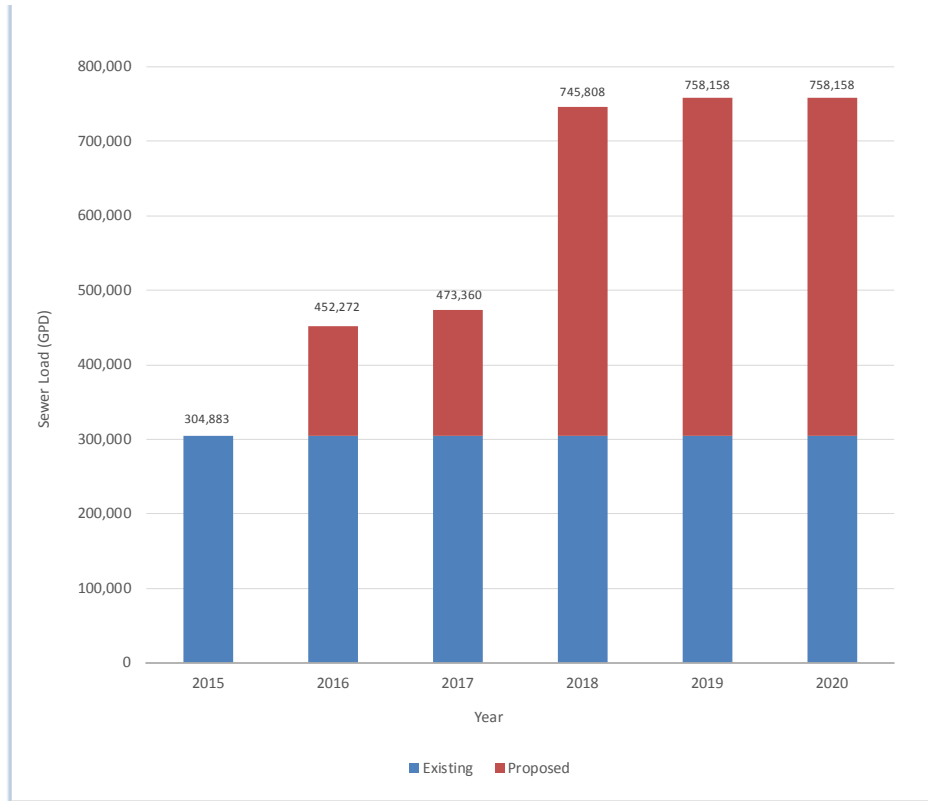


FIGURE 3. CAMPUSWIDE EXISTING AND NEW SANITARY SEWER INFRASTRUCTURE



GRAPH 1. EXISTING AND PROPOSED SEWER LOAD

BUILDING NAME	Building ID	PLANNED USE	PROPOSED DEMAND FLOW			PEAK SEWER FLOW (GPM)
			BASIC GSF	UNIT FLOW (GPD/1000 SF)	AVERAGE WATER/SEWER FLOW (GPD)	
Student Housing Ph.1 (600 Beds)	2A	Housing	189000	300	56700	236.25
Student Recreation Center	E	Recreation	151148	600	90688.8	377.87
Admin	B	Administration	105440	200	21088	87.87
LaCorte Hall Expansion		Classroom/Office	51600	200	10320	43.00
Academic	A	Unassigned	221400	200	44280	184.50
Black Box Theatre	C	Arts	7640	125	955	3.98
Non-State	I	Incubator/Foundation	87300	200	17460	72.75
Academic	J	Acad/Admin	170935	200	34187	142.45
Academic	K	Acad/Admin	106485	200	21297	88.74
Student Union Expansion	L	LSU	85188	200	17037.6	70.99
Acad/Admin	M	Health, Human Services	116000	300	34800	145.00
Acad/Admin	N	Acad/Admin	123770	200	24754	103.14
Acad/Admin	O	Acad/Admin	130025	300	39007.5	162.53
Student Housing Ph. 2 (300 Beds)	2B	Housing	94500	300	28350	118.13
Parking Structure		Parking Structure	-	-	-	-
Plant Operations	P	Central Plant	6000	150	900	3.75
Plant Operations	Q	Satellite Central Plant	47000	150	7050	29.38
Extended Education		Classroom/Office	22000	200	4400	18.33
TOTAL					453,275	1,889

TABLE 2. PROPOSED DEMAND FLOW IN CORE CAMPUS

PART B: LDP AREA SANITARY SEWER INFRASTRUCTURE

A. EXISTING SYSTEMS

The existing sewer provides service to the entire CSUDH campus (Central Campus, Child Development Center, Continuing Ed and Facilities) the on-site California Academy of Mathematics and Science School (CAMS) and the Stub Hub sports complex (formerly the Home Depot Center).

Sanitary sewer service is provided to the campus by the City of Carson at four connections; an 8-inch line at the north side of campus on Victoria Street; second a 12-inch pipe on the western portion of the campus on Avalon Blvd. Two sewer connections are on the south side of the campus at University Drive; a 12-inch line at Fariman Drive; and an 8-inch connection to the east of Caney Ave.

B. NEW SYSTEMS

The new sanitary sewer system will have to coordinate with the utility master plan update. It is recommended that appropriate pipe size to achieve sufficient transport flow. The sanitary sewer system for the core campus is oversized and does not create the necessary transport velocities.

LDP sewer lines will connect with campus to help reach the necessary transport velocity. Size sewer pipe for actual flow from low-flow fixtures and design for minimum scour velocity.

The analysis of sanitary sewer system included the Child Care portion of Parcel 4A. It is recognized that the development of a new Child Care/Development Center located along University Drive is expected to be constructed and maintained by the campus.

Table 3. presents proposed sanitary sewer demand flow in the LDP area.

PARCEL NUMBER/LAND USE	PLANNED USE	LDP DEMAND FLOW			
		GSF/UNIT OR GSF X 1000	FLOW/UNIT	AVERAGE WATER/SEWER FLOW (GPD)	PEAK SEWER FLOW (GPM)
1-A Multi-Family	Family Rental	235	156	36,660	153
1-A Retail	Retail	16,445	150	2,467	10
1-B Multi-Family	Family Rental	250	156	39,000	163
1-B Retail	Retail	20.63	150	3,095	13
3-A Apartments	Student Apartments	244	156	38,064	159
3-B Apartments	Faculty Apartments	288	156	44,928	187
4-A Multi-Family	Family Rental	270	156	42,120	176
4-A Child Care	Child Care	13,125	200	2,625	11
4-A Retail	Retail	17,695	150	2,654	11
4-B Multi Family	Family Rental	274	156	42,744	178
4-B Retail	Retail	39,495	150	5,924	25
5-A Multi Family	Family Rental	236	156	36,816	153
5-B Multi Family	Family Rental	340	156	53,040	221
5-C Multi Family	Family Rental	330	156	51,480	215
6-A Business Park	Office Building	345.6	200	69,120	288
6-B Business Park	Office Building	140.4	200	28,080	117
7-A Business Park	Office Building	86.4	200	17,280	72
TOTAL				516,097	2,150

TABLE 3. PROPOSED DEMAND FLOW IN LDP

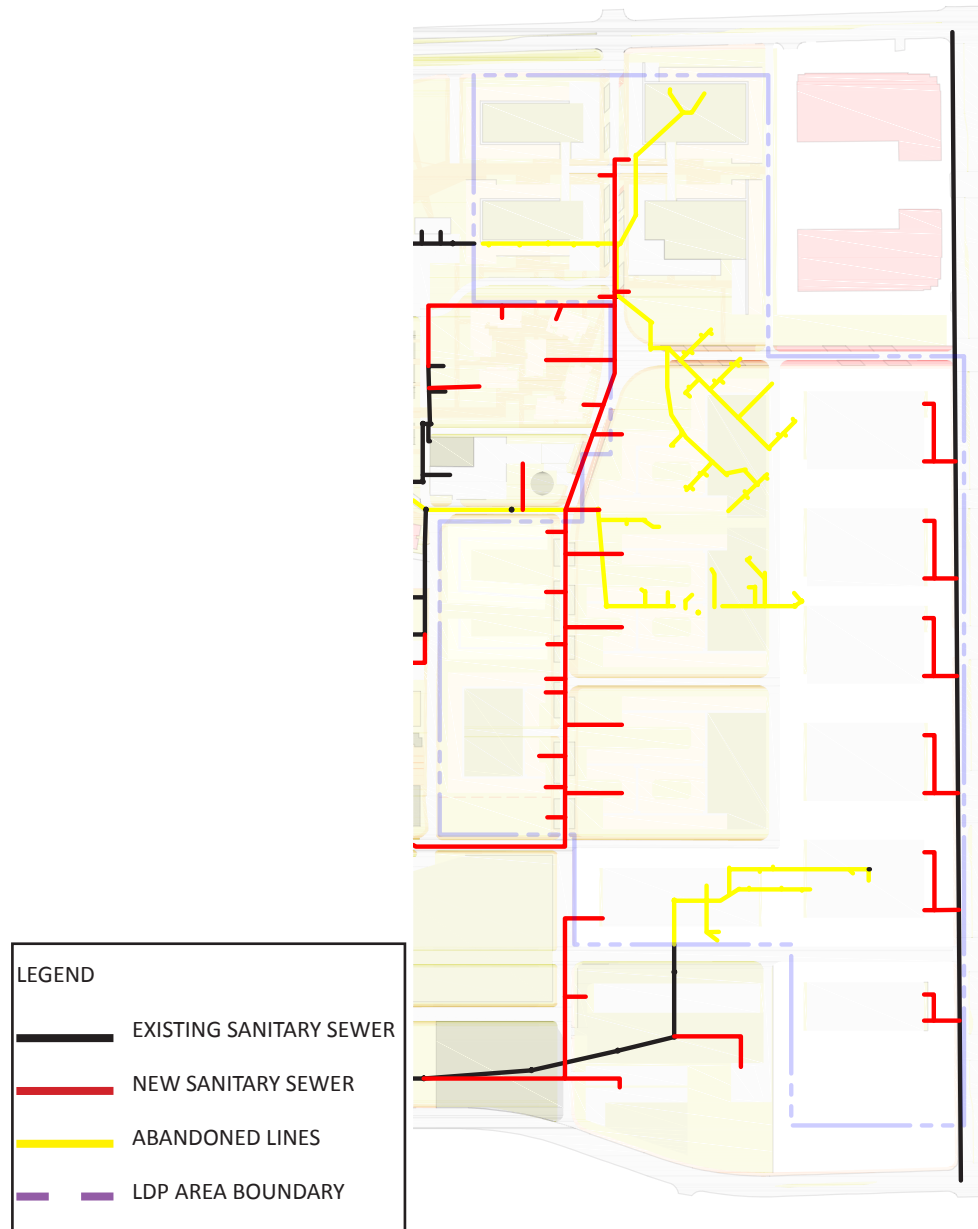


FIGURE 4. LDP AREA EXISTING AND NEW SANITARY SEWER INFRASTRUCTURE

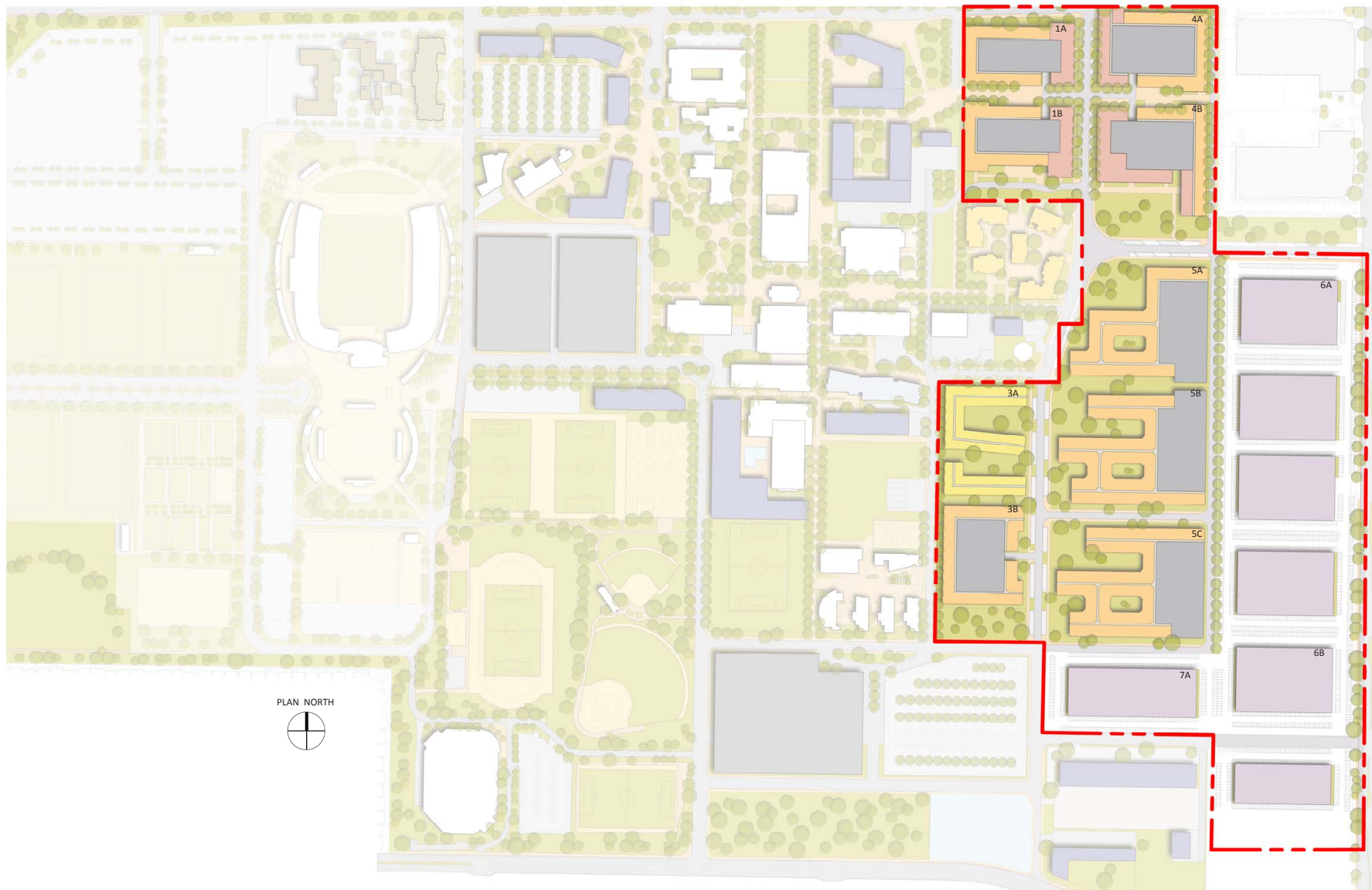


FIGURE 5. LDP BUILDINGS

CAMPUS DOMESTIC WATER INFRASTRUCTURE

DOMESTIC WATER INFRASTRUCTURE HIGHLIGHTS

PART-A: CORE CAMPUS

Core Area: 1.7 million GSF

Long term: Provide new service connection from existing domestic water network.

Strategy: The domestic water system has sufficient capacity to provide potable water to existing facilities and the proposed future facilities. It is expected that with the completion of the additional facilities the water service from Victoria Boulevard will provide additional flow. Under current conditions, that service provides minimal flow.

CORE CAMPUS BUILDINGS LIST

- A Academic
- B Admin
- C Black Box Theatre
- D Academic
- E Rec Center
- I Incubator
- J Academic
- K Academic
- L Student Union Expansion
- M Academic
- N Academic
- O Academic
- P Central Plant Expansion
- Q Satellite Central Plant
- R Facilities Services Complex
- V Child Care
- W Fab Lab Garage
- 2A,B Residency Halls

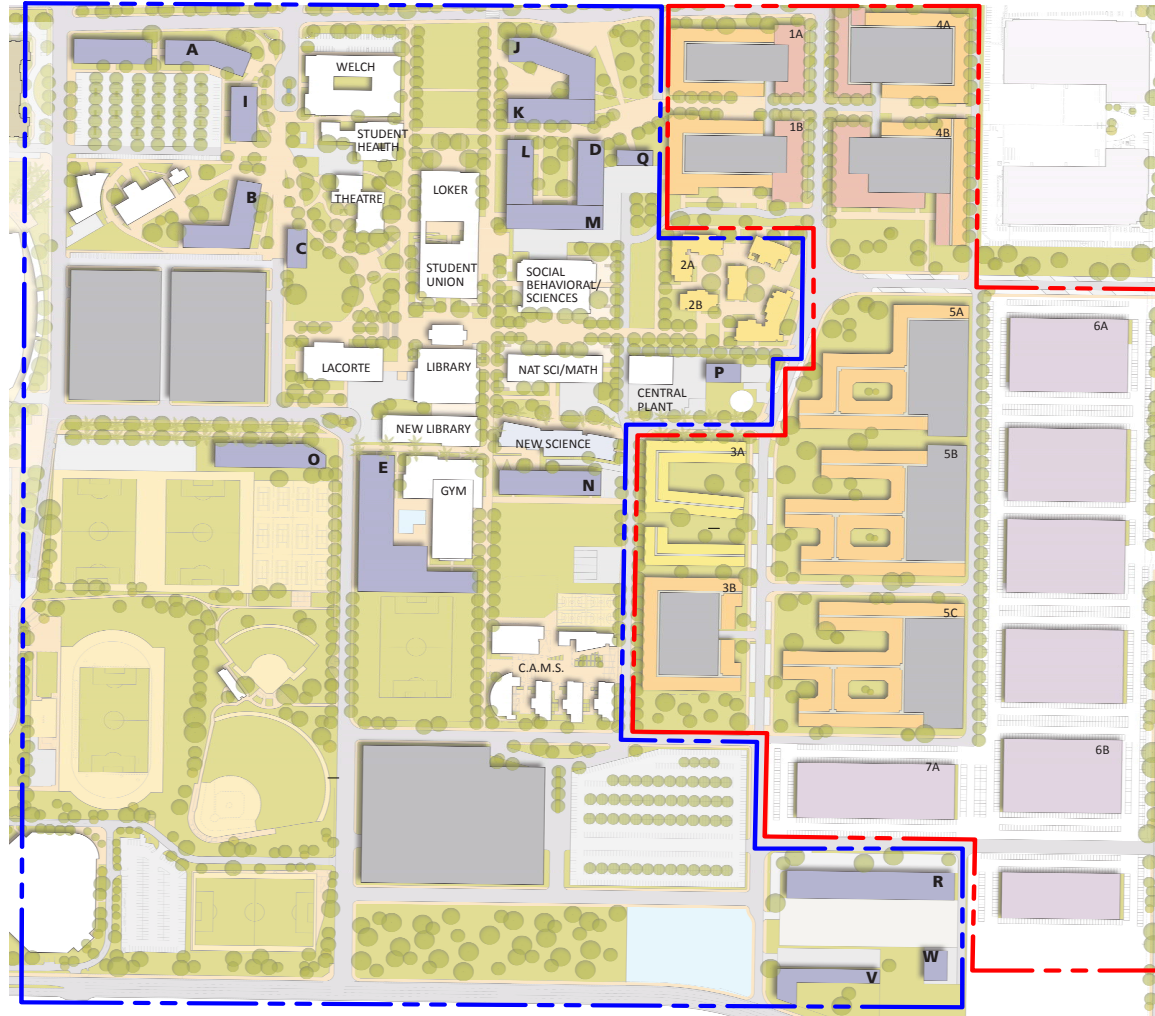
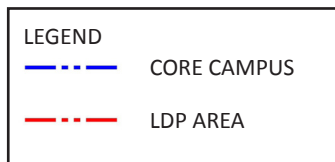


FIGURE 1. HIGHLIGHTS OF CAMPUS MASTER PLAN DOMESTIC WATER INFRASTRUCTURE



PART-B: LDP

LDP Parking Area: 1.9 million GSF
 LDP Building Area: 3.8 million GSF

Strategy: Create a looping system between land development and core campus with separate meters for billing.

LDP LAND USE

- 1A Mixed Use
- 1B Mixed Use
- 3A Apartments¹
- 3B Apartments
- 4A Mixed Use
- 4B Mixed Use
- 5A Multi Family Rental
- 5B Multi Family Rental
- 5C Multi Family Rental
- 6A Business Park
- 6B Business Park
- 7A Business Park

¹ Parcel 3A is included in analyses of the Land Development Project (LDP) area but it is recognized that the student apartment uses envisioned for that area may be developed by CSUDH and later become part of the campus.

PART A: CORE CAMPUS DOMESTIC WATER INFRASTRUCTURE

A. EXISTING CONDITIONS

Domestic water service is provided to the CSUDH campus by California Water Service (CWS) Company in Torrance CA. There are numerous connections off the main that run through the southern quarter of the campus (the former main for Dominguez Water Company), from east to west with a tee that turns south to University Drive. The main water service connection for the campus is a 12-inch line on the east side of campus (Detail A on CSUDH Master Utilities Plan for Domestic Water), just east of CAMS. There is a 12-inch connection west on this line for the main campus (Detail B), used as a back-up if pressure drops, which has not happened in recent years. This CWS water main also serves the Stub Hub Complex on separate connections. The third large 12" connection for back-up on campus is from the CWS main in Victoria Street. The Child Development Center (CDC) buildings in the northeast portion of campus have their own connections to the water main in Victoria, each for the CDC and the Infant Toddler Center (ITC). The campus has approximately 34 fire hydrants, not counting the Stub Hub complex. Fire water for the University is served directly off the domestic waterline system for fire hydrants and building fire sprinklers. For this reason, water modeling and analysis is conducted for fire flow

requirements, which guarantees there will be sufficient pressure for domestic use. The campus does not have any water pumps for their domestic/fire water system.

B. SYSTEM CHANGES UNDERWAY (APRIL 2017)

The domestic water system has sufficient capacity to provide potable water to existing facilities and the proposed future facilities. Only laterals from water mains to new buildings will be required.

Table 1 represents the existing demand flow for both sanitary sewer and domestic water lines. Unit flows can be found from the Board of Directors of County Sanitation District No.8 ordinance. The average water flow must be calculated in order to obtain a sewer peak flow. Loading for Each Class of Land Use – LACSD: <http://www.lacsd.org/civicax/filebank/blobdload.aspx?blobid=3531>

BUILDING NAME	PLANNED USE	EXISTING DEMAND FLOW				PEAK SEWER FLOW (GPM)
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(SAC-1) SOUTH ACADEMIC COMPLEX 1	CLASSROOM/OFFICE	15,500	200	3,100	2.15	12.92
(SAC-2) SOUTH ACADEMIC COMPLEX 2	CLASSROOM/OFFICE	15,940	200	3,188	2.21	13.28
(SAC-3) SOUTH ACADEMIC COMPLEX 3	CLASSROOM/OFFICE	17,280	200	3,456	2.40	14.40
(HC) HUGHES ATHLETIC AND EDUCATION	CLASSROOM/OFFICE	2,843	200	569	0.39	2.37
(EE) EXTENDED EDUCATION CENTER	CLASSROOM/OFFICE	24,619	200	4,924	3.42	20.52
(CAMS) CA. ACADEMY OF MATH AND SCIENCE	CLASSROOM/OFFICE	31,667	200	6,333	4.40	26.39
BASEBALL/SOFTBALL STORAGE	WAREHOUSING	3,380	25	85	0.06	0.35
(EAC) EAST ACADEMIC COMPLEX	CLASSROOM/OFFICE	17,760	200	3,552	2.47	14.80
(CAMS) CA. ACADEMY OF MATH AND SCIENCE	CLASSROOM/OFFICE	13,548	200	2,710	1.88	11.29
(CDC) CHILD DEVELOPMENT CENTER	CLASSROOM/OFFICE	4,320	200	864	0.60	3.60
(ITC) INFANT TODDLER CENTER	CLASSROOM/OFFICE	4,320	200	864	0.60	3.60
	TOTAL	1,387,120		304,883		

TABLE 1. EXISTING DEMAND FLOW

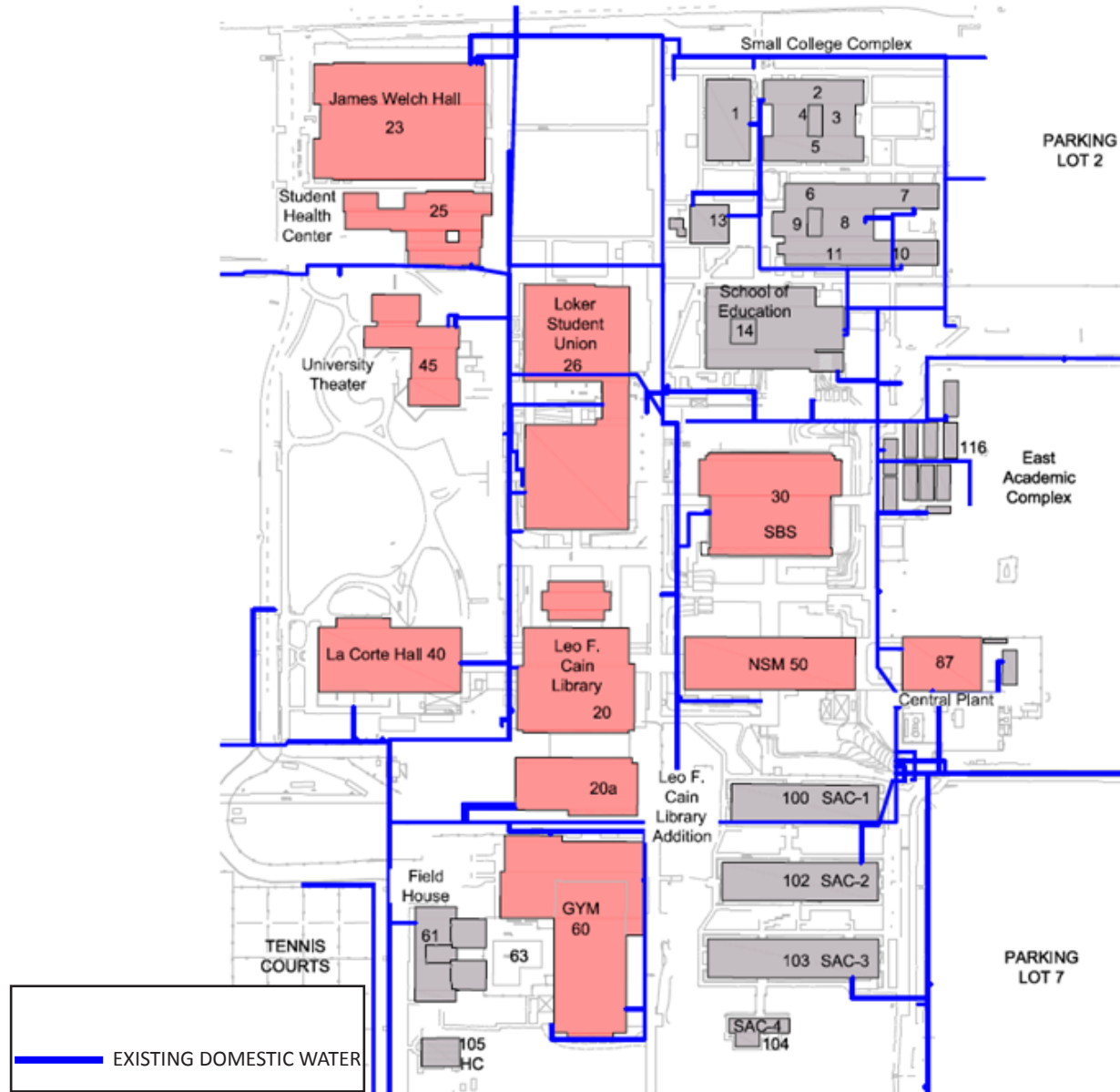
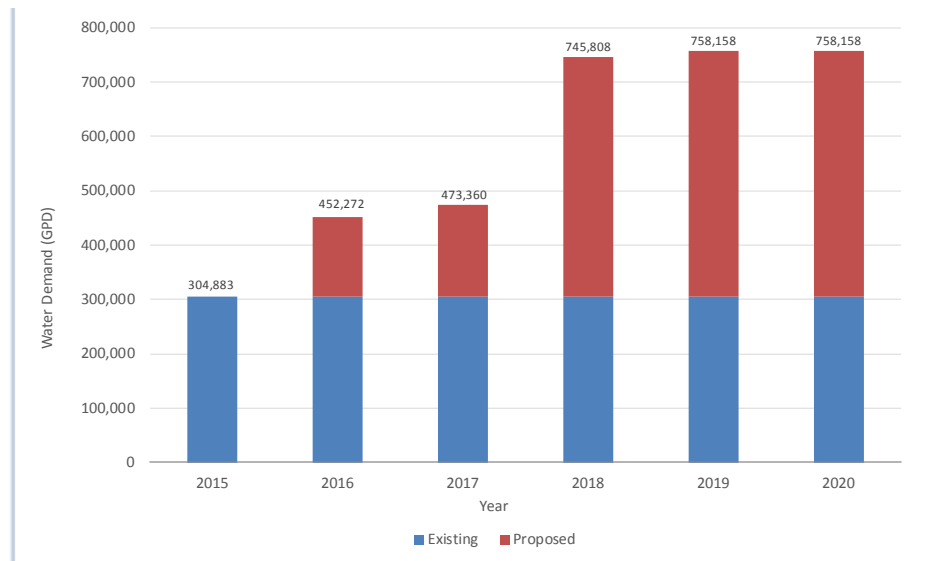


FIGURE 2. EXISTING DOMESTIC WATER INFRASTRUCTURE

Table 2 represents the proposed demand flow for both sanitary sewer and domestic water-lines for new campus buildings. Unit flows can be found from the Board of Directors of County Sanitation District No. 8 ordinance. Loading for Each Class of Land Use – LACSD: <http://www.lacsd.org/civicax/filebank/blobdload.aspx?blobid=3531>

BUILDING NAME	Building ID	PLANNED USE	PROPOSED DEMAND FLOW			PEAK SEWER FLOW (GPM)
			BASIC GSF	UNIT FLOW (GPD/1000 SF)	AVERAGE WATER/SEWER FLOW (GPD)	
Student Housing Ph.1 (600 Beds)	2A	Housing	189000	300	56700	236.25
Student Recreation Center	E	Recreation	151148	600	90688.8	377.87
Admin	B	Administration	105440	200	21088	87.87
LaCorte Hall Expansion		Classroom/Office	51600	200	10320	43.00
Academic	A	Unassigned	221400	200	44280	184.50
Black Box Theatre	C	Arts	7640	125	955	3.98
Non-State	I	Incubator/Foundation	87300	200	17460	72.75
Academic	J	Acad/Admin	170935	200	34187	142.45
Academic	K	Acad/Admin	106485	200	21297	88.74
Student Union Expansion	L	LSU	85188	200	17037.6	70.99
Acad/Admin	M	Health, Human Services	116000	300	34800	145.00
Acad/Admin	N	Acad/Admin	123770	200	24754	103.14
Acad/Admin	O	Acad/Admin	130025	300	39007.5	162.53
Student Housing Ph. 2 (300 Beds)	2B	Housing	94500	300	28350	118.13
Parking Structure		Parking Structure	-	-	-	-
Plant Operations	P	Central Plant	6000	150	900	3.75
Plant Operations	Q	Satellite Central Plant	47000	150	7050	29.38
Extended Education		Classroom/Office	22000	200	4400	18.33
TOTAL					453,275	1,889

TABLE 2. PROPOSED DEMAND FLOW IN CORE CAMPUS



GRAPH 1. EXISTING AND PROPOSED DOMESTIC WATER DEMAND

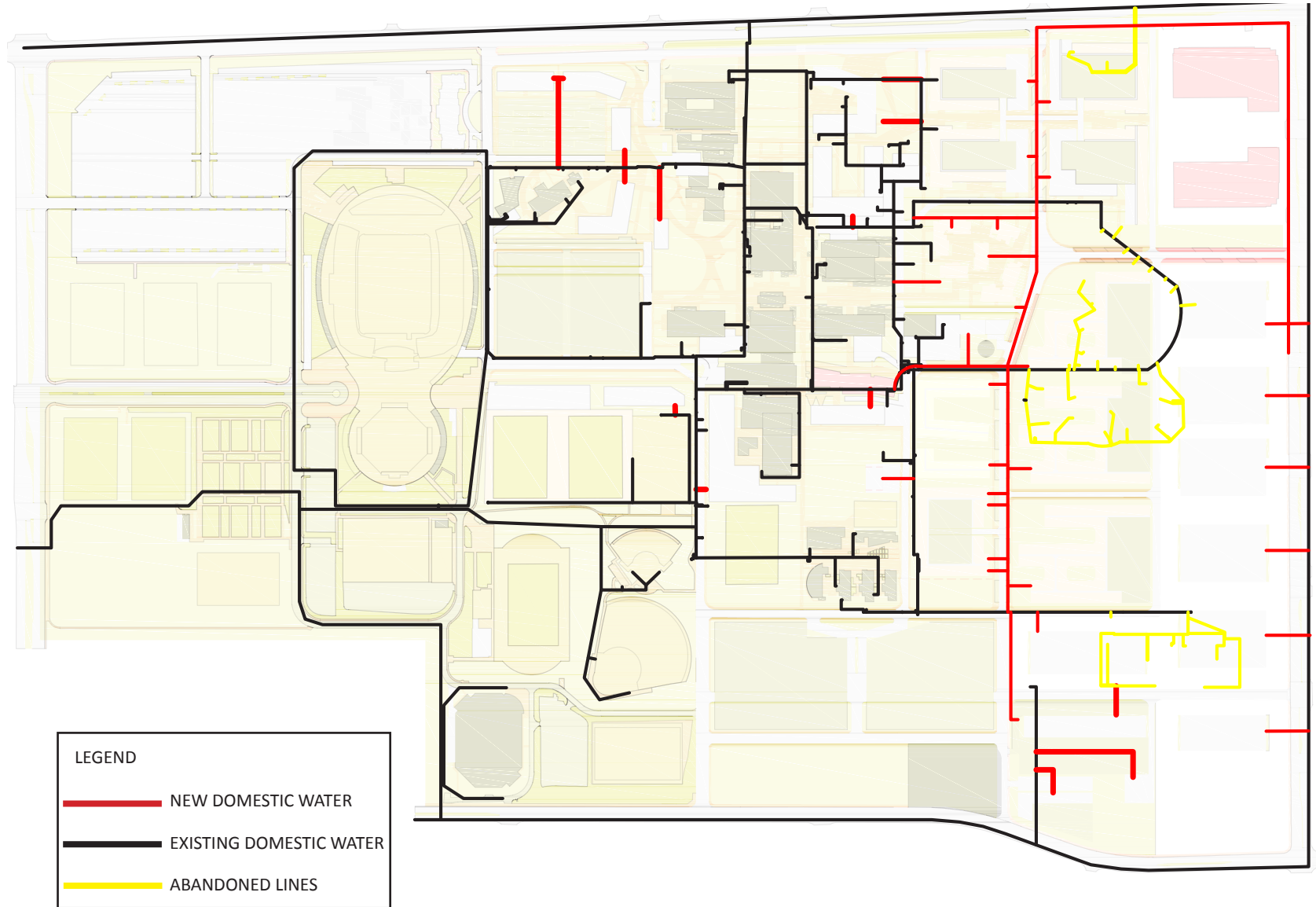


FIGURE 3. EXISTING AND NEW DOMESTIC WATER INFRASTRUCTURE

PART B: LDP AREA DOMESTIC WATER INFRASTRUCTURE

A. EXISTING CONDITIONS

Domestic water service is provided to the CSUDH campus by California Water Service (CWS) Company in Torrance CA. The main water service connection for the campus is a 12-inch on the east side of. There is a 12-inch connection west on this line for the main campus (Detail B), used as a back-up if pressure drops, which has not happened in recent years. This CWS water main also serves the Stub Hub Complex on separate connections. The third large 12" connection for back-up on campus is from the CWS main in Victoria Street. The Child Development Center (CDC) buildings in the northeast portion of campus have their own connections to the water main in Victoria, each for the CDC and the Infant Toddler Center (ITC). The campus has approximately 34 fire hydrants, not counting the Stub Hub complex. Fire water for the University is served directly off the domestic waterline system for fire hydrants and building fire sprinklers.

B. NEW CONDITIONS

The Core campus and land development will have a loop domestic water system. New connections for the land development will be located on Victoria street and Central avenue. The Core campus and land development will each have separate meters for separate billing. Only laterals from water mains to new buildings will be required.

The analysis of domestic water system included the Child Care portion of Parcel 4A. It is recognized that the development of a new Child Care/Development Center located along University Drive is expected to be constructed and maintained by the campus.

Table 3. presents the proposed demand flow for domestic water in the LDP area.

PARCEL NUMBER/LAND USE	PLANNED USE	LDP DEMAND FLOW			
		GSF/UNIT OR GSF X 1000	FLOW/UNIT	AVERAGE WATER/SEWER FLOW (GPD)	PEAK SEWER FLOW (GPM)
1-A Multi-Family	Family Rental	235	156	36,660	153
1-A Retail	Retail	16,445	150	2,467	10
1-B Multi-Family	Family Rental	250	156	39,000	163
1-B Retail	Retail	20.63	150	3,095	13
3-A Apartments	Student Apartments	244	156	38,064	159
3-B Apartments	Faculty Apartments	288	156	44,928	187
4-A Multi-Family	Family Rental	270	156	42,120	176
4-A Child Care	Child Care	13,125	200	2,625	11
4-A Retail	Retail	17,695	150	2,654	11
4-B Multi Family	Family Rental	274	156	42,744	178
4-B Retail	Retail	39,495	150	5,924	25
5-A Multi Family	Family Rental	236	156	36,816	153
5-B Multi Family	Family Rental	340	156	53,040	221
5-C Multi Family	Family Rental	330	156	51,480	215
6-A Business Park	Office Building	345.6	200	69,120	288
6-B Business Park	Office Building	140.4	200	28,080	117
7-A Business Park	Office Building	86.4	200	17,280	72
TOTAL				516,097	2,150

TABLE 3. PROPOSED DEMAND FLOW IN LDP

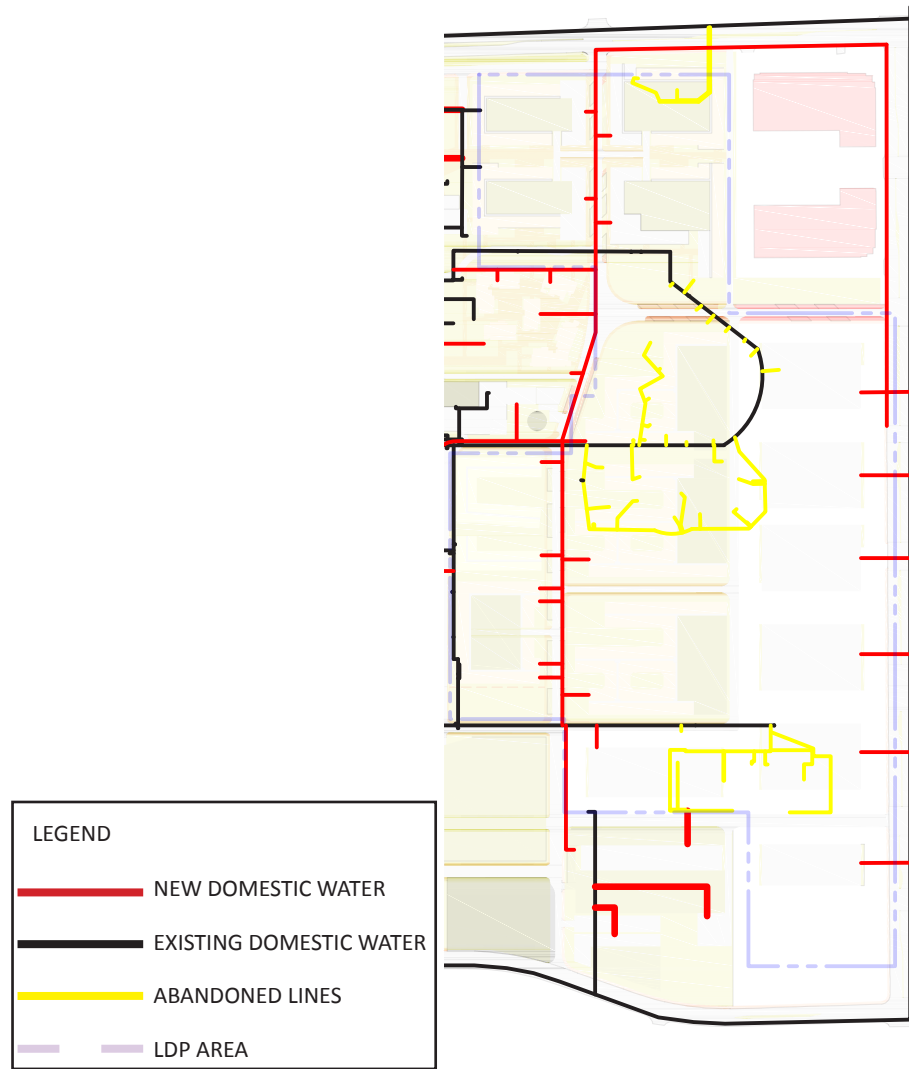


FIGURE 4. EXISTING AND NEW DOMESTIC WATER IN LDP AREA

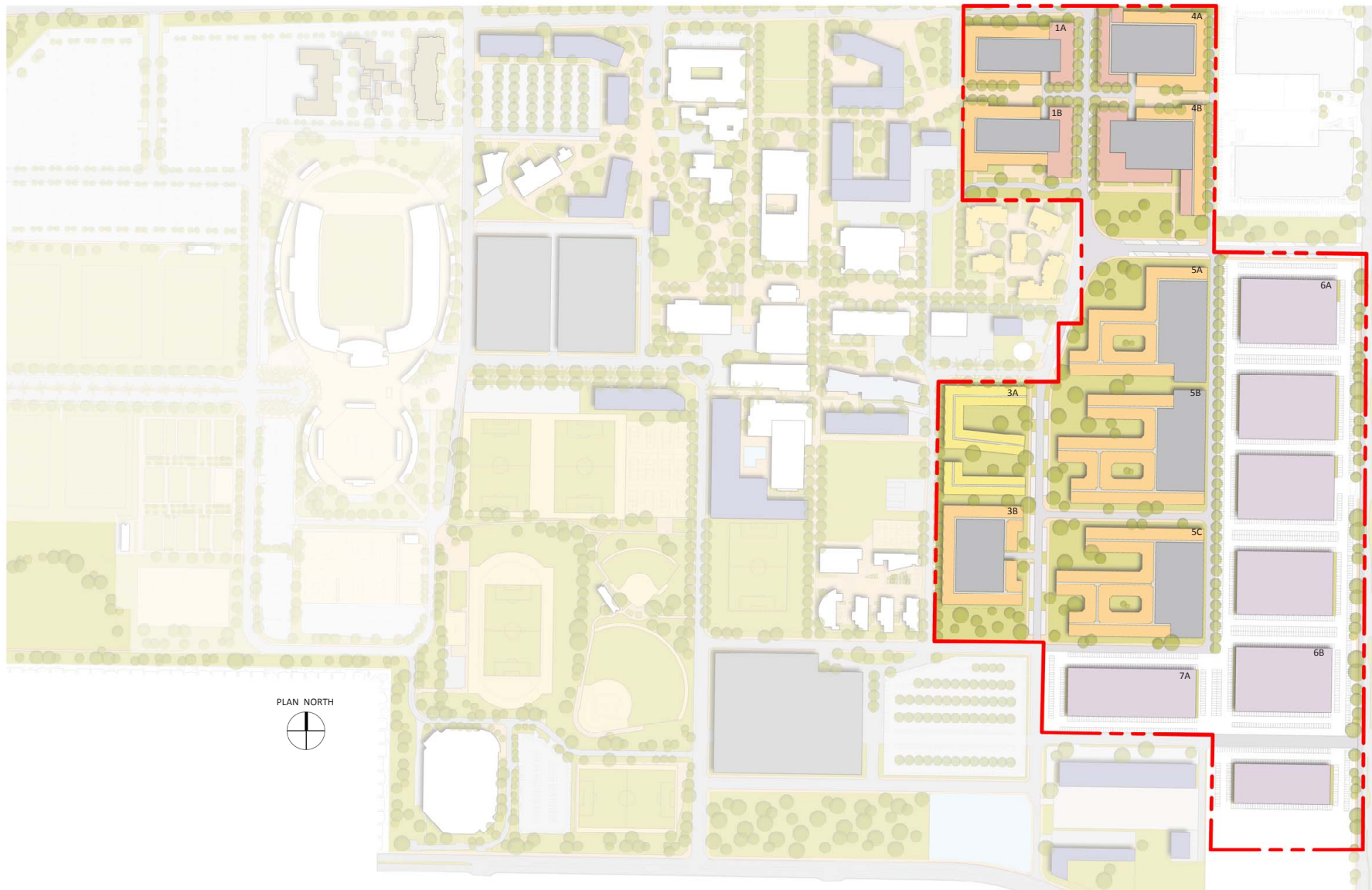


FIGURE 5. LDP BUILDINGS

CAMPUS STORM DRAINAGE SYSTEM

STORM DRAINAGE INFRASTRUCTURE HIGHLIGHTS

PART-A: CORE CAMPUS

Core Area: 1.7 million GSF

Long term: allowable flow 1.52 cubic feet per second per acre (1.52 cfs/acre)

Strategy: Provide sufficient site area to retard storm water and reduce peak discharge rate to the capacity of the downstream receiving system.

CORE CAMPUS BUILDINGS LIST

- A Academic
- B Admin
- C Black Box Theatre
- D Academic
- E Rec Center
- I Incubator
- J Academic
- K Academic
- L Student Union Expansion
- M Academic
- N Academic
- O Academic
- P Central Plant Expansion
- Q Satellite Central Plant
- R Facilities Services Complex
- V Child Care
- W Fab Lab Garage
- 2A,B Residency Halls

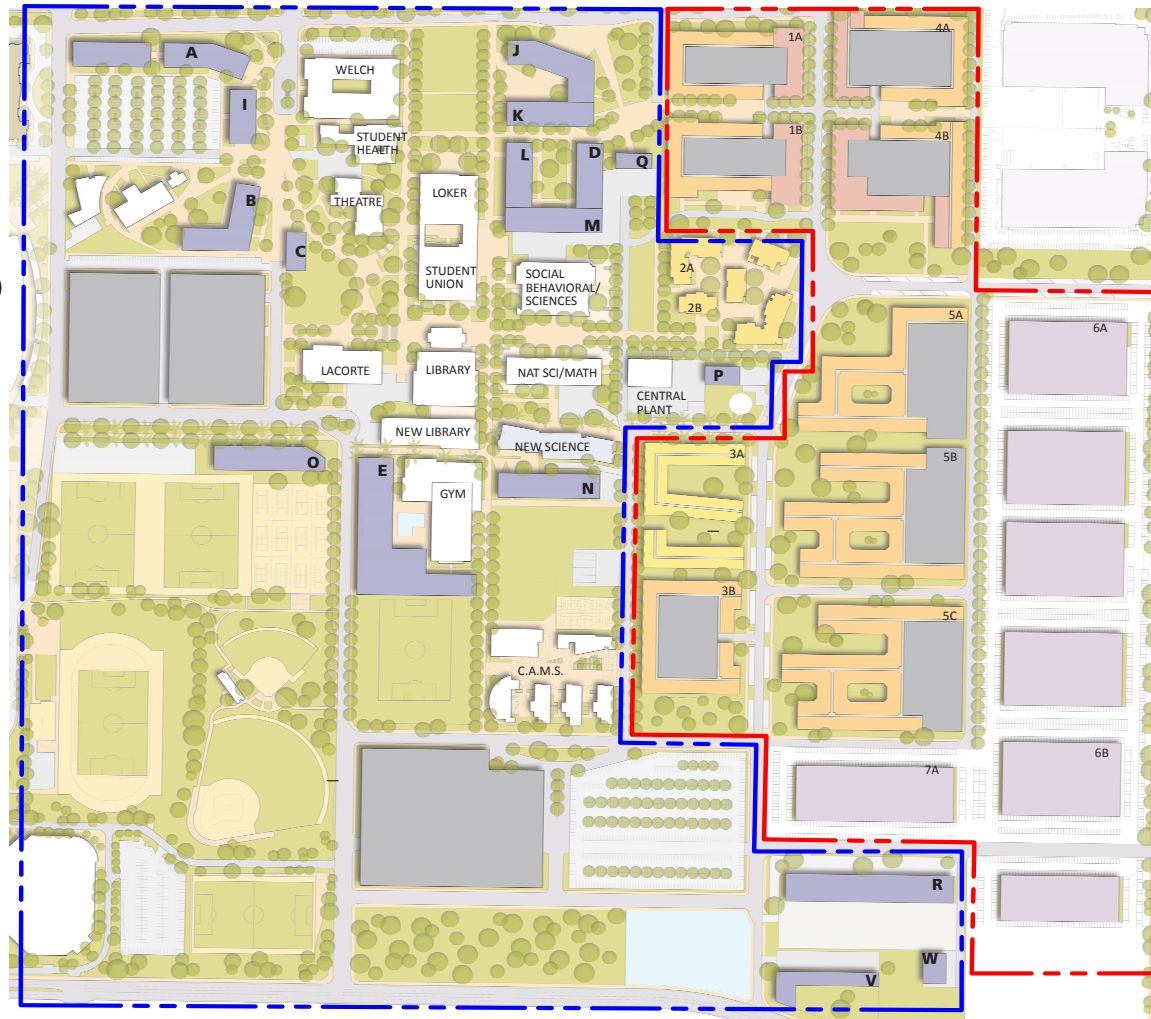
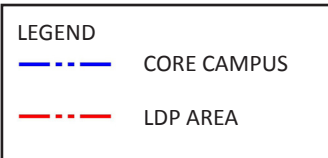


FIGURE 1. HIGHLIGHTS OF CAMPUS MASTER PLAN STORM DRAINAGE INFRASTRUCTURE



PART-B: LDP

LDP Parking Area: 1.9 million GSF
 LDP Building Area: 3.8 million GSF

Strategy: Provide sufficient site area to retard storm water and reduce peak discharge rate to the capacity of the downstream receiving system. Each lot will drain separately to main lines in the development area. A restriction between the storage the parcels and main lines will limit discharge to the rate provided by the County.

LDP LAND USE

- 1A Mixed Use
- 1B Mixed Use
- 3A Apartments
- 3B Apartments
- 4A Mixed Use
- 4B Mixed Use
- 5A Multi Family Rental
- 5B Multi Family Rental
- 5C Multi Family Rental
- 6A Business Park
- 6B Business Park
- 7A Business Park

PART A: CORE CAMPUS STORM DRAINAGE INFRASTRUCTURE

A. EXISTING SYSTEMS

The existing storm drain system that serves the main portion of the University discharges through a 60-inch connection to a LA County Public Works storm drain on the south side of campus at University Drive and Campaign Drive. The Student Health Center (SHC # 25) has recurring issues with ponding in the parking area on the southwest side, often flooding the south entrance to the building. The SHC also experiences, to a lesser degree, ponding on the north side, which has been known to impact Welch Hall. On the east side of University Theater, the basement stairwell has had chronic problems with flooding, even in the smallest rain storm. A new sump-pump was installed several years ago, but is breaking down and unable to handle minor storm water discharges.

B. SYSTEM CHANGES UNDERWAY (APRIL 2017)

Existing downstream capacities are limited. Site designers of new projects must contact Los Angeles County Public Works to obtain requirements for limitations of discharge rates. Los Angeles County has limited storm water discharges to PD 0961 to 1.52 cubic feet per second (CFS) per acre drained during a 50-year storm event and prohibited discharges to PD 242 and MTD 1520. This requires retarding of storm water on-site to reduce peak discharges. The area listed under "Site Area required for Storm Water Mitigation Site Improvement, SF" should be considered a guideline only. Storage lengths that produces volume sufficient for storage capacity.

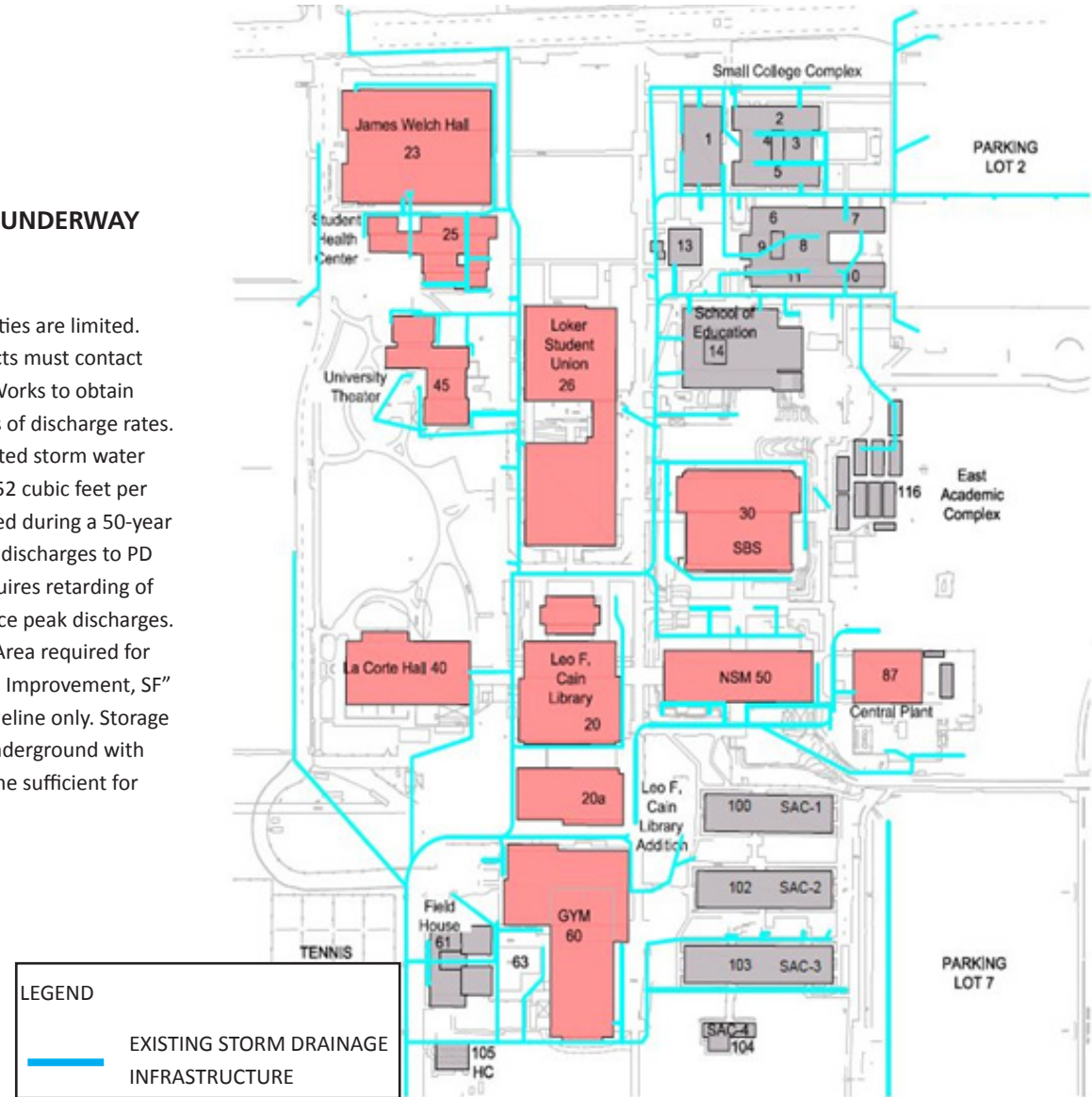


FIGURE 2. EXISTING STORM DRAINAGE INFRASTRUCTURE

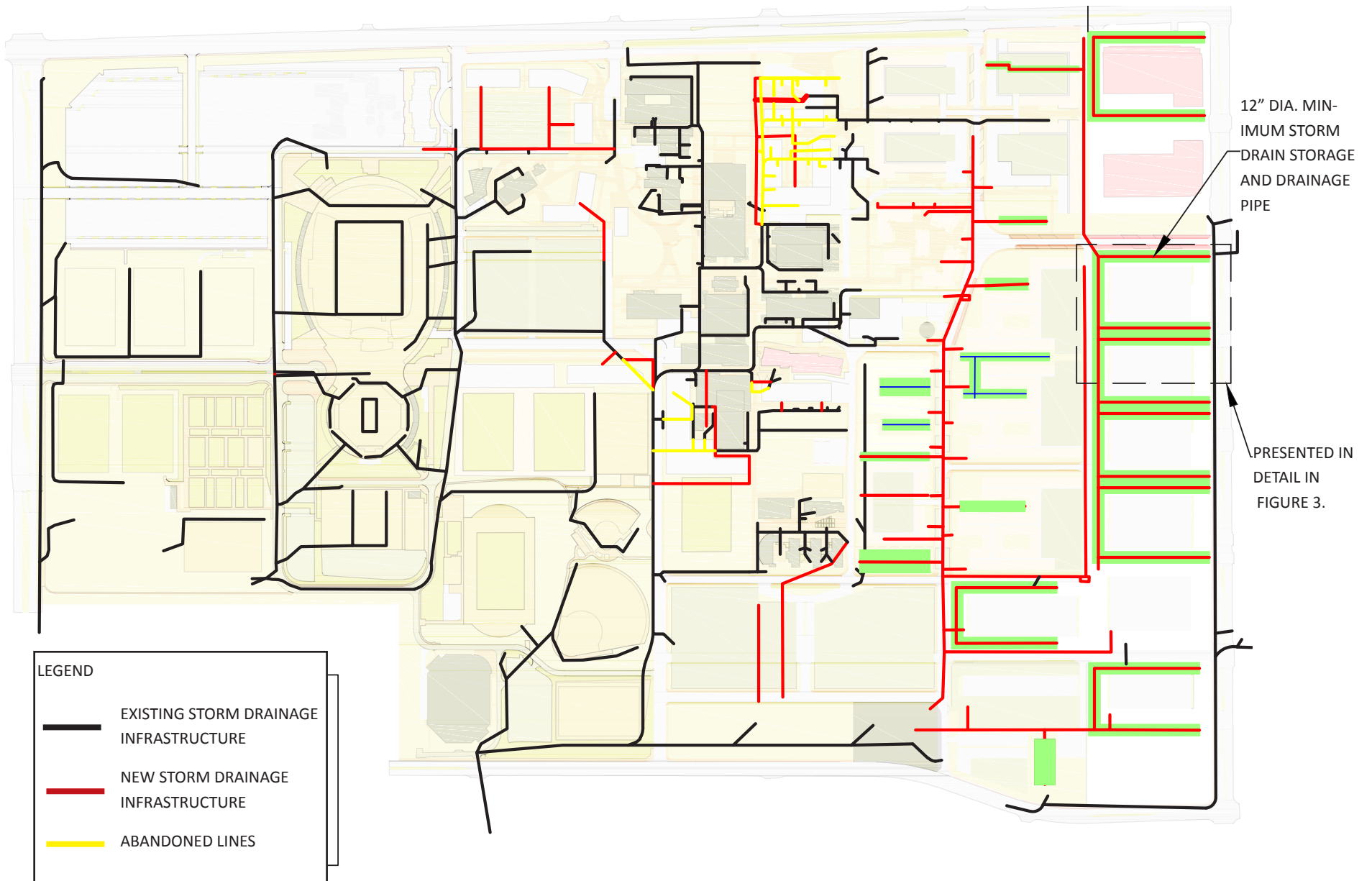


FIGURE 3. EXISTING AND NEW STORM DRAINAGE INFRASTRUCTURE

PART B: LDP AREA STORM DRAINAGE INFRASTRUCTURE

As with the main campus, the new restriction by Los Angeles County limits storm water discharges to PD 0961 (County Constructed) to 1.52 cubic feet per second (CFS) per acre drained during a 50-year storm event and prohibits discharge to PD 242 and MTD 1520. This requires retarding of storm water on-site to reduce peak discharges.

Wheeler & Gray determined through hydrologic modeling using the Army Corps of Engineers' HEC-RAS program that attenuation of peak discharges from upstream parcels to downstream parcels would be impractical. It would require large areas and/or volumes to be retarded at each parcel before discharging to a downstream parcel. This scheme was not pursued because modeling showed flooding when using planter volumes typical for commercial developments.

Instead, Wheeler & Gray determined the peak discharge from a typical parcel using Los Angeles County Department of Public Works' HydroCalc 1.0.2 modeling software to produce a hydrograph for a small area. The typical parcel used is Business Park 1 of the Land Development Plan. The area of the site in acres was multiplied by 1.52 CFS/Acre to determine the peak allowable discharge for a site of the size of this typical parcel. In the case of the example presented in this Master Plan,

that rate is 6.56 CFS. A line at this rate was drawn across the hydrograph to show the volume of discharge that is required to be stored on site. The volume calculated is 2,305 cubic feet (CF). This volume can be stored within the concept planter area, which was assumed will be constructed at an invert slope of 0.5%, and approximately 1,200 feet of 18-inch diameter pipe.

For each site, storage pipes can be constructed under parking lots and driveways to provide sufficient storage capacity. The pipe will also serve to drain the buildings and parking lots.

Each lot will drain separately to main lines in the development area. A restriction between the storage the parcels and main lines will limit discharge to the rate provided by the County.

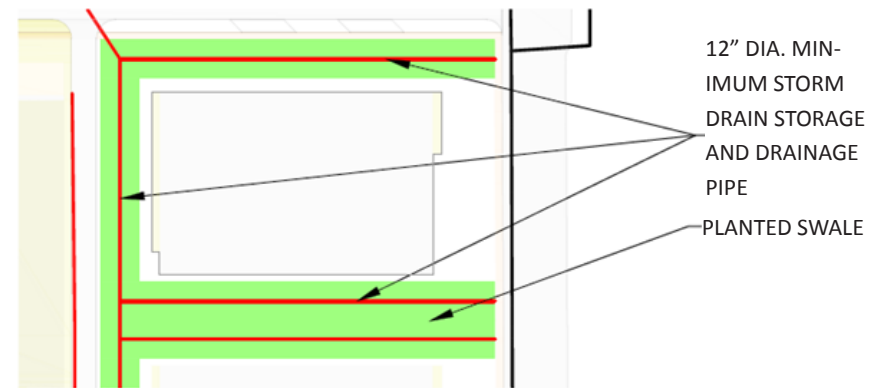


FIGURE 4. DETAIL OF STORM DRAIN STORAGE AND DRAINAGE PIPE

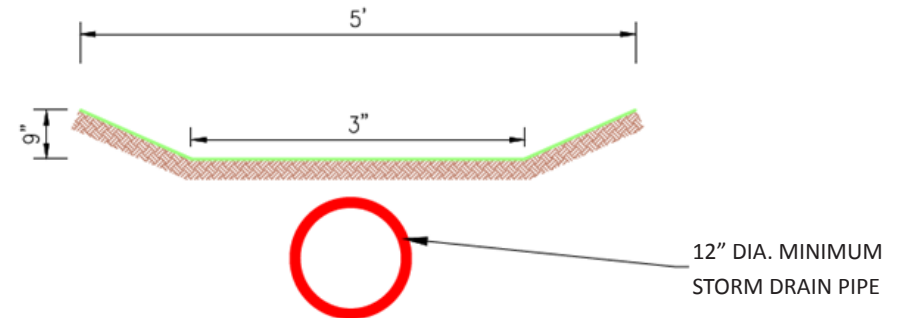


FIGURE 5. CROSS SECTION OF PLANTED SWALE

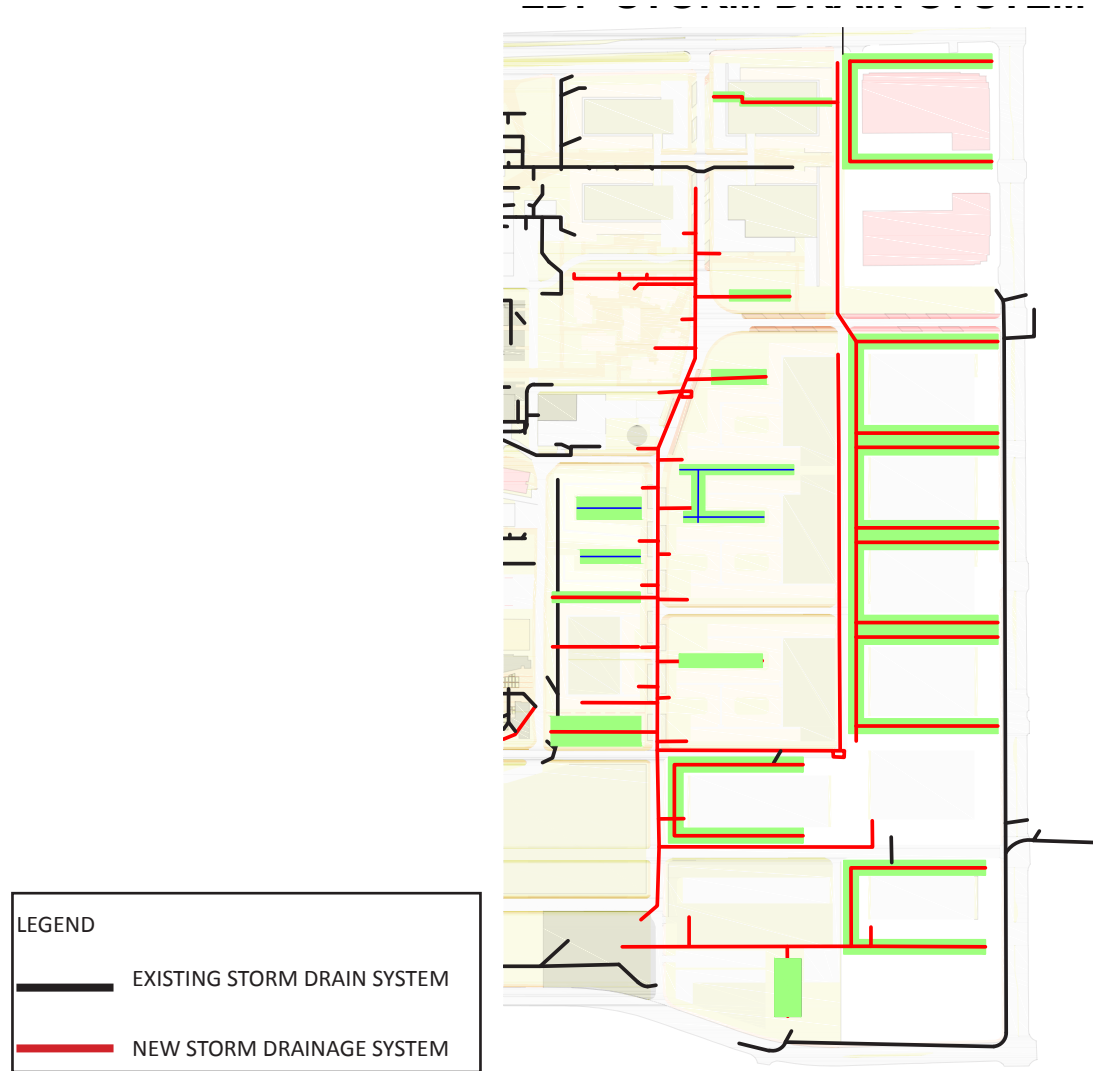
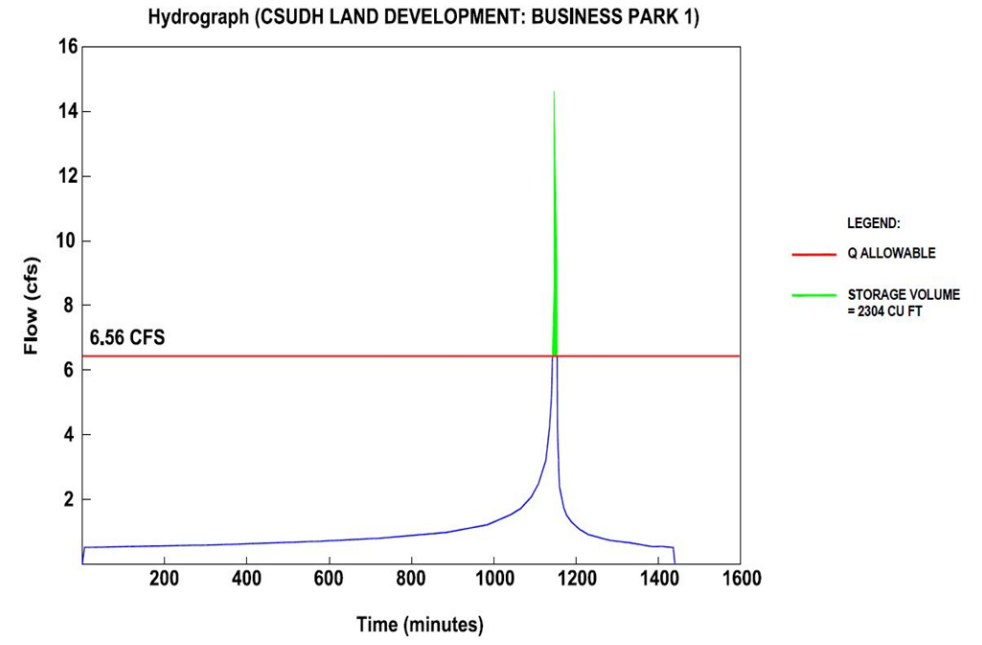


FIGURE 6. LDP AREA EXISTING AND NEW STORM DRAIN SYSTEM

Input Parameters	
Project Name	CSUDH Land Development
Subarea ID	Business Park 1
Area (ac)	4.32
Flow Path Length (ft)	436.0
Flow Path Slope (vft/hft)	0.018
50-yr Rainfall Depth (in)	6.3
Percent Impervious	0.91
Soil Type	9
Design Storm Frequency	50-yr
Fire Factor	0
LID	False

Output Results	
Modeled (50-yr) Rainfall Depth (in)	6.3
Peak Intensity (in/hr)	3.7588
Undeveloped Runoff Coefficient (Cu)	0.9153
Developed Runoff Coefficient (Cd)	0.9
Time of Concentration (min)	5.0
Clear Peak Flow Rate (cfs)	14.614
Burned Peak Flow Rate (cfs)	14.614
24-Hr Clear Runoff Volume (ac-ft)	1.8863
24-Hr Clear Runoff Volume (cu-ft)	82167.2928

TABLE 1. PEAK FLOW HYDROGRAPHIC ANALYSIS



GRAPH 1. GRAPH DEPICTING HYDROGRAPH CALCULATED FOR BUSINESS PARK 1

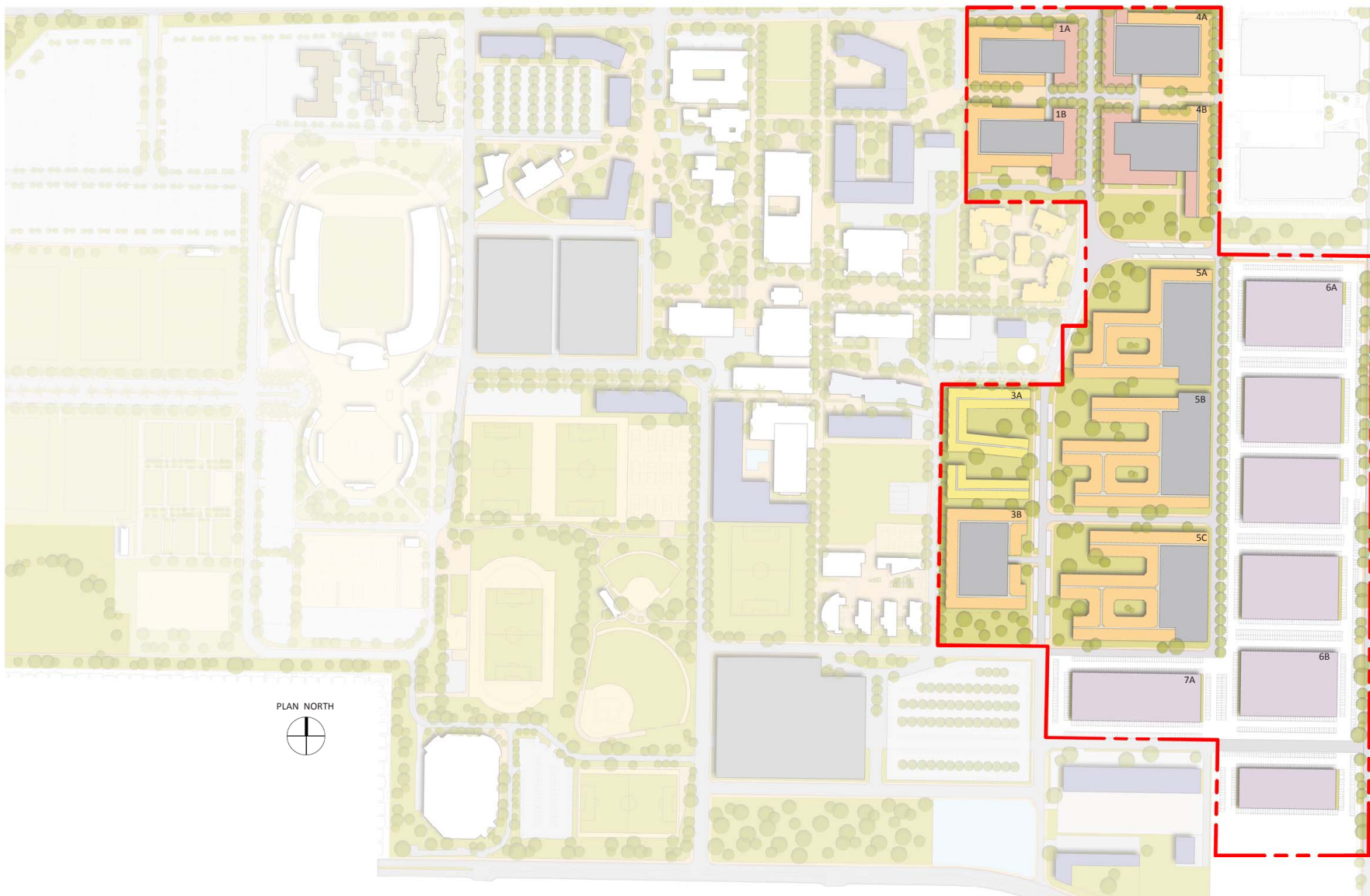


FIGURE 7. LDP BUILDINGS

**G.7 Master Plan Water Infrastructure & Proposed
Project Water Demand Supply Narrative to the Civil
Engineering Report, 2017**

A1. Existing Conditions -Sanitary Sewer

The existing sanitary sewer provides service to the CSUDH campus (Central Campus, Child Development Center, Continuing Ed and Facilities), the on-site California Academy of Mathematics and Science School (CAMS) and the Stub Hub sports complex (formerly the Home Deport Center).

Sanitary sewer connections are owned and operated by the City of Carson. There are four connections; an 8-inch line on the north side of campus on Victoria Street; a 12-inch line on the western portion of the campus on Avalon Boulevard, which serves the Extended Education buildings and the privately owned and operated Stub Hub sports complex; a 12-inch line at Fariman Drive that serves the central campus, Student Housing 2, and the University sports fields to the southwest; and an 8-inch connection to the east of Caney Avenue that serves the Physical Plant.

A2. System Changes – Sanitary Sewer

In general, the existing sanitary sewer network on campus is oversized. While this provides more than sufficient capacity for existing facilities and significant expansion, models of the system show that it does not achieve transport velocities in several reaches of the system at peak rates. Additional sewer flow from new buildings and faculties will increase velocities and improve operation of the system. For this reason, no improvements to the downstream reaches are necessary.

The total increase in effluent discharge to campus and downstream sanitary sewer systems

will consist of additional flows due to increase in the Full Time Equivalent (FTE) student count, net increase in student housing, new market rate residences, new commercial development that will part of the University Village plan and an addition of 3,000 spectator seats to the Stub Hub Center. Note that in the table Proposed Demand Flows the rate shown for future discharge from the Stub Hub Center exceeds the capacity of the downstream system. The proposed flows are split between multiple laterals and will enter the downstream system at different point; therefore, the component flows will not exceed capacity.

The increase in FTE student is calculated using a current FTE student count of 11,533. The proposed increase to an FTE of 20,000 students is an increase of 8,467 FTE students. The increase in sewer discharge attributable to FTE student increase is calculated using Los Angeles County Sanitation District's (LACSD) Mean Loading tabulation for a College/University campus is 20 gallons per day per student. This results in an increase of 169,340 gallons per academic day (GPD), or 0.17 million gallons per day (MGD). Total annual discharge will be calculated based on an academic calendar of 240 days, including summer sessions and non-credit events.

Student housing will increase by a net 988 beds. Using LACSD's Mean Loads for a Rooming House and two beds per Room results in an increase of discharges of 61,750 GPD, or 0.06 MGD. Total annual discharge will be calculated based on 10 months of residency.

The University Village project will create 2,149 market rate apartments. Using LACSD's Mean

Loading for Multi-Unit Residential units, this will result in an increase of discharges of 0.34 MGD.

The University Village elements will include 572, 400 gross square feet of commercial business space. Using LACSD's Mean Loading for Office Building space, this will result in an increase of discharges of 0.11 MGD.

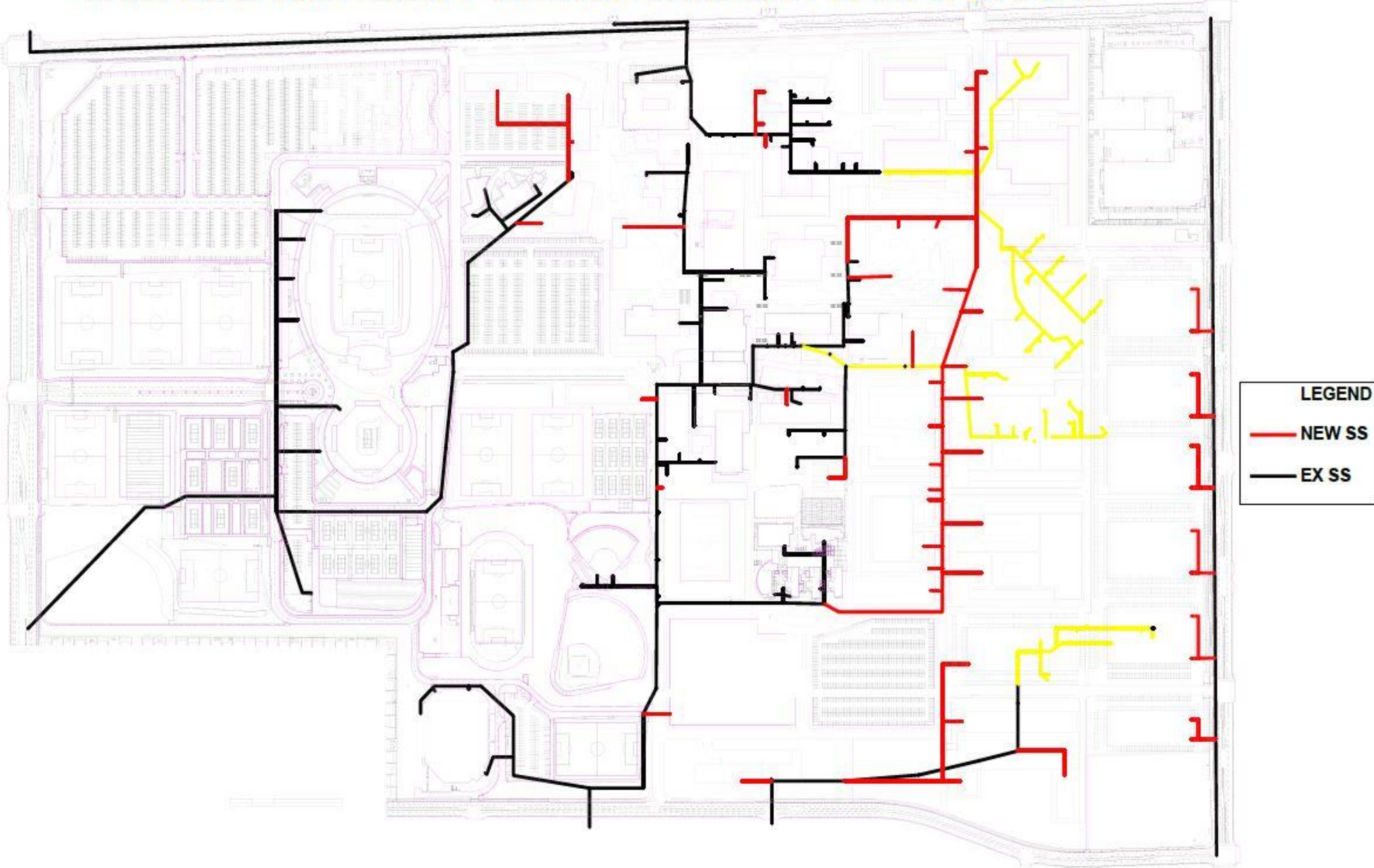
The University Village elements will include 96,085 gross square feet of retail space. Using LACSD's Mean Loading for a Store or Regional Mall results in an increase of discharges of 0.11 MGD.

The Stub Hub Center will increase seating capacity by 3,000 seats. Using LACSD's Mean Loading for a Sports Stadium and the increase in effluent will be 0.03 MGD at peak, which is only during sold out events. The annual increase is based on 24 sold-out events per year.

The total increase in effluent discharge is estimated to be 0.73 MGD at aggregate of peak.

Campus effluent is treated at the Joint Water Pollution Control Plant (JWPCP) in the City of Carson. The plant is owned and operated by the Los Angeles County Sanitation Districts. According to the LACSD (<https://www.lacsd.org/wastewater/wwfacilities/jwpcp/>) the plant has a permitted capacity 400 MGD and is currently operating at 260 MGD. The excess permitted capacity is 140 MGD; therefore, the plant has sufficient capacity to accept the additional effluent discharge.

CAMPUS & UNIVERSITY VILLAGE SANITARY SEWER SYSTEM



B1. Existing Conditions – Domestic (Potable) Water

Domestic water service is provided to the CSUDH campus by California Water Service (CWS) Company in Torrance CA. There are numerous connections from a water main that run through the southern quarter of the campus (the former main for Dominguez Water Company), from east to west with a tee that turns south to University Drive. The main water service connection for the campus is a 12-inch line on the east side of campus (Detail A on CSUDH Master Utilities Plan for Domestic Water), just east of CAMS. There is a 12-inch connection west on this line for the main campus (Detail B), used as a back-up if pressure drops, which has not happened in recent years. This CWS water main also serves the Stub Hub Complex on separate connections. The third large 12" connection for back-up on campus is from the CWS main in Victoria Street. The Child Development Center (CDC) buildings in the northeast portion of campus have separate connections to a main in Victoria, each for the CDC and the Infant Toddler Center (ITC). The campus has approximately 34 fire hydrants, not including the Stub Hub complex. Fire water for the University is served directly off the domestic waterline system for fire hydrants and building fire sprinklers. For this reason, water modeling and analysis is conducted for fire flow requirements, which guarantees there will be sufficient pressure for domestic use. The campus does use pumps for their domestic/fire water system.

B2. System Changes – Domestic (Potable) Water

The domestic water system has sufficient capacity to provide potable water to existing facilities and the proposed future facilities. Only laterals from water mains to new buildings will be required.

Domestic water demand will increase as the various elements of the master plan are executed. Estimated waster demands are calculated using Los Angeles County Sanitation District' Mean Loadings for District 8. Note that the campus is irrigated with reclaimed water; therefore, no irrigation water is included in the domestic water demand increases.

Campus Full Time Equivalent (FTE) Students will increase by 8,467. The increase in water demand attributable to FTE student increase is 20 gallons per day per student estimated using Los Angeles County Sanitation District's (LACSD) Mean Loading tabulation for a College/University campus. This results in an increase of 169,340 gallons per academic day (GPD) and 125 acre-feet (AF) per year based on an academic calendar of 240 days, including summer sessions and non-credit events.

Student housing will increase by a net 988 beds. Using LACSD's Mean Loads for a Rooming House and two beds per Room results in and increase in demand of 61,750 GPD and 58 AF per based on 10 months of residency.

The University Village project will create 2,149 market rate apartments. Using LACSD's Mean Loading for Multi-Unit Residential units, this will increase demand by 375 AF per year.

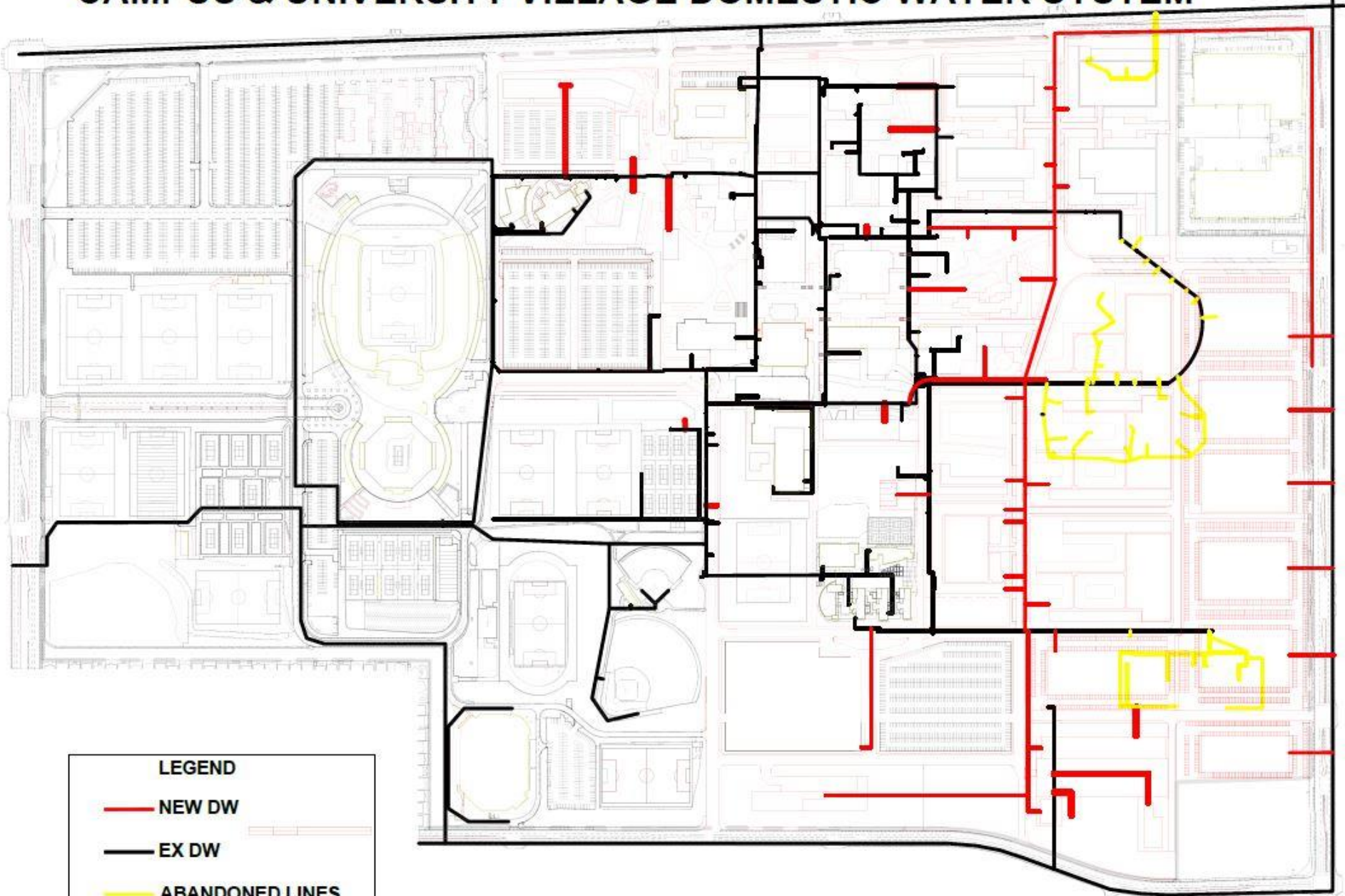
The University Village elements will include 572, 400 gross square feet of commercial business space. Using LACSD's Mean Loading for Office Building space, this will increase demand by 128 AF per year.

The University Village elements will include 96,085 gross square feet of retail space. This will increase demand by 16 AF per year.

The Stub Hub Center will increase seating capacity by 3,000 seats. Using LACSD's Mean Loading for a Sports Stadium and 24 sold-out events per year, the increase in demand will be 2 acre-feet per year.

Total annual increase in domestic/potable demand is estimated to be 648.8 acre-feet. The campus is served by California Water Service. (CWS). According to CWS's 2015 Urban Water Management Plan (UWMP) CWS will provide 31,508 acre-feet of water in 2020 and 31,683 acre-feet in 2030. From the UWMP, CWS's available purchased and ground water supplies will be 34,796 AF in 2020 and 34,701 AF in 2035. Projected demands for potable water are 31,508 AF in 2020 and 31,528 AF in 2030. CWS has sufficient available water to provide for the estimated increase.

CAMPUS & UNIVERSITY VILLAGE DOMESTIC WATER SYSTEM



LEGEND

- NEW DW
- EX DW
- ABANDONED LINES

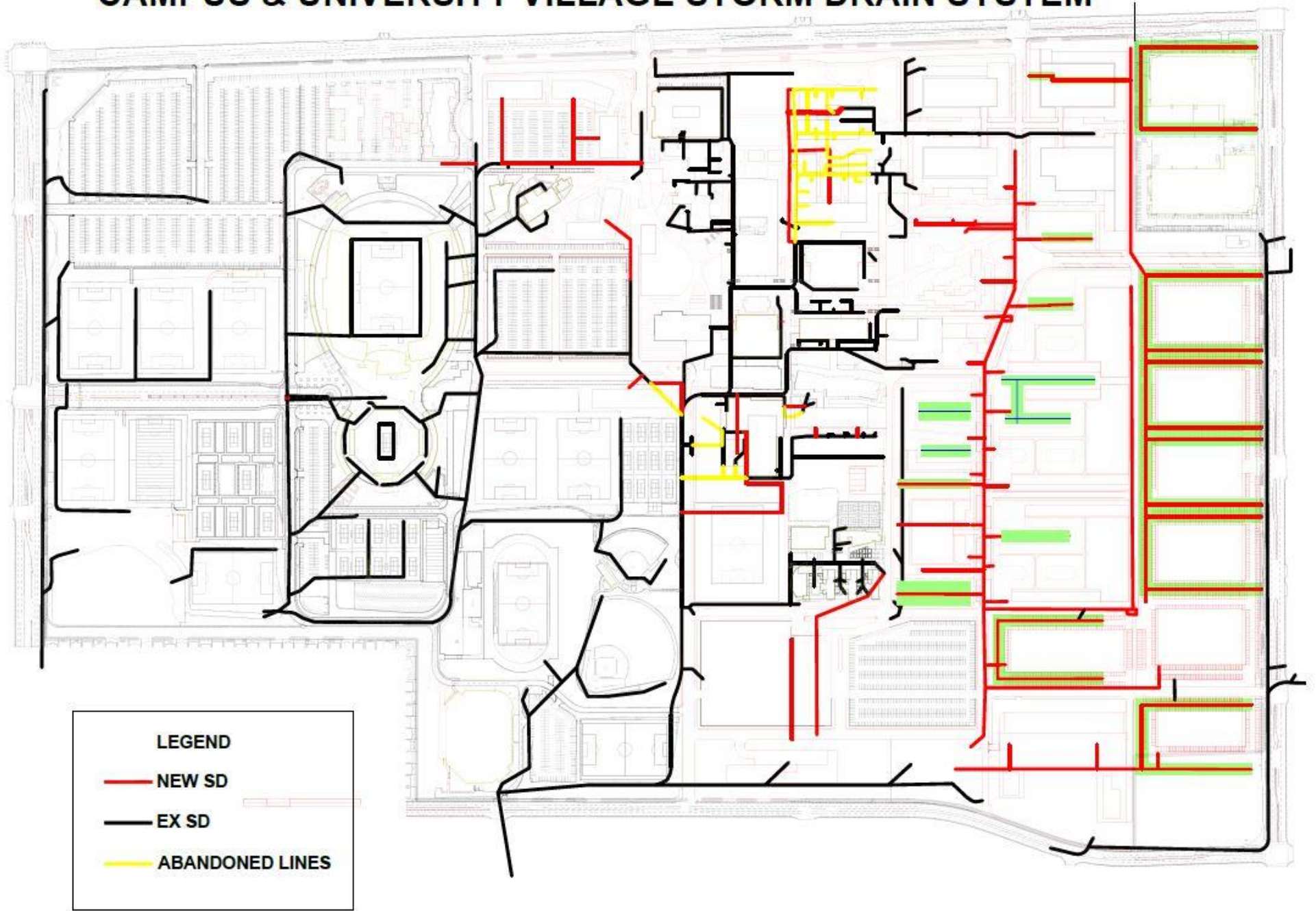
C1. Existing Conditions - Storm Drain

The existing storm drain system that serves the main portion of the University discharges through a 60-inch connection to a Los Angeles County Public Works storm drain on the south side of campus at University Drive and Campaign Drive. The Student Health Center (SHC # 25) has recurring issues with ponding in the parking area on the southwest side, often flooding the south entrance to the building. The SHC also experiences, to a lesser degree, ponding on the north side, which has been known to impact Welch Hall. On the east side of University Theater, the basement stairwell has had chronic problems with flooding, even in the smallest rain storm. A new sump-pump was installed several years ago, but is breaking down and unable to handle minor storm water discharges.

C2. System Changes – Storm Drain

Existing downstream capacities are limited. Los Angeles County has limited storm water discharges to PD 0961 to 1.52 cubic feet per second (CFS) per acre drained during a 50-year storm event and prohibited discharges to PD 242 and MTD 1520. No new storm drain facilities downstream of campus will be constructed to accept increased flow. The campus will retain or retard storm water discharges on campus to limit peak discharges from individual project site to 1.52 CFS. This will be accomplished by surface storm water retention areas and sub-surface retention structures, such as oversized pipes.

CAMPUS & UNIVERSITY VILLAGE STORM DRAIN SYSTEM



LEGEND

- NEW SD
- EX SD
- ABANDONED LINES

D1. Existing Demand Flow

The table shown represents the existing demand flow for both sanitary sewer and domestic water lines. Unit flows can be found from the Board of Directors of County Sanitation District No.8 ordinance.

The average water flow must be calculated in order to obtain a sewer peak flow.

Loading for Each Class of Land Use – LACSD:

<http://www.lacsd.org/civicax/filebank/blobload.aspx?blobid=3531>

CALIFORNIA STATE UNIVERSITY, DOMINGUEZ HILLS
WATER AND SEWER DEMANDS FOR EXISTING FACILITIES

BUILDING NAME	PLANNED USE	BASIC GSF	EXISTING DEMAND FLOW				
			UNIT FLOW (GPD/1000 SF)	AVERAGE WATER/SEWER FLOW (GPD)	AVERAGE WATER FLOW (GPM)	PEAK SEWER FLOW (GPM)	*DESIGN FLOW CAPACITY (GPM)
(SCC-1) SMALL COLLEGE COMPLEX 1	CLASSROOM/OFFICE	8,529	200	1,706	1.18	7.11	525.54
(SCC-2) SMALL COLLEGE COMPLEX 2	CLASSROOM/OFFICE	5,313	200	1,063	0.74	4.43	525.54
(SCC-3) SMALL COLLEGE COMPLEX 3	CLASSROOM/OFFICE	1,263	200	253	0.18	1.05	525.54
(SCC-4) SMALL COLLEGE COMPLEX 4	CLASSROOM/OFFICE	1,263	200	253	0.18	1.05	525.54
(SCC-5) SMALL COLLEGE COMPLEX 5	CLASSROOM/OFFICE	5,315	200	1,063	0.74	4.43	525.54
(SCC-6) SMALL COLLEGE COMPLEX 6	CLASSROOM/OFFICE	5,841	200	1,168	0.81	4.87	525.54
(SCC-7) SMALL COLLEGE COMPLEX 7	CLASSROOM/OFFICE	2,145	200	429	0.30	1.79	525.54
(SCC-8) SMALL COLLEGE COMPLEX 8	CLASSROOM/OFFICE	2,920	200	584	0.41	2.43	525.54
(SCC-9) SMALL COLLEGE COMPLEX 9	CLASSROOM/OFFICE	1,626	200	325	0.23	1.36	525.54
(SCC-10) SMALL COLLEGE COMPLEX 10	CLASSROOM/OFFICE	2,145	200	429	0.30	1.79	525.54
(SCC-11) SMALL COLLEGE COMPLEX 11	CLASSROOM/OFFICE	5,841	200	1,168	0.81	4.87	525.54
(SCC-13) SMALL COLLEGE COMPLEX 13	CLASSROOM/OFFICE	5,290	200	1,058	0.73	4.41	525.54
(COE) SCHOOL OF EDUCATION	CLASSROOM/OFFICE	27,875	200	5,575	3.87	23.23	544.89
(LIB) LEO F. CAIN LIBRARY	LIBRARY	152,006	100	15,201	10.56	63.34	555.31
LIBRARY ADDITION	LIBRARY	139,569	100	13,957	9.69	58.15	1384.86
(WH) JAMES L. WELCH HALL	CLASSROOM/OFFICE	179,222	200	35,844	24.89	149.35	587.57
(SHC) STUDENT HEALTH CENTER	PROFESSIONAL BLDG	20,046	300	6,014	4.18	25.06	1009.19
(LSU) LOKER STUDENT UNION	COLLEGE/UNIV UNION	123,033	300	36,910	25.63	153.79	932.74
(SBS) SOCIAL/BEHAVIORAL SCIENCES	CLASSROOM/OFFICE	81,000	200	16,200	11.25	67.50	584.63
(LCH) LACORTE HALL	CLASSROOM/OFFICE	70,331	200	14,066	9.77	58.61	564.31
(UT) UNIVERSITY THEATRE	INDOOR THEATRE	25,201	125	3,150	2.19	13.13	447.48
(NSM) NATURAL SCIENCES/MATHEMATICS	CLASSROOM/OFFICE	85,450	200	17,090	11.87	71.21	2355.82
(GYM) GYMNASIUM	GYM W/ SHOWER	65,752	600	39,451	27.40	164.38	1207.29
(SP) SWIMMING POOL	SWIMMING POOL	-	-	2,600	1.81	10.83	1207.29
(BLDG A) PUEBLO DOMINGUEZ SH-1	RESIDENCE HALL	89,220	300	26,766	18.59	111.53	1419.93
(BLDG X) PUEBLO DOMINGUEZ SH-2	RESIDENCE HALL	76,093	300	22,828	15.85	95.12	1256.08
(CP) CENTRAL PLANT	PLANT	12,840	150	1,926	1.34	8.03	2642.14
(HC) HUGHES ATHLETIC AND EDUCATION	CLASSROOM/OFFICE	2,760	200	552	0.38	2.30	2435.87
(EE) EXTENDED EDUCATION CENTER	CLASSROOM/OFFICE	24,584	200	4,917	3.41	20.49	1599.1
(CAMS) CA. ACADEMY OF MATH AND SCIENCE	CLASSROOM/OFFICE	31,667	200	6,333	4.40	26.39	6105.96
BASEBALL/SOFTBALL STORAGE	WAREHOUSING	3,360	25	85	0.06	0.35	92.54
(CAMS) CA. ACADEMY OF MATH AND SCIENCE	CLASSROOM/OFFICE	13,548	200	2,710	1.88	11.29	6105.96
(PP) PHYSICAL PLANT SHOPS	PLANT/OFFICES	6,009	200	1,202	0.83	5.01	2978.7
(PP) PHYSICAL PLANT VEHICLE M	PLANT/OFFICES	2,056	200	411	0.29	1.71	2978.7
(PP) PHYSICAL PLANT GROUNDS	PLANT/OFFICES	2,190	200	438	0.30	1.83	2978.7
STUB HUB TENNIS - RESTROOMS	COMMERCIAL	12,726	1,000	12,726	8.84	53.03	635.2
STUB HUB TENNIS - CONCESSIONS	COMMERCIAL	3,301	1,000	3,301	2.29	13.75	635.2
STUB HUB - LOCKER/FACILITIES	RECREATION	111,500	800	66,900	46.46	278.75	635.2
STUB HUB - VELODROME SPORTS CENTER	RECREATION	2,720	300	816	0.57	3.40	635.2
STUB HUB MAIN STADIUM - RESTROOMS	COMMERCIAL	21,375	1,000	21,375	14.84	99.06	635.2
STUB HUB MAIN STADIUM - CONCESSIONS	COMMERCIAL	11,695	1,000	11,695	8.12	48.73	635.2
(FH) FIELD HOUSE	CLASSROOM/OFFICE	13,650	200	2,730	1.90	11.38	1207.29
(PP) PHYSICAL PLANT	PLANT/OFFICES	27,826	200	5,565	3.86	23.19	2978.7
(SAC-1) SOUTH ACADEMIC COMPLEX 1	CLASSROOM/OFFICE	15,500	200	3,100	2.15	12.92	1185.92
(SAC-2) SOUTH ACADEMIC COMPLEX 2	CLASSROOM/OFFICE	15,940	200	3,188	2.21	13.28	1185.92
(SAC-3) SOUTH ACADEMIC COMPLEX 3	CLASSROOM/OFFICE	17,280	200	3,456	2.40	14.40	1670.19
(EAC) EAST ACADEMIC COMPLEX	CLASSROOM/OFFICE	17,760	200	3,552	2.47	14.80	1670.19
(CDC) CHILD DEVELOPMENT CENTER	CLASSROOM/OFFICE	4,320	200	864	0.60	3.60	1419.93
(ITC) INFANT TODDLER CENTER	CLASSROOM/OFFICE	4,320	200	864	0.60	3.60	1419.93
UNIVERSITY WAREHOUSE	WAREHOUSE	5,602	25	140	0.10	0.58	1474.29
PHYSICAL PLANT WAREHOUSE	WAREHOUSE	6,216	25	155	0.11	0.65	2978.7
TOTAL		1,573,054		283,724			

*HYDRAULIC CAPACITY OF IMMEDIATE DOWNSTREAM SANITARY SEWER

D2. Proposed Demand Flow

This table represents the proposed demand flow for both sanitary sewer and domestic waterlines for new campus buildings. Unit flows can be found from the Board of Directors of County Sanitation District No. 8 ordinance.

Loading for Each Class of Land Use – LACSD:

<http://www.lacsd.org/civicax/filebank/blobload.aspx?blobid=3531>

CALIFORNIA STATE UNIVERSITY, DOMINGUEZ HILLS
WATER AND SEWER DEMANDS FOR EXISTING FACILITIES

		PROPOSED DEMAND FLOW					
BUILDING NAME	MASTER PLAN DESIGNATION	PLANNED USE	BASIC GSF	UNIT FLOW (GPD/1000 SF)	AVERAGE WATER/SEWER FLOW (GPD)	PEAK SEWER FLOW (GPM)	* DESIGN FLOW CAPACITY (GPM)
Student Housing (988 Beds)		Housing	988	125	123500	514.58	635.2
Child/Infant Care Center		Classroom/Office	17,846	200	3569.2	14.87	635.2
Lab, Faculty and Other		Classroom/Office	629,534	200	125906.8	524.61	635.2
Lecture and Multimodal		Classroom/Office	93,249	200	18649.8	77.71	635.2
General Administration		Classroom/Office	110,786	200	22157.2	92.32	635.2
Media		Classroom/Office	52,714	150	7907.1	32.95	635.2
Plan Operation Total		Plant	58,850	150	8827.5	36.78	635.2
Student Recreation Center		Recreation	192,538	600	115522.8	481.35	1875.32
Extended Education (Phase II)		Classroom/Office	21,385	200	4277	17.82	635.2
Incubator		Incubator/Foundation	28,564	200	5712.8	23.80	635.2
Additional Educational Support Space		Classroom/Office	27,184	200	5436.8	22.65	635.2
1-A Multi-Family		Family Rental	230	156	35,880	150	635.2
1-A Retail		Retail	16,445	150	2,467	10	635.2
1-B Multi-Family		Family Rental	249	156	38,844	162	635.2
1-B Retail		Retail	19,235	150	2,885	12	635.2
3-B Apartments		Faculty Apartments	180	156	28,080	117	635.2
4-A Multi-Family		Family Rental	297	156	46,332	193	635.2
4-A Retail		Retail	20,695	150	3,104	13	635.2
4-B Multi Family		Family Rental	287	156	44,772	187	635.2
4-B Retail		Retail	39.71	150	5,957	25	635.2
5-A Multi Family		Family Rental	236	156	36,816	153	635.2
5-B Multi Family		Family Rental	340	156	53,040	221	635.2
5-C Multi Family		Family Rental	330	156	51,480	215	635.2
6-A Business Park		Office Building	345.6	200	69,120	288	3402.70
6-B Business Park		Office Building	140.4	200	28,080	117	3402.70
7-A Business Park		Office Building	86.4	200	17,280	72	3402.70
				464137	1934		

*HYDRAULIC CAPACITY OF IMMEDIATE DOWNSTREAM SANITARY SEWER

G.8 Water Supply Assessment 2019



CALIFORNIA WATER SERVICE

Rancho Dominguez District 2632 West 237th Street
Torrance, CA 90505 Tel: (310) 257-1400

June 18, 2019

Jay Bond
California State University, Dominguez Hills
1000 East Victoria Street, WH B470
Carson, CA 90747

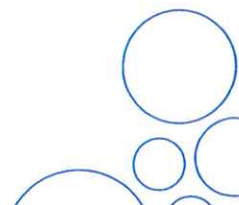
California Water Service Company is pleased to present the requested water supply assessment, "California SB 610 Water Supply Assessment (WSA) for the proposed California State University Dominguez Hills Campus Master Plan", dated June 18th, 2019. California Water Service Company has served the site since 1960 and continues to serve it through our Dominguez District distribution Zone 2 service connections on Avalon Boulevard and Central Avenue.

We have provided the WSA for your use for clearance and/or permitting through the local regulating agencies. The WSA concludes that for the next 20 years, the Dominguez District will have adequate water supplies to meet the projected demands associated with the proposed California State University Dominguez Hills development project and those of all existing customers and other anticipated future users.

Please contact Ralph Felix at (310) 357-6410, if you have any questions concerning the WSA or our ability to continue serving the project.

Thank you,

Daniel Armendariz
District Manager



CAL STATE UNIVERSITY DOMINGUEZ HILLS
SB610 WATER SUPPLY ASSESSMENT

JUNE 18, 2019

Prepared by:

Yarne & Associates, Inc.

For

California Water Service Company
2632 West 237th Street
Torrance, California 90505

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Introduction and Project Description

California Water Service Company (Cal Water) is submitting the following California SB 610 Water Supply Assessment (WSA) for the proposed California State University, Dominguez Hills Campus Master Plan hereafter called the CSUDH CMP.

The proposed project is the adoption and implementation of CSUDH's 2018 Campus Master Plan, which provides a development plan that will accommodate growth from the current enrollment of approximately 11,000 FTES to a maximum enrollment of 20,000 FTES over a planning horizon extending to 2035. The proposed project serves to revise and update the previously approved Campus Master Plan, which provided for a number of new campus facilities and improvements. The proposed project entails development of new and expanded facilities in three areas of the 344- acre campus: (1) the Core Campus; (2) the University Village; and (3) the StubHub Center.

The Core Campus project component occupies 179.5 acres and includes:

- twelve new academic and administrative facilities, including: classrooms, laboratories, faculty and administrative offices, new performing arts facilities, a new incubator/research facility,
- and facilities for accommodating CSUDH's new mobile Fabrication Lab vehicles;
- student support facilities, including: an expansion of the Loker Student Union, new student apartment housing,
- and a new student recreation center;
- athletic facilities, including: a remodeled gymnasium and existing and new playfields;
- campus support facilities, including: a new, expanded Child Care Center, new Facilities Services offices and yards, expansion of the existing Central Plant, a satellite central plant; and a new electric substation.
- parking facilities to accommodate 20,000 FTES, including reconfigured surface lots and new parking structures;
- reconfigured campus entries at both north and south, including new campus visitor services and reconfigured vehicle access to parking facilities;
- open space areas for campus activities, programmed and informal gathering and recreation; and
- existing natural reserve areas and a new area for an urban farm project.

The University Village project component occupies 76.5 acres and is a new planned mixed-use campus development that includes:

- new retail uses to support both the Core Campus and the University Village, including on-street parking and parking in structures;
- new housing, including market-rate apartments, which will provide housing for faculty and staff, students and the general public;
- business park development targeted to uses compatible with and supportive of the University's educational mission;
- open space areas for informal activities, leisure, gathering and recreation
- preservation of an existing natural reserve area; and

- reconfigured vehicle circulation including an extension of Birchknoll Drive and reconfigured vehicle access from Central Avenue.

The StubHub Center, occupying the western-most 88 acres of the campus, currently includes an existing stadium, and will include additional facilities previously approved as part of the 2010 Campus Master Plan. The proposed project includes the following with respect to the StubHub Center:

- Stadium capacity will be increased by 3,000 seats. Currently, the stadium has seating for 27,000 spectators when configured for the Los Angeles Galaxy Major League Soccer (MLS) games, and will have seating for 30,000 spectators when configured for Los Angeles Chargers National Football League (NFL) games to be held on Sundays through 2020, and for other events; and
- Reorientation of previously approved facilities within the StubHub Center, which were approved as part of the 2010 Campus Master Plan. Specifically, the proposed project includes reorientation of Building 122 - Office Complex and Field House/Training Facility; Building 123 – Dormitories; and Building 124 - Conference Center/Hotel. These proposed facilities were originally aligned in a parallel manner on a site between Victoria Avenue and the soccer stadium. Reorientation of these buildings consists of aligning them perpendicular to Victoria Street, with no change in size, square footage, floor area, height, or overall capacity. Further, these facilities will be located in the same area of the StubHub Center consistent with the 2010 Campus Master Plan.

The project site is the CSUDH campus, located in the City of Carson, in Los Angeles County. The campus consists of approximately 344 acres, and is bounded on the north by Victoria Street, on the south by University Avenue, on the west by Avalon Boulevard, and on the east by Central Avenue. Central Avenue provides access to the campus from the State Route 91 (SR-91) freeway. The campus is surrounded by existing, predominantly single-family residential development to the north across Victoria Street and to the south across University Avenue; residential and commercial development to the west across Avalon Boulevard; and light industrial park facilities to the east across Central Avenue. The surrounding areas are fully developed, with very few vacant undeveloped parcels remaining. Los Angeles County Fire Station 116 is located directly across from the campus on Victoria Street.

Figure 1 shows the regional location of the CSUDH campus (red rectangular area).

Figure 2 is an aerial photo of the existing CSUDH campus with delineations of the University Village, Core Campus and StubHub Center.

Figure 3 shows the 2018 Campus Master Plan.

Figure 2: Existing CSUDH Campus

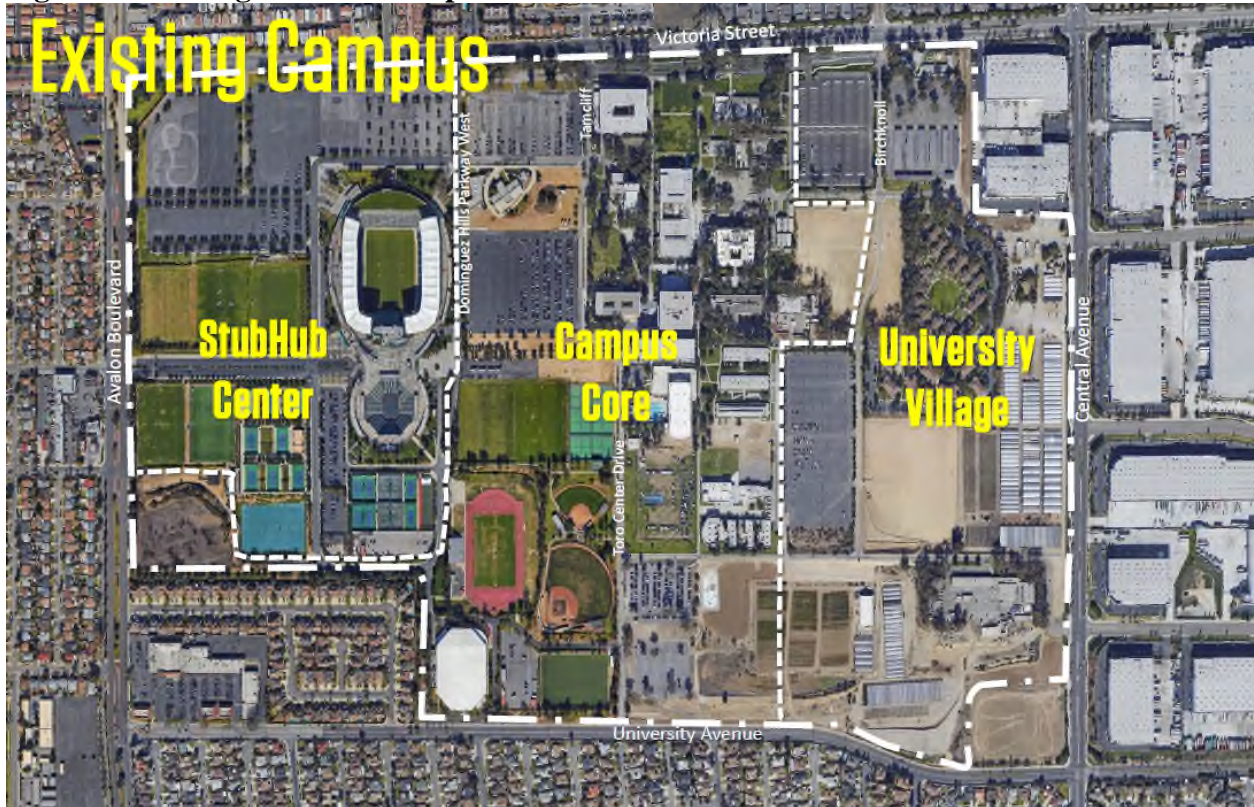
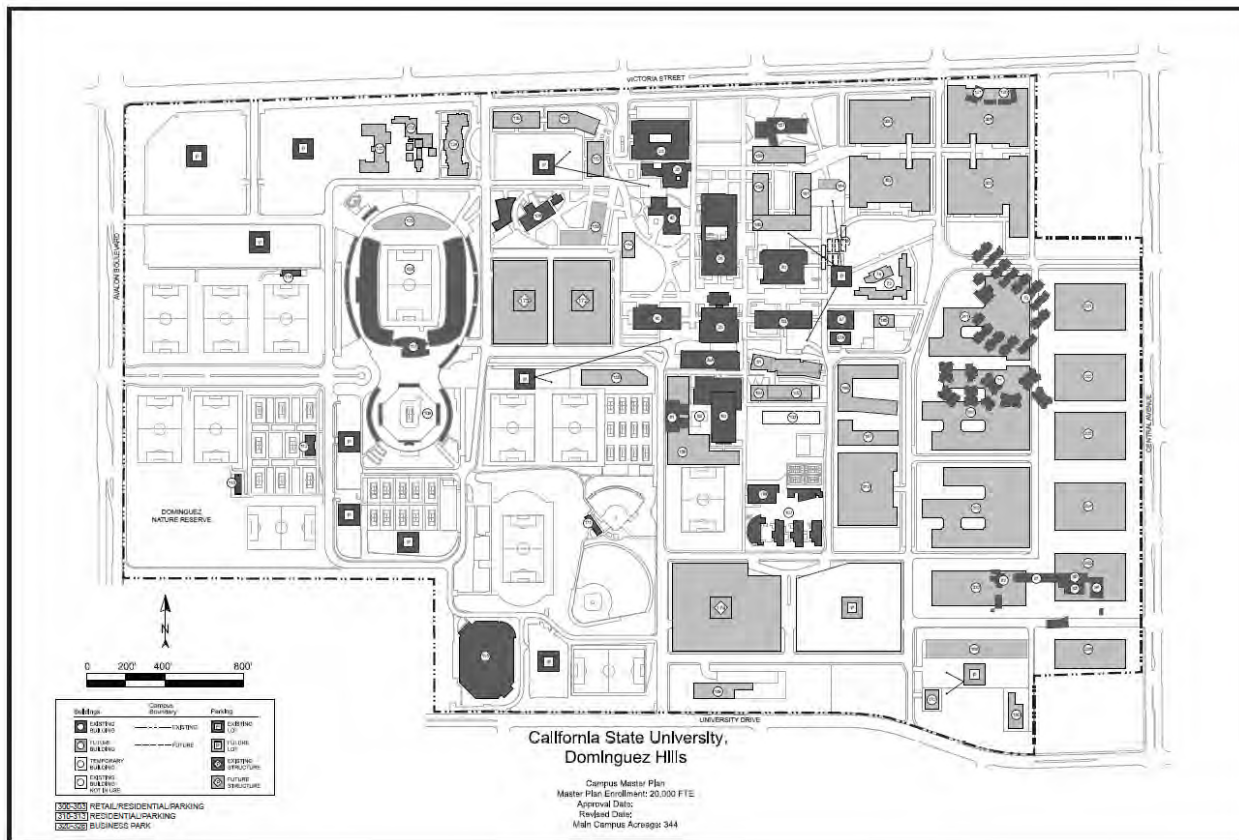


Figure 3: CSUDH 2018 Campus Master Plan



Summary of Existing and Proposed CSUDH Campus Master Plan Facilities

Existing campus facilities excluding student housing occupy 1,408,000 sq ft. Existing student housing provides 649 beds which occupies 165,318 sq ft.

For the Campus Master Plan, total additional square feet of facilities without student and market-rate housing is approximately 1,901,000 sq ft. An estimated 186,000 sq ft of existing facilities will be demolished resulting in a net increase in space of 1,715,000 sq ft.

For the maximum housing alternative, proposed student housing is 2,028 beds or an increase of 1,379 beds over the existing number. The estimated square footage is 1,797,037 sq ft.

For market-rate housing, 1,969 new dwelling units are proposed, which are assumed will be similar to multi-family dwelling units in the Dominguez District.

Senate Bill 610 (Chapter 643, Statutes of 2001) (SB 610) amended state law as of January 1, 2002, to include consideration of water supply availability when cities and counties are making land use development decisions. SB 610 requires information on water supply availability be provided to local public agency decision-makers prior to approval of development projects that meet or exceed any of the following criteria:

1. A residential development of more than 500 dwelling units.
2. A shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet.
3. A commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space.
4. A hotel or motel with more than 500 rooms.
5. An industrial, manufacturing or processing plant or industrial park planned to house more than 1,000 persons occupying more than 40 acres of land or having more than 650,000 square feet of floor area.
6. A mixed-used project that includes one or more of the projects specified above.
7. A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

The proposed Campus Master Plan exceeds criteria 6.

This WSA assesses the adequacy of the water supply to meet the estimated demands of the proposed CSUDH CMP over the next 20 years and those of the Dominguez District customers and projected new users under normal, single dry year and multiple dry year conditions (Water Code §10911(a)). SB 610 requires that the information presented in a WSA be included in the administrative record that is the basis for an approval action by the local public agency.

SB 610 recognizes local control and decision-making regarding availability of water for projects and approval of projects. A WSA is to be provided for inclusion in environmental documentation for projects subject to the California Environmental Quality Act (as defined in Water Code 10912 [a]).

The CSUDH CMP is not specifically included in Cal Water's Dominguez system 2015 Urban Water Management Plan (UWMP); therefore, its water requirements are addressed in this WSA. The 2015 UWMP is based on data recorded through 2015. Cal Water has collected and compiled data on population growth, water demand and water supplies from 2016 to September 2018. These data have been used in this WSA. The Dominguez District 2015 UWMP document can be referenced for more detailed information on historic water demand and supply. In June 2009, Cal Water completed a Water Supply and Facilities Master Plan (WSFMP) for the Dominguez District that also included an assessment of future water demand and supply that was used in preparing the 2015 UWMP.

CSUDH CMP Water Demand

Cal Water currently provides potable and recycled water services to CSUDH. Potable water is supplied for all campus uses except landscape irrigation. Irrigation water is recycled water provided by West Basin Municipal Water District and is delivered to the campus through a separate piping system. The Campus Master Plan will continue to use recycled water for landscape irrigation.

There are 8 separate metered water service connections from Cal Water's Dominguez District distribution system to the existing CSUDH campus. For the 4 years from 2015 through 2018, the average daily water metered use for the entire campus was 232,968 gallons/day (gpd). Generally,

student housing water use is higher than other campus building uses. Here, a factor of 1.5 is used.

The following equation was used to derive existing campus average daily water use expressed in gpd per sq ft or gpd/ft²:

x = Existing CSUDH campus average water use rate - gpd/ft²

$$1,408,000 \text{ ft}^2 (x) \text{ gpd/ft}^2 + 1.5 (165,318) \text{ ft}^2 (x) \text{ gpd/ft}^2 = 232,968 \text{ gpd}$$

$$x = 0.14068 \text{ gpd/ft}^2$$

For the proposed MCP, it is conservatively assumed that for non-housing facilities there will be a 10% reduction in the average daily use rate.

A review of literature on water use by fixtures and appliances shows that toilets 15 years and older generally exceed 2 gallons per flush. More recent toilets use 1.6 gallons per flush. The latest water efficient toilets use only 0.6 gallons per flush. Depending on the reference toilet, the latest toilets achieve 62.5% to 70% reduction in water use compared to older versions. New efficient dishwashers use between 4.5 and 7 gallons per wash load compared to older machines, which use between 7 and 14 gallons per wash load. Using 10.5 gallons per load for older machines and 5.75 gallons per load for newer water efficient machines results in an average savings of 4.75 gallons per load or a reduction in water use of 45%. Showers with restricted flow heads have an average flow rate of 2.0 gallons per minute (gpm) versus conventional shower head flows of 2.5 gpm or a 20% reduction. Washing machines 20 years or older used 40 gallons per standard load versus new machines using 13 gallons per load or a reduction of 67.5%.

For 2020, the Dominguez 2015 UWMP projects 16,876 multi-family dwelling units with an average number of persons per unit of 3.13, which totals 52,822 persons. Projected 2020 water use for multi-family dwelling units is 2,111,335 gpd. Therefore, estimated average per capita water use for multi-family dwelling units in the Dominguez District is 40 gpd/person.

Estimated Campus Master Plan average daily water use at build-out:

1) *Market Rate Dwelling units:*

Assuming an occupancy rate of 3.0 persons per dwelling unit for the proposed new dwelling units in the MCP, results in the following demand estimate at build out:

$$1,969 \text{ dwelling units} \times 3.0 \text{ persons} \times 40 \text{ gpd/person} = 236,280 \text{ gpd}$$

2) *Non-Housing Facilities:*

$$1,715,000 \text{ ft}^2 (0.9) (0.14068 \text{ gpd/ft}^2) = 217,140 \text{ gpd}$$

3) *Student Housing:*

Assuming student housing has the same per capita water use as the market rate dwelling units

results in the following demand estimate at build out:
2,028 beds or persons x 40 gpd/person = 81,120 gpd

Total estimated water use: 534,540 gpd

The estimated increase in average daily water use is: 534,540 – 232,968 = 301,572 gpd or 338 Acre-Feet/Year (AFY)

California Water Code 10631, Paragraph (e) (2), requires a potable water use projection (average annual demand forecast) in five-year increments for a 20-year period. The CSUDH CMP demand forecast in 5-year increments for the next 20 years is shown in Table 1.

Table 1: CSU Dominguez Hills CMP Forecasted Increased Demand (AF)					
Year	2020	2025	2030	2035	2040
Demand	0	120	180	338	338

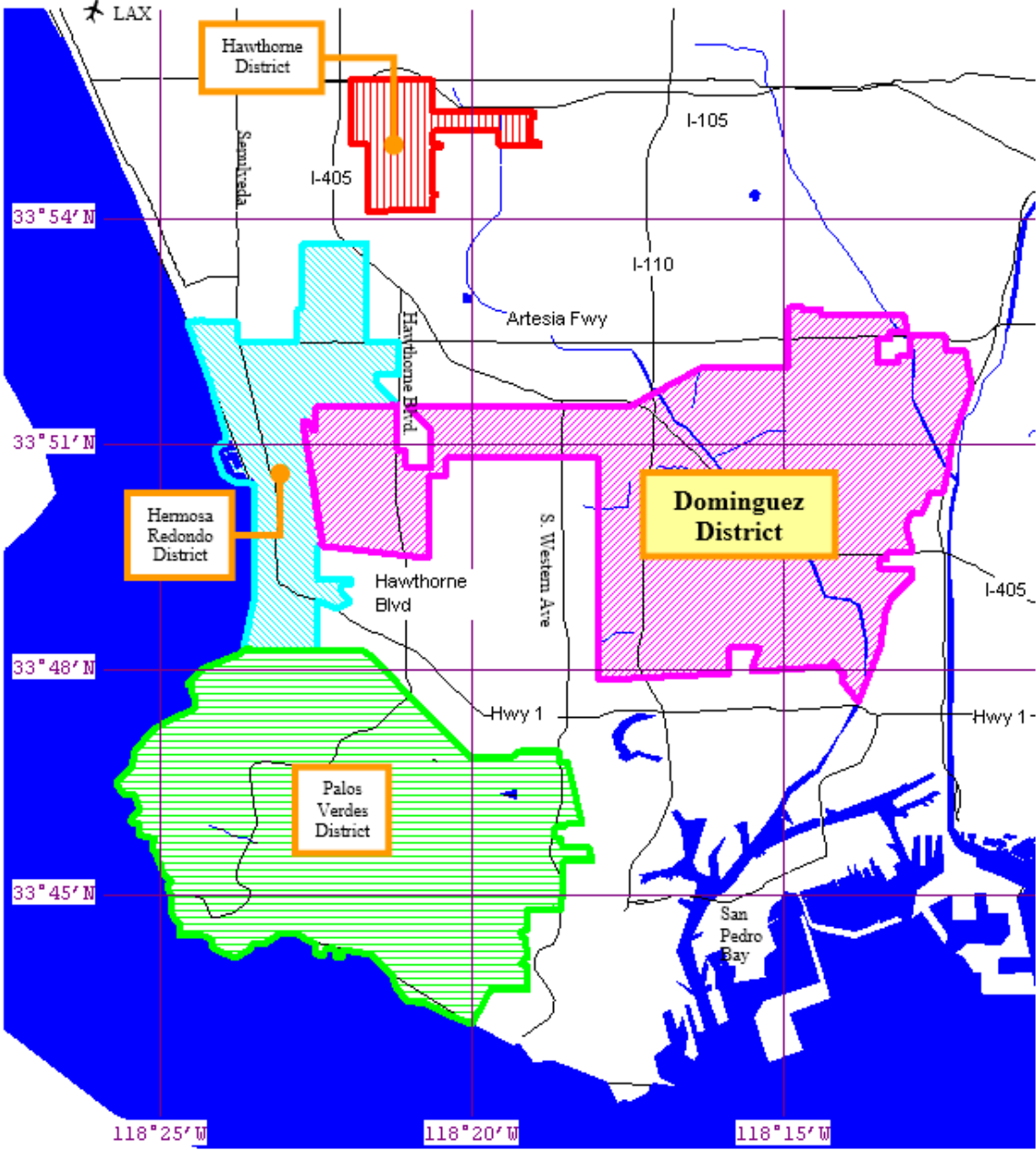
Dominguez District Background Information

The Dominguez District is located in the southern corner of Los Angeles County approximately ten miles north of Los Angeles Harbor. The Dominguez District is one of three Cal Water districts in close proximity. The other two are the Hermosa Redondo and the Palos Verdes Districts. Cal Water also is under contract to operate the Hawthorne District, and has various operations and billing contracts.

The Dominguez District serves most of the City of Carson, as well as a portion of the City of Torrance and small sections of the cities of Compton, Long Beach and Los Angeles and unincorporated Los Angeles County. The district covers approximately 35 square miles and is bounded on the north by the cities of Redondo Beach, Torrance, Los Angeles, Carson and Compton, on the east by Long Beach, on the south by the cities of Los Angeles, Lomita and Torrance, and on the west by Redondo Beach.

Figure 4 shows the location of the Dominguez District.

Figure 4: Location of the Dominguez District



Cal Water started providing water utility services in the Dominguez District in 2000. Water served by the District comes from a combination of local groundwater and surface water purchased from Central Basin Municipal Water District (CBMWD) and West Basin Municipal Water District (WBMWD), which is imported from the Colorado River and the State Water Project. Recycled water is also used within the district. The district owns 392 miles of pipeline, nine active wells, 12 storage tanks, and seven imported water connections. For the period from

2010 to 2015 the District delivered an average of 29 million gallons per day (mgd) to over 32,000 service connections.

A detailed service area map is provided in Appendix E of the 2015 Dominguez Urban Water Management Plan (UWMP).

Cal Water estimates the district population was 142,227 in 2015. District population has been growing slowly at an annual rate of 0.13 percent for the past 15 years. Between the 2000 and 2010 Censuses, it grew at an average annual rate of 0.11 percent. Service area population is projected to increase at a rate of 0.28 percent annually through the 2040 planning horizon. This is based on the 15-20 year historical rate of growth in single- and multi-family housing units in the District.

To estimate current service area population, Cal Water uses MARPLOT and LandView 5 software to intersect District service area boundaries with Census Blocks from the 2000 and 2010 Censuses. This yields estimates of the number of housing units and population within each Census Block in the District for 2000 and 2010. From these data, Cal Water estimates the total population and the average number of persons per housing unit in the District. Cal Water applies the average number of persons per housing unit to the number of housing units served to calculate service area population in non-Census years.

Between the 2000 and 2010 Censuses, the average number of persons per household remained unchanged at 3.13. The projection of future population is based on this housing unit density. Projected service area population is given in Table 2.

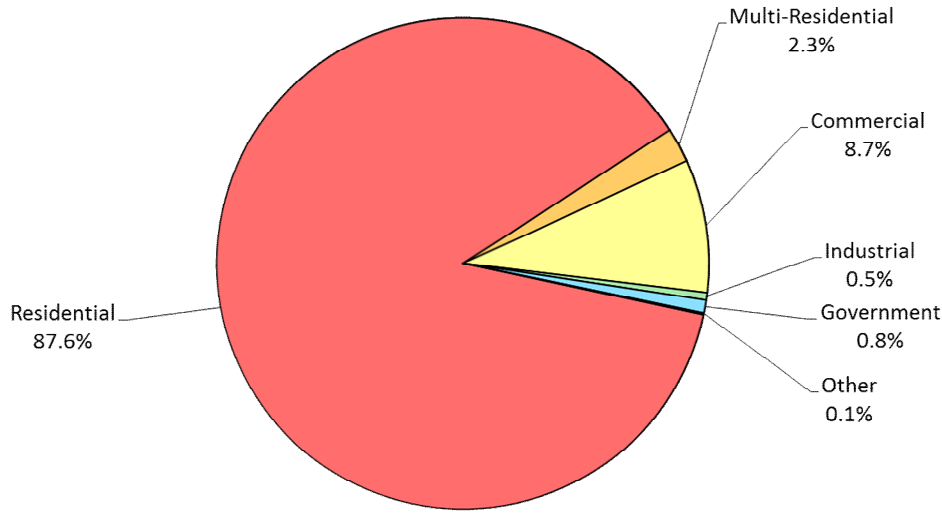
Table 2: Dominguez District Population Projections						
Persons	2015	2020	2025	2030	2035	2040
	142,227	144,201	146,202	148,230	150,287	152,372

Cal Water’s user classes for customer services are as follows:

- ◆ Single-family Residential
- ◆ Multi-family Residential
- ◆ Commercial
- ◆ Industrial
- ◆ Government
- ◆ Other

Figure 5 shows the distribution of services by customer type based on 2015 data.

Figure 5: Dominguez District Distribution of Services (2015)



Dominguez District Water Demand

Actual water demand from 2010 to 2017 is shown in Table 3. The reduction in demand that occurred in 2016 and 2017 was due to the severe drought that started in 2012 and the 2016 state mandatory requirement that all urban areas achieve at least a 20% reduction in water demand compared to an earlier base period.

Table 3: Dominguez District Actual Water Demand	
Year	AFY
2010	33,020
2011	31,672
2012	33,348
2013	33,905
2014	33,863
2015	31,316
2016	29,250
2017	28,836

Projected potable water demands by customer category through 2040 are shown in Table 4. Future demands are estimated as the product of future services and expected water use per service. Future services are based on historical growth rates in the District. Single-family

residential services are projected forward using the historical growth rate for the last 15 years while multi-family residential services are projected using the last 20 years. Commercial and industrial services are projected forward using the historical growth rate for the past 20 and 15 years, respectively. The forecast assumes no change in the number of institutional services. The projected average annual growth rate in services across all customer categories is approximately 0.3 percent. Table 5 presents the projected potable and recycled water use for the district.

Expected water use per service, shown in Figure 6, is based on weather-normalized historical use, adjusted for future expected water savings from plumbing codes and District conservation programs. Weather normalization of historical use was done econometrically using the California Urban Water Conservation Council GPCD Weather Normalization Methodology. Expected water savings from plumbing codes are presented in Section 4.4 of the 2015 UWMP. Expected water savings from District conservation programs and projected compliance with the District’s SB X7-7 2020 per capita water use target are covered in Chapter 9 of the 2015 UWMP.

Projected water demands in Table 4 are based on unrestricted demands under normal weather conditions.

Figure 6: Historical and Projected Average Use per Service in Gallons per Day

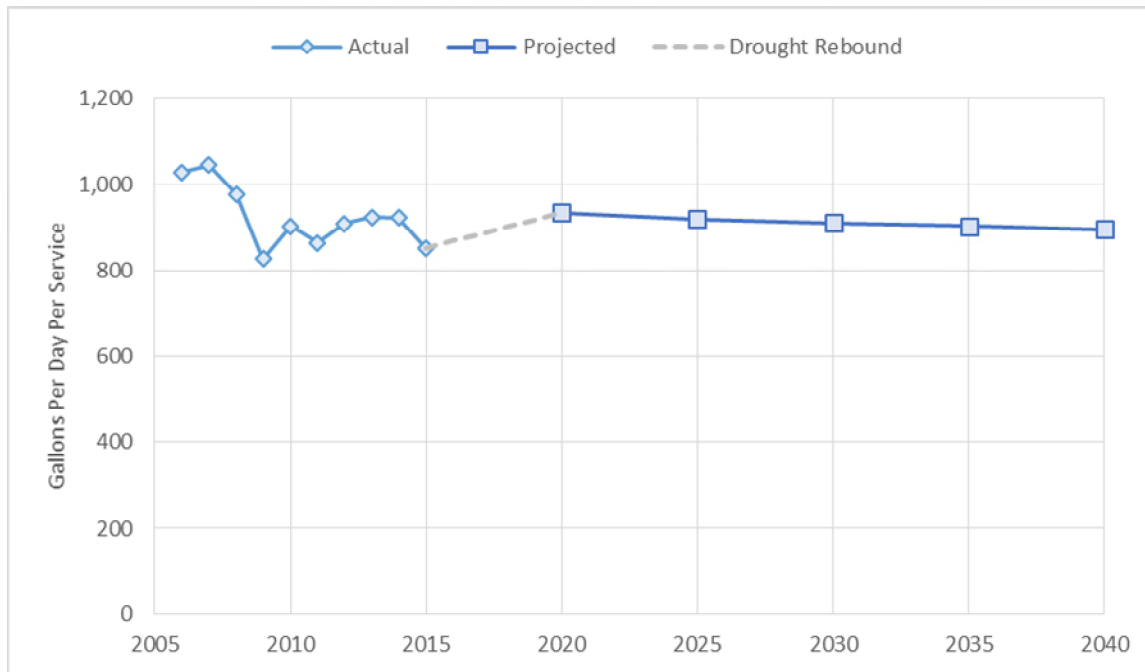


Table 4: Dominguez Projected Potable Water Demand					
Use Type	(AF)				
	2020	2025	2030	2035	2040
Single Family	9,507	9,439	9,450	9,484	9,542
Multi-Family	2,365	2,289	2,249	2,223	2,207
Commercial	7,070	7,002	7,017	7,031	7,053
Industrial	10,444	10,558	10,680	10,805	10,933
Institutional/Governmental	1,492	1,484	1,478	1,473	1,469
Other	108	113	118	123	129
Losses	520	527	535	543	551
Total	31,508	31,413	31,528	31,683	31,883

Cal Water purchases recycled water from West Basin Municipal Water District (WBMWD) and provides it to a number of customers for non-potable uses, thereby reducing use of potable water. The projections of future water demand in Table 5 incorporate expected water savings from plumbing codes and appliance standards for residential and commercial toilets, urinals, clothes washers, dishwashers, and showerheads. The Dominguez District’s program and implementation of demand management measures (DMM) are discussed in Chapter 9 of the UWMP.

Projected total water demand including recycled water is shown in Table 5. Current and projected recycled water use is discussed in Section 6.5 of the 2015 UWMP. Table 5 does not include recycled water that is injected into the groundwater system for recharging aquifers that are pumped for potable supply – indirect potable reuse (IPR). This amount is projected to be a constant 3,288 AFY.

Table 5: Dominguez Projected Total Water Demands (AF)						
		2020	2025	2030	2035	2040
Potable Water		31,508	31,413	31,528	31,683	31,883
Recycled Water		7,950	8,800	9,700	10,700	11,800
Total Water Demand		39,458	40,213	41,228	42,383	43,683

The estimated increase in CSUDH CMP potable water demand at build out in 2035 is 338 AFY or 1.0% of projected 2035 and 2040 Dominguez District demand. In 2025, CSUDH CMP increase in demand is 0.38% of Dominguez District demand. Conservatively, the estimated increase in CSUDH CMP demand is added to the projected Dominguez District demand in Table

4 resulting in the demand projections in Table 6.

Table 6: Projected Dominguez District + CSUDH CMP Increase Potable Water Demand (AF)						
		2020	2025	2030	2035	2040
Dominguez District		31,508	31,413	31,528	31,683	31,883
CSUDH CMP		0	120	180	338	338
Total Demand		31,508	31,533	31,708	32,021	32,221

Demand Management Measures

A summary of Dominguez District current and planned demand management measures (DMM) and an overview of the expected water savings and compliance with the Water Conservation Act of 2009 (SB X7-7) follow.

DMM categories in Section 10631(f) of the UWMP Act consist of:

- Water waste prevention ordinances
- Metering
- Conservation pricing
- Public education and outreach
- Distribution system water loss management
- Water conservation program coordination and staffing support, and
- Other demand management measures

Water Waste Prevention Ordinances

Water use restrictions are authorized by the California Public Utilities Commission (CPUC) Rule 14.1 or Schedule 14.1. Restrictions are also regulated by ordinances passed by local governments. In the Dominguez District the cities of Carson and Torrance have passed water conservation ordinances. They are included in Appendix J of the 2015 UWMP. Schedule 14.1 puts measures in place to enable Cal Water to enforce the water-use prohibitions set by the State Board, including:

- Applying water to outdoor landscapes that causes runoff onto adjacent property, non-irrigated areas, private and public walkways, roadways, parking lots, or structures
- Using a hose to wash motor vehicles unless the hose is fitted with a shut-off nozzle or device that causes it to cease dispensing water immediately when not in use
- Applying water to driveways and sidewalks
- Using water in a fountain or other decorative water feature, except where the water is part of a recirculating system

- Applying water to outdoor landscapes during and within 48 hours after measurable rainfall
- Using potable water to irrigate outside of new construction without drip or microspray systems
- Using potable water on street medians
- Filling or refilling ornamental lakes or ponds except to sustain existing aquatic life
- Customers must fix leaks within their control within five business days of notification
- Hotel/motel operators must provide option to not have towels or linens laundered daily during a guest’s stay, and must provide clear notice of this option in easy-to-understand language
- Restaurants and other eating and drinking establishments may only serve drinking water upon request

Beginning June 1, 2015, individual customers were provided water budgets based upon their water use each month in 2013 minus the state-mandated reduction for the Dominguez District of 16%. If a customer used less than his or her water budget, the unused water was carried forward, similar to rollover minutes on a cell phone plan. Water used in excess of the monthly budget was subject to a drought surcharge

Metering

All service connections within the Dominguez District are metered. Meters are read monthly and routinely maintained and calibrated. Customers are billed monthly based on their metered water use.

Cal Water is also piloting automatic meter reading (AMR) and advanced metering infrastructure (AMI) in several of its districts. AMI may be used by Cal Water in the future to detect and alert households of leaks and other possible problems as well as to provide customers with tailored water use information to help them use water more efficiently.

Conservation pricing

Starting in 2008 Cal Water adopted tiered rate designs for single family residential service. Uniform volumetric rate designs are employed by Cal Water for other water service classes. Current volumetric rates by class of service within Dominguez District are provided in Table 7.

Table 7: Volumetric Water Rates by Class of Service (\$/CCF)				
Class of Service	Tier 1 (1-11 ccf)	Tier 2 (12-17 ccf)	Tier 3 (18+ ccf)	All units of water
Single Family	\$2.87	\$3.11	\$3.63	
Non Residential				\$3.13

Per the Memorandum of Understanding Regarding Urban Water Conservation in California (MOU), conservation pricing provides economic incentives to customers to use water efficiently via a volumetric water rate. The MOU considers uniform, seasonal, tiered (block), and allocation-based rate designs as each being potentially consistent with conservation pricing,

provided that either (1) 70% or more of total annual revenue is derived from the volumetric component of the rate design or (2) the proportion of total revenue from the volumetric component of the rate design equals or exceeds the long-run incremental cost of providing water service, or (3) the utility's metering technology, rate structure, and customer communication programs satisfy various requirements specified by the MOU.

The Dominguez district's rate structure complies with Option 1 of the Urban MOU's definition of conservation pricing. Urban MOU BMP compliance reports are provided in Appendix L of the 2015 UWMP.

Public Education and Outreach

Cal Water's public outreach program is divided into four components, as follows:

Residential Customer Assistance – This category provides tailored assistance to residential customers through home water surveys and monthly water use reports. It provides assistance to residential customers wanting to reduce their indoor and outdoor water uses. While available to all residential customers, marketing of home water surveys is generally focused on high use residential customers.

Non-Residential Customer Assistance – This category provides tailored assistance to commercial customers through commercial water surveys, monthly landscape reports to large landscape customers, and large landscape water use surveys. It provides assistance to commercial customers wanting to reduce their use of water for sanitation, hygiene, process, and landscape purposes.

Public Information and School Education – Cal Water's public information program provides general information on the need for and value and methods of water conservation through multiple media outlets, including its website, direct mail, external print media, and radio. Cal Water's school education program includes the Cal Water H2O Challenge, a project-based learning competition for grades 4-6, Cal Water Town, an interactive online learning tool, and general information and learning materials for students and teachers.

Rebate Program Information and Marketing – Through its website, bill inserts, newsletters, and radio and print media, Cal Water advertises and markets a variety of conservation rebate programs, including rebate programs for high-efficiency toilets, urinals, and clothes washers, and irrigation equipment and landscape efficiency improvements.

Programs to Assess and Manage Distribution System Loss

Cal Water annually quantifies the District's volume of apparent and real water losses. Cal Water uses the AWWA water audit method and component analysis. For the five-year period 2011-2015, apparent and real water loss in the Dominguez District averaged 594 AF.

Cal Water is implementing a lift-and-shift sonic data logger leak detection program which will survey up to one-third of main miles annually in three 80 day shifts. Lift-and-shift sonic data logging technology will enable Cal Water to quickly and efficiently locate leaks in one part of the water distribution network and then redeploy the equipment to another part of the network. Staff will review sound files from the loggers for potential leak warnings and discuss this information with District management, who can then assign work orders for repair crews to

investigate and repair leaks. Cal Water conservatively estimates the lift-and-shift program will reduce real water loss in the District by up to 29 AFY.

Water Conservation Program Coordination and Staffing Support

Conservation program staffing positions must be approved by the CPUC through its General Rate Case every three years. Currently authorized conservation program staffing consists of five full-time positions, which include:

- A Conservation Program Manager
- A Conservation Program Analyst
- A Landscape Program Analyst
- Two Conservation Program Coordinators

These five staff positions manage all aspects of Cal Water's conservation programs deployed across 24 separate districts serving a combined population of about 2 million through 470,000 service connections. Staffing constraints have been one of the primary challenges Cal Water has faced in expanding the scope and reach of its conservation programs throughout its service districts. To ensure adequate management and oversight of the expansion and utilization of its conservation programs, Cal Water is proposing in its current General Rate Case to add three additional Conservation Program Coordinator positions. If approved, total staffing level would increase from 5 to 8 FTE positions.

Other Demand Management Measures

Cal Water has rebate, give-away, and direct installation programs aimed at plumbing fixture replacement and irrigation equipment and landscape efficiency improvements. Following are brief descriptions of each of these DMMs.

MaP Premium and Non-Premium Toilet Replacement – This program replaces old toilets with MaP certified high-efficiency toilets. Financial rebates, direct installation, and direct distribution are used to deliver toilets to customers. For residential customers, MaP premium certified toilets which have greater water savings potential are eligible for a \$100 rebate while the rebate for MaP non-premium toilets is \$50. For commercial customers, a rebate of \$100 is available for valve-type toilets flushing 1.28 gallons or less and EPA WaterSense labeled tank-type toilets. Cal Water centrally administers the program. This program is available to all residential and non-residential customers. Cal Water markets the program through direct mail, print media, bill stuffers, and its website. Where advantageous, Cal Water partners with local or regional agencies and community organizations to offer the program.

Urinal Valve and Bowl Replacement – This program replaces old urinals with high-efficiency urinals meeting the new 0.125 gallon per flush water use standard adopted by the California Energy Commission in April 2015. Financial rebates of up to \$150 are available to customers. The program targets offices and public buildings receiving significant foot traffic. Cal Water centrally administers the program. While this program is available to all non-residential customers, marketing focuses on prime targets, such as restaurants and high-density office buildings. Cal Water markets the program through direct mail, print media, bill stuffers, and its website.

Clothes Washer Replacement – This program provides customer rebates up to \$150 for residential and up to \$200 for non-residential high-efficiency clothes washers. The program targets single-family households, multi-family units, multi-family common laundry areas, and commercial coin-op laundries. Cal Water centrally administers the program, and markets the program through direct mail, print media, bill stuffers, and its website. This program is available to all residential and non-residential customers. Where advantageous, Cal Water partners with local or regional agencies to offer the program.

Residential Conservation Kit Distribution – This program offers Cal Water residential customers conservation kits featuring a range of water-saving plumbing retrofit fixtures. Kits are available at no charge to customers, who can request them via Cal Water’s website, via mail, or by contacting or visiting their District. Each kit includes the following items: high-efficiency showerheads, kitchen faucet aerator, bathroom faucet aerators, full-stop hose nozzle, and toilet leak detection tablets. Cal Water centrally administers this program as part of a company-wide program operated in each of its districts. This program is available to all residential customers. Cal Water markets the program through direct mail, print media, bill stuffers, and through its website.

Smart Controllers Rebates/Vouchers – This program targets residential and non-residential customers with high landscape water use. The program offers financial incentives up to \$125 for residential controllers and up to \$25 per station for commercial-grade controllers to either the customer or contractor for proper installation of the Smart Controller at customer sites. The landscape contractor has the direct relationship with customers and is typically the entity customers listen to when making landscape and irrigation decisions. The program educates contractors about the customer benefits of Smart Controllers along with proper installation of the devices. This program is offered to all residential and non-residential customers. Cal Water markets the program through direct mail, print media, bill stuffers, and its website.

High Efficiency Irrigation Nozzle Web Vouchers/Rebates – Water efficient sprinkler nozzles (popup and rotating) and integrated pressure-regulated spray bodies use significantly less water than a standard sprinkler head by distributing water more slowly and uniformly to the landscape. In addition to reducing water use, water directed from these nozzles reduces run-off onto streets and sidewalks with a more directed flow. Customers are able to obtain the nozzles and spray bodies either directly through Cal Water or via a web-voucher program. Restrictions on the number of nozzles individual customers may receive vary by customer class and/or landscape size. Cal Water centrally administers this program as part of a company-wide program operated in most of its districts.

Turf Buy-Back – This program offers customers a \$1 per square foot rebate to replace turf with qualified drought-tolerant landscaping. Customer applications are screened to ensure program requirements are met, including before and after photos of the retrofitted landscape area. Turf replacement rebates were offered in a subset of Cal Water districts starting in 2014 and offered across all districts starting in 2015 as a drought response measure. Governor Brown’s Executive Order B-29-15 calls on the Department of Water Resources to lead a statewide initiative, in partnership with local agencies, to replace 50 million square feet of lawns and ornamental turf with drought tolerant landscapes.

Implementation of DMMs from 2011 to 2015 is summarized in Table 8. Estimated annual and cumulative water savings is shown in the last row of the table. The water savings estimates do not include those from water waste prevention ordinances, conservation pricing, general public information, or distribution system water loss management.

Significant additional reductions in water demand were achieved in 2015 in response to the the District’s drought response measures, including its public information campaigns to save water and its Schedule 14.1 water use restrictions, water budgets, and drought surcharges that went into effect June 1, 2015. Relative to its 2013 reference year under the State Board’s Emergency Regulation for Statewide Urban Water Conservation, water demand between June and December 2015 decreased by 17.9 percent. Per capita potable water use in 2015 was 176 GPCD compared to the District’s SB X7-7 2015 interim water use target of 194 GPCD.

Table 8: Dominguez District Results of Implementation of DMMs: 2011-2015		
1. Plumbing Fixture Replacement	2011 – 2015 Total	Average Annual
Toilets & Urinals (number distributed)	6,223	1,245
Clothes Washers (number distributed)	476	95
Conservation Kits (number distributed)	4,927	985
2. Irrigation Equipment/Landscape Upgrades		
Smart Controllers (number distributed)	41	8
Nozzles & Spray Bodies (number distributed)	47,128	9,426
Turf Buy-Back (sq ft removed)	2,249	450
3. Residential Customer Assistance		
Surveys/Audits (homes receiving)	254	51
4. Non-Residential Customer Assistance		
Surveys/Audits (sites receiving)	11	2
Large Landscape Reports (sites receiving)	366	73
Estimated Water Savings (AF)	1,061	212

Projected SB X7-7 compliance water use for Dominguez District in 2020 under planned levels of DMM implementation is 195 GPCD compared to its target water use of 173 GPCD. On its own, Dominguez District is not expected to be able to meet its 2020 GPCD target. However, SB X7-7 allows water suppliers to form regional alliances and set regional targets for purposes of compliance. Under the regional compliance approach, water suppliers within the same hydrologic region can comply with SB X7-7 by either meeting their individual target or being part of a regional alliance that meets its regional target. The regional target is calculated as the population-weighted average target for the water suppliers comprising the regional alliance. The Dominguez district has formed a regional alliance with Cal Water’s four other Southern California water districts. Projected 2020 potable water demand for the regional alliance under planned levels of DMM implementation is 163 GPCD compared to a regional alliance target of 161 GPCD. While projected 2020 potable water use exceeds the regional target, the target is

within the margin of error for the forecast and therefore the likelihood the regional target will be achieved is high.

Water Conservation Master Plans

To comply with requirements for urban water use reduction, Cal Water developed Water Conservation Master Plans (WCMP) for each of its service districts. WCMPs set forth a framework for compliance and describe Cal Water’s specific conservation actions to be implemented in the next five years. Major tasks in the WCMPs include:

1. A complete review of State policies and development of a compliance strategy
2. Calculating all appropriate per capita targets
3. Determining water savings required from new programs
4. Performing an analysis of conservation programs
5. Developing a portfolio of conservation program actions
6. Creating a plan for monitoring and updating the WCMP

The Water Conservation Master Plan for the Dominguez system is in Appendix L in the Dominguez District 2015 UWMP.

Water Shortage Allocation Plans

Cal Water has also developed Water Shortage Allocation Plans (WSAP), which are plans of action to reduce water demand should significant water supply shortages occur. These actions may be implemented for several months or several years depending on circumstances. The WSAP differs from the WCMP, which is focused on achieving permanent reductions in per capita water use by Cal Water’s customers and is not driven by significant short or long reductions in supply. In the short-term, the WSAP assists Cal Water in further reducing demand so that it matches significant reductions in supply.

Implementation of Cal Water’s WSAP for the Dominguez system will generally be triggered by actions taken by WBMWD and the Metropolitan Water District (MWD). Except in unusual circumstances, Cal Water will follow the lead of these agencies when deciding whether to implement its WSAP. Cal Water has a four-stage approach that corresponds to specific levels of projected water supply shortage. Depending on the supply reduction target, this approach becomes increasingly more aggressive in requiring customer water use reductions. The stage selected depends on such factors as wholesale supply reductions, availability of alternative supplies, time of year and coordinated regional actions among all affected water utilities and agencies.

The percentage of supply shortage determined by MWD will be a significant factor in Cal Water’s decision on which stage of supply reduction it will implement for the Dominguez system. Supply reductions percentages are shown for each of the 4 stages in Table 9.

Table 9: Cal Water Supply Shortage Reduction Stages	
Stage	Projected Supply Reduction %
Stage 1	5 to 10%
Stage 2	10 to 20%
Stage 3	20 to 35%
Stage 4	35 to >50%

A description of each stage follows.

Stage 1 is for water supply shortages of up to 10 percent and can be used to address annual variations in precipitation and mild dry year periods of one or two years duration. All reductions in Stage 1 are voluntary and impacts to customers are considered minimal.

Stage 2 is based on projected water supply shortages between 10 and 20 percent. Stage 2 is for water shortages of moderate severity such as those caused by a multi-year dry period. Reductions by customers can be voluntary or mandatory depending on percentage of water shortage. Mandatory requirements would likely be implemented if supply shortage exceeds 15 percent. Customers will experience moderate impacts on normal water use and some businesses may experience financial impacts.

Stage 3 will be activated if there is a water supply reduction between 20 and 35 percent. This stage can be triggered by a very severe multi-year dry period or major failures in facilities for storage, transmission, treatment water and distribution facilities due to a natural disaster such as an earthquake. Supply reduction of these percentages could impact public health and safety and cause significant financial impacts on local businesses. All reductions are mandatory and customer allocations will be made.

Stage 4 would be triggered by a reduction of supply greater than 35 percent, and possibly above 50 percent. This would be a crisis caused by a most severe multi-year dry period, a severe natural disaster resulting in catastrophic failure of major water supply infrastructure.

Cal Water's groundwater supply from the Central and West Basins is limited to its APA of 16,897 AFY, which is based on the safe yield of each basin and is fixed in both wet and multiple dry year periods. After Dominguez system well pumping capacity is increased to sustainably produce the APA, groundwater supply can be used to offset reductions in imported water from WBMWD. Recycled water is a drought-proof supply not subject to reductions by WBMWD. During critical water shortage periods, Cal Water will maximize recycled water use with existing customers and work on increasing use by additional customers in order to reduce potable water demand.

In April of each year, MWD assesses its available water supply for the coming water year and determines if reductions in water use by its member agencies are not required, are advisable or are in fact needed. MWD evaluates the performance of WBMWD retailers as a whole and will only assess penalties to WBMWD if retailers' collective use exceeds its allocation. These reduction targets are passed along through WBMWD to Cal Water and from Cal Water to its customers. If requested by MWD, the allocation period begin on July 1st and continues for at least one year or until the availability of supplies warrants the lifting of requesting water use reductions.

During all stages of water shortages, water production data for all sources are monitored by Dominguez system management. Customer water use data is concurrently monitored to determine if demand reduction percentages are being achieved and, if not, which customers require greater attention by Cal Water.

Dominguez District Water Supply

Information from the 2015 UWMP and more recent data on potable and recycled water use through 2017 was used to develop the supply plan for the Dominguez District to 2040.

Following are the Dominguez District's water supply sources:

- Imported water purchased from Metropolitan Water District of Southern California through the West Basin Municipal Water District.
- Groundwater pumped from two adjudicated groundwater basins - the West Coast Basin and the Central Basin. Groundwater is extracted from both basins using 10 wells (8 active and 2 inactive).
- Cal Water purchases treated desalted brackish groundwater produced in the C. Marvin Brewer Desalter owned by West Basin Municipal Water District.
- Recycled wastewater produced by the West Basin Municipal Water District in their West Basin Water Recycling Plant located in El Segundo.

In 2015, the Dominguez District used 26,908 AF of purchased water and 4,408 AF of groundwater pumped from Cal Water wells for a total of 31,316 AF of potable water. Hence, groundwater supplied 14.1% of total annual demand. In 2017, the district had a total potable supply of 28,836 AF of which 15% or 4,325 AF were pumped groundwater.

For the period from 2011-2015, the average of the three principal potable and recycled water sources was 68% purchased, 17% groundwater and 15% recycled (non-potable).

Total supply quantities equal the projected total demand for potable and recycled water. Cal Water operates its potable water distribution system so that demand not met by groundwater sources is met by potable water conveyed through its interconnections with the WBMWD transmission system.

Cal Water has a capital improvement program to construct new wells and install treatment facilities on existing wells with non-compliant water quality in order to achieve full use of its adjudicated groundwater rights. The plan is to provide sufficient well capacity to fully utilize its annual allocation of groundwater. Currently, Cal Water leases a portion of its groundwater rights using short-term transfer agreements. Purchased water has and will continue a major source of the District's potable supply. Recycled water supply equals projected demand for non-potable uses in the District.

Purchased Water

Purchased potable water is imported and supplied by MWD to WBMWD. Historically, purchased water has been the main supply source. In 2020, groundwater is projected to provide 38.8% and in 2025, 53.8% of potable supply. The challenge has been and continues to be finding suitable well sites from which high quality water can be pumped. If water quality is non-compliant with drinking water standards then Cal Water must also provide treatment facilities at the well site.

Water from MWD is delivered through four interconnection feeders (Palos Verdes Feeder, Victoria Feeder, Long Beach Lateral and Extension and the Sepulveda Feeder) to WBMWD and through seven WBMWD service connections to the Dominguez District. The total rated capacity of the seven service connections is 72,000 gpm. If operated at full capacity, these connections are capable of delivering up to 103.7 mgd (116,140 AFY) – a flow rate higher than the distribution system could accommodate.

Cal Water has a supply purchase agreement with WBMWD. Water purchased by Cal Water and supplied to the Dominguez District comes from either the Colorado River Aqueduct, which is owned by MWD, or through the California Aqueduct, a facility of the State Water Project (SWP), which is owned and operated by the California Department of Water Resources (DWR).

MWD classifications of service and rate structure have changed in recent years and further changes are anticipated. Key to these changes is a purchase agreement for imported water between WBMWD and MWD. This agreement became effective January 1, 2003, had an initial term of five years, and establishes requirements for water sales within MWD's service area. The agreement sets a Base Allocation for each Purchaser, which is essentially their share of the supply MWD has made available to WBMWD. The Base Allocation is determined on that Purchaser's five-year average non-surplus purchases during fiscal years ending 1997 through 2001. Over the term of the agreement, the Purchaser commits to purchase at least 60 percent of the Base Allocation times five, which is known as the Purchase Commitment. If a Purchaser does not purchase the full Purchase Commitment over the term of the agreement, then they must pay for the balance at the current Tier 1 Supply Rate.

A two-tier rate and annual allocation is another aspect of this agreement. The agreement sets a Tier 1 Annual Maximum at 90 percent of the Base Allocation. All water purchased in any year in an amount that is equal to or less than the Tier 1 Maximum will be purchased at the current Tier 1 Rate. Any amount of water purchased in excess of the Tier 1 Annual Maximum will be at the Tier 2 Rate. In 2013, the Tier 1 rate for water purchased from WBMWD was \$1,089/AF and the Tier 2 rate was \$1,239/AF.

In the Imported Water Purchase Agreement between Cal Water and WBMWD, the Base Allocation, Tier Allocations, and Purchase Commitment are established as a combined amount for the three Cal Water districts (Palos Verdes, Hermosa-Redondo, Dominguez) and the Hawthorne service area. The Dominguez District shares in the combined amount with the other three service areas. The agreement became initially effective on January 1, 2003. There have been several subsequent amendments, with No. 4 dated January 1, 2008, being the most recent. It eliminated Cal Water's Base Allocation, set the Tier 1 Annual Maximum to 70,000 acre-feet and the Purchase Commitment is 210,000 acre-feet. Cal Water has developed an allocation that distributes the Tier 1 Annual Maximum to each of its four districts, so that if the total Tier 1 Maximum is exceeded the applicable Tier 2 charges can be assessed to the appropriate district. Allocations among the four districts are as follows: Dominguez 22,400 AF, Hawthorne 4,900 AF, Hermosa-Redondo 16,800 AF, and Palos Verdes 25,900.

In-Lieu Seasonal Storage is an economic incentive program designed to encourage purveyors to shift groundwater production from winter to summer to reduce peak summer demands. Seasonal Storage Service is a classification for water that is available for delivery by MWD during the October through April period during years of adequate supply. Monthly certification is required to receive this reduced-price Seasonal Storage Service.

To qualify for In-Lieu Seasonal Storage service water rates, a purveyor must reduce demand for supplemental water from MWD in the summer months (May to September) and shift production of groundwater from winter to summer. The baseline production ratio between local groundwater supply and total demand verifies that this shift has been accomplished. In-Lieu Seasonal Storage groundwater not pumped is left in the ground to augment groundwater replenishment. This unused groundwater results in a rebate or compensation from the Water Replenishment District (WRD) for the amount not pumped.

This program benefits MWD by reducing the summer peak flows that push MWD's treatment facilities and distribution system to capacity limits, and enables MWD to maximize water importation during winter when surplus flows are abundant in the areas of origin. Changes are

anticipated in this conjunctive use program in the future. Cal Water's participation in this conjunctive use program will depend on the makeup of the economic incentives provided by these changes.

Groundwater

In 1965 the Central Basin was adjudicated, and in 1961 the West Coast Basin was adjudicated, with the Department of Water Resources as Watermaster. The adjudication orders are attached to the Dominguez District 2015 UWMP as Appendices J and K for each basin, respectively. The DWR Annual Summary of Watermaster Service reports on groundwater status in each of the basins. This summary includes historical fluctuation of water level elevation in wells throughout the basin. These references indicate that, since the reduction in pumping began in 1954 and the adjudication was implemented in 1961, groundwater levels in the West Coast Basin have risen some 20 to 60 feet, depending on location. However, many groundwater elevations in the basin remain below sea level, requiring maintenance of seawater intrusion barriers.

The West Coast Basin is a pressurized aquifer groundwater basin with three primary aquifers: the 200-foot Sands, the Silverado Aquifer, and the Lower San Pedro Aquifer. These aquifers have continuity with the Pacific Ocean in Santa Monica Bay. Overdraft of the basin was caused by excessive pumping due to population growth and rapid industrialization of the Los Angeles Coastal Plain beginning in the 1930s. This overdraft caused lowering of the piezometric head of the aquifers, which increased pumping cost and resulted in seawater intrusion. The adjudication of the West Coast Basin began in 1945 when Cal Water, along with the City of Torrance and the Palos Verdes Water Company, filed a lawsuit in Superior Court, Los Angeles County, to quiet title to the groundwater rights and control pumping in the basin. As part of the effort to resolve the overdraft condition, the WBMWD was formed in 1947 to distribute supplemental water to the major water purveyors imported into the region by the MWD. In 1955 when pumpers realized the severity of the overdraft, groundwater pumping was limited under an interim agreement. In 1961, the Court rescinded the interim agreement and signed the West Coast Basin Judgment.

The Dominguez Water Company was identified as a party to the judgment and granted water rights. Now Cal Water, as a result of the merger with Dominguez, owns 10,417.45 acre-feet of adjudicated rights in the West Coast Basin, or 16.15 percent of the total basin annual adjudicated rights of 64,486.25 acre-feet. This amount is in addition to the 4,070 acre-feet held by Cal Water's Hermosa-Redondo District. As a result of the reduction in pumping ordered by the adjudication and increased recharge via the injection wells of the seawater intrusion barrier, in-lieu replenishment and improved underflow from Central Basin, the water levels in the West Coast Basin have slowly recovered to near 1940 levels.

The adjudication of the Central Basin began not out of litigation as in the West Coast Basin, but out of the collective concern expressed by the major pumpers regarding the impacts that reduced groundwater quantity and quality would have on the future of their communities. The Central Basin Municipal Water District was formed in 1952 to distribute supplemental water to the major water purveyors. In 1954 it was annexed to the MWD, so that access to the imported water supplies was available to the region.

The WRD was created in 1959, largely out of cooperation between the West Coast Basin Water Association and the Central Basin Water Association, with the directive to facilitate artificial replenishment of the two basins as a means of eliminating the overdraft and halting seawater intrusion. To quiet the title to and limit production of the groundwater in Central Basin, the WRD

filed a lawsuit in Superior Court, Los Angeles, in 1962 against more than 700 parties. Later that year after a vast majority of the pumpers approved of the approach, the Court adopted an interim agreement to limit the production from the basin. In 1965, following extensive meetings by the parties to work out a settlement that was supported by pumpers representing over 75 percent of the basins anticipated water rights, the court approved the stipulated judgment for the Central Basin.

This judgment established an adjudicated water right for each party, but limited the allowable pumping allocation (APA) to 80 percent of the water right, which equals 217,367 acre-feet annually. The Dominguez Water Company was identified as a party to the judgment and granted water rights. As a result of the merger with Dominguez, Cal Water now owns these 8,100 acre-feet of adjudicated right with the associated 6,480 AFY of APA in the Central Basin. This amount is in addition to the 11,774 acre-feet held by Cal Water’s East Los Angeles District. Table 10 summarizes the Dominguez District’s allowable pumping allocation from the two basins.

Table 10: Cal Water Groundwater Pumping Rights	
Basin	Pumping Rights AFY
Central Basin	6,480.00
West Coast Basin	10,417.45
Total	16,897.45

The principle mechanisms for recharge in the West Coast Basin are injection of water into the seawater intrusion barriers, in-lieu replenishment, and inflow to the West Coast Basin from the Central Basin. The Central Basin is recharged through percolation of water applied to surface spreading ponds in the Montebello Forebay, in-lieu replenishment, and inflow to the Central Basin from the San Gabriel Valley.

The Los Angeles County Department of Public Works owns and operates all groundwater recharge facilities as a county-funded activity through a longstanding inter-agency agreement. As a result, costs associated with the capture and recharge of storm water runoff are not directly accounted for in the cost of water replenishment. All other water used for replenishing the groundwater of the Central and West Coast Basins is funded by the WRD through the Replenishment Assessment. Additionally, the WRD manages various groundwater quality cleanup programs. To finance its designated responsibilities, the WRD levies a Replenishment Assessment on every acre-foot of groundwater produced in the Central and West Coast Basins.

Cal Water’s management plan for Dominguez District water supplies includes participating in existing regional conjunctive-use programs and making use of economic incentives and the lease market to the fullest extent possible.

Basin Boundaries and Hydrology

The West Coast Subbasin is bounded on the north by the Ballona Escarpment, an abandoned erosional channel from the Los Angeles River. On the east it is bounded by the Newport-Inglewood fault zone and on the south and west by the Pacific Ocean and consolidated rocks of the Palos Verdes Hills. The surface of the sub-basin is crossed in the south by the Los Angeles River through the Dominguez Gap, and the San Gabriel River through the Alamitos Gap, both of which then flow into San Pedro Bay.

The Central Subbasin occupies a large portion of the southeastern part of the Coastal Plain of Los Angeles Groundwater Basin. This subbasin is bounded on the north by a surface divide called the La Brea High, and on the northeast and east by emergent less permeable Tertiary rocks of the Elysian, Repetto, Merced and Puente Hills. The southeast boundary between Central Basin and Orange County Groundwater Basin roughly follows Coyote Creek, which is a regional drainage province boundary. The southwest boundary is formed by the Newport Inglewood fault system and the associated folded rocks of the Newport Inglewood uplift. The Los Angeles and San Gabriel Rivers drain inland basins and pass across the surface of the Central Basin on their way to the Pacific Ocean Bay.

A detail description of the basin is given in the California's Ground Water Bulletin 118, which is included as Appendix G in the Dominguez District 2015 UWMP. Also included in Appendix G are the Central Basin Adjudication Order, West Basin Adjudication Order, and Water Replenishment District of Southern California 2015 Engineering Survey and Report.

Groundwater Management Plan

As the regional groundwater management agency for two of the most utilized groundwater basins in the state of California, the WRD plays an integral role in overall water resource management in southern Los Angeles County. The WRD manages groundwater for nearly four million residents in 43 cities of southern Los Angeles County. The 420 square mile service area uses about 250,000 AF of groundwater per year, which equates to nearly 40 percent of the total demand for water. The WRD ensures that a reliable supply of high-quality groundwater is available through its clean water projects, water supply programs, and effective management principles.

Dominguez District Wells (Groundwater) Summary

Presently, the district has 6 active potable supply wells in the West and Central Basins with a combined production capacity of 6,971 AFY if operated continuously. With a duty factor of 80% annual production is estimated to be 5,577 AFY.

Table 11 is a summary of actual and projected well production for the Dominguez District.

Table 11: Dominguez District Wells Actual and Projected Production			
Well Number	Actual or Projected Capacity (GPM)	Annual Production - 80% Use (AFY)	Year in Service
<i>West Coast Basin Wells</i>			
215-01	598	772	Currently
216-02	1,000	1,290	2022
219-02	1,200	1,548	2025
232-02	837	1,080	2022
275-01	524	676	2022
277-01	521	672	Currently
279-01	1,000	1,290	Currently
294-01	1,000	1,290	2022
298-01	1,216	1,569	Currently
<i>Central Basin Wells</i>			
272-01	800	1,032	2022
290-01	690	890	Currently
297-01	297	383	Currently
300-01*	1,000	1,290	2025
301-01*	1,000	1,290	2025
Total	11,683	15,076	

For 2022 Cal Water projects annual well production of 10,946 AFY and in 2025 15,076 AFY. By 2030, Cal Water plans additional well production capacity to enable it to fully utilize its allowable pumping allocation from the West and Central Basins of 16,987 AFY.

While Cal Water is implementing new well and treatment facilities projects to increase production capacity, it will continue to purchase water to meet the balance of district demands.

Historically, Cal Water lost some well production capacity due to groundwater quality issues and reduced well efficiencies. In 2009, well production capacity was approximately 10,700 AFY. In 2000, Cal Water pumped 14,737 AF or 87 percent of its adjudicated rights.

As indicated in Table 11, Cal Water has new well and well treatment facilities projects that it intends to bring on line by year 2025 and 2025. The 2030 projection for additional well capacity is intended to enable Cal Water to achieve full use of its allowable pumping allocation.

Cal Water provides ongoing maintenance, well rehabilitation and engineering support to maintain production in all of its wells including adding treatment facilities for wells with water quality issues.

Sustainable Groundwater Management Act

On September 16, 2014, Governor Brown signed into law Assembly Bill 1739, Senate Bill 1168, and Senate Bill 1319 (AB-1739, SB-1168, and SB-1319). This three-bill legislative package is known collectively as the Sustainable Groundwater Management Act (SGMA). SGMA was amended in the later part of 2015 by Senate Bill 13, Senate Bill 226 and Assembly Bill 1390 to provide clarity to the original law and guidance on groundwater adjudications. This new legislation defines sustainable groundwater management as the “management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results” [Water Code § 10721(u)]. The legislation defines “undesirable results” to be any of the following effects caused by groundwater conditions occurring throughout the basin [Water Code § 10721(w) (1-6)]:

- Chronic lowering of groundwater levels indicating a significant and unreasonable depletion of supply;
- Significant and unreasonable reduction of groundwater storage;
- Significant and unreasonable seawater intrusion;
- Significant and unreasonable degraded water quality;
- Significant and unreasonable land subsidence;
- Surface water depletions that have significant and unreasonable adverse impacts on beneficial uses of the surface water.

UWMPs prepared by Cal Water since 2005 including the 2015 plan include many of the elements required for SGMA implementation summarized as follows:

- Historic and future customer growth and water demand.
- Historic and future water supplies
- Potential actions Cal Water will need to take to develop additional water supplies to maintain supply reliability
- Water quality and necessary actions to protect and decontaminate water supplies
- Supplementing water supplies with recycled water and desalinated water.
- Projected capability of the supply to reliably serve customer demands under normal, single-dry-year and multiple-dry-year conditions.

The legislation provides for financial and enforcement tools to carry out effective local sustainable groundwater management through formation of Groundwater Sustainability Agencies

(GSA's) consisting of local public agencies, water companies regulated by the CPUC and mutual water companies. The legislation requires that GSA's within High and Medium Priority basins under the California Statewide Groundwater Elevation Monitoring (CASGEM) program subject to critical conditions of overdraft prepare and submit a Groundwater Sustainability Plan (GSP) for the basin by January 31, 2020 [Water Code § 10720.7(a) (1)], and requires GSA's in all other groundwater basins designated as High or Medium Priority basins to prepare and submit a GSP by January 31, 2022 [Water Code § 10720.7 (a) (2)]. Following State approval, the basin would thereafter be managed under the GSP. Intended outcomes and benefits of SGMA include:

- Advancement in understanding and knowledge of the State's groundwater basins and their issues and challenges;
- Establishment of effective local governance to protect and manage groundwater basins;
- Management of regional water resources for regional self-sufficiency and drought resilience;
- Sustainable management of groundwater basins through the actions of GSA's, utilizing State assistance and intervention only when necessary;
- All groundwater basins in California are operated to maintain adequate protection to support the beneficial uses for the resource;
- Surface water and groundwater are managed as "a Single Resource" to sustain their interconnectivity, provide dry season base flow to interconnected streams, and support and promote long-term aquatic ecosystem health and vitality;
- A statewide framework for local groundwater management planning, including development of sustainable groundwater management best management practices and plans;
- Development of comprehensive and uniform water budgets, groundwater models, and engineering tools for effective management of groundwater basins;
- Improved coordination between land use and groundwater planning;
- Enforcement actions as needed by the SWRCB to achieve region-by-region sustainable groundwater management in accordance with the 2014 legislation.

To assist in attaining the above outcomes, the California Department of Water Resources (DWR) will provide GSA's with the technical and financial assistance necessary to sustainably manage their water resources. The benefits of these outcomes include:

- A reliable, safe and sustainable water supply to protect communities, farms, and the environment, and support a stable and growing economy;

- Elimination of long-term groundwater overdraft, an increase in groundwater storage, avoidance or minimization of subsidence, enhancement of water flows in stream systems, and prevention of future groundwater quality degradation.

Cal Water works collaboratively with other basin stakeholders for sustainable management of groundwater including sharing costs and benefits on an equitable basis. Cal Water recognizes the challenges of the legislation in terms of technical, legal, political, and financial/economic issues and is taking an active role in local and state-wide management of groundwater resources. Any changes to allowable pumping made by the Groundwater Sustainability Agency and the GSP could affect the amount of groundwater that Cal Water is allowed to pump in the future. The GSP is to be completed by January 31, 2020.

Recycled Water

Although Los Angeles County Sanitation District's (LACSD) Joint Water Pollution Control Plant (JWPCP) provides wastewater collection and treatment services for the Dominguez service area, recycled water comes from WBMWD's West Basin Water Recycling Facility (WBWRF). The source of water to that facility is secondary effluent from the City of Los Angeles' Hyperion Wastewater Treatment Plant, which provides secondary treatment using the activated sludge process. Most of the Hyperion treated effluent is disposed of through an ocean outfall. Approximately six percent of treated effluent goes to the WBWRF in El Segundo where it undergoes chemical clarification, recarbonation, microfiltration, and chlorination. The WBWRF produces 42,000 AFY (37.5 mgd) of recycled water and has a maximum capacity of 67,210 AFY (60 mgd).

WBMWD has one of the largest recycled water programs in the United States. WBMWD has identified over 105 economically feasible recycled water users. Fully implemented, the recycling program has the potential to use over 67,210 AFY of recycled water. In the Dominguez system, Cal Water began purchasing recycled water from WBMWD in 2000 for industrial process waters and landscape irrigation. WBMWD and Cal Water's plan is to increase use of recycled water with as new customers as WBMWD's distribution system is expanded. This will result in less potable water use where that water is being used for those purposes.

Recycled water from the WBWRF is used for groundwater replenishment through more than 100 injection wells. In addition to serving Cal Water the WBWRF provides recycled water to more than 140 sites in Manhattan Beach, Torrance, Hermosa Beach, Carson, and Inglewood. Its biggest customers are the Chevron, Mobil and BP oil refineries. It should be noted that Cal Water operates and maintains the recycled water distribution system under contract to WBMWD. Figure 7 shows the 2009 transmission system.

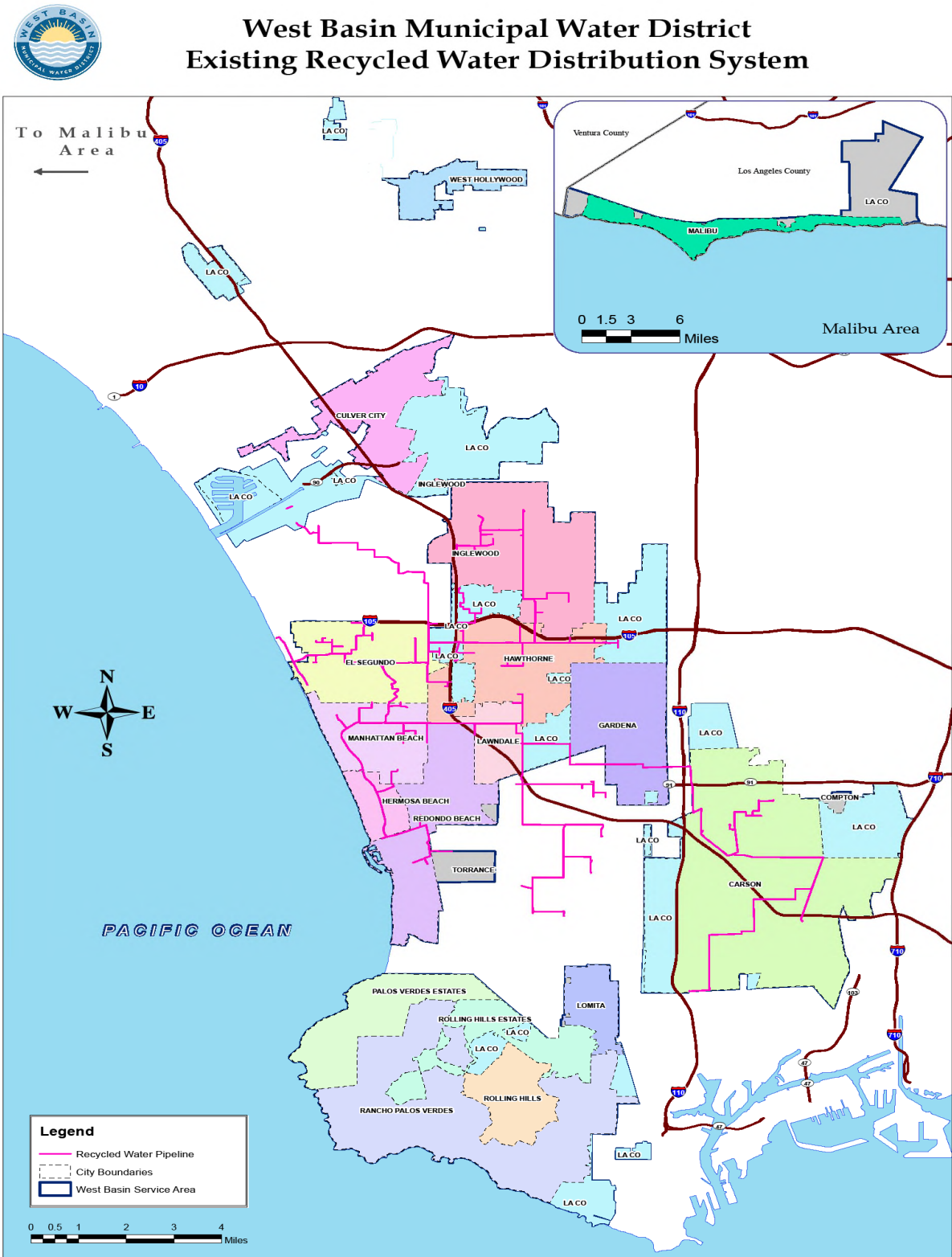
WBMWD is responsible for:

- Determining the technical and economic feasibility of supplying recycled water to the Dominguez service area
- Encouraging the use of and optimizing the use of recycled water in the Dominguez service area
- Extension of recycled water lines within the Dominguez service area

Cal Water actively supports use of recycled water by its customers and offers recycled water at a reduced cost. WBMWD has identified over 105 feasible recycled water users with a combined

estimated average annual demand of 19,100 AFY. In 2015, Cal Water supplied 5,089 AF of WBMWD recycled water to 11 customers in the Dominguez system. Examples of recycled customers include the BP/ARCO refinery, the Home Depot sports complex with numerous soccer fields, and the Cal State University Dominguez Hills campus.

Figure 7: WBMWD Recycled Water Transmission System



The WBMWD Water Recycling Master Plan identifies potential customers in the Dominguez service area. Currently there are eleven customers that use recycled water. WBMWD's recycling plan includes several projects to install pipelines capable of delivering recycled water throughout the Harbor/South Bay area.

Estimates of increased use of recycled water in WBMWD's Water Recycling Master Plan (WRMP) are quite high when compared to what has actually occurred in the Dominguez District. The WRMP assumes several large water users will switch to recycled water rather than pump groundwater for which they hold water rights at a cost nearly double the cost of groundwater. The WRMP anticipates large uses of recycled water by several industrial customers for processes for which use of recycled water has not been demonstrated. Hence, for the Dominguez District, Cal Water uses a lower growth projection than WBMWD. Cal Water's projected increase in recycled water use from 6,081 AFY in 2015 to 11,800 AFY in 2040 or an increase of 5,719 AFY in 25 years (229 AFY per year increase) can be considered to be conservative when compared to the projections in WBMWD's Water Recycling Master Plan.

Desalinated Water

Desalted Brackish Groundwater

Seawater intrusion into the groundwater of the West Coast Basin has been a problem since the 1930s. Two seawater intrusion barriers, the West Coast Basin Barrier and the Dominguez Gap Barrier, have been constructed and put into operation to stop salt water intrusion. The Los Angeles County Department of Public Works is responsible for maintenance of these barriers and the WRD provides freshwater that is injected into these barriers. A large amount of brackish water still lies inland of the saltwater barriers. It is being removed by extraction wells and treated at the C. Marvin Brewer Desalter, a reverse osmosis treatment plant that started operating in 1993. Dominguez Water Corporation, with the support of the WBMWD, WRD, MWD, and the US Bureau of Reclamation established the desalter project. Its costs of operation are reduced through a MWD incentive program so that the unit cost of desalinated brackish water is slightly less than non-interruptible imported freshwater from MWD. Since the merger of Cal Water and Dominguez Water Corporation in 2000, Cal Water has operated the desalter project.

Desalinated Ocean Water

In 2014, WBMWD completed an ocean water desalination demonstration project at the L.A. Conservation Corps' SEA Lab facility in Redondo Beach for the purpose of developing and collecting data for planning, permitting, design, construction, and operation of a full-scale desalination facility. The demonstration plant used full-scale equipment to assess operating factors, evaluate alternative processes and assess water quality and energy efficiency. Based on the results of the study, WBMWD determined that building a full-scale desalination plant is feasible.

1. WBMWD intends to build a 20 mgd desalination plant in El Segundo (expandable to 60 mgd) because that location offers many advantages and has none of the significant issues associated with the demonstration plant site in Redondo Beach. Because of the extensive permitting and approval requirements, conducting the necessary environmental and scientific field studies, preparing the necessary draft and final documents, obtaining funding, designing, constructing, testing and commissioning of all new facilities could take at least 10 years to complete.

2. WBMWD plans on determining Cal Water's interest in participating in its El Segundo desalination plant in terms of supply, costs and other factors. Cal Water is considering this option.
3. The research completed by WBMWD at the Redondo Beach demonstration plant could provide useful information to Cal Water in locating possible treatment plant sites and in developing a preliminary feasibility assessment should Cal Water elect to pursue its own desalination project. An in-depth technical, environmental, permitting and cost analysis would be required to provide the information needed to decide whether or not it was feasible for Cal Water to move forward with its own desalination project.

Transfer or Exchange Agreements

Both the West Coast Basin and Central Basin judgments allow for transfer of groundwater rights through sale or lease agreements between parties and for the carryover of unused rights in an amount up to 20 percent of the groundwater rights held by a party. DWR is the designated Watermaster for both the West Coast Basin and Central Basin Adjudications. In that capacity, DWR accounts for all groundwater production in the basin, and annually reports on groundwater production and related groundwater-use transactions. The parties must file monthly production reports and notify the Watermaster regarding all leases or sales of rights.

The lease or purchase of additional adjudicated water rights could be used to increase supply reliability and availability. Obtaining additional adjudicated rights would further increase the savings available to the system under MWD's seasonal service program. Hence, the Dominguez system's program for increasing reliable groundwater production capacity of its wells to fully utilize all of its existing adjudicated rights and those of other agencies when opportunities become available. In the past 12 years, Cal Water has leased some of its adjudicated rights in both basins on a short-term basis to other agencies that had production capacity and had the need for more water. As Cal Water increases its well production capacity, it will not renew these leases. Cal Water has had several short-term leases with local municipalities and private companies to use their available excess groundwater allocations for supply and will evaluate negotiating new leases as Dominguez District well capacity increases and full use of Cal Water's allowable pumping allocation is achieved.

Future Water Supply

Cal Water's plan for the Dominguez District and its three neighboring districts is to continuously provide adequate reliable supplies through facilities that meet peak demand requirements and have sufficient reserve capacity for fire protection. Cal Water recognizes that water supply planning is an ongoing process that requires regular reviews of assumptions and conditions.

The reliability of MWD imported water supplies has been affected by a number of factors in recent years, so MWD has implemented several programs to improve supply reliability:

- Financial incentives for development of local supplies
- Use of imported supplies on a seasonal basis and in a manner that maximizes the importation of supplies into Southern California
- Storage for surplus imported supplies for future use
- Restore use of local groundwater that have been contaminated

Cal Water will evaluate prospective additional supply projects and regional supply conditions to include:

- Status of West Coast and Central Basin groundwater basin storage, availability of groundwater and utilization of adjudicated water rights
- Transfer Agreements with other utilities that hold adjudicated groundwater rights in the two basins and have surplus water rights available
- Status and maintenance of seawater intrusion barriers managed by the Los Angeles County Department of Public Works
- Increased participation in WBMWD's water recycling program in the Dominguez and adjacent systems.
- Possible participation in WBMWD's desalination treatment project.

Cal Water coordinates its supply planning activities with other purveyors who are served by WBMWD. Cal Water participated in the development of the WBMWD Water Shortage Contingency Plan. Proposed Programs in this plan include:

- West Coast Basin Judgment Work Group - Representatives of the West Coast Basin Water Association are developing possible amendments to provide more flexible operations during drought, expansion of storage and conjunctive operation of the basin, and innovative water management practices.
- Water Supply and Drought Management Planning.
- Implementation of the Best Management Practices through a Memorandum of Understanding.
- West Coast Basin Reclamation Program.
- West Coast Basin Saline Plume Mitigation Planning.

While Cal Water recognizes that MWD and WBMWD are committed to providing reliable and affordable imported water supplies, it also recognizes that as water demand increases the potential for water shortages does also. MWD's and WBMWD's objective is to provide 100 percent supply reliability over the next twenty years to meet all non-discounted, non-interruptible demand in the region. MWD initiatives to ensure this reliability include the Integrated Resource Plan (IRP), the Water Surplus and Drought Management Plan (WS&DMP) and the Local Resource Investments program.

As indicated previously, Cal Water is committed to implementing new programs and projects in increasing water conservation, expanding use recycled water and maximizing use of its groundwater rights to decrease reliability on MWD supplied water.

Supply Adequacy and Reliability Assessment

This section combines and compares previously presented information on projected demand and supplies for the Dominguez District to address the question of whether Dominguez system supplies are adequate and reliable for the next 20 years for normal hydrologic conditions, one dry year and a multiple dry year period.

Normal Water Year

Groundwater supply is limited to Cal Water’s allowable pumping allocation and by well production capacity. As explained previously, Cal Water is installing new wells to increase pumping capacity and adding wellhead treatment to existing wells with water quality issues. Cal Water plans to maximize use of its allowable pumping allocation by 2030. Recycled water supply is matched to expected demand from this source. If some industrial customers in the Dominguez District were to convert their process water use to recycled water sooner, this would decrease potable water demand and make existing potable supplies available for future growth.

Cal Water’s combined projected purchased water for all four of its districts receiving WBMWD water will be below its Tier I maximum of 70,000 AFY in normal hydrologic years.

According to MWD’s 2010 Regional Urban Water Management Plan, sufficient supplies of imported water will be available in normal hydrologic years to meet all projected demands.

Table 12 compares demand with supply for a normal hydrologic year and demonstrates adequacy of supply to meet demands.

Table 12: Dominguez District: Normal Hydrologic Year Supply and Demand Comparison (AF)						
	2015	2020	2025	2030	2035	2040
Purchased water	26,908	29,219	16,457	14,811	15,124	15,324
Groundwater	4,405	5,577	15,076	16,897	16,897	16,897
Recycled water	6081	7,950	8,800	9,700	10,700	11,800
Supply totals	36,394	39,458	40,333	41,408	42,721	44,021
Demand totals	36,394	39,458	40,333	41,408	42,721	44,021
Difference	0	0	0	0	0	0

Single Dry Year

Cal Water projects no decrease in total supply available and that it will meet projected demands. As noted in the previous section, groundwater and recycled water are expected to be available in the quantities projected and are not affected by a dry year. MWD’s Regional Urban Water Management Plan indicates sufficient supplies of imported water will be available in single dry years to meet all projected demands. MWD indicates that the policies in its 2010 and 2015 IRP updates will ensure this reliability. Therefore, the supply is projected to be meet demand during a single dry year as shown in Table 13.

Table 13: Single Dry Year Supply and Demand Comparison (AF)						
	2015	2020	2025	2030	2035	2040
Purchased water	26,908	29,219	16,457	14,811	15,124	15,324
Groundwater	4,405	5,577	15,076	16,897	16,897	16,897
Recycled water	6081	7,950	8,800	9,700	10,700	11,800
Supply totals	36,394	39,458	40,333	41,408	42,721	44,021
Demand totals	36,394	39,458	40,333	41,408	42,721	44,021
Difference	0	0	0	0	0	0

Multiple Dry Year Period

Because of adequate existing groundwater basin storage volume and ongoing regional groundwater recharge programs, groundwater supply is considered reliable. Therefore, Cal Water will be able pump up to its annual APA based on need and well production capacity. The quantity of recycled water to be delivered in the Dominguez system during a multiple dry year period is expected to be the same as that delivered during a normal hydrologic year.

MWD's 2010 Regional Urban Water Management Plan indicates that sufficient supplies of imported water will be available during multiple dry years to meet all projected demands. MWD believes that the policies in the 2010 and 2015 IRP updates will ensure reliability.

In 2035, the full estimated increase in potable demand for the CSUDH CMP is projected to occur. Hence, the analysis for a multiple dry year period is based on three dry years following 2035.

For the first dry year (2036), no change in supply or demand is projected. Demand for 2036 is estimated to be a 1/5 of the increase in the demand between 2035 and 2040 or 40 AF.

On the conservative side, it is assumed that the quantity of purchased water delivered to the Dominguez District by WBMWD is reduced by 10% in the 2nd dry year (2037) and by 20% in the 3rd dry year (2038).

As previously noted, in the Imported Water Purchase Agreement between Cal Water and WBMWD, the Base Allocation, Tier Allocations, and Purchase Commitment are established as a combined amount for the three Cal Water districts (Palos Verdes, Hermosa-Redondo, and Dominguez) and the Hawthorne service area. The Dominguez District shares in the combined amount with the other two districts and the Hawthorne service area. Amendment No. 4 to the Agreement eliminated Cal Water's Base Allocation and set the Tier 1 Annual Maximum to 70,000 AF and a total Purchase Commitment to 210,000 AF. Cal Water's allocation of its Tier 1 Annual Maximum among its 3 districts and the Hawthorne service area is: Dominguez 22,400 AF, Hawthorne 4,900 AF, Hermosa-Redondo 16,800 AF, and Palos Verdes 25,900. So the Dominguez District gets 32% of the total. For the Purchase Commitment of 210,000 AF, the Dominguez District's proportional amount is 67,200 AF.

In 2015, the Dominguez District's actual use of MWD purchased water was 26,908 AF.

A 10% reduction of purchased supply based on 2015 use of 26,908 AF is 2,690 AF or available

supply would be 24,217 AF. The 2037 estimate of purchased water is 15,204 AF which is 9,013 AF less than the 2015 reduced amount.

For the 3rd year, a 20% reduction in purchased water would equal 5,382 AF of the 2015 purchased water or available supply would be 21,526 AF. The 2038 estimate of purchased water is 15,244 AF which is 6,282 AF less than the 2015 reduced amount.

Table 14 shows that even if there were cut backs in MWD supply of 10 percent and 20 percent as assumed, it would have no effect on the adequacy of Dominguez District supplies to meet projected normal demands during a multiple dry year period.

Table 14: Multiple Dry Year Period Supply and Demand Comparison: 2nd & 3rd Years AFY				
Water Supply	2035 Normal Water Year Water Supply	Multiple Dry Water Year Water Supply		
		2036 -1st Year	2037 – 2nd Year	2038 – 3rd Year
Purchased	15,124	15,164	15,204	15,244
Recycled	10,700	10,700	10,700	10,700
Groundwater	16,897	16,897	16,897	16,897
Total Supply	42,721	42,761	42,801	42,841
Demand	42,721	42,761	42,801	42,841

During dry years when deliveries from the Colorado River Aqueduct and the State Water Project (SWP) are reduced, MWD can draw water from other storage areas established through groundwater banking and transfer agreements made with other agencies. These agreements are further described in MWD’s Water Surplus and Drought Management Plan (WSDM Plan).

Summary and Conclusion

Based on:

- Adequacy of existing and planned supplies from WBMWD and MWD,
- Plans to construct new wells and maintain existing wells including constructing treatment facilities to address water quality issues where needed in order to fully utilize its adjudicated groundwater rights,
- Plans to continue to participate in MWD’s in-lieu storage program for increasing basin groundwater storage for use during drought periods,
- Plans to increase use of recycled water from WBMWD,
- In-place, ongoing and planned expanded water conservation programs and best management practices for reducing demand during normal and single and multiple dry years,
- Continuing participation in regional supply programs sponsored by WBMWD and MWD,
- Success in obtaining increased reductions in water use during multiple dry years by implementing its four-stage water demand reduction program, and
- Over ninety years of experience in continuously providing an adequate supply to meet demands during normal, single and multiple dry years in the Dominguez District,

Cal Water concludes that for the next 20 years (2020 – 2040), the Dominguez District will have adequate water supplies to meet projected demands associated with the proposed CSUDH Campus Master Plan and those of all existing customers and other anticipated future customers for normal, single dry year and multiple dry year conditions.

End of WSA

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1000 EAST VICTORIA STREET
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6. CAL STATE UNIVERSITY, DOMINGUEZ HILLS
Master Plan Update 2018 (Power Point Presentation)
February 12, 2018

Appendix H. Alternatives

H.1 Increased Student Housing Alternative Table 3. Alternative Comparison of LOS and Significant Impacts

Study ID	Intersection Name	2025 Plus Project AM Peak Hour				2035 Plus Project AM Peak Hour				2025 Plus Project PM Peak Hour				2035 Plus Project PM Peak Hour			
		Proposed Project		Increased Student Housing		Proposed Project		Increased Student Housing		Proposed Project		Increased Student Housing		Proposed Project		Increased Student Housing	
		LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?
18	Wilmington Ave./Artesia Blvd. EB	C	No	C	No	C	No	C	No	C	No	C	No	C	No	C	No
19	Wilmington Ave./Victoria St.	A	No	A	No	A	No	A	No	A	No	A	No	A	No	A	No
20	I-110 SB Off-Ramp/190th St.	F	Yes	F	Yes	F	Yes	F	Yes	F	Yes	F	Yes	F	Yes	F	Yes
21	I-110 NB On-Ramp/190th St.	A	No	A	No	B	No	B	No	C	No	C	No	D	No	D	No
22	Figueroa St./190th St./Victoria St.	E	Yes	D	No	E	Yes	E	Yes	F	Yes	F	Yes	F	Yes	F	Yes
23	Broadway/Victoria St.	B	No	B	No	C	No	C	No	D	No	D	No	E	Yes	E	Yes
24	Main St./Victoria St.	C	No	C	No	D	No	D	No	F	Yes	F	Yes	F	Yes	F	Yes
25	Avalon Blvd./University Dr.	A	No	A	No	A	No	A	No	B	No	B	No	C	No	C	No
26	Avalon Blvd./Del Amo Blvd.	D	No	D	No	E	Yes	E	Yes	E	No	E	Yes	F	Yes	F	Yes
27	Avalon Blvd./I-405 NB Ramps	A	No	A	No	A	No	A	No	A	No	A	No	A	No	A	No
28	Avalon Blvd./I-405 SB Ramps	A	No	A	No	B	No	B	No	A	No	A	No	A	No	A	No
29	Central Ave./University Dr.	C	No	C	No	F	Yes	F	Yes	B	No	B	No	F	Yes	F	Yes
30	Wilmington Ave./University Dr.	B	No	B	No	B	No	B	No	C	No	C	No	C	No	C	No
31	Central Ave./Del Amo Blvd.	D	No	D	No	D	No	D	No	C	No	C	No	D	No	D	No
32	Wilmington Ave./Del Amo Blvd.	C	No	C	No	C	No	C	No	C	No	C	No	C	No	C	No
33	W. Artesia Blvd./Crenshaw Blvd.	E	No	E	No	E	No	E	No	F	No	F	No	F	No	F	No
34	W. 190th St./S. Western Ave.	D	No	D	No	D	No	D	No	D	No	D	No	D	No	D	No
35	W. Artesia Blvd./Vermont Ave.	D	No	D	No	D	No	D	No	F	No	F	No	F	No	F	No

Study ID	Intersection Name	2025 Plus Project AM Peak Hour				2035 Plus Project AM Peak Hour				2025 Plus Project PM Peak Hour				2035 Plus Project PM Peak Hour			
		Proposed Project		Increased Student Housing		Proposed Project		Increased Student Housing		Proposed Project		Increased Student Housing		Proposed Project		Increased Student Housing	
		LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?
36	Alameda St./Compton Blvd.	B	No	B	No	B	No	B	No	C	No	C	No	C	No	C	No
37	Alameda St./SR 91 EB Ramps	A	No	A	No	A	No	A	No	C	No	C	No	D	No	D	No

Source: WSP. 2019. TIS (January 2019).

H.2 Increased Student Housing Alternative Table 4. Alternative Comparison of LOS

Table 4. Alternative Comparison of LOS and Significant Impacts: Freeway Segments Northbound/Eastbound

ID	CMP Station	Fwy Rte	Post Mile	Location	2025 Plus Project AM Peak Hour				2035 Plus Project AM Peak Hour				2025 Plus Project PM Peak Hour				2035 Plus Project PM Peak Hour			
					Proposed Project		Increased Student Housing		Proposed Project		Increased Student Housing		Proposed Project		Increased Student Housing		Proposed Project		Increased Student Housing	
					LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?
91-1		91	6.344	Jct. Rte. 110 to Avalon Blvd.	C	No	C	No	C	No	C	No	F(0)	No	F(0)	No	F(0)	Yes	F(0)	Yes
91-2		91	7.426	Avalon Blvd. to Central Ave.	C	No	C	No	C	No	C	No	F(3)	Yes	F(3)	Yes	F(3)	Yes	F(3)	Yes
91-3		91	8.435	Central Ave. to Wilmington Ave.	C	No	C	No	C	No	C	No	F(3)	Yes	F(3)	Yes	F(3)	Yes	F(3)	Yes
91-4		91	9.162	Wilmington Ave. to Alameda St.	C	No	C	No	D	No	D	No	F(3)	Yes	F(3)	Yes	F(3)	Yes	F(3)	Yes
91-5		91	10.271	Alameda St. to Alameda St./Santa Fe Ave.	E	No	E	No	F(0)	Yes	F(0)	Yes	F(3)	Yes	F(3)	Yes	F(3)	Yes	F(3)	Yes
91-6	1033	91	10.41	Alameda St./Santa Fe Ave. to Long Beach Blvd.	C	No	C	No	C	No	C	No	F(2)	Yes	F(2)	No	F(2)	Yes	F(2)	Yes
91-7		91	11.096	Long Beach Blvd. to Jct. Rte. 710	C	No	C	No	C	No	C	No	F(2)	Yes	F(2)	No	F(2)	Yes	F(2)	Yes
91-8		91	11.681	Jct. Rte. 710 to Cherry Ave.	D	No	D	No	D	No	D	No	F(0)	No	F(0)	No	F(0)	Yes	F(0)	Yes
91-9	1034	91	13.094	Cherry Ave. to Paramount Blvd.	D	No	D	No	D	No	D	No	F(0)	No	F(0)	No	F(0)	Yes	F(0)	Yes
91-10		91	13.594	Paramount Blvd. to Downey Ave.	D	No	D	No	D	No	D	No	F(0)	No	F(0)	No	F(0)	Yes	F(0)	Yes
91-11		91	14.103	Downey Ave. to Jct. Rte. 19	C	No	C	No	C	No	C	No	E	No	E	No	E	Yes	E	Yes
91-12		91	14.618	Jct. Rte. 19 to Clark Ave.	C	No	C	No	C	No	C	No	F(0)	No	F(0)	No	F(0)	Yes	F(0)	Yes
91-13		91	15.105	Clark Ave. to Bellflower Blvd.	C	No	C	No	C	No	C	No	E	No	E	No	E	Yes	E	No
91-14		91	15.614	Bellflower Blvd. to Jct. Rte. 605	C	No	C	No	C	No	C	No	E	No	E	No	E	No	E	No

ID	CMP Station	Fwy Rte	Post Mile	Location	2025 Plus Project AM Peak Hour				2035 Plus Project AM Peak Hour				2025 Plus Project PM Peak Hour				2035 Plus Project PM Peak Hour			
					Proposed Project		Increased Student Housing		Proposed Project		Increased Student Housing		Proposed Project		Increased Student Housing		Proposed Project		Increased Student Housing	
					LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?
110-1	1045	110	1.23	Channel St. to C St.	C	No	C	No	C	No	C	No	B	No	B	No	B	No	B	No
110-2		110	2.771	C St. to Anaheim St.	B	No	B	No	B	No	B	No	A	No	A	No	B	No	B	No
110-3		110	3.264	Anaheim St. to Jct. Rte. 1	B	No	B	No	B	No	B	No	B	No	B	No	B	No	B	No
110-4		110	4.061	Jct. Rte. 1 to Sepulveda Blvd.	D	No	D	No	D	No	D	No	C	No	C	No	C	No	C	No
110-5		110	5.451	Sepulveda Blvd. to Carson St.	F(0)	Yes	F(0)	Yes	F(0)	Yes	F(0)	Yes	D	No	D	No	D	No	D	No
110-6		110	7.016	Carson St. to Torrance/Del Amo Blvd.	F(1)	Yes	F(1)	Yes	F(2)	Yes	F(2)	Yes	E	Yes	E	Yes	E	Yes	E	Yes
110-7		110	8.028	Torrance/Del Amo Blvd. to Jct. Rte. 405	F(2)	Yes	F(2)	Yes	F(2)	Yes	F(2)	Yes	F(0)	Yes	F(0)	Yes	F(0)	Yes	F(0)	Yes
110-8		110	8.775	Jct. Rte. 405 to Jct. Rte. 91	F(0)	Yes	F(0)	Yes	F(0)	Yes	F(0)	Yes	D	No	D	No	D	No	D	No
110-9		110	9.87	Jct. Rte. 91 to Redondo Beach Blvd.	C	No	C	No	D	No	D	No	D	No	D	No	D	No	D	No
110-10		110	11.239	Redondo Beach Blvd. to Rosecrans Ave.	D	No	D	No	D	No	D	No	D	No	D	No	D	No	D	No
110-11		110	11.891	Rosecrans Ave. to El Segundo Blvd.	D	No	D	No	D	No	D	No	D	No	D	No	E	Yes	E	Yes
110-12		110	12.898	El Segundo Blvd. to Jct. Rte. 105	D	No	D	No	D	No	D	No	E	No	E	No	E	Yes	E	Yes
110-13		110	13.82	Jct. Rte. 105 to Century Blvd.	D	No	D	No	D	No	D	No	D	No	D	No	D	No	D	No
110-14		110	14.967	Century Blvd. to Manchester Ave.	F(0)	No	F(0)	No	F(0)	No	F(0)	No	F(0)	No	F(0)	No	F(0)	Yes	F(0)	Yes

ID	CMP Station	Fwy Rte	Post Mile	Location	2025 Plus Project AM Peak Hour				2035 Plus Project AM Peak Hour				2025 Plus Project PM Peak Hour				2035 Plus Project PM Peak Hour			
					Proposed Project		Increased Student Housing		Proposed Project		Increased Student Housing		Proposed Project		Increased Student Housing		Proposed Project		Increased Student Housing	
					LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?
110-15	1046	110	15.976	Manchester Ave. to Florence Ave.	E	No	E	No	E	No	E	No	E	No	E	No	F(0)	Yes	F(0)	Yes
110-16		110	16.981	Florence Ave. to Gage Ave.	F(0)	No	F(0)	No	F(0)	No	F(0)	No	F(0)	No	F(0)	No	F(0)	Yes	F(0)	No
110-17	1047	110	17.514	Gage Ave. to Slauson Ave.	F(0)	No	F(0)	No	F(0)	No	F(0)	No	F(0)	No	F(0)	No	F(0)	Yes	F(0)	Yes
110-18		110	17.98	Slauson Ave. to 51st St.	F(0)	No	F(0)	No	F(0)	No	F(0)	No	F(0)	No	F(0)	No	F(0)	Yes	F(0)	Yes
110-19		110	18.495	51st St. to Vernon Ave.	F(0)	No	F(0)	No	F(0)	No	F(0)	No	F(0)	No	F(0)	No	F(0)	Yes	F(0)	Yes
110-20		110	18.998	Vernon Ave. to Martin Luther King Jr. Blvd.	E	No	E	No	E	No	E	No	F(0)	No	F(0)	No	F(0)	Yes	F(0)	Yes
110-21		110	19.502	Martin Luther King Jr. Blvd. to Exposition Blvd.	D	No	D	No	D	No	D	No	D	No	D	No	D	No	D	No
110-22		110	19.996	Exposition Blvd. to Jct. Rte. 10	D	No	D	No	D	No	D	No	D	No	D	No	D	No	D	No
405-1		405	3.324	Lakewood Blvd. to Cherry Ave.	F(1)	No	F(1)	No	F(1)	No	F(1)	No	F(0)	No	F(0)	No	F(0)	No	F(0)	No
405-2		405	4.879	Cherry Ave. to Orange Ave.	F(1)	No	F(1)	No	F(1)	Yes	F(1)	No	F(0)	No	F(0)	No	F(0)	No	F(0)	No
405-3		405	5.388	Orange Ave. to Atlantic Ave.	F(3)	No	F(3)	No	F(3)	Yes	F(3)	Yes	F(3)	No	F(3)	No	F(3)	Yes	F(3)	Yes
405-4		405	6.076	Atlantic Ave. to Long Beach Blvd	F(3)	No	F(3)	No	F(3)	Yes	F(3)	Yes	F(2)	No	F(2)	No	F(2)	No	F(2)	No
405-5		405	6.34	Long Beach Blvd to Jct. Rte. 710	F(0)	No	F(0)	No	F(0)	No	F(0)	No	E	No	E	No	E	No	E	No
405-6	1066	405	7.596	Jct. Rte. 710 to Alameda St.	F(0)	No	F(0)	No	F(0)	Yes	F(0)	Yes	F(0)	No	F(0)	No	F(0)	Yes	F(0)	Yes

ID	CMP Station	Fwy Rte	Post Mile	Location	2025 Plus Project AM Peak Hour				2035 Plus Project AM Peak Hour				2025 Plus Project PM Peak Hour				2035 Plus Project PM Peak Hour			
					Proposed Project		Increased Student Housing		Proposed Project		Increased Student Housing		Proposed Project		Increased Student Housing		Proposed Project		Increased Student Housing	
					LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?
405-7		405	8.784	Alameda St. to Wilmington Ave.	F(0)	No	F(0)	No	F(0)	Yes	F(0)	Yes	F(0)	No	F(0)	No	F(0)	Yes	F(0)	Yes
405-8		405	9.556	Wilmington Ave. to Carson St.	F(2)	No	F(2)	No	F(2)	Yes	F(2)	Yes	F(0)	No	F(0)	No	F(0)	Yes	F(0)	Yes
405-9		405	10.541	Carson St. to Avalon Blvd.	F(2)	Yes	F(2)	Yes	F(2)	Yes	F(2)	Yes	F(0)	Yes	F(0)	No	F(0)	Yes	F(0)	Yes
405-10	1067	405	11.224	Avalon Blvd. to Jct. Rte. 110	F(0)	No	F(0)	No	F(0)	Yes	F(0)	Yes	F(0)	Yes	F(0)	Yes	F(0)	Yes	F(0)	Yes
405-11		405	12.97	Jct. Rte. 110 to Vermont Ave.	F(0)	No	F(0)	No	F(0)	Yes	F(0)	Yes	F(0)	Yes	F(0)	Yes	F(0)	Yes	F(0)	Yes
405-12		405	13.28	Vermont Ave. to Normandie Ave.	E	No	E	No	F(0)	Yes	F(0)	Yes	D	No	D	No	D	No	D	No
405-13		405	13.826	Normandie Ave. to Western Ave.	F(0)	No	F(0)	No	F(0)	No	F(0)	No	E	Yes	E	Yes	E	Yes	E	Yes
405-14		405	14.398	Western Ave. to Crenshaw Blvd.	F(1)	No	F(1)	No	F(2)	Yes	F(2)	Yes	F(0)	Yes	F(0)	Yes	F(0)	Yes	F(0)	Yes
405-15		405	15.447	Crenshaw Blvd. to Artesia Blvd.	F(1)	No	F(1)	No	F(1)	Yes	F(1)	Yes	F(0)	Yes	F(0)	Yes	F(0)	Yes	F(0)	Yes
405-16		405	16.573	Artesia Blvd. to Hawthorne Blvd.	F(0)	No	F(0)	No	F(0)	No	F(0)	No	D	No	D	No	E	No	E	No
405-17		405	17.589	Hawthorne Blvd. to Inglewood Ave.	F(0)	No	F(0)	No	F(0)	No	F(0)	No	E	No	E	No	E	Yes	E	Yes
405-18	1068	405	18.233	Inglewood Ave. to Rosecrans Ave.	F(0)	No	F(0)	No	F(0)	No	F(0)	No	F(0)	No	F(0)	No	F(0)	Yes	F(0)	Yes
710-1		710	12.97	Jct. Rte. 91 to Alondra Blvd.	E	No	E	No	E	No	E	No	F(3)	No	F(3)	No	F(3)	No	F(3)	No
710-2		710	13.945	Alondra Blvd. to Jct. Rte. 105	E	No	E	No	E	No	E	No	F(3)	No	F(3)	No	F(3)	No	F(3)	No

Source: WSP. 2019. TIS (January 2019).

H.3 Increased Student Housing Alternative Table 5. Alternative Comparison of LOS

Table 5. Alternative Comparison of LOS and Significant Impacts: Freeway Segments Southbound/Westbound

ID	CMP Station	Fwy Rte	Post Mile	Location	2025 Plus Project AM Peak Hour				2035 Plus Project AM Peak Hour				2025 Plus Project PM Peak Hour				2035 Plus Project PM Peak Hour			
					Proposed Project		Increased Student Housing		Proposed Project		Increased Student Housing		Proposed Project		Increased Student Housing		Proposed Project		Increased Student Housing	
					LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?
91-1		91	6.344	Jct. Rte. 110 to Avalon Blvd.	F(3)	No	F(3)	No	F(3)	Yes	F(3)	Yes	F(3)	No	F(3)	No	F(3)	Yes	F(3)	Yes
91-2		91	7.426	Avalon Blvd. to Central Ave.	E	Yes	E	No	E	Yes	E	Yes	C	No	C	No	C	No	C	No
91-3		91	8.435	Central Ave. to Wilmington Ave.	E	Yes	E	Yes	F(0)	Yes	F(0)	Yes	C	No	C	No	C	No	C	No
91-4		91	9.162	Wilmington Ave. to Alameda St.	F(0)	Yes	F(0)	Yes	F(0)	Yes	F(0)	Yes	C	No	C	No	C	No	C	No
91-5		91	10.271	Alameda St. to Alameda St./Santa Fe Ave.	F(1)	Yes	F(1)	Yes	F(2)	Yes	F(2)	Yes	D	No	D	No	D	No	D	No
91-6	1033	91	10.41	Alameda St./Santa Fe Ave. to Long Beach Blvd.	D	No	D	No	E	Yes	E	Yes	C	No	C	No	C	No	C	No
91-7		91	11.096	Long Beach Blvd. to Jct. Rte. 710	F(0)	Yes	F(0)	Yes	F(0)	Yes	F(0)	Yes	C	No	C	No	D	No	C	No
91-8		91	11.681	Jct. Rte. 710 to Cherry Ave.	F(2)	No	F(2)	No	F(2)	Yes	F(2)	Yes	E	No	E	No	E	Yes	E	Yes
91-9	1034	91	13.094	Cherry Ave. to Paramount Blvd.	F(0)	No	F(0)	No	F(0)	Yes	F(0)	Yes	D	No	D	No	D	No	D	No
91-10		91	13.594	Paramount Blvd. to Downey Ave.	F(1)	No	F(1)	No	F(2)	Yes	F(2)	Yes	E	No	E	No	E	Yes	E	Yes
91-11		91	14.103	Downey Ave. to Jct. Rte. 19	F(1)	No	F(1)	No	F(1)	Yes	F(1)	Yes	E	No	E	No	E	No	E	No
91-12		91	14.618	Jct. Rte. 19 to Clark Ave.	F(3)	No	F(3)	No	F(3)	Yes	F(3)	Yes	F(0)	No	F(0)	No	F(0)	No	F(0)	No
91-13		91	15.105	Clark Ave. to Bellflower Blvd.	F(1)	No	F(1)	No	F(1)	Yes	F(1)	Yes	D	No	D	No	D	No	D	No
91-14		91	15.614	Bellflower Blvd. to Jct. Rte. 605	F(1)	No	F(1)	No	F(1)	Yes	F(1)	Yes	D	No	D	No	D	No	D	No

ID	CMP Station	Fwy Rte	Post Mile	Location	2025 Plus Project AM Peak Hour				2035 Plus Project AM Peak Hour				2025 Plus Project PM Peak Hour				2035 Plus Project PM Peak Hour			
					Proposed Project		Increased Student Housing		Proposed Project		Increased Student Housing		Proposed Project		Increased Student Housing		Proposed Project		Increased Student Housing	
					LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?
110-1	1045	110	1.23	Channel St. to C St.	B	No	B	No	B	No	B	No	C	No	C	No	C	No	C	No
110-2		110	2.771	C St. to Anaheim St.	B	No	B	No	B	No	B	No	C	No	C	No	C	No	C	No
110-3		110	3.264	Anaheim St. to Jct. Rte. 1	B	No	B	No	B	No	B	No	B	No	B	No	B	No	B	No
110-4		110	4.061	Jct. Rte. 1 to Sepulveda Blvd.	C	No	C	No	C	No	C	No	D	No	D	No	D	No	D	No
110-5		110	5.451	Sepulveda Blvd. to Carson St.	E	No	E	No	E	Yes	E	Yes	F(0)	Yes	F(0)	Yes	F(0)	Yes	F(0)	Yes
110-6		110	7.016	Carson St. to Torrance/Del Amo Blvd.	F(0)	No	F(0)	No	F(0)	Yes	F(0)	Yes	F(1)	Yes	F(1)	Yes	F(1)	Yes	F(1)	Yes
110-7		110	8.028	Torrance/Del Amo Blvd. to Jct. Rte. 405	F(0)	Yes	F(0)	Yes	F(0)	Yes	F(0)	Yes	F(2)	Yes	F(2)	Yes	F(2)	Yes	F(2)	Yes
110-8		110	8.775	Jct. Rte. 405 to Jct. Rte. 91	F(2)	Yes	F(2)	Yes	F(2)	Yes	F(2)	Yes	F(3)	Yes	F(3)	Yes	F(3)	Yes	F(3)	Yes
110-9		110	9.87	Jct. Rte. 91 to Redondo Beach Blvd.	D	No	D	No	D	No	D	No	D	No	D	No	D	No	D	No
110-10		110	11.239	Redondo Beach Blvd. to Rosecrans Ave.	E	Yes	E	No	E	Yes	E	Yes	D	No	D	No	D	No	D	No
110-11		110	11.891	Rosecrans Ave. to El Segundo Blvd.	E	Yes	E	Yes	F(0)	Yes	F(0)	Yes	E	No	E	No	E	Yes	E	Yes
110-12		110	12.898	El Segundo Blvd. to Jct. Rte. 105	D	No	D	No	D	No	D	No	D	No	D	No	D	No	D	No
110-13		110	13.82	Jct. Rte. 105 to Century Blvd.	D	No	D	No	D	No	D	No	D	No	D	No	D	No	D	No
110-14		110	14.967	Century Blvd. to Manchester Ave.	F(0)	Yes	F(0)	Yes	F(0)	Yes	F(0)	Yes	F(0)	No	F(0)	No	F(0)	Yes	F(0)	Yes
110-15	1046	110	15.976	Manchester Ave. to Florence Ave.	F(0)	No	F(0)	No	F(0)	Yes	F(0)	Yes	F(0)	No	F(0)	No	F(0)	Yes	F(0)	No
110-16		110	16.981	Florence Ave. to Gage Ave.	F(0)	No	F(0)	No	F(0)	Yes	F(0)	Yes	F(0)	No	F(0)	No	F(0)	Yes	F(0)	Yes

ID	CMP Station	Fwy Rte	Post Mile	Location	2025 Plus Project AM Peak Hour				2035 Plus Project AM Peak Hour				2025 Plus Project PM Peak Hour				2035 Plus Project PM Peak Hour			
					Proposed Project		Increased Student Housing		Proposed Project		Increased Student Housing		Proposed Project		Increased Student Housing		Proposed Project		Increased Student Housing	
					LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?
110-17	1047	110	17.514	Gage Ave. to Slauson Ave.	F(0)	No	F(0)	No	F(0)	Yes	F(0)	Yes	F(0)	No	F(0)	No	F(0)	Yes	F(0)	Yes
110-18		110	17.98	Slauson Ave. to 51st St.	F(1)	Yes	F(0)	No	F(1)	Yes	F(1)	Yes	F(0)	No	F(0)	No	F(0)	Yes	F(0)	Yes
110-19		110	18.495	51st St. to Vernon Ave.	F(0)	No	F(0)	No	F(0)	Yes	F(0)	Yes	F(0)	No	F(0)	No	F(0)	No	F(0)	No
110-20		110	18.998	Vernon Ave. to Martin Luther King Jr. Blvd.	F(0)	No	F(0)	No	F(0)	Yes	F(0)	Yes	F(0)	No	F(0)	No	F(0)	No	F(0)	No
110-21		110	19.502	Martin Luther King Jr. Blvd. to Exposition Blvd.	F(0)	No	F(0)	No	F(0)	Yes	F(0)	Yes	F(0)	No	F(0)	No	F(0)	Yes	F(0)	Yes
110-22		110	19.996	Exposition Blvd. to Jct. Rte. 10	E	No	E	No	E	No	E	No	D	No	D	No	D	No	D	No
405-1		405	3.324	Lakewood Blvd. to Cherry Ave.	E	No	E	No	E	No	E	No	F(0)	No	F(0)	No	F(0)	No	F(0)	No
405-2		405	4.879	Cherry Ave. to Orange Ave.	F(0)	No	F(0)	No	F(0)	No	F(0)	No	F(3)	No	F(3)	No	F(3)	No	F(3)	No
405-3		405	5.388	Orange Ave. to Atlantic Ave.	F(1)	No	F(1)	No	F(1)	No	F(1)	No	F(3)	No	F(3)	No	F(3)	Yes	F(3)	Yes
405-4		405	6.076	Atlantic Ave. to Long Beach Blvd	D	No	D	No	D	No	D	No	F(0)	No	F(0)	No	F(0)	No	F(0)	No
405-5		405	6.34	Long Beach Blvd to Jct. Rte. 710	F(0)	No	E	No	F(0)	No	F(0)	No	F(1)	No	F(1)	No	F(1)	Yes	F(1)	Yes
405-6	1066	405	7.596	Jct. Rte. 710 to Alameda St.	D	No	D	No	D	No	D	No	F(0)	No	F(0)	No	F(0)	Yes	F(0)	Yes
405-7		405	8.784	Alameda St. to Wilmington Ave.	D	No	D	No	D	No	D	No	F(0)	No	F(0)	No	F(0)	Yes	F(0)	Yes
405-8		405	9.556	Wilmington Ave. to Carson St.	F(0)	No	F(0)	No	F(0)	No	F(0)	No	F(2)	No	F(2)	No	F(3)	Yes	F(2)	Yes
405-9		405	10.541	Carson St. to Avalon Blvd.	F(0)	No	F(0)	No	F(0)	Yes	F(0)	Yes	F(2)	Yes	F(2)	Yes	F(2)	Yes	F(2)	Yes
405-10	1067	405	11.224	Avalon Blvd. to Jct. Rte. 110	F(0)	Yes	F(0)	Yes	E	No	E	No	F(0)	No	F(0)	No	F(0)	Yes	F(0)	Yes

ID	CMP Station	Fwy Rte	Post Mile	Location	2025 Plus Project AM Peak Hour				2035 Plus Project AM Peak Hour				2025 Plus Project PM Peak Hour				2035 Plus Project PM Peak Hour			
					Proposed Project		Increased Student Housing		Proposed Project		Increased Student Housing		Proposed Project		Increased Student Housing		Proposed Project		Increased Student Housing	
					LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?	LOS	Significant Impact?
405-11		405	12.97	Jct. Rte. 110 to Vermont Ave.	F(0)	Yes	F(0)	Yes	F(0)	Yes	F(0)	Yes	F(1)	Yes	F(1)	Yes	F(1)	Yes	F(1)	Yes
405-12		405	13.28	Vermont Ave. to Normandie Ave.	D	No	D	No	D	No	D	No	F(0)	No	F(0)	No	F(0)	Yes	F(0)	Yes
405-13		405	13.826	Normandie Ave. to Western Ave.	F(0)	No	F(0)	No	F(0)	Yes	F(0)	Yes	F(1)	No	F(1)	No	F(1)	Yes	F(1)	Yes
405-14		405	14.398	Western Ave. to Crenshaw Blvd.	F(0)	Yes	F(0)	No	F(0)	Yes	F(0)	Yes	F(0)	No	F(0)	No	F(1)	Yes	F(1)	Yes
405-15		405	15.447	Crenshaw Blvd. to Artesia Blvd.	E	No	E	No	E	Yes	E	Yes	F(0)	No	F(0)	No	F(0)	Yes	F(0)	Yes
405-16		405	16.573	Artesia Blvd. to Hawthorne Blvd.	E	No	E	No	F(0)	Yes	F(0)	Yes	F(0)	No	F(0)	No	F(0)	No	F(0)	No
405-17		405	17.589	Hawthorne Blvd. to Inglewood Ave.	F(0)	No	F(0)	No	F(0)	Yes	F(0)	Yes	F(1)	No	F(1)	No	F(1)	No	F(1)	No
405-18	1068	405	18.233	Inglewood Ave. to Rosecrans Ave.	D	No	D	No	D	No	D	No	F(0)	No	F(0)	No	F(0)	No	F(0)	No
710-1		710	12.97	Jct. Rte. 91 to Alondra Blvd.	D	No	D	No	E	No	E	No	C	No	C	No	C	No	C	No
710-2		710	13.945	Alondra Blvd. to Jct. Rte. 105	E	No	E	No	E	Yes	E	Yes	C	No	C	No	D	No	D	No

Source: WSP. 2019. TIS (January 2019).

Appendix I. Public Services

I.1 Public Services Questionnaire



PUBLIC SERVICES QUESTIONNAIRE

WSP consultants made contact with individuals from the agencies and community resources below between the dates of May 3, 2018 through May 23, 2018. Supplemental information was also sourced from each agency's and/or resource's websites through online searches and per guidance via email and phone conversations with the individuals contacted. Information was sourced from 2017 throughout 2018.

CONTACTS

Agency/Community Resource	Individuals contacted via email/phone call	Contact Information	Date*	Responded?/Notes
Ambler Avenue Elementary School	--	--	5/8/2018	Yes.
Annalee Avenue Elementary School	Front Desk	--	5/8/2018	Yes.
Bonita Street Elementary School	Front Desk	--	5/8/2018	Yes.
Broadacres Avenue Elementary School	Front Desk	--	5/8/2018	Yes.
Bursh Elementary School	Front Desk	310-898-6130	5/8/2018	--
Carnegie Jr. High School	Front Desk	310-952-5700	5/8/2018	--
Carson Christian School	Front Desk	--	5/8/2018	Yes.
Carson Regional Library	Manager Leticia Tan	310-830-0901 ltan@library.lacounty.gov	5/4/2018	Yes. Provided information, connected us with other libraries.
Carson Street Elementary School	Front Desk	--	5/8/2018	Yes. No longer a school. Houses offices for the district now.
Curtiss Jr. High School	Counselor	--	5/8/2018	--
Del Amo Elementary School	Front Desk	--	5/8/2018	--
Environmental Charter Middle School	Front Desk	--	5/8/2018	Yes.
Fire Station 116	Front Desk Assistant	310-324-5941	5/7/2018	Yes. Assistant mentioned that this station does not serve the CSU DH.
Fire Station 161	Assistant II Marion Jaikowski	310-263-2732	5/4/2018	--
Goal Oriented Academic Learning	--	--	5/8/2018	No.
Golden Wings Academy	Front Desk	--	5/8/2018	Yes. Not a school only child care for 0-12 years old. Would not provide info.
John Muir Charter School	--	kfoster@johnmuircs.com	5/8/2018	--



LA County Sheriff – Carson Station	Captain Jason Skeen	310-830-1123 sibmedia24hrs@lasd.org	5/4/2018	Yes. No information.
LA County Parks & Recreation	Warren Ontiveros	--	5/22/2018	Yes. Sends Comprehensive Parks and Recreation Needs Assessment.
Leapwood Elementary School	Front Desk	--	5/8/2018	Yes.
Longfellow Elementary School	Front Desk	--	5/8/2018	Yes.
Magnolia Science Academy	Front Desk	--	5/8/2018	Yes.
New Millennium Secondary School	Registrar	--	5/8/2018	--
Ralph Bunche Elementary School	Front Desk	--	5/8/2018	--
Recreation Facilities & Parks - Carson	Recreation Program Manager - Michael Whittiker	310-835-0212 MWhittik@carson.ca.us	5/4/2018	Yes.
Recreation Facilities & Parks - Carson	Scott Griffiee	SGriffiee@carson.ca.us	5/16/2018	Yes. Corresponded through 5/24/2018.
Robert F. Kennedy School	Front Desk	--	5/8/2018	Yes.
Towne Avenue Elementary School	Principal Mark Hirata	mhirata@lausd.net	5/8/2018	--
University Police (CSUDH)	Crime Analyst - Charlotte		5/8/2018	Yes. Guided caller to website where databases are kept.
University Police (CSUDH)	Lieutenant David Hall		5/4/2018	Yes. Provided information over the phone.
Walton Middle School	--	--	5/8/2018	Yes.
<p>-- = Information regarding this contact/call/correspondence may not have been recorded and/or has been unable to be retrieved. * = Approximate</p>				



INFORMATION GATHERED

FIRE PROTECTION

PRIMARY

Station Serving CSUDH Address	# of Staff	Types and # of Equipment	Service Population	# of Incidents			Response Time (minutes)		
				Emergency Medical	Fire	Non-emergency /Others	Emergency Medical	Fire	Non-emergency /Others
<p>Primary</p> <p>Station 116 755 E Victoria St, Carson, CA</p> <p>For incident nos. contact 310-324-5941</p>	9			1 truck, 1 engine, 1 paramedic squad	# not available. Boundaries are west to Figueroa; north to gardena blvd; south to del amo; east to central		4-5 min.	4-5 min.	10 – 12 min

LACOFD FIRE STATIONS NEAR THE CSUDH CAMPUS

LACoFD Fire Station Name	Address	Distance from Campus (miles)
LACoFD Station 116	755 E. Victoria St. Carson, CA 90746	0.2
LACoFD Station 10	1860 E. Del Amo Blvd. Carson, CA 90746	2.0
LACoFD Station 95	137 W. Redondo Beach Blvd. Gardena, CA 90248	2.1
LACoFD Station 105	18915 S. Santa Fe Ave. Compton, CA 90221	2.5
LACoFD Station 158	1650 W. 162nd St. Gardena, CA 90247	3.0
LACoFD Station 36	127 W. 223rd St. Carson, CA 90745	3.1
LACoFD Station 127	2049 E. 223rd St. Carson, CA 90810	3.2

Sources: County of Los Angeles ISD/IDD 2017. County of Los Angeles Fire Department. Features Services Webpage. <https://locator.lacounty.gov/fire>. Accessed November 2017.



POLICE PROTECTION

UNIVERSITY POLICE

Station Address	# of Staff	Service Population
1000 E Victoria St WH B100 Carson, CA 90747	21	15,000

CAMPUS AND STUDENT HOUSING CRIME INCIDENTS 2014-2016

Crime	Statistics		
	2015	2016	2017
Homicide	0	0	--
Sex Offenses (felony)	5	1	--
Rape	0	1	--
Robbery	1	2	--
Aggravated Assault	7	5	--
Burglary	9	11	--
Larceny	--	--	--
Disorderly Conduct	--	--	--
Grand Theft Auto	5	11	--
Weapons Violations	0	8	--
Vandalism	--	--	--
Arson	0	0	--

Source:
<http://shq.lasdnews.net/CrimeStats/yir9600/yir2015/cas/1.htm>
<http://shq.lasdnews.net/CrimeStats/CAASS/Patrol-CurrentMonth-YTD.PDF>
<https://www.csudh.edu/Assets/csudh-sites/dhpd/docs/clery%20crime%20stats%202014-2016.pdf>



SCHOOLS

School Facility	Address	Distance from CSUDH	Current Enrollment	Design Capacity
Los Angeles Unified School District				
Leapwood Avenue Elementary School	19302 Leapwood Avenue, Carson 90746	0.2 mile	Approx. 325 grades k-5 th	Full capacity ? call back to confirm
Annalee Avenue Elementary School	19410 S Annalee Avenue, Carson 90746	0.3 mile	Call back at 1pm	
Towne Avenue Elementary School	18924 Towne Avenue, Carson 90746	0.4 mile	Emailed	
Curtiss Jr. High School	1256 E Helmick Street, Carson 90746	0.5 mile	600 grades 6-8 th	Left vm for counselor or Ms. Lopez
Broadacres Avenue Elementary School	19424 S Broadacres Avenue, Carson 90746	0.6 mile	285 pre k - 5 th grade	500 spaces
Ambler Avenue Elementary School	319 E Sherman Drive, Carson 90746	0.9 mile	615 grades k-5 th	720 spaces
Magnolia Science Academy	1219 E Dimondale Drive, Carson 90746	1.5 mile	Shared campus 486 6-8 th	33 x 15 classrooms = 495
New Millennium Secondary School	1301 W 182nd Street, Gardena 90248	1.9 miles		Left vm with registrar
Carnegie Jr. High School	21820 Bonita Street, Carson 90745	1.9 miles		No answer call back 310-952--5700
Del Amo Elementary School	21228 Water Street, Carson 90745	2.0 miles	400 expanded tradition k-5 th	k-3 24 in a class 4-5 th grade 30 in class = approx. 500
Bonita Street Elementary School	21929 Bonita Street, Carson 90745	2.0 miles	511 k-5 th	k-3 250 3-5 370 = approx. 620.
Carson Street Elementary School	161 E Carson Street, Carson 90745	2.0 miles		Emailed Mr. Leon
Compton Unified School District				
Caldwell Street Elementary School	2300 W Caldwell Street, Compton 90220	0.9 mile	Not a school anymore. Houses offices for the district now	
Walton Middle School	900 W Greenleaf Drive, Compton 90220	1.0 mile	309	18 classes x 25 students = 450
Ralph Bunche Elementary School	16223 S Haskins Lane, Carson 90746	1.1 miles	425	33 students x 17 = 561
Longfellow Elementary School	1101 S Dwight Street, Compton 90220	1.3 miles	510	30 students x 20 = 600
Robert F. Kennedy Elementary School	1305 S Oleander Street, Compton 90220	1.6 miles	665	28 classrooms x 30 = 840
Bursch Elementary School	2505 W 156th Street, Compton 90220	1.9 miles	Call back	<u>(310) 898-6130</u>
Other				
Carson Christian School	17705 Central Avenue, Carson 90746	0.3 mile	80	150



John Muir Charter School	16425 Ishida Avenue, Gardena CA 90248	1.0 mile	kfoster@johnmuircs.com	
Learning Tree Academy	454 Carson Plaza Drive, Carson 90746	1.3 mile	Number disconnected	
Little Angels PreSchool and Kindergarten	18419 S Avalon Boulevard, Carson 90746	1.5 mile	Trouble with connection	
Golden Wings Academy	20715 S Avalon Boulevard, Carson, 90746	1.5 mile	Not a school only child care for 0-12 years old. Would not provide info.	
Environmental Charter Middle School	812 W 165th Place, Gardena 90747	2.0 miles	360	25 students x 12 12 classes = 300
Goal Oriented Academic Learning	21111 Dolores Street, Carson 90745	2.0 miles	Could not get local school info	

SCHOOL FACILITIES WITHIN 2-MILE RADIUS OF CAMPUS

School Facility	Address	Distance from CSUDH	Current Enrollment
Los Angeles Unified School District			
Leapwood Avenue Elementary School	19302 Leapwood Avenue, Carson 90746	0.2 mile	325
Annalee Avenue Elementary School	19410 S Annalee Avenue, Carson 90746	0.3 mile	244
Towne Avenue Elementary School	18924 Towne Avenue, Carson 90746	0.4 mile	323
Curtiss Jr. High School	1256 E Helmick Street, Carson 90746	0.5 mile	600
Broadacres Avenue Elementary School	19424 S Broadacres Avenue, Carson 90746	0.6 mile	285
Ambler Avenue Elementary School	319 E Sherman Drive, Carson 90746	0.9 mile	615
Magnolia Science Academy	1219 E Dimondale Drive, Carson 90746	1.5 mile	486
New Millennium Secondary School	1301 W 182nd Street, Gardena 90248	1.9 miles	185
Carnegie Jr. High School	21820 Bonita Street, Carson 90745	1.9 miles	915
Del Amo Elementary School	21228 Water Street, Carson 90745	2.0 miles	400
Bonita Street Elementary School	21929 Bonita Street, Carson 90745	2.0 miles	511
Carson Street Elementary School	161 E Carson Street, Carson 90745	2.0 miles	N/A
Compton Unified School District			
Walton Middle School	900 W Greenleaf Drive, Compton 90220	1.0 mile	309
Ralph Bunche Elementary School	16223 S Haskins Lane, Carson 90746	1.1 miles	425



Longfellow Elementary School	1101 S Dwight Street, Compton 90220	1.3 miles	510
Robert F. Kennedy Elementary School	1305 S Oleander Street, Compton 90220	1.6 miles	665
Bursch Elementary School	2505 W 156th Street, Compton 90220	1.9 miles	N/A
Other			
Carson Christian School	17705 Central Avenue, Carson 90746	0.3 mile	80
John Muir Charter School	16425 Ishida Avenue, Gardena CA 90248	1.0 mile	N/A
Learning Tree Academy	454 Carson Plaza Drive, Carson 90746	1.3 mile	N/A
Little Angels PreSchool and Kindergarten	18419 S Avalon Boulevard, Carson 90746	1.5 mile	N/A
Golden Wings Academy	20715 S Avalon Boulevard, Carson, 90746	1.5 mile	N/A
Environmental Charter Middle School	812 W 165th Place, Gardena 90747	2.0 miles	360
Goal Oriented Academic Learning	21111 Dolores Street, Carson 90745	2.0 miles	N/A

Source: California Department of Education, 2017. Called each individual school & visited their website.

LIBRARIES

Library Address	# of Staff	Service Population	Capacity	Facility & Service Provided
Leo F. Cain Library (CSUDH)	35 staff members	existing student enrollment of 15,179	290,000 square feet	book loaning, study rooms, research help, public computers, a coffee shop, and iPad and laptop loans
Dr. Martin Luther King, Jr. Library, 17906 S Avalon Boulevard, Carson 90746	2 full time and 3 part time staff members	--	5,024 square foot building that can hold 75 people at maximum capacity	book loaning services, online resources such as eBooks and music, homework help, free Wi-Fi, public computers, a family area, and a teen space
Carson Library, 151 E Carson Street, Carson 90745	25 staff members	--	33,112 square feet and the meeting room capacity is 125 persons	book loaning services, online resources such as eBooks and music, homework help, free Wi-Fi, public computers, a family area, and a teen space



RECREATIONAL FACILITIES AND PARKS

Name/Location	Amenities	Distance from CSUDH	Size	Service Population
City of Carson Parks and Recreational Facilities				
Stevenson Park/ 17400 Lysander Drive, Carson 90746	ball fields, basketball courts, children's play area, horse-shoes, meeting/craft rooms, picnic areas, snack bar, tennis courts, volleyball courts, wading pools. Gymnasium is planned.	0.2 mile	11.7/11.83 acres	4,636.27
Dr. Thomas G. Mills Memorial Park/ 1340 E Dimondale Drive, Carson 90746	ball fields, basketball courts, children's play area, football field, meeting/craft rooms, picnic areas, snack bar, soccer field, tennis courts.	0.5 mile	5.0/4.98 acres	5,493.98
Del Amo Park/ 703 E Del Amo Boulevard, Carson 90746	ball fields, basketball courts, children's play area, football field, meeting/craft rooms, picnic areas, snack bar.	0.7 mile	5.0/8.62 acres	3,697.93
Walnut Street Mini Park/ 440 E Walnut Street, Carson 90746	basketball courts, children's play area, picnic areas.	0.7 mile	1.5/0.69 acres	2,730.61
James Anderson Jr. Memorial Park/ 19101 S Wilmington Avenue, Carson 90746	basketball courts, children's play area, Frisbee golf course, meeting/craft rooms, picnic areas, tennis courts.	0.7 mile	8.5/8.44 acres	4,244.98
Vernon Hemingway Park/ 700 E Gardena Boulevard, Carson 90746	ball fields, basketball courts, children's play area, meeting/craft rooms, picnic areas, snack bar, tennis courts.	0.9 mile	13.0/11.91 acres	2,759.34
County Recreational Facilities Located in Carson				
Victoria Park Community Regional Park (County) 419 E 192nd Street, Carson 90746	ball fields, basketball courts, swimming pool, gymnasium, tennis courts, play area, recreation building, picnic area.	0.3 mile	36.0/24.96 acres	7,477.01
Victoria Golf Course (County) 340 E 192nd Street, Carson 90746	public regulation golf course.	0.3 mile	161.6 acres	
Source: http://ci.carson.ca.us/content/files/pdfs/planning/generalplan/Chapter%209_Parks%20and%20Recreation.pdf				